# THE DETECTION OF FORGERY

## OR

# A STUDY IN HANDWRITING

BY

P. RAMANATHA AIYER, B.A., B.L., *Vakil,*

Author of The Principles and Precedents on the Art of Cross Examination, The Law of Benami Transactions, Law of Costs, Law of Receivers, Law of Interest in British India, Statute Law relating to Marriage and Divorce in British India, Commentaries on the Codes of Civil and Criminal Procedure, The Indian Limitation Act, The Easements Act, The Provincial Small Cause Courts Act, The Court Fees and Suits Valuation Act, The Law of Minors and Guardianship, The Contract Act, The Current Index of Indian Cases, The Civil Court Manual, The Criminal Court Manual, The All India Digest, Civil and Criminal, Etc., etc.

and

N. S. RANGANATHA AIYER, B.A., B.L.,
*High Court Vakil.*

WITH A FOREWORD BY
J. C. ADAM Esq., Bar-at-Law
and Public Prosecutor, High Court of Judicature, Madras.

"The correctness of a disputed or doubtful writing may be established by comparing it with something written by the party with his own hand and the like; also by presumption, by confrontation of parties, by direct proof, by marks, by previous connection, by a probability of title and by inference."

—*Yajnavalkya (Ch. II, V. 92) cited in Mayukha C. II, S. I.*

PRINTED BY
JEGAM & CO., DODSON PRESS,
TRICHINOPOLY.
1927.

DEDICATED

BY KIND PERMISSION

TO

HIS LORDSHIP

Sir W.W. PHILLIPS, Kt., I.C.S.,

OFFICIATING CHIEF JUSTICE,

HIGH COURT OF JUDICATURE, MADRAS.

# CONTENTS.


| CHAPTERS. | | PAGE. |
|---|---|---|
| | **PART I—GENERAL.** | |
| | PREFACE | |
| | FOREWORD | |
| i. | INTRODUCTORY | 1 |
| ii. | FORMATION OF HANDWRITING | 21 |
| iii. | VARIATIONS IN WRITING (*Normal and Abnormal Handwriting*) | 29 |
| iv. | DUAL PERSONALITY IN HANDWRITING | 38 |
| v. | CORRESPONDENCE BETWEEN CHARACTER & HANDWRITING | 42 |
| | **PART II—METHODS OF FORGERY.** | |
| vi. | METHODS OF FORGERY—(*Forgery by Tracing and Freehand Forgery*) | 52 |
| vii. | FORGERY BY IMITATION | 65 |
| viii. | DISGUISED HANDWRITING | 69 |
| ix. | OTHER METHODS OF FORGERY | 78 |
| x. | FORGED WILLS (*and claims against estates of deceased persons*) | 84 |
| | **PART III—DETECTION OF FORGERY.** | |
| xi. | DETECTION OF FORGERY—BY COMPARISON WITH GENUINE WRITING | 94 |
| xii. | —BY COMPARISON BY JUDGE AND JURY | 105 |
| xiii. | —BY EXAMINATION OF DOCUMENT | 108 |
| xiv. | —BY EXAMINATION OF INK, PAPER, ETC. | 113 |
| xv. | —BY REFERENCE TO TIME AND PLACE | 124 |
| xvi. | —BY THE USE OF MICROSCOPE AND PHOTOGRAPHY | 127 |
| xvii. | —BY REFERENCE TO SURROUNDING CIRCUMSTANCES (*Circumstantial Evidence*) | 134 |
| | **PART IV—EVIDENCE AND PRACTICE.** | |
| xviii. | EVIDENCE AS TO HANDWRITING | 150 |
| xix. | NON-EXPERT EVIDENCE | 156 |
| xx. | EXPERT EVIDENCE | 160 |
| xxi. | BIAS OF EXPERTS | 171 |
| xxii. | BLUNDERS OF EXPERTS | 174 |
| xxiii. | CROSS-EXAMINATION OF WITNESSES AS TO HANDWRITING | 184 |
| xxiv. | CHARGE TO JURY AS TO EVIDENCE OF HANDWRITING | 192 |
| | **PART V—MISCELLANEOUS.** | |
| xxv. | RELATION OF LIGHT TO PROOF OF DOCUMENTS | 195 |
| xxvi. | DETECTION OF FORGERY IN TYPEWRITTEN DOCUMENT | 200 |
| xxvii. | FINGER PRINTS | 208 |
| | INDEX | 220 |

# PREFACE.

The commercial relations of men for centuries have been increasing and constantly growing more complex. The application of writing to the relations and business of mankind is multiform, and the detection of forgery and proof of handwriting are factors of prime importance, both in the domain of general business and in court proceedings.

The questions connected with the subject have presented themselves from the earliest times, in all countries, at all times, in various forms. From the clumsy forgery by a village rustic of the scrabbling hand of his unlettered neighbour, to the most finished imitation of the master forger of false bank-notes and counterfeit government bonds, that puzzles the minds of the best experts in the field,—the courts have had to deal with questioned documents in all varied forms.

Centuries ago, the sages of old, Yajnavalkya and Narada, have laid down rules to determine the genuineness or otherwise of deeds and bonds, which closely correspond to the methods pursued in modern courts when dealing with disputed documents.

From the nature of the subject, it is not possible to lay down uniform rules for dealing with all cases of forgeries and proof of writing. The instruments of the expert will help a great deal. But by themselves they may not suffice to detect fraud in all cases of forgery contested in courts of Justice. The question is a complicated human problem. The skill of the specialist, the trained legal acumen of the lawyer, the sound common sense that takes into account the deep-seated motives of a man's mind, the art of the detective that seeks to find the secret springs of human action,—all these have their appropriate places in bringing to light the hidden fraud and the dark design of the scheming forger.

It has been our aim to deal briefly with this subject in all its different aspects. We have taken care not to make this work too technical. It is our hope that the work will be found interesting and instructive both to the lawyer and the layman.

We have also given a number of illustrative cases, in which the detection of forgery has played an important part, so that the reader may draw his own conclusions from a knowledge of the methods pursued, and the results achieved, in those cases. Illustrating points by comparison is always effective. Little anecdotes sometimes have a volume of significance. Reasoning by comparison is a method that catches, and often carries conviction. It captures the ear, interests the mind and holds the attention.

In the preparation of this work, almost all available works on the subject have been consulted and referred to. Our special acknowledgments are due to Mr. Ames, whose excellent work on the subject is still the standard treatise on forgery. We have been greatly helped by a close study of this work, and choice extracts have been given in appropriate places. Our grateful acknowledgments are also due to Moore on Facts, Ram on Facts, Carvalho's Forty Centuries of Ink, Osborne's Questioned Documents, Hardless on Forgery, Wills' Circumstantial Evidence (portion dealing with Finger Prints), Mitchell on Experts, Bose on Finger Prints, Sir Edward Henry's book on Finger Prints, Galton on Finger Prints and several scattered articles by eminent writers, contributed to the leading American, English and Indian Law Journals from time to time,—especially those contributed by the expert Mr. Albert Osborne who has made original and valuable contribution to the clearing of the many rather obscure points on this subject. Thus, in the chapter on the "Relation of Light to Proof of Documents" we have largely cited from an article by Mr. Osborne contributed to the Chicago Legal News. Similarly, in the chapter on " Dual Personality in Handwriting," we have been greatly helped by, and we have given large citations from, an article by an eminent writer in an American Law Review reproduced in the pages of the Criminal Law Journal of India. So also, in the preparation of the Chapter on "Forgery in Typewritten Documents," we have obtained large assistance from an article contributed by Mr. Frank Brewster to the 15th Volume of the Criminal Law Journal and another by Mr. H. N. Green, associate editor of the American and English Annotated cases, contributed to the Law Notes, November, 1904.

Our grateful thanks are also due to Sir W. W. Phillips, Kt., Officiating Chief Justice of the Madras High Court, for kindly consenting to the dedication of this book to his Lordship, and to J. C. Adam, Esq., Public Prosecutor, High Court of Judicature, Madras, for the very kind and sympathetic Foreword which he has written for this work.

It is not without diffidence that we are placing this book before the profession. We are conscious that the book is far from being perfect or exhaustive; and it is possible that there are other defects and deficiencies. Any suggestions for improvement by our learned brethren in the profession will be gladly considered and given effect to in the second and subsequent editions of this work.

If this little venture of ours can but have the effect of directing the attention of the profession to this rather neglected field of legal investigation we shall have the satisfaction that our labours have not altogether been in vain.

TRICHINOPOLY,
1—7—27.

THE AUTHORS.

# FOREWORD.

THIS is a book which deals chiefly with facts. It is said that facts are stubborn things; but first they must be proved. If they are indubitable, if they cannot be got over, if there is no possible alternative but to accept them, the case, as often as not, is at an end. But there are few such cases. In the majority doubts arise, facts as presented can be denied and controverted, new facts can be found to contradict them, the testimony that presents them can be attacked and the witness may be shown to be a liar, a fool, or liable to error. In no branch of testimony is there greater possibility of error than in handwriting. Perhaps of all branches of opinion evidence this is the most difficult to deal with. There are very few real experts. In India not more than one or two. A handwriting expert as defined in the Indian Evidence Act, Sec. 45, is one who is specially skilled in questions as to the identity of handwriting and the opinion of any person who does not fulfil this requisite of being specially skilled is not receivable in evidence. In a well-known case at the Madras Criminal Sessions a witness called as a handwriting expert was dismissed by the Judge before he had given his evidence because he hesitated about the word "specially." In matters of opinion the law therefore eliminates the evidence of all non-experts. No doubt evidence is admissible of persons acquainted with another person's handwriting, that is, of persons who have seen him write or who have received documents purporting to be written by him, or when in the ordinary course of business, documents purporting to be written by him have been habitually submitted to the witness. Where there is no question of forgery the opinion of a bank clerk as to a customer's signature on a cheque is of great weight. The bank clerk is usually quite unable to give reasons for his opinion, which seems to arise as from a sixth sense—a sense which rarely betrays him. But the skilful forger can deceive even the bank clerk and it is just here that the value of really reliable expert evidence comes in. In the present work the elder Hardless is frequently referred to. I met him on several occasions and had occasion to note his methods and the almost uncanny ability with which he demonstrated them. He was not only a thoroughly scientific investigator but he was a wonderful penman who appeared to be able to copy any writing so as even to deceive the writer himself. This he did with amazing celerity—almost, one might say, he dashed it off. On one occasion, I remember, he at my request copied all the family signatures and none of us could have sworn that they were not our own. Nevertheless he was able to convince us that the expert could detect the difference. The effect was good but there were scientific reasons for declaring that they were by a different hand.

Under the Indian Evidence Act, Sec. 73, the Court can determine by comparison with admitted or proved writings whether the writing in question is that of the person by whom it purports to have been written. But if the Magistrate or Judge has never read anything about scientific examination of writing or has no reliable expert at hand to give an opinion and add reasons for it, he must feel at a great loss. The present work by directing his attention to scientific deduction from handwriting is certain to be of considerable assistance to him.

It may be objected that treatises on facts are of little utility to the lawyer in his actual practice. This is no doubt true and for two special reasons. In the first place, two cases in which facts are entirely similar rarely or, I might almost say, never, occur, so that to search for a case on all fours with the case on trial would prove a waste of time and labour. In the second place, even if such a case were found, its usefulness would be very doubtful, because a decision on facts in another case has no binding force in our law. But to the law student such books are valuable from an educative standpoint. In India especially, a perusal of them would be of advantage, for, unfortunately a great many Indian lawyers are sadly deficient in their ability to weigh facts. It is in comparing testimony and forming a judgment as to the credibility of witnesses that they find their greatest difficulties. With respect to scientific or technical matters the Indian lawyer frequently admits his inability to tackle the evidence, and if questions arise of such a nature he often lets that part of the case go and does not attempt to meet the arguments put forward by the opposing counsel.

This is particularly noticeable with regard to handwriting. Even when expert evidence is forthcoming Judges frequently admit their inability to form an opinion. Knowing nothing about scientific detection, they have either been unable to follow the expert's demonstration or unwilling to attempt to do so. The result of this refusal to examine the documents for himself not seldom results in the Judge either unreservedly accepting the expert's opinion or refusing to do so because of what he believes to be the great fallibility of all such experts. But, as I have said, handwriting experts are very rare so that most cases have to be decided without them. In these cases the result is that a scientific examination is not made and the case is decided upon the other evidence. In short the Judge or Magistrate frequently shirks this evidence. In the course of my practice I have had many opportunities of dealing with forged documents. For instance alibis supported by forged documents are of the commonest occurrence in this country. In many cases they are obvious concoctions while in others some cleverness is exhibited, but in most cases I have found that after a close and detailed study of the actual documents themselves and also in comparison with undisputed writings, an opinion can be formed. Sooner or later

something is discovered which shows them to be either genuine or false. I do not mean things fanciful or doubtful but clear and convincing things which might have been discovered by the Judge or Magistrate himself if he had only taken the trouble to examine the documents with care and not given the matter up as being too technical or scientific for his comprehension.

In the same way want of training in human testimony leads to unfortunate results. Perfectly reasonable discrepancies in the evidence of several eye-witnesses are considered to be fatal to the case or almost impossible agreements are accepted as strong proof. Here again inability to deal properly with facts might be cured by some system of early training. A course in that branch of psychology which deals with human observation and recollection of observed facts might with advantage be added to the law student's curriculum. In default of such special education a perusal of books such as the present cannot be without value, and in spite of the fact that books on facts are of little practical use as works of reference in a particular case, they should not be neglected by the lawyer who desires to make himself thoroughly efficient. "The usual character of human testimony" says Paley, "is substantial truth under circumstantial variety. This is what the daily experience of courts of justice teaches. When accounts of a transaction come from the mouths of different witnesses it is seldom that it is not possible to pick out apparent or real inconsistencies between them. These inconsistencies are studiously displayed by an adverse pleader but oftimes with little impression upon the Judges. On the contrary, a close and minute agreement induces the suspicion of confederacy and fraud." This truth is very apparent in the crime of forgery. As pointed out in this book an individual frequently writes the same letters in a different manner. Variations are due to differences in the pen, pencil, ink, paper, table, chair or the state of health of the writer. Such differences might well appal the unskilled examiner of documents. He might be excused for asking "how can I say if the document was written by the accused when in his admitted writings he rarely writes the same word twice alike?" If the Judge knows nothing about scientific examination of handwriting one can hardly wonder at such an attitude.

Another common form of forgery is the falsification of hospital registers in proof of alibi. Nothing seems to be easier than to get at these registers and insert a name or alter a name already there to correspond with the accused's. It is truly amazing how a man will be said to have gone fifty or a hundred miles away to be treated for some petty complaint for which he could have had attention near his home. No Judge experienced in criminal matters pays much attention to such a register and a careful examination of it frequently discloses the fraud.

Another form of forgery which is sometimes practised is with reference to birth certificates. The original birth register is cleverly altered and a

certified copy of the entry applied for. The certified copy is filed in Court. As it contains no alteration it is readily accepted. Where the date of birth is in issue the Court should insist on the original register being examined. In one case of this kind where the original register was in French a male name had been erased in the original and a female name inserted, but a consequential word had not been altered from the masculine to the feminine. The Magistrate knew French and at once detected the mistake.

Forgery of promissory notes is so common in parts of the Madras Presidency that it is said that the person whose signature has been forged finds it easier to meet the note with a false receipt for payment than to attempt to demonstrate its falsity.

I note that considerable attention has been paid to the finger print system of identification. False personation before Registration officers is of frequent occurrence in India. A deed is forged by the accused conveying a lady's land to himself or an accomplice. It is then registered, some female relative of the accused being brought forward to personate the lady. The fraud is usually not found out for some time,—not until the lady discovers that some stranger is dealing with her land. The finger print system invariably discloses the fraud and there is not much difficulty in convicting the culprits, but in many cases it takes time to convince the Magistrate or Judge that the finger print system is a reliable one. It is therefore desirable that every Magistrate and Judge should know something about finger prints.

In the present work the authors have collected almost all that has been said about handwriting that is of value. There is no doubt that it will prove of considerable worth.

J. C. ADAM.

# DETECTION OF FORGERY
## OR
## A STUDY IN HANDWRITING.

### CHAPTER I.

## Introductory.

CONTENTS:—Importance of the subject in matters of business and in daily transactions.—Necessity for special study of the subject.—Nature of handwriting in general; Its speciality and individuality.—Characteristics of handwriting compared with features of human countenance.—General similarity in writing is always combined with differences in detail.—Similarity of human countenance may often be more deceptive than similarity in handwriting.—Comparison between the character of handwriting and countenance continued.—Justice Johnson's case.—Variations in identity.—Causes of variation.—Handwriting and signature.—Signature by mark.—Other marks.—Basis of expert evidence as to handwriting.—Its ancient origin and use from earliest times.—Use of expert evidence in some early English Cases—Illustrative Cases.—A claim under King George III's will contested.—Tichborne trial.—Trial of Miss Edmunds.—The triumph of a lawyer, by close observation and careful study of document.—Russell's defence of Parnell.—Russell's Cross-examination of Pigott.—Forgery exposed.—A splendid triumph.

A gentleman who was a customer at a certain bank was asked by the bank clerk whether a particular cheque bore his signature.

The gentleman looked at it, and said, "That is all right."

"All right?" said the bank clerk. "Is that really your signature, Sir?"

**Importance of the subject in matters of business and in daily transactions.**

"Certainly," said the gentleman.

"Quite sure, sir?"

"As sure as I am of my own existence."

The clerk looked puzzled and somewhat disconcerted, so sure was he that the signature was false.

"How can I be deceived in my own handwriting?" asked the supposed drawer of the cheque.

"Well," said the clerk, "you will excuse me, I hope, but I have *refused to pay on that signature*, because I do not believe it is yours."

"PAY!" said the customer. "For Heaven's sake, do not dishonour my signature."

"I will never do that," was the answer, "but will you look through your papers, counterfoils, bank-book, and accounts, and see if you can trace this cheque?"

The customer looked through his accounts and found no trace of it or the amount for which it was given.

At last, on examining *the number* of the cheque, he was convinced that the signature could not be his, *because he had never had a cheque-book with that number in it*. At the same time, his astonishment was great that the clerk should know his handwriting better than he knew it himself.

"I will tell you," said the clerk, "how I discovered the forgery. A boy presented this cheque, purporting to have been signed by you. I cashed it. He came again with another. I cashed that. A little while afterwards he came again. My suspicions were then aroused, not by anything in the signature or the cheque, but by the circumstance of the *frequency of his coming*. When he came the third time, however, I suspended payment until

I saw you, because the *line under your signature with which you always finish was not at the same angle*; it went a trifle nearer the letters, and I at once concluded it was a FORGERY." And so it turned out to be [1].

Here is an instance of what special skill and careful observation can do to prevent fraud, and detect it when accomplished, in the business world.

Mr. Daniel Ames, the author of the famous work on the detection of Forgery, gives us an instance of an artist long connected with one of the largest bank-note companies in America who remarked that he could take a finished engraving—say, an elaborate bond or bank-note made by his company—and identify, infallibly, the work of every man who had a hand in its production, even though there might be a large number of different artists represented. More than that, he stated that if a score of the men with whom he had worked should each draw a straight line, an inch long, under normal conditions, he could pick out the author of each particular line. This seems at first blush an extravagant statement, but probably it is true. It simply means that every man differs from every other man as to method, nervous force, brain propulsion, etc; and that while these bits of lines to the ordinary observer would be exact duplicates one of another, to the eye of one skilled in that business, and by long supervision familiar with the character and style of work turned out by various subordinates, one line would differ from another line in appearance even as one man differs from another [2].

**Necessity for special study of the subject.**

"Writing is a thing that is tangible, and almost every man who can write has a character that those who are acquainted with it can readily recognise," said Chief Justice Cameron of Ontario, "and though it may, by expert penmen, be imitated, as a general rule, its individuality is easily established. A man has a peculiar voice and may be identified by it; it is his own; and though, like the features of the human face, there is a general resemblance in the voices of all mankind, there are marked differences which indicate its possessor very clearly [3]."

**Nature of handwriting in general.—Its speciality and individuality.**

"Experiment and observation have disclosed the fact that there are certain general principles which may be relied upon in questions pertaining to the genuineness of handwriting. For instance it seems to be established that in every person's manner of writing there is a certain distinct prevailing character which can be discovered by observation, and being once known, can be afterwards applied as a standard to try other specimens of writing the genuineness of which is disputed. In each person's handwriting there is some distinctive characteristic, which, as being the reflex of his nervous organization, is necessarily independent of his own will, and unconsciously forces the writer to stamp the writing as his own. Those skilful in such matters state that it is impossible for a person to successfully disguise in a writing of any length this characteristic of his penmanship [4]."

"In general there is a distinct prevailing character in every person's manner of writing which is easily discoverable by observation, and when once known may be afterwards applied as a mental standard by which to test any other species of his writings whose genuineness is disputed [5]."

"Everyman's handwriting has a definite and distinct character, so much so that those familiar with it are, at all times, able to distinguish it from all others," said Justice Brayton in Kinney v. Flynn.*

---

(1) Hawkins' Reminiscences pp. 320—321.
(2) Ames. Intro.
(3) Scott. v. Crerar, 11 Ont. 541, 554.
(4) Hanriot v. Sherwood, 82 Va. 1, 8, per Lacy, J.
(5) Reid. v. Warner. 17 L. C. Rep. 485, 492, Per Badgelet J. On this point see also Moore on Facts, Vol. 1, pp. 604—607.
* 2 R. I. 319, 326.

In the Matter of Hamilton[6], Judge Blatchford said "the general correspondence" of signatures before him was such that there was no room to doubt that they were made by the same person.

**Characteristics of handwriting compared with features of human countenance.**

"By nature, custom, and habit, individuals as a general rule, acquire a system of forming letters which gives to their writing a fixed character, as distinct as the features of the human face, which distinguishes their own handwriting from the handwriting of every other person[7]."

"The general rule which admits of the proof of the handwriting of a person by experts, who have compared the writing with other writings of the same person, is founded on the reason that in every man's writing there is a peculiar prevailing characteristic which distinguishes it from the handwriting of every other person, and, therefore that an expert, by studying characteristics as they appear in the genuine writings, may be able to determine with some degree of certainty whether a writing sought to be proved contains any of the characteristics of that which he has examined and studied[8]."

The fact that personality enters into hand-writing, and becomes an unconscious and dominant habit which establishes an identity to every handwriting as absolutely as does physiognomy to the person is the basis on which evidence as to handwriting is admitted and acted upon in courts[9].

**General similarity in writing is always combined with differences in detail.**

It is also an undisputed fact to be remembered that the same person never writes twice exactly alike. This is true to such an extent that one of the infallible tests of forgery of a disputed writing or signature is that it coincides word for word, line for line, and dot with dot, with another the genuineness of which is admitted. Although a person's handwriting varies as to its precise detail, yet in its general habitual characteristics it is the same "as several peas may vary in size, color, smoothness and outline, yet inevitably and unmistakably retain every characteristic that identifies them as peas and distinguishes them from pebbles or any other object of similar size and form[10]."

**Similarity of human countenance may often be more deceptive than similarity in handwriting.**

Although the peculiarities of a person's handwriting have been compared to the features of the human face, yet, coincident personality to such a degree as to lead to a mistaken identity of persons is very much more probable than that the handwriting of two individuals should so closely approximate each other as to be mistaken one for the other, especially when subjected to a careful analytical study and comparison by a capable expert.

The features that go to make up the human physiognomy are but few when compared with the various forms of the fifty-two letters of the English alphabet, large and small, not to mention their equally various relations, proportions, shades, spacing, initials, terminals, crosses, dots, etc.[11].

That all these various features when woven into the fabric of handwriting could be coincident throughout two habitual handwritings is absolutely impossible; the characteristic distinctions thus inevitably stamped upon one's writing are beyond the powers of numbers to enumerate. The number of different positions in which the twenty-six letters of the alphabet alone may be placed is 4,032, 914, 611, 265, 046, 555, 840, 000, using the fifty-two letters (large and small), with their changed forms and other differences, as

---

(6) 1 Ben. (U. S) 455, 11 Fed. Cas. No. 5,976.
(7) Green v. Terwilliger, 56 Fed. Rep. 384, 407, per Hawley D. J.
(8) Matter of Hopkins, 172 N. Y. 360, 370; 65 N. E. Rep. 173.
(9) Ames p. 17.
(10) Ames. p. 28.
(11) Ibid 19.

above stated; it will be obvious that the personalities of an habitual handwriting are quite beyond the power of enumeration to express [12].

It has been said that there is a distinct individual character in the handwriting of every man who can write; and with those who have written much, that character is so fixed and striking, that persons acquainted with it feel no more difficulty in recognizing it than in knowing the face of the writer [13].

**Comparison between the character of handwriting and countenance continued.**

"We know with certainty the faces of our acquaintances though we have not always the power to describe particularly the points of difference in the faces of different individuals, or the minute particularities of any one," said Judge Wright of Ohio, charging a jury [14]. "This skill is not limited to a knowledge of the face, while all the features, or their expression, remain as we have been accustomed to see them. We know the face, though derangement has imparted to it a new appearance, or when distorted by pain, or disfigured by wounds, and presented in an entire new light. It is the image of the whole face that impresses the memory. The same faculties enable us to discriminate among different plants and trees, and to distinguish their varieties and the different species of the same general class. We daily meet those, who, with a single glance of the eye upon a tree, can tell the precise kind of fruit it will bear, and we would implicitly rely upon their opinion, although, if questioned, they were unable to describe accurately the difference between the several species. We judge of writing as of other things, by its individual character as a whole [15]."

"A witness may well recognize a familiar hand, without being able to testify to one single peculiarity which distinguishes it from the handwritings of all other men. So with identity. We may recognize a person and be able to testify to his identity with confidence, without being able to describe a single peculiar feature different from that of every other man. The proof in such case depends upon the conclusion formed in the mind of the witness. It is a mere matter of opinion, but it is the only satisfactory or reliable evidence that can be given [16]."

**Justice Johnson's case.**

On the trial of Mr. Justice Johnson in the Court of King's Bench, a witness who had been acquainted with the defendant fourteen or fifteen years, and had been employed in his office ten years, testified in chief that, in his opinion, the disputed writing was not the handwriting of the defendant. Apparently he did not give this opinion upon the instant, and thus laid himself open to the following question by Mr. Erskine on cross-examination: "Likeness of handwriting has been compared with the features of the face: I should suppose Judge Johnson's face is familiar to you; should you be as long looking at his features to see if you knew him?" The witness replied: "I have not a sharp eye, and I should not be staring in any man's face. You should give one time to look over it. I could have said it at the first blush, but I did not wish to give an answer as if I had come prepared [17]."

Where a witness examined genuine documents in his possession before he declared that a disputed writing was genuine, the court said his testimony was not thereby invalidated and was only slightly diminished in weight. "It can hardly be expected," the court argued, "that any cautious and

(12) Ibid.
(13) Gilliam v. Perkinson. 4 Rand. (Va). 325, 328.
(14) Murphy v. Hagerman. Wright (Ohio) 294, 297.
(15) Moore on Facts. Vol. 1. s. 601, p 607.
(16) Dewitt v. Barley, 13 Barb. (N. Y.) 550, 554, per Parker J.
(17) Trial of the Hon. Mr. Justice Johnson, 29 How. St. Tr. 488.

conscientious man would speak promptly and confidently upon such a subject, which is at best only a matter of belief and opinion, without a close inspection of the writing, and refreshing his memory by all means in his power. It is like an acquaintance with the human countenance. We frequently know the face upon first sight without knowing when or where we have before seen it; and having forgotten to whom it belongs we are reminded by circumstances brought to our recollection by some extraneous information, of the name of the person, and the time, place, and circumstances of our former acquaintance, which enables us to speak with confidence as to the identity of the person; not upon this information, but upon our own recollection thus refreshed, although time may have made a considerable change in his features. One speaking confidently, under such circumstances, would be entitled to belief in a degree little, if any, less than one who had a daily and intimate intercourse with the person in question [18]."

"Hours and hours and hours have I spent in endeavours, altogether fruitless, to trace the writer of the letter that I send, by a minute examination of the character, and never did it strike me till this moment, that your father wrote it. In the style I discover him, in the scoring of the emphatical words—his never-failing practice—in the formation of many of the letters, and in the **adiew**! at the bottom so plainly, that I could hardly be more convinced had I seen him write it [19]."

---

(18) Redford v. Peggy. 6 Rand. (Va.) 316, 333. per Green J.

(19) Cowper's Works (Letters), Vol. V. p. 217, Ed. 1836, Ram on Facts p. 52.

When Ulysses returned to Penelope after an absence of twenty years, she did not recognise him; she remembered him only as he was when he left her. And when at length she was convinced he was her husband, it was only by his conversation, by a fact he told her of, one that took place before he went away:—

"Penelope! the Gods to thee have given
Of all thy sex, the most obdurate heart.
Another wife lives not, who could endure
Such distance from her husband new-return'd
To his own country in the twentieth year,
After such hardship. But prepare me, nurse,
A bed, for solitary I must sleep,
Since she is iron, and feels not for me.
Him answer'd then prudent Penelope.
I neither magnify thee, Sir! nor yet
Depreciate thee, nor is my wonder such
As hurries me at once into thy arms,
Though my remembrance perfectly retains,
Such as he was, Ulysses, when he sail'd
On board his bark from Ithaca—Go, nurse,
Prepare his bed, but not within the walls
Of his own chamber built with his own hands.
Spread it without, and spread it well with warm
Mantles, with fleeces, and with richest rugs.
So spake she, proving (*a*) him, and, not untouch'd
With anger at that word, thus he replied.
Penelope, that order grates my ear.
Who hath displaced my bed? The task were hard
Even to an artist; other than a God
None might with ease remove it; as for man,
It might defy the stoutest in his prime
Of youth, to heave it to a different spot.
For in that bed elaborate, a sign,
A special sign consists; I was myself
The artificer; I fashion'd it alone.

---

(*a*) "The proof consisted in this—that the bed, being attached to the stump of an olive tree still rooted, was immoveable; and Ulysses having made it himself, no person present, he must needs be apprized of the impossibility of her orders, if he were indeed Ulysses; accordingly, this demonstration of his identity satisfies all her scruples." Cowper.

Marvellous is the creation of God. Among all the fourteen hundred millions of people who inhabit the earth no two are identically the same. No more are any two handwritings. Although resemblances may be striking, a perfect likeness of any two things does not exist. "Alike as two peas" is a trite saying; yet when two peas are scrutinized under the lens of a microscope differences of detail multiply well-nigh to the infinite.

**Variations in identity.**

A fine or stub pen, haste or deliberation, good or bad health, sitting or standing, drunk or sober, may radically change the appearance and quality of writing, as may the condition of health or age, change or impair the personal appearance of the writer; but it might as well be claimed that these abnormal circumstances make a new person as that they make a new handwriting. The pen in a palsied, drunken, or incensed hand may be erratic in its motion, but no more so than would be the motions of the feet and body from a corresponding cause. Each inevitably strives to perform its normal and habitual functions, and approximates doing so exactly according to the degree of the impediment [20].

**Causes of variation.**

Many persons habitually sign their names in a peculiar hand, very different from their handwriting in the body of papers written by them; they adopt and persevere in a particular form of signature, while their general hand is constantly changing [21].

**Handwriting and Signature.**

---

Within the court a leafy olive grew
Lofty, luxuriant, pillar-like in girth.
Around this tree I built, with massy stones
Cemented close, my chamber, roof'd it o'er,
And hung the glutinated portals on.
I lopp'd the ample foliage and the boughs,
And severing near the root its solid bole,
Smooth'd all the rugged stump with skilful hand,
And wrought it to a pedestal well squared
And modell'd by the line. I wimbled, next,
The frame throughout, and from the olive-stump
Beginning, fashion'd the whole bed above
Till all was finish'd, plated o'er with gold,
With silver, and with ivory, and beneath
Close interlaced with purple cordage strong.
Such sign I give thee. But if still it stand
Unmoved, or if some other, severing sheer
The olive from its bottom, have displaced
my bed—that matter is best known to thee.
He ceased; she, conscious of the sign so plain
Given by Ulysses, heard with fluttering heart
And faltering knees that proof. Weeping she ran
Direct toward him, threw her arms around
The hero, kiss'd his forehead, and replied.

* * *

Pardon the fault
That I embraced thee not as soon as seen,
For horror hath not ceased to overwhelm
My soul, lest some false alien should, perchance,
Beguile me.

* * *

But now, since evident thou hast described
Our bed, which never mortal yet beheld,
Ourselves except and Actoris my own
Attendant, given me when I left my home
By good Icarius, and who kept the door,
Though hard to be convinced, at last I yield."
(Cowper's Hom. Odyssey, Book XXIII.)

(20) Ames p. 28.

(21) Moore on Facts, Vol. I. p. 606.

The most striking feature in the handwriting of a person is the uniformity of signature; so said the court in the case of Luco v. State [22].

Sometimes a man uses a different signature for different kinds of documents—his autograph to notes, for instance differing from that on receipts; but a common general character may be visible in all of them, so that a witness who has seen one may be permitted to give his opinion as to others [23].

One person's knowledge of the handwriting of another may be confined to his general style of writing, and may not extend to his signature. A signature may, and very often does, possess a great peculiarity, it may be, in the form of the letters, or in some flourish, which does not attend the writer's general style of writing. The peculiarity is made use of by some persons from mere whim or caprice, by others from a desire to conceal the writer's usual style, or to make his signature difficult to be imitated. Although, therefore, a person can recognise another's general style, it may not follow that he can recognise his style of signature: this he may never have seen [24].

On the other hand, a person may be competent to recognise another's style of signature, although quite unable to recognise his general style of writing; for of his style beyond his signature, he may be quite ignorant; and the one may be very different from the others [25].

**Signature by Mark.**

In an American Court it was held that a witness who has frequently seen a party make his mark to deeds or other writings, and who can testify that he believes that he knows it, may be permitted to prove the execution of an instrument thus subscribed. "It may be more difficult to acquire a knowledge of a simple mark, by which an illiterate man executes a deed, than the knowledge of the handwriting of one who can write his name in full, but we cannot perceive why it may not be done," said the Court. "In some instances the

---

(22) 23. How. (U. S) 515, 541.
(23) Brachmann. v. Hall. 1 Disney (Ohio) 539, 546.
(24) Ram on Facts, p. 55.
(25) Ram on Facts, p. 55.

Referring to this subject, Ram, in his work on Facts says:—

"It is often the habit of a person to sign his name in his ordinary style of writing, making in his signature no difference in the shape of his letters, or otherwise; and yet in this case one not acquainted with the other's style of writing, except in his signature, cannot recognise his style in any other writing, as in the body of a letter, unless he assume, or it be conceded, that the style in his signature is the style of his usual writing; since his style of signature may very much differ from that of his usual writing. And supposing that assumption or concession to be made, it is obvious that one signature, or a hundred signatures, may lead to mistake, since the number of small letters in the name will be few, and that of capital letters still fewer, compared with the whole number of letters in the alphabet; and a strong probability therefore is, that many letters will be found in the body of the writing, which are not used in the signature to it; and of the writer's style in forming these many other letters the witness has no knowledge.

"But, on the contrary, if one is acquainted with the style of another's writing except his signature, which he has never seen, if that style be in the signature, he can as well recognise it in the signature, as he can in any other words composed of the same letters.

"It is probably more often required to recognise a style of signature, than that of any other writing. In a great variety of transactions the body of paper is written by one person, and the signature to it by another; as letters on commercial and other business, bills of exchange, promissory notes, contracts, deeds, wills.

"The impression which one person has in his mind of another's style of signature, may have been made by his seeing many of his signatures, or even one only. And the impression made by the one alone may, for the purpose of proving the person's signature, be as valuable, be entitled to as much weight, as if the impression were the result of seeing many of his signatures. Circumstances may have caused the impression of the style of the single signature to be very deeply and firmly fixed. Yet in ordinary cases the value of the evidence of a person's style of signature will probably be determined by the number of his signatures, which the witness has seen." (Ram on Facts, page 55-56.)

peculiarity may be as strong as that which marks the characters of one who can write, and in other instances not perhaps so great, yet in all, we apprehend, would be found something distinct and peculiar, which would enable one who had frequently seen the party make his mark to know it [26].

In a case in Oregon the Court said: "Considering the manner in which marks of persons incapable of writing their own signatures are usually made by merely touching the pen while the scrivener forms the character, it is a matter of doubtful propriety whether any person ought to be allowed as a matter of evidence, to identify such a mark as a handwriting; but the mark of some persons by reason of methods of their own adoption in its formation, and its inherent peculiarities, might be capable of identification, and we are of the opinion that such evidence ought to be permitted to go to the jury; but the attending circumstances touching the habits of the person whose mark is in the balance, his accustomed manner of making the same, and the peculiarities attending it which render it capable of identification, should be carefully considered and scrutinized in determining the weight to be ascribed thereto [27]."

But generally where a mark, on inspection, appears to have nothing in its construction to distinguish it from the ordinary marks used by illiterate persons to authenticate their assent to written instruments, it is not the subject of opinion evidence [28].

The admission of such testimony would lead to great uncertainty, and open a door to fraud. It would be far more dangerous in the case of wills than in other instruments where living parties may have some means of counteracting its effect [29].

Testimony of the marksman himself denying the genuineness of his mark, twenty or thirty years having elapsed since it was made, was declared to be entirely insufficient to establish the fact of forgery [30].

**Other marks.**

"Mere perpendicular marks, or scratches used either perpendicularly or horizontally on a signature for the purpose of cancelling it, do not contain the characteristics necessary in the formation of letters to enable an expert or any person to speak with any degree of certainty with reference to the person who made the marks, and opinion evidence on the subject is therefore inadmissible [31]."

**Basis of expert evidence as to handwriting.**

It being an incontrovertible fact that the writing of no two persons can ever be identically the same, it follows that there must exist between all writings a distinguishable difference, and that those persons who, by reason of their specially acute natural discernment, and by their special study and experience in the observation of these distinctions, must come to have greater skill in their discovery and specification than can others not so favourably circumstanced, and that the conclusions which such specialists may reach from the study and comparison of different handwritings will be reliable according to the degree of their special skill and integrity and the circumstances of the case.

Referring to this subject, Ames, the great expert in handwriting says:—

"To the casual observer, different handwritings often look alike and would be mistaken one for the other. Few people could distinguish between

(26) Strong v. Brewer. 17 Ala. 706, 710. per Dargan. C. J. Moore on Facts p. 609, 610.
(27) State v Tice 30 Oregon, 457; 48 Pac. Rep. 367, per Wolverton J.
(28) Shinkle v Crock, 17 Pa. St. 159.
(29) Ibid.
(30) Hutcheson v. Meazell, 64 Tex. 604.
(31) Matter of Hopkins, 172 N. Y. 360, 65 N. E. Rep. 173.

the track of a small dog and that of a cat of approximate size, yet the naturalist would readily and unerringly do so. To Mr. Jones "All coons look alike,"—because he is unfamiliar with coons. There are few men who can recognise one bay mule from another in a drove, yet, the dealer readily can do so. His eye is trained. So it is in all the affairs of life. The trained eye and judgment of the specialist observe distinctions that escape the eye of the novice. The distinctive value of the specialist's knowledge and skill is recognized in every walk of life—whether he is an architect, dentist doctor, lawyer, teacher, blacksmith, and so on to the end [32]."

**Its ancient origin and use from earliest times.**

From time immemorial such persons have been called into courts to express their opinions and present their reasons for such opinions concerning their respective callings [33].

Under the Roman law, the judge, had the right to summon those who were specially skilled in any art, trade, or calling, to inform him respecting the same.

In English courts expert testimony has long been admitted. As early as the 16th century (1553), Mr. Justice Saunders said :—"If matters arise in our law which concern other sciences or faculties, we commonly appeal to the aid of that science or faculty which it concerns, which is an honourable and commendable thing in our law, for thereby it appears that we do not despise all other sciences but our own, but we approve of them and encourage them as things worthy of commendation [34]."

**Use of expert evidence in some early English cases.**

In 1774, a celeberated case was tried, where Olivia, Princess of Cumberland, contested a claim under the will of King George the Third, and by the aid of handwriting experts discovered and proved an ingenious forgery, establishing her claim to a legacy of the value of fifteen thousand pounds. In the famous Tichborne trial, handwriting experts played a conspicuous part.

**Illustrative cases. A claim under King George III's Will-contested—Tichborne trial.**

In the trial of Miss Edmonds, of Brighton, in the 18th century, for poisoning a child, the offence came to light and was established under very peculiar circumstances. She had bought poison of a chemist under the assumed name of Wood, which name she signed on the register for the sale of poison. At the time of the inquest on the child, who died from eating the poisoned chocolates, she forged a letter in the name of the coroner, requesting the loan of the chemist's book for inspection at the inquest. The chemist gave the book to the boy who brought the letter, and he carried it to Miss. Edmonds, who tore out as she supposed, the entry she had written. It appeared, however, on the trial that the abstracted entry referred to another Miss Wood, and that the true criminal's writing remained. An expert proved to the satisfaction of the court that the letter and signature were both written by Miss Edmonds, who was convicted of the alleged crime [35].

**Trial of Miss Edmonds.**

The expert has got his own place in making a pronouncement on questioned documents. But much may be done by the Lawyer by close observation and deep thinking. We shall close this chapter with an illustrative case, in which, one of the most daring forgeries in the world was exposed in courts by a Lawyer with sound common sense, and not with the aid of the expert and his art. We refer to the Parnell Commission enquiry, and to the exposure by Mr. Russell of Pigott's forged letter published in the London Times.

**The triumph of a lawyer by close observation and careful study of document.**

(32) Ames p. p. 73—74. (33) Ibid (34) Ibid 74. (35) Ames p. 74.

A decidedly great event in the life of Russell is the defence of Parnell [36].

**Russell's defence of Parnell**

In March 1887 the Times began the publication of a series of articles entitled 'Parnellism and Crime'. These articles were written to prove that the Parnell movement was a revolutionary movement, stained by crime, and designed to overthrow British authority in Ireland.

In April the Times went a step further, and published a facsimile letter, purporting to bear Parnell's signature, in which the murder of Lord Frederick Cavendish (Chief Secretary for Ireland) and Mr. Burke (Under Secretary) in the Phoenix Park, Dublin, on May 6, 1882, was excused. The letter ran as follows :

" Dear Sir,—I am not surprised at your friend's anger but he and you should know that to denounce the murders was the only course open to us. To do that promptly was plainly our best policy. But you can tell him, and all others concerned, that, though I regret the accident of Lord F. Cavendish's death, I cannot refuse to admit that Burke got no more than his deserts. You are at liberty to show him this, and others whom you can trust also, but let not my address be known. He can write to the House of Commons.

Yours very truly,
Charles S. Parnell."

The publication of this letter, of course made a great stir. It was discussed in Parliament and in the country, and people felt that a serious blow had been struck at the prestige of the Irish leader. He alone treated the matter with characteristic *sang froid*, simply stating in the House of Commons that the letter was a forgery, and taking no further trouble about the business. The subject was then for the moment allowed to drop; meanwhile the Times went on publishing 'Parnellism and Crime.'

In this state of affairs, Mr. F. H. O'Donnell, an ex-Irish M.P., feeling himself aggrieved by certain statements in 'Parnellism and Crime', took proceedings against the Times. The Times pleaded that nothing in the articles pointed at Mr. O'Donnell, and the jury took the same view of the case. However, in the conduct of the suit, the Times counsel (Sir Richard Webster, then Attorney-General) reiterated the charges levelled at Parnell and Parnellism, and the old discussion about the Parnell movement and the facsimile letter was reopened. Parnell now asked for the appointment of a Select Committee to inquire whether the facsimile letter was a forgery. The Government refused this request, but proposed instead to appoint a Special Commission, composed of three Judges, to investigate all the charges made by the Times.

Russell returned the general retainer which he had for the Times and appeared before the Special Commission on October 22, 1888, as leading counsel for Parnell. The Attorney-General (Sir Richard Webster) led for the Times. The Commissioners were Mr. Justice (afterwards Lord) Hannen, Mr. Justice Day, and Mr. Justice Smith (afterwards Master of the Rolls). The charges of the Times were practically two fold :— (1) against Parnell personally for writing the facsimile letter; (2) against sixty-five Irish members by name (but really against the whole Irish parliamentary party) for belonging to a lawless, violent, rebellious, and even a murderous organisation whose aim was the plunder of landlords and the overthrow of English rule.

O'Brien the biographer of Russell thus narrates the incident :— I was out of London at the opening of the Commission, and did not call upon

(36) We are indebted to this account of the Parnell Commission enquiry to Mr. O'Brien's Life of Russell.

Russell until the middle of November. On entering his room I was met with a disagreeable look and the exclamation, 'You ought to be ashamed of yourself.'

'Why ?' I asked.

*Russell*: 'This case has been on for a month and you have not put in an appearance during the whole of the time.'

'Well,' I said, 'I am on the spot now, at all events.'

*Russell*: 'Yes, and quite time too; and let me tell you your friend Parnell has been acting very badly. He is a selfish fellow. He thinks only of himself.'

I said, 'And quite right too; for he is worth more to Ireland than anybody else.'

*Russell*: 'He takes no trouble about any part of the case but the forged letter.'

I said, 'He is perfectly right; there is nothing in the case but the forged letter.'

*Russell*: 'I beg your pardon, I think there is something else in the case besides the forged letter. There are specific charges against others and against the movement generally which have to be met; and Parnell ought to trouble himself about these charges and ought to help us to meet them. But he will not even come to consultations except to discuss what directly concerns himself.'

I said, 'That is, the forged letter ?'

*Russell*: 'Yes.'

I repeated, 'And he is perfectly right.' Russell shook his head and looked angry. 'Will you let me,' I said 'put a point to you ?'

*Russell*: (With characteristic readiness to listen to you, no matter how angry or how much opposed to you he might be): 'Certainly.'

I continued, 'Suppose you prove that this letter is a forgery, prove it to the whole world—leave nobody in doubt—what becomes of the Times, even though they should prove the statements in "Parnellism and Crime" up to the hilt? They are beaten, no question about it.'

*Russell*: 'Yes, yes, yes, I understand that.'

I said 'Well, I have not finished yet.'

*Russell*: 'Go on.'

'But suppose you don't prove the letter to be a forgery, and the Times does not make good its charges against the movement generally, then you are smashed beyond all doubt. Is the Court with me so far ?'

*Russell (Smiling)*: 'I quite appreciate what you say my friend, but it is not the point. The letter of course is the main thing, but the case has to be fought through—letter and charges. Parnell ought to throw himself into the whole case, and he does not. That, my friend, is the point.'

Russell's biographer O'Brien thus continues :—The Commission dragged its weary length, along, and the stale story of aggrarian outrages, Land League lawlessness, and Fenian plots were spun out until the whole investigation paled on the public mind, and every one asked, "When shall we get to the letter ?" The Irish member said from the outset that the letter had been forged by Richard Pigott—the same Richard Pigott who had been clerk in the Ulsterman office in Russell's Belfast days, and who had now, after a career of ill-fortune and ill-fame, sunk to the lowest depths of misery and despair. In February 1889 it was known that the Times had bought the

letter from Mr. Houston, the Secretary of the Irish Loyal and Patriotic Union, and that Mr. Houston had bought it from Pigott. But how did Pigott come by it? That was the question of the hour, and people looked forward to the day when Pigott should go into the box to tell his story, and when Sir Charles Russell would rise to cross-examine him. * *

About a week before Pigott was called Russell grew restless and irritable. He looked ill. As usual, I sat occasionally with him at luncheon. He did not like to speak about the case. It pleased him best to talk of something far away from the Special Commission. At times he remained altogether silent looking fixedly on his plate, and giving no sign. His expression was grave, thoughtful, anxious; and his face and manner showed that the strain upon him was intense. Every one knew that all depended on the cross-examination of the man who sold the letter to the Irish Loyal and Patriotic Union. Russell felt it.

On Wednesday, February, 20, Pigott went into the box. He looked well and pugnacious. Any person unaware of the flaws in his character would have regarded him as a respectable man, and a staying witness. He gave his evidence clearly and calmly and at the conclusion of the first day's examination left the box with a self-satisfied expression. On Thursday morning he returned looking radiant, and confidently surveyed the Court. Before the adjournment for luncheon the examination-in-chief closed.

His evidence, so far as the letter was concerned came practically to this: he had been employed by the Irish Loyal and Patriotic Union to hunt up documents which might incriminate Parnell, and he had bought the facsimile letter, ith other letters, in Paris from an agent of the *clan-na-Gael*, who had no objection to injure Parnell for a valuable consideration.

On the rising of the Court Russell returned to his chambers. I went with him. We sat at luncheon together. He looked unusually pale, talked little, and was impatient and irritable. He mentioned some point on which I differed from him. "Don't argue," he said with an angry gesture; then added gently "Don't you see how highly strung I am?" He seemed to have a poor appetite, and rather forced himself to eat.

**Russell's cross-examination of Pigott.**

At about twenty minutes past two Pigott stepped jauntily into the box and Russell rose. I never saw such a sudden metamorphosis in any man. During the whole week or more he had looked pale, worn, anxious, nervous, distressed. He was impatient, irritable, at times disagreeable. Even at luncheon, half an hour before, he seemed to be thoroughly out of sorts and gave you the idea rather of a young junior with his first brief than of the most formidable advocate at the Bar. Now all was changed. As he stood facing Pigott, he was a picture of calmness, self-possession, strength; there was no sign of impatience or irritability; not a trace of illness, anxiety or care; a slight tinge of colour lighted up the face, the eyes sparkled, and a pleasant smile played about the mouth. The whole bearing and manner of the man, as he proudly turned his head towards the box, showed courage, resolution, confidence. Addressing the witness, with much courtesy, while a profound silence fell upon the crowded Court, he began: "Mr. Pigott would you be good enough, with my Lord's permission, to write some words on that sheet of paper for me. Perhaps you will sit down in order to do so." A sheet of paper was then handed to the witness. I thought he looked for a moment surprised. This clearly was not beginning that he had expected. He hesitated, seemed confused. Perhaps, Russell observed it. At all events he added quickly:

'Would you like to sit down?'

'Oh, no, thanks,' replied Pigott, a little flurried.

The President: 'Well, but I think it is better that you should sit down. Here is table upon which you can write in the ordinary way—the course you always pursue.'

Pigott sat down, and seemed to recover his equilibrium.

*Russell*: 'Will you write the word "livelihood"?'

Pigott wrote.

*Russell*: 'Just leave a space. Will you write the word "Likelihood"?'

Pigott wrote.

*Russell*: 'Will you write your own name? Will you write the word "proselytism"; and finally (I think I will not trouble you at present with any more) "Patrick Egan" and "P. Egan"?'

He uttered those last words with emphasis, as if they imported something of great importance. Then, when Pigott had written, he added carelessly, 'There is one word I had forgotten. Lower down, please, leaving spaces, write the word "*hesitancy*".' Then, as Pigott was about to write, he added as if this were the vital point, 'with a small "h".'

Pigott wrote and looked relieved.

*Russell*: 'Will you kindly give me the sheet?'

Pigott took up a bit of blotting paper to lay on the sheet, when Russell, with a sharp ring to his voice, said rapidly, 'Don't blot it, please.' It seemed to me that the sharp ring in Russell's voice startled Pigott. While writing he had looked composed; now again he looked a little flurried and nervously handed back the sheet. The Attorney-General looked keenly at it, and then said, with the air of a man who had himself scored, 'My Lords, I suggest that had better be photographed, if your Lordships see no objection.'

*Russell*: (turning sharply towards the Attorney-General, and with an angry glance and an Ulster accent, which sometimes broke out when he felt irritated): 'Do not interrupt my cross-examination with that request.'

Little did the Attorney-General at that moment know that in the ten minutes or quarter of an hour which it had taken to ask these questions, Russell had gained a decisive advantage. Pigott had in one of his letters to Pat. Egan spelt '*hesitency*'. In one of the incriminatory letters '*hesitency*' was so spelt, and in the sheet now handed back to Russell, Pigott had written '*hesitency*' too. In fact, it was Pigott's spelling of this word that had put the Irish members on his scent. Pat. Egan, seeing the word spelt with an 'e' in one of the incriminatory letters, had written to Parnell saying in effect 'Pigott is the forger. In the letter ascribed to you "*hesitancy*" is spelt "*hesitency*". That is the way Pigott always spells the word. These things were not dreamt of in the philosophy of the Attorney-General when he interrupted Russell's cross-examination with the request that the sheet 'had better be photographed'. So closed the first round of the combat.

Russell went on in his former courteous manner, and Pigott who had now completely recovered confidence, looked once more like a man determined to stand to his guns.

Russell, having disposed of some preliminary points, at length (and after he had been perhaps about half an hour on his feet) closed with the witness.

*Russell*: 'The first publication of the articles "Parnellism and Crime" was on the 7th March 1887?'

*Pigott* (sturdily): 'I do not know.'

*Russell* (amicably): 'Well, you may assume that is the date.'

*Pigott* (carelessly): 'I suppose so.'

*Russell* 'And you were aware of the intended publication of the correspondence (the incriminatory letters)?'

*Pigott* (firmly): 'No, I was not at all aware of it.'

*Russell* (sharply, and with the Ulster ring in his voice): 'What?'

*Pigott* (boldly): 'No, certainly not.' * * *

*Russell*: 'Were you not aware that there were grave charges to be made against Mr. Parnell and the leading members of the Land League?'

*Pigott* (positively): 'I was not aware of it until they actually commenced.'

*Russell* (again with the Ulster ring): 'What?'

*Pigott* (defiantly): 'I was not aware of it until the publication actually commenced.'

*Russell* (pausing, and looking straight at the witness): 'Do you swear that?'

*Pigott* (aggressively): 'I do.'

*Russell* (making a gesture with both hands, and looking towards the Bench): 'Very good, there is no mistake about that.'

Then there was a pause: Russell placed his hands beneath the shelf in front of him, and drew from it some papers—Pigott, the Attorney-General, the judges, every one in Court looking intently at him the while. There was not a breath, not a movement. I think it was the most dramatic scene in the whole cross-examination, abounding as it did in dramatic scenes. Then handing Pigott a letter, Russell said calmly 'Is that your letter? Do not trouble to read it; tell me if it is your letter.'

Pigott took the letter, and held it close to his eyes as if reading it.

*Russell* (sharply): 'Do not trouble to read it.'

*Pigott*: 'Yes, I think it is.'

*Russell* (with a frown): 'Have you any doubt of it?'

*Pigott*: 'No.'

*Russell* (addressing the judges): 'My Lords, it is from Anderson's Hotel and it is addressed by the witness to Archbishop Walsh. The date, my Lords, is the 4th of March, three days before the first appearance of the first of the articles, "Parnellism and Crime".'

He then read:

"Private and Confidential.

"My Lord,—The importance of the matter about which I write will doubtless excuse this intrusion on your Grace's attention. Briefly, I wish to say that I have been made aware of the details of certain proceedings that are in preparation with the object of destroying the influence of the Parnellite party in Parliament."

Having read this much, Russell turned to Pigott and said:

'What were the certain proceedings that were in preparation?'

*Pigott*: 'I do not recollect.'

*Russell* (resolutely): 'Turn to my Lords and repeat the answer.'

*Pigott*: 'I do not recollect.'

*Russell*: 'You swear that—writing on the 4th March less than two years ago?'

*Pigott*: 'Yes.'

*Russell*: 'You do not know what that referred to?'

*Pigott*: 'I do not really.'

*Russell*: 'May I suggest to you?'

*Pigott*: 'Yes, you may.'

*Russell*: 'Did it refer to the incriminatory letters among other things?'

*Pigott*: 'Oh, at that date. No, the letters had not been obtained, I think, at that date two years ago.'

*Russell*: (quietly and courteously): 'I do not want to confuse you at all, Mr. Pigott.'

*Pigott*: 'Would you mind giving me the date of that letter?'

*Russell*: 'The 4th of March.'

*Pigott*: 'The 4th of March.'

*Russell*: 'Is it your impression that the letters had not been obtained on that date?'

*Pigott*: 'Oh, yes, some of the letters had been obtained before that date.'

*Russell*: 'Then, reminding you that some of the letters had been obtained before that date, did that passage that I have read to you in the letter refer to these letters among other things?'

*Pigott*: 'No, I rather fancy they had reference to the forthcoming articles in the Times.'

*Russell*: (glancing keenly at the witness): 'I thought you told us that you did not know anything about the forthcoming articles.'

*Pigott* (looking confused): 'Yes, I did. I find now I am mistaken, that I must have heard something about them.'

*Russell* (severely): 'Then try not to make the same mistake again Mr. Pigott. "Now", you go on (continuing to read from Pigott's letter to the Archbishop) "I cannot enter more fully into details than to state that the proceedings referred to consist in the publication of certain statements purporting to prove the complicity of Mr. Parnell himself, and some of his supporters with murders and outrages in Ireland, to be followed in all probability by the institution of criminal proceedings against these parties by the Government."'

Having finished the reading, Russell laid down the letter and said turning towards the witness: 'Who told you that?'

*Pigott*: 'I have no idea'.

*Russell* (striking the paper energetically with his fingers): 'But that refers among other things to the incriminatory letters?'

*Pigott*: 'I do no recollect that it did.'

*Russell* (with energy): 'Do you swear that it did not?'

*Pigott*: 'I will swear that it did not.'

*Russell* 'Do you thing it did?'

*Pigott*: 'No, I do not think it did.'

*Russell*: 'Do you think that these letters, if genuine, would prove or would not prove Parnell's complicity in crime?'

*Pigott*: 'I thought they would be very likely to prove it.'

*Russell*: 'Now, reminding you of that opinion, I ask you whether you did not intend to refer, not solely I suggest, but among other things to the letters as being the matter which would prove complicity or purport to prove complicity?'

*Pigott*: 'Yes, I may have had that in my mind.'

*Russell*: 'You could have hardly any doubt that you had.'

*Pigott*: 'I suppose so.'

*Russell*: You suppose you may have had?'

*Pigott*: 'Yes.'

*Russell*: 'There is the letter and the statement: (reading) "Your Grace may be assured that I speak with full knowledge, and am in a position to prove beyond all doubt and question the truth of what I say." Was that true?'

*Pigott*: 'It could hardly be true.'

*Russell*: 'Then did you write that which was false?'

*Pigott*: 'I suppose it was in order to give strength to what I said. I do not think it was warranted by what I knew.'

*Russell*: 'You added the untrue statement in order to add strength to what you said?'

*Pigott*: 'Yes.'

*Russell*: 'You believe these letters to be genuine?'

*Pigott*: 'I do.'

*Russell*: 'And did at this time?'

*Pigott*: 'Yes.'

*Russell* (reading): '"And I will further assure your Grace that I am also able to point out how these designs may be successfully combated and finally defeated." How, if these documents were genuine documents, and you believed them to be such, how were you able to assure his Grace that you were able to point out how the design might be successfully combated and finally defeated?'

*Pigott*: 'Well, as I say, I had not the letters actually in my mind at that time. So far as I can gather, I do not recollect the letter (to Archbishop Walsh) at all. My memory is really a blank on the circumstances.'

*Russell*: 'You told me a moment ago, after great deliberation and consideration, you had both (the incriminatory letters and the letter to Archbishop Walsh) in your mind?'

*Pigott*: 'I said it was probable I did; but I say the thing has completely faded out of my mind.'

*Russell*: (resolutely): 'I must press you. Assuming the letters to be genuine, what were the means by which you were able to assure his Grace that you could point out how the design might be successfully combated and finally defeated?'

*Pigott* (hopelessly): 'I cannot conceive really.'

*Russell*: 'Oh, try. You must really try.'

*Pigott*: (in manifest confusion and distress): 'I cannot.'

*Russell* (looking fixedly at the witness): 'Try.'

*Pigott*: 'I cannot.'

*Russell*: 'Try.'

*Pigott*: 'It is no use.'

*Russell* (emphatically): 'May I take it, then, your answer to my Lords is that you cannot give any explanation?'

*Pigott*: 'I really cannot absolutely.'

*Russell* (reading): '"I assure your Grace that I have no other motive except to respectfully suggest that your Grace would communicate the substance to some one or other of the parties concerned, to whom I could furnish details, exhibit proofs, and suggest how the coming blow may be effectually met." What do you say to that Mr. Pigott?'

*Pigott*: 'I have nothing to say except that I do not recollect anything about it absolutely.'

*Russell*: 'What was the coming blow?'

*Pigott*: 'I suppose the coming publication.'

*Russell*: 'How was it to be effectively met?'

*Pigott*: 'I have not the slightest idea.'

*Russell*: 'Assuming the letters to be genuine, does it not even now occur to your mind how it could be effectively met?'

*Pigott*: 'No.'

Pigott now looked like a man, after the sixth round in a prize fight, who had been knocked down in every round. But Russell showed him no mercy.

* * * * * *

*Russell*: 'Whatever the charges (in "Parnellism and Crime," including the letters) were, did you believe them to be true or not?'

*Pigott*: 'How can I say that when I say I do not know what the charges were? I say I do not recollect that letter (to the Archbishop) at all, or any of the circumstances it refers to.'

*Russell*: 'First of all you know this: that you procured and paid for a number of letters?'

*Pigott*: 'Yes.'

*Russell*: 'Which, if genuine, you have already told me, would gravely implicate the parties from whom these were supposed to come?'

*Pigott*: 'Yes, gravely implicate.'

*Russell*: 'You would regard that, I suppose, as a serious charge.'

*Pigott*: 'Yes.'

*Russell*: 'Did you believe that charge to be true or false?'

*Pigott*: 'I believed that charge to be true.'

*Russell*: 'You believe that to be true.'

*Pigott*: 'I do.'

*Russell*: 'Now I will read this passage (from Pigott's letter to the Archbishop): "I need hardly add that, did I consider the parties really guilty of the things charged against them I should not dream of suggesting that your Grace should take part in an effort to shield them; I only wish to impress on your Grace that the evidence is apparently convincing, and would probably be sufficient to secure conviction if submitted to an English Jury." What do you say to that, Mr. Pigott?'

*Pigott* (bewildered): 'I say nothing, except that I am sure I could not have had the letters in my mind when I said that, because I do not think the letters conveyed a sufficiently serious charge to cause me to write in that way.'

*Russell*: 'But you know that was the only part of the charge, so far as you have yet told us, that you have had anything to do in getting up?'

*Pigott*: 'Yes, that is what I say; I must have had something else in my mind which I cannot at present recollect—that I must have had other charges.'

*Russell*: 'What charges?'

*Pigott*: 'I do not know. That is what I cannot tell you.'

*Russell*: 'Well, let me remind you that that particular part of the charges, the incriminatory letters, were letters that you yourself knew all about?'

*Pigott*: 'Yes, of course.'

*Russell*: (reading from another letter of Pigott's to the Archbishop): "I was somewhat disappointed in not having a line from your Grace, as I ventured to expect I might have been so far honoured. I can assure your Grace that I have no other motive in writing save to avert, if possible, a great danger to people with whom your Grace is known to be in strong sympathy. At the same time, should your Grace not desire to interfere in the matter, or should you consider that they would refuse me a hearing, I am well content, having acquitted myself of what I conceived to be my duty in the circumstances. I will not further trouble your Grace save to again beg that you will not allow my name to transpire, seeing that to do so would interfere injuriously with my prospects, without any compensating advantage to any one. I make the request all the more confidently because I have had no part in what is being done to the prejudice of the Parnellite party, though I was enabled to become acquainted with all the details."

*Pigott* (with a look of confusion and alarm): 'Yes.'

*Russell*: 'What do you say to that?'

*Pigott*: 'That appears to me clearly that I had not the letters in my mind.'

*Russell*: 'Then, if it appears to you clearly that you had not the letters in your mind what had you in your mind?'

*Pigott*: 'It must have been something far more serious.'

*Russell*: 'What was it?'

*Pigott* (helplessly, great beads of perspiration standing out on his forehead and trickling down his face): 'I cannot tell you. I have no idea.'

*Russell*: 'It must have been something far more serious than the letters?'

*Pigott* (vacantly): 'Far more serious.'

*Russell* (briskly): 'Can you give my Lords any clue of the most indirect kind as to what it was?'

*Pigott* (in despair): 'I cannot.'

*Russell*: 'Or from whom you heard it?'

*Pigott*: 'No.'

*Russell*: 'Or when you heard it?'

*Pigott*: Or when I heard it.'

*Russell*: 'Or where you heard it?'

*Pigott*: 'Or where I heard it.'

*Russell*: 'Have you ever mentioned this fearful matter—whatever it is —to anybody?'

*Pigott*: 'No.'

*Russell*: 'Still locked up, hermetically sealed in your own bosom?'

*Pigott*: 'No, because it has gone away out of my bosom, whatever it was.'

What followed is thus narrated by Mr. O'Brien:—

**Forgery exposed.**

**A splendid triumph.**

On receiving this answer Russell smiled, looked at the Bench, and sat down. A ripple of derisive laughter broke over the Court, and a buzz of many voices followed. The people standing around me looked at each other and said 'Splendid'. The judges rose, the great crowd melted away, and an Irishman who mingled in the throng expressed the general sentiment in a single word, 'Smashed'. The cross-examination had commenced at about twenty minutes past two; it was over for the day at about twenty minutes to four, when Pigott left the box a broken man. One hour later Russell sat alone in his chambers. One of his 'devils' came in to talk about another case. Russell listened for a while, and then said, 'It is no use. I can't attend to it. You don't know how this kind of thing takes it out of a man. I won't do anything until to-morrow.' On the morrow Pigott reappeared. But the crisis was over. He could no longer hold his own, and with every blow Russell now beat him to the ropes. This is what was written by Mrs. Sidney Buxton: 'I spent Thursday and Friday, 21st and 22nd, at the Parnell Commission, hearing Pigott examined and coming in for the whole of his cross-examination by Sir C. Russell. There was only one and a quarter hour of this on Thursday afternoon, but it was the turn of the tide. It was the most exciting time I ever spent. In the end we came away simply astonished that a fellow-creature can be such a liar as Pigott. It was very funny too: but I could not help thinking of Becky Sharp's "It is easy to be virtuous on 5000£ a year", and to see the old man standing there with everybody's hand against him, driven into a corner at last, after all his turns and twists, was something pathetic. Of course, it is a tremendous triumph, for the Home Rulers.' On Friday, February 22 the Court adjourned until Tuesday 26th. On that morning Pigott was again called, but there was no answer.

The President: 'Where is the witness?'

The Attorney-General: 'My Lords, as far as I know, I have no knowledge whatever of the witness; but I am informed that Mr. Soames (Manager of the Times) has sent to his hotel, and he has not been there since eleven last night.'

Russell: 'If there is any delay in his appearance, I ask your Lordship to issue a warrant for his apprehension and to issue it immediately.'

It was decided, however, that no steps should be taken until next day.

Next day the Attorney-General informed the Court that a document in Pigott's handwriting had been received from Paris. A closed envelope, addressed to one of the Times' agents, was then handed to Mr. Cunyngham, Secretary to the Commission. The envelope contained a confession of guilt taken down by Mr. Labouchere, M. P., in the presence of Mr. G. A. Sala and signed by Pigott on February 23 at Mr. Labouchere's house. I shall quote one passage from the confession.

"*Letters*—The circumstances connected with the obtaining of the letters as I gave in evidence are not true. No one save myself was concerned in the transaction. I told Mr. Houston that I had discovered the letters in Paris, but I grieve to have to confess that I simply fabricated them, using genuine letters of Messrs. Parnell and Egan in copying certain words

phrases, and general character, of the handwriting. I traced some words and phrases by putting the genuine letters against the window and placing the sheets on which I wrote over it. [37] These genuine letters were the letters from Mr. Parnell, copies of which have been read in Court, and four or five letters from Mr. Egan which were also read in Court. I destroyed these letters after using them. Some of the signatures I traced in this manner, and some I wrote. I then wrote to Mr. Houston, telling him to come to Paris for the documents. I told him that they had been placed in a black bag with some old accounts, scraps of paper, and old newspapers. On his arrival I produced to him the letters, accounts, and scraps of paper. After a brief inspection he handed me a cheque in Court for 500£, the price I had told him I had agreed to pay for them. At the same time he gave me 105£ in bank notes as my own commission."

In the face of this confession the Times of course withdrew the facsimile letter, and the Commission found that it was a forgery. The last scene in this squalid drama was enacted on March 5. A warrant had been issued for Pigott's arrest on the charge of perjury. The police tracked him to an hotel in Madrid. 'Wait,' he said to the officers who showed him the warrant, 'until I go to my room for some things I want.' The officers waited; the report of a pistol was heard; there was a rush to Pigott's room; and the wretched man was found on the floor with a bullet through his brain. He had died by his own hand.

(37) This is an instance of forgery by tracing as distinguished from free-hand forgery. See the subject dealt with in detail in a subsequent chapter.

CHAPTER II.

# Formation of Handwriting.

CONTENTS:—Nature of handwriting in general.—Factors in the formation of handwriting.—Influence of the school-room.—Family influence.—Illustrations.—Innocent father convicted for guilty son.—Father taking on himself the crime of his guilty daughter.—Common business surroundings.—Race and nationality.—sex influences.—Influence of the mind.—"Writing a mirror of the mind".—Physical causes in the formation of figures caused by different kinds of movements in writing.—Four kinds of movements in writing.—(1) Finger movement.—(a) Simple finger movement.—Limited pen-scope in finger movement.—Marks of illiterate persons generally made by finger movement.—Other cases where finger movement is most commonly employed.—(b) Advanced finger movement.—(2) Wrist movement.—(a) Simple.—(b) Combined finger and wrist movement.—(3) Fore-arm movement.—(a) Simple.—(b) Combined finger and fore-arm movement.—(4) Raised arm or whole arm movement.—Characteristics of these different kinds of movements.—Eccentric and whimsical writing.

**Nature of handwriting in general.**

The making of any mark upon any surface by direct human agency, as a means of communicating information to a fellowman is (in a broad sense) handwriting; this may include engrossing and drawing, and even painting. Nevertheless, in its popular acceptation the term "handwriting" is limited to that form of *freely written characters* usually adopted by one person in sending messages to another person.

In its restricted sense, therefore, handwriting may be considered as the written speech of the individual; like his oral efforts—and, indeed, like his every act—it soon becomes impressed with characteristics peculiar to himself, and tending to differentiate him from all other individuals. This establishes for him a customary and distinctive style, in writing, which may be more or less varied, from time to time, by accidental causes, such as haste, carelessness, position in writing, excitement, weakness or disease. [1]

Lavater, the great Swiss physiognomist, thus records his opinion:—"Individual writing is inimitable. The more I compare the different handwritings which fall in my way, the more I am confirmed in the idea that they are so many expressions of so many emanations of the character of the writer. Every country, every nation, every city has its peculiar handwriting."

Several causes combine to stamp upon the writing of a person his individuality.

**Factors in the formation of handwriting.**

The personal qualities, taste, judgment, disposition, and environment of the writer are powerful elements in shaping his style [2].

The use of a particular style of copy by the young student gives the first impulse for the formation of the peculiar style of his handwriting. It is sometimes urged as an objection to the use of engraved copy-books in public schools, that from the uniform and impersonal character of the copies there is danger that pupils will acquire a style of writing so nearly alike as to eliminate the ordinary personality by which the writing of one person is distinguished from that of another. True personality in writing can be neither taught nor materially hindered by the style of copy or effort of the

**Influence of the School Room.**

(1) Article in Ame. Law Journal cited in 21 Cr. L. J. 46. (2) Ames. 23.

teacher. The peculiarity of style comes by evolution through time and circumstances, and those who are apprehensive lest all or many people should come to write alike, from any cause, might be equally apprehensive lest the same childish forms and features which they see in the school room should remain unchanged through advancing years. The teacher need be concerned only in assisting the learner to acquire all the essentials of a good handwriting—namely, good, legible forms, together with ease and grace of execution [3].

Similarity in writing, may, however, occur in cases where "persons of nearly equal skill have learned to write by practising from the same copies, and whose hands have not subsequently changed by practice under widely different circumstances, or been dominated by strong peculiar personal traits. In such writing there will be many accidental coincidences of form and combination between that of different writers, and mistaken identity is liable to be made, except by those to whom the handwriting is thoroughly familiar, or from a somewhat expert examination [4]."

"Evidence as to handwriting is also subject to sources of fallacy and error, among which may be enumerated tuition by the same preceptor, employment with other persons in the same place of business, as well as designed imitation or disguise, all of which are frequently causes of great similarity in writing [5]."

Sometimes members of the same family possess striking similarities in the formation of their handwriting as in their persons and characteristics.

**Family influences.**

This resemblance very naturally results from coincident instructions, example, and hereditary family traits. "These family resemblances are occasionally so great as to lead to mistaken identity of both person and writing, by persons of limited acquaintance, but not of either by intimate relatives or associates. In neither case can we conceive a complete and perfect identity to be possible [6]."

**Illustrations: Innocent father convicted for guilty son.**

A farmer was tried under the special commission for Whiltshire in January, 1831, upon an indictment which charged him with having felonously sent a threatening letter, which was alleged to have been written by him. That the letter was in the prisoner's handwriting was positively sworn to by witnesses who had had ample means of becoming acquainted with it, while the contrary was as positively asserted on the part of the prisoner by numerous witnesses equally competent to speak to the fact. But the scale appears to have been turned by the circumstance that the letter in question, and two others of the same kind sent to other persons, together with a scrap of paper found in the prisoner's bureau, had formed one sheet of paper, the ragged edges of the different portions exactly fitting each other, and the water-mark name of the maker, which was divided into three parts, being perfect when the portions of paper were united. The jury found the prisoner guilty, and he was sentenced to be transported for life. The judge and jury having retired for a few minutes, during their absence the prisoner's son, a youth about eighteen years of age, was brought to the table by the prisoner's attorney, and he confessed that he had been the writer of the letter in question and not his father. He then wrote on a piece of paper from memory a copy of the contents of the anonymous letter, which on comparison left no doubt of the truth of his statement. The writing was not a verbatim copy, although it differed but little; and the bad spelling of the original was repeated in the copy. The original was then handed to him

(3) Ibid 29.
(4) Ibid 36.
(5) Wills' Cir. Evi. 233.
(6) Ames 33.

and on being desired to do so, he copied it, and the writing was exactly alike. Upon the return of the learned judge the circumstances were mentioned to him, and he had the prisoner tried upon a second indictment for sending a similar letter when the son admitted in the witness box writing and sending all the three letters in question, and the father was at once acquitted. The son was subsequently indicted for the identical offence which had been imputed to the father; he pleaded guilty, and was sentenced to transportation for seven years. It appeared that he had access to the father's bureau, which was commonly left open [7].

**Father taking on himself the crime of his guilty daughter.**

"No observer of passing events, or reader of newspapers, during the early part of the nineteenth century will require to be told the history of the ex-judge Robert Johnson, the subject of prosecution for a seditious libel, under the strange circumstances of his holding, at the time, a seat upon the bench, and of there being absolutely no evidence of his authorship, beyond a sort of general conviction that he was a likely person to do an act of the kind. The article alleged to be libellous was an attack upon Lord Hardwicke, in his capacity of Lord Lieutenant of Ireland. It was published in Cobbett's Register, under the signature of Juverna, and was, in fact, composed by the judge. Nevertheless, the manuscript, although sworn by a Crown-witness to be in Mr. Johnson's handwriting, was actully written by his daughter. This circumstance he might have proved; but as he could not do so without compromising his amanuensis, the jury were obliged to return a verdict of guilty [8]."

**Common business surroundings.**

Men in certain businesses or professions sometime adopt peculiarities of characters, though less frequently than formerly; and there are also characteristic peculiarities indicative of age, infirmity, and sex [9].

**Race and nationality.**

The distinguishing personality of handwriting is not limited to individuals. The writing of the different races and nationalities in the world is marked and varied in its idiosyncrasies as are the physiognomies and other peculiar race characteristics [10].

Every country, every nation, every city has its peculiar handwriting. The extensive and close observer can distinguish between nationalities by their writing as he does by speech, physiognomy or any other race peculiarity [11].

Take, for instance, a collection of signatures written by persons of different nationalities—American, English, German, French, etc. One who is familiar with the writing of such nationalities will distinguish between them with about as much certainty as he would between the groups of persons by whom they were written [12].

Some years ago Mr. Ames prepared an elaborate testimonial to one John W. Mackey as from the employees of a Cable Company, and, when completed, pages of the same were sent to the leading offices, for the signatures of the employees of different nationalities, and a comparison of those signatures revealed the fact that the signatures of persons of each of the English, American and French nationalities possessed peculiar and distinguishable characteristics of their own [13].

---

(7) Wills' Cir. Evid. 291—292.
(8) Lord Cloncurry's Recollections of his Life and Times, p. 302. Ram on Facts, page. 54.
(9) Wills. Cir. Evid. 234.
(10) Ames. 29.
(11) Lavator.
(12) Ames 277.
(13) Ibid 29.

Even when one has learned to write another than his native language, the race-distinction remains to a preceptible degree [14].

An English man talking Bengali can easily be distinguished from a native of Bengal talking the same language. Even so a foreigner's writing of an Indian language usally retains some peculiarities of style, as perceptible to the close observer as the accents of his speech.

Sex also plays a prominent part in the formation of the handwriting of the person. The women betrays her sex in her writing as much as in her daily actions. It is said that a boy delights in his hobby-horse and the girl in her doll; the greater and more heroic things of life engage the attention of men, while women are led by their nature and instinct into the more circumscribed realm of social and domestic life. She ornaments her home and decorates her person quite beyond the inclination of man. She is punctilious as to the niceties and details of life; he is impatient of them. So also, in writing, a woman can omit no detail that catches her fancy more than she could omit to adorn her person with some dainty ribbon. It is thus that a woman betrays her sex in the fastidious detail of her writing.

**Sex influences.**

It should not be forgotten that here, as in other respects abnormal cases do arise. It occasionally happens that some masculine woman will so closely approximate the plainness of male handwriting as to challenge a sex identity, just as an occasional male will manifest, in his writing, a feminine caprice to a degree that will destroy any sex distinction [15].

Although it be a fact that writing ultimately becomes the automatic production of the hand, it is equally a fact that it does so as the pupil and agent of the mind; and in the moulding process the peculiar qualities of its tutor and master enter unconsciously into its composition, and it becomes, as it were, a mirror of its creator—the mind [16].

**Influences of the mind—"writing a mirror of the mind"**

Several physical causes also conspire to stamp upon the writing of different persons their own personality. One having short, thick fingers, the muscles of which, with those of the hand and arm, are hardened and stiffened by severe labour and are little exercised in writing, cannot possibly write like one having long, flexible fingers constantly exercised in writing [17].

**Physical causes in the formation of figures—caused by different kinds of movements in writings.**

There are four main movements employed in the formation of figures and letters:—(1) Finger, (2) Wrist, (3) Fore-arm and (4) Whole arm movements. These again are sub-divided according to the various degrees of combinations of each of the above movements as the simple finger movement, the advanced finger movement, the combined finger and wrist movement, the combined finger and fore-arm movement; and sometimes a whole-arm movement is united with one or more of the others [18].

**Four kinds of movements in writing.**

Finger movement is that movement produced by the muscular action, that is the extension and contraction, of the thumb, first and second fingers, the hand and arm remaining stationary, except for lateral motion.

**(1) Finger movement.**

In the finger movement the hand and arm rest on the table, the motion of the writing being performed chiefly by the finger [19].

**(a) Simple finger movement.**

---

(14) Ibid 33. (15) Ibid 42.
(16) See the subject discussed at length in a later chapter "correspondence between character and handwriting". Ames 37.
(17) Ibid 23. (18) Ames 43; Hardless 46. (19) Ames 43.

A distinguished expert says that "the finger movement is that method of writing in which the letters are made almost entirely by the action of the thumb and the first and second fingers, the actual motion extending to the second and slightly to the third joints. This is the movement employed by children and illiterates and generally by those with whom writing is an unfamiliar process. Most of the new 'vertical writing' is produced by this movement. The finger movement gives but little freedom of any kind and especially but very little slight lateral freedom. Such writing shows lack of clear cut, smooth strokes and contains numerous broad curves, but is marked by somewhat irregular connections between letters and parts of letters and is usually slow and laboured. It is the movement nearly always employed in forged writing [20]."

The finger movement is the first or initial movement in writing, and this writing is usually poor owing to excessive gripping of the pen.

"Finger movement is comparatively easy to acquire because the levers are relatively short and the power close to the weight—the contraction near the pen [21]."

But the "finger movement is rather limited in scope, crampt in manner, and irregular in execution. It is easily acquired but tiring in use. Slow, accurate writing may be done very successfully with it, but rapid writing tires the fingers, and they fail to produce graceful forms [22]."

Writing with the finger movement cannot produce the flowing, easy, and graceful style of one who calls the muscles of the wrist or forearm into use [23].

Writing produced by the employment of this method is usually shaded, slow, formal and without dash or flourish and is most susceptible of forgery or imitation [24].

**Limited pen-scope in finger movement.**

The distance covered on paper by the pen without change of pivot otherwise called by experts the "pen-scope" is largely dependant on the kind of movement employed. The pen-scope in finger movement writing is very limited. Forearm movements generally have an extended pen-scope and this increases according to the distance between the pen and the arm rest or pivot.

**Marks of illiterate persons generally made by finger movement.**

Marks of illiterate persons are generally made by the finger movement. Similarly those who have learnt no more than just to write their signatures are usually capable of employing only this movement. So also persons who have learnt to use some small symbols to represent their marks for signatures only employ this movement.

**Other cases where finger movement is most commonly employed.**

This is also the method which would generally be employed in interpolating words or figures in completed documents.

In correcting drafts, where interliniations or additions have to be made, this method is often employed for want of space on paper.

Persons otherwise accustomed to the more advanced movements adopt this method when putting their initials in informal documents.

**(b) Advanced finger movement.**

The advanced finger movement consists of an easier execution of characters and their longer combinations than the simple finger movement, the hand moving more easily over the paper upon the nails of the third and fourth fingers.

(20) Hardless 47.
(21) Zaner on writing cited in Hardless p. 46.
(22) Ibid.
(23) Ames 23.
(24) Ibid 43.

(2) Wrist movement: (a) Simple.

The wrist movement is the name given to the writing in which the motion is produced mostly by the wrist. Women generally employ the wrist movement, in their writing. Such writing is usually angular.

Such writing is less formal (than the finger movement) and is written with facility and more or less dash.

(b) Combined finger and wrist movement.

The fingers are also sometimes employed to assist the wrist, and in such cases the writing would be what is called the combined finger and wrist movement. In this method, the action of the wrist chiefly supplies the motion, and the writing is characterised by a considerably enlarged scope [25].

(3) Forearm movement: (a) Simple.

The forearm movement is the one that is generally adopted by persons who have to do a considerable amount of writing work. This is less tiresome to the writer than the other movements referred to.

(b) Combined finger and forearm movement.

The combined finger and forearm movement is the most easy and rapid of the movements, the motion coming chiefly from the action of the muscles of the forearm. In this movement writing is usually less formal and accurate than writing on either the finger or wrist movements, and requires very much more discipline to acquire or retain than do those movements.

(4) Raised arm or whole arm movement.

The raised arm or whole arm movement is the action of the arm when raised and used from the shoulder. This is the mode used for ornamental or flourishy letters and rubrics and is sometimes seen in the headings and on covers of large ledgers and account books, and addresses on large envelopes. This is the movement also employed in blackboard writing and other writing on a very large scale [26].

Characteristics of these different kinds of movements.

It is exceedingly difficult for a person habitually writing by one movement to successfully imitate writing executed by another movement.

The greater the freedom of movement in writing, the more difficult it is to forge or simulate.

One habituated to the finger movement cannot successfully forge the writing of a fore-arm writer.

It is possible for a more skilful writer to descend to the low art of an unskilled writer, but it is far less probable that the unskilled hand should ascend to a much higher scale of art than it has ever known or practised.

The forearm writer will be much more successful in imitating writing written with the finger movement.

Writing and signatures which are slowly and laboriously written on a finger movement can be most easily and successfully imitated [27].

Eccentric and whimsical writing.

It is an observable fact that original and highly eccentric persons usually develop an equally original and eccentric handwriting [28].

There are cases of " whimsical, nondescript styles which we occasionally find, in which the writers utterly ignore all system or example, and seem to defy alike all rules of art and nature by deliberately introducing forms and

(25) Ames 43—44.
(26) Ibid.
(27) Ibid.
(28) Ibid 33.

combinations which may be anything or nothing according to their position and the context, and which constitute as a whole a "hand" as grotesque and inimitable as the character of its author".

There is another case of eccentric writing consisting of well-nigh unintelligible hieroglyphics of some great men, whose essentially bad writing is the result, more of an attempt to force an unskilled hand to perform the utterly impossible task of keeping pace with their rushing torrent of thoughts, than of any real eccentricity of character [29].

Much bad writing results from the effort of an untrained hand, striving to perform the impossible task of recording the thought of the highest trained minds.

When a hand capable of writing well thirty words per minute endeavours to record the thoughts of a mind that can furnish two hundred words in the same time, it often descends to dots, dashes and slurs, legible only from the context [30].

(29) Ibid.

(30) Ibid 23.

CHAPTER III.

# Variations in writing.

## (Normal and Abnormal Handwriting).

CONTENTS:—Variations in handwriting.--Necessity for a knowledge of the similarity and variations and causes thereof.—Methods of study and investigation.—Variations of handwriting—Judicial dicta as to.—Persistence of personality under varying circumstances —Variance between signature and other writing.—Causes of variation in handwriting.—(i) Nature of pen, paper, ink, position of writer etc.—(ii) Other physical causes—Signature of wills.—(iii) Available space for writing.—(iv) Condition of health.—(v) Mental condition.—(vi) Age and infirmity.—(vii) Impairment of sight.—(viii) Nervous disease.—(ix) Hand benumbed with cold.—(x) Muscular difficulty.—(xi) Intoxication.—(xii) Literacy or otherwise of the writer.—(xiii) Tremor.—(xiv) Writing resumed after long vacation.—(xv) Writing at the beginning and end of a long document.—(xvi) Filling up of blank spaces in document.—(xvii) Writing with left hand.—(xviii) Writing with pen held by the teeth or toes.—(xix) Writing by a guided hand.—(xx) Writing by a palsied hand.—(xxi) Writing under hypnotism or hysteria.—(xxii) Writing a disguised hand.—(xxiii) Writing with different instruments—pencil, pen and ink.

**Variations in handwriting.**

The circumstance, that few persons constantly keep the very same character of their handwriting, is a fruitful source of mistake in the identity of writings. A usual style of signature, or other writing, is frequently much altered by time, hurry in writing, temporary nervousness, or unsteadiness of the hand, or even by the kind of pen used, quill or steel, or the badness of a pen. And it is common that a person writes different hands at different periods of his life. This may be the effect, not only of increase in age, but of a habit contracted from time to time of writing larger or smaller, or forming letters after a different fashion, or of using abbreviated words, or words differently abbreviated [1].

---

(1) Ram on Facts p. 53. The effect of time is visible both on the countenance of the person as well as the formation of his writing. Time alters the form of features, imparts wrinkles, changes the complexion, whitens and destroys hair.

"Thou changest not: but I am changed,
Since first thy pleasant banks I ranged;
And the grave stranger, come to see
The play-place of his infancy,
Has scarce a single trace of him,
Who sported once upon thy brim."
—(*Bryant's Poems* (*The Rivulet*), *p. 51, Eng. Ed., 1850. Ram on Facts, page 60*).

Already hoary age doth mark my brow,
And ploughs my face in wrinkles, not a few;
My late companions, could they see me now,
Would fail to recognise the friend they knew.—(Ovid. Port. lib. i; 4).

"It costs me not much difficulty to suppose that my friends, who were already grown old when I saw them last, are old still; but it costs me a good deal sometimes to think of these, who were at that time young, as being older than they were. Not having been an eye-witness to the change that time has made in them, and my former idea of them not being corrected by observation, it remains the same; my memory presents me with this image unimpaired; and while it retains the resemblance of what they were, forgets that by this time the picture may have lost much of its likeness, through the alteration that succeeding years have made in the original." *Cowper's Works* (*Letters*). Vol. IV, p. 41, ed. 1836.

"If two persons, each between sixty and seventy years of age, were forty years ago almost daily together and intimate friends, but during those forty years have never met, and at the end of that time they happen to meet, a great probability is, they will not at all recognise each other; and if each is convinced of the other's identity, it will not be by their sight, but by their conversation, bringing to each other's mind events or circumstances, which took place antecedent to the forty years, and of which each has a remembrance." *Ram on Facts, page 61.*

**Necessity for a knowledge of the similarity and variations and causes thereof.**

In the first place, in order to identify handwriting correctly it is as important to know how handwritings by different writers are likely to resemble each other as to know how they may vary.

"Writings in the same language must inevitably resemble each other in many ways, and certain modifications of writings in the same language must necessarily have many similarities."

Handwritings of the same system, learned in the same schools, and writing by different writers of the same nationality must also inevitably be similar in many ways.

As a basis, therefore, of an accurate judgment on the identity of handwriting, one must possess some knowledge of these basic facts, or, error is not only possible but probable. It will readily appear how one attempting to identify an anonymous letter showing the characteristics of an unfamiliar style of any kind will be inclined to say that it was written by any suspected writer who may happen to write that unknown style.

It may be a dangerous assumption for one to undertake to identify a disputed handwriting who is unacquainted with the characteristics of the ordinary differing styles of handwriting as affected by use, system, nationality, sex, age, and occupation [2].

**Methods of Study and investigation.**

This special knowledge enables the observer to recognize, identify and correctly interpret the great variety of characteristics which must be depended upon to identify a piece of handwriting. Judgment on the subject must finally be based upon a study of similarities and differences as compared with each other, for, to some extent there must be both in any two specimens of handwriting in the same language. A mere statement of these facts is sufficient to show the danger when handwriting identification is made by those without experience and without any knowledge whatever of these principles. What illuminates, vitalizes and safeguards testimony on the subject is clear and intelligent discussion of the reasons for the opinions expressed.

The controlling principle underlying every act of identification is that sufficient characteristics must combine to exclude the practical possibility of accidental coincidence. Accuracy is finally dependent upon the number and character of the characteristics relied upon and error may result either because a conclusion is based upon too few characteristics or from a misinterpretation of the characteristics. Error in identifying a person may arise from a conclusion based upon only one or two characteristics of a general nature, or on the other hand, such identification may become unmistakable if marks, scars, measurements, and other significant characteristics combine in sufficient number. The problem in all identification is the discovery and weighing of the characteristics.

To one unfamiliar with the personal characteristics of a foreign race, like the Chinese for example, any two Chinamen of about the same age look much alike. The reason for this is that only the pronounced characteristics are noted and these, being divergent from those with which the observer is familiar, make different individuals look alike. This same error is possible in any kind of identification if based upon characteristics unfamiliar to the observer.

It is contended that handwriting can be identified as we recognize the face of a friend, and that we gain a knowledge of it incidentally and without

(2) Article by Osborne in Ame. Law Rev; cited in 16 Cr. L. J. 97—99.

effort. It is true that we recognize the usual, undisguised writing of our friends just as we recognize them in their usual dress and character. The difficulty is that a disputed writing may be either a clever imitation or a more or less skillful disguise, and in either case superficial knowledge of a handwriting, limited to the recognition of only its conspicuous or surface features, may easily lead to error. Under these conditions the very least similarity is often taken as proof of genuineness or, on the other hand, the slightest divergence from normal may be construed as proof of forgery, the error thus going in either direction.

Other sources of error are lack of knowledge of certain common variations, modifications, and developments of handwriting in the same language, and unfamiliarity with the usual normal variation in the handwriting of any writer. It is inevitable that handwriting should be somewhat affected by the conditions under which it is written, and one who attempts to identify it should know what the reasonable range of this variation is and this fact must always be taken into account in reaching a judgment on the subject.

The most common source of error is the basing of opinions on "general appearance" alone. In such judgments the effect of system or national characteristics is not properly considered, and the distinction between general and individual characteristics is not made. The opinion is not based upon any reasons that can be put into words, but results from a kind of assumed occult or clairvoyant power. This fallacious and indefinite doctrine of dependence on "general appearance" alone has been advocated by numerous legal text writers whose views have been based largely upon certain old legal opinions that have been cited many times [3]."

**Variations in handwriting—Judicial dicta as to**

"It is within the range of common experience and observation that the genuine signatures of the same person vary greatly according to the circumstances and conditions under which they are written [4]."

"There is often a slight variation in the different signatures of the same person, and this might very well cause persons called as witnesses on the subject to doubt as to the genuineness of some of them [5]."

Sir John Nicholl speaking of that weakest and most deceptive of all evidence—dissimilitude of handwriting, said that "if such evidence may have some slight weight where the case for its affirmative proof depends on handwriting, still against the positive evidence of witnesses attesting and deposing to a signature as actually made in their presence it can scarcely have any effect [6]."

In another case he said: "Without knowing very precisely the state and condition of the writer at the time, and exercising a very discriminating judgment upon these, persons deposing especially to a mere signature not being that of such or such a person, from its dissimilarity, howsoever ascertained, or supposed to be, to his usual handwriting, are so likely to err that negative evidence to a mere subscription or signature can seldom, if ever, under ordinary circumstances, avail in proof against the final authenticity of the instrument to which the subscription or signature is attached [7]."

The question whether a person whose genuine signatures were in evidence could have improved his handwriting in a short time so as to make a signature as good as the disputed one, was held not to be a proper subject for the testimony of handwriting experts [8].

(3) Ibid.
(4) Roberts v. Woods. 82 Ill. App. 630. 645, per Grabtree. J.
(5) Scott v. New Brunswick. Bank, 31 N. Bruns. 21, 35; per Sir John C. Allen. C. J.
(6) Young v. Brown. 1 Hag. Ecc. 556, 3 Eng. Ecc. 243—249.
(7) Robson. v. Rocke, 2 Add. Ecc. 53.
(8) McKeone v. Barnes. 108. Mass.

Nothing is more difficult of successful simulation, and nothing is more difficult to destroy, than character in handwriting [9].

**Persistence of personality under varying circumstances.**

Ames says:—"It is a fact universally recognized by experts and those well informed respecting handwriting, not only that every man has got distinctive characteristics in his writings and signature, that distinguish him from the rest of the world but also that the same man never writes his signature twice exactly alike. Approximations may be very close, but never microscopically the same. While this is true of measurements and minutiæ of detail, there are yet ever-present, coincident characteristics that positively identify one genuine signature with another. Letters and writing no more change *characteristics* with their measurements, than does a square, a circle, or a triangle."

Signatures may differ widely in their general appearance, according to their size, purpose, the ink or pen with which they are written, physical or mental condition of the writer, whether written with haste or deliberation, etc; but none or all of these circumstances can create a new handwriting any more than a change of garb or circumstances can make a new man. It is the same character of writing or man that is appearing in a new role. And what is true of a signature is also largely true of any extended writing [10].

Making full allowance for the effect of all abnormal conditions of a person upon his writing, for instance, writing with an untrained left hand, or while intoxicated, or in a hypnotic state or by a paralytic or one infirm from old-age, disease, or impaired mental or physical capacity from any cause, yet, the hard fact remains that the distinctive characteristics of the writer cannot be obliterated from the writing or the signature so as to make it difficult or impossible for a close observer to detect the common feature in all the writings [11].

It has been observed that even under any peculiar conditions the hand, which from lifelong practice has come to write, as it were, automatically, through the sheer force of habit, continues, however changed the circumstances, to be dominated by the same old habits, and strives to write as before; and its efforts will be modified to a degree, and in a manner, peculiar to the nature and extent of the difficulty under which it writes.

**Variance between signature and other writing.**

One's signature usually differs from his general writing from the fact that there is more thought and care exercised in the choice of types of letters and so combining them as to give the greatest facility in writing it, and frequently artistic effect is considered; and from the more frequent repetition of an autograph it is written more automatically than the body of the writing. It is usually more or less monogrammic in its character, and comes ultimately to be more personified and to stand in a peculiar manner as the representation of its author. It palpitates, as it were, with his very life and character,—it is his *Alter Ego* [12].

**Causes of variation in handwriting.**

A person's handwriting "may be affected by his health, mood of mind at the time he writes, his haste or leisure in writing, the character of the pen, ink, or paper, or other fortuitous circumstances [13]."

"Dissimilitude may be occasioned by a variety of circumstances—by the state of the health and spirits of the writer, by his materials, by his

(9) Ames 54—57. (10) Ibid. (11) Ibid 47. (12) Ibid 57.
(13) Per Biddle C. J. in Jones v. State, 60 Ind. U. S. 241, 244.

position, by his hurry or care—circumstances which deserve still more consideration when witnesses rest their opinion on a fancied dissimilarity of individual letters [14]."

(i) Nature of pen, paper, ink, position of writer etc.

"It is the experience of all business men that persons often vary materially in their signatures," said Surrogate Calvin of N. Y., "depending sometimes upon the character of the pen, quality of paper or ink, and nervous condition of the writer, his posture in writing, his absence from other interference, and many other circumstances which might be suggested, all of which serve to occasion dissimilarity [15]."

In a case in New Jersey the Court unhesitatingly declared that "dissimilarities pointed out by a famous expert as indicating forgery of a signature were easily accounted for by the fact that the signature was written with a half-stub pen, and that the pen was held by the writer in a position a little different from that in which he was in the habit of holding it [16]."

It is a matter of common experience that different pens and different inks are used in the writing of a single document; "and this may cause a difference in the general style of writing and give to the document a false appearance of having been written at different times [17]."

Where a document is all written by the same hand the parts may not be uniform in hue or in other respects by reason of a freer flow from the pen, consequently a greater accumulation of ink at one point than at others. It is the common experience of every scrivener that irregularities in the general appearance of written instruments, a diversity in the form and shading of the letters are not only possible but of very frequent occurrence in writings by the same person at the same time, and with the same pen and ink, and that such is especially liable to be the case where the scrivener writes from dictation with his attention divided between the mental operation of comprehending and formulating the instructions of the person dictating and the physical operation of placing the same upon the paper [18].

(ii) Other physical causes—signature of wills.

"Of equal importance are the physical circumstances surrounding an individual, the height of the table at which he sits, the differences between sitting and standing, when he has to write in a posture to which he is unaccustomed, the flexibility and peculiar character of the pen or quill, the kind of ink and the substance supporting the paper. A trial will speedily convince any one of the radical differences perceptible between two successive signatures when the only circumstance altered has been to write one on marble and the other on cloth; or when the difference is in the kind of paper—those accustomed to ruled paper may write badly on unruled—and the same may be said as to the peculiar quality of the paper, whether sized or unsized, the amount of light in the room etc. The circumstances affecting handwriting are almost numberless. The state of bodily health is another point. A natural condition of the parts of the body used in writing is of prime importance. A trifling blow on the arm, the effects of a slight fall, a rheumatic or neuralgic pang, or gouty twinges may either completely annul or greatly modify the power and facility of writing. Tremulousness of the hands, due to partial paralysis and a weakening in physical and mental power, may induce a shaky handwriting. Any one of these circumstances may completely vitiate all the learned disquisitions of these

(14) Per Sir John Nicholl, Constable v. Steibel. I Heg. Ecc. 56.
(15) Servant v. Hesdra, 5 Redf. N. Y. 47, 60 (contested will admitted to probate).
(16) Greenwood, v. Henry. (N. J. 1894). 28 Atl. Rep. 1053. 1057.
(17) Matter of Taylor, 126 C. 97, 58 Pac. Rep. 454.
(18) Matter of Carver. (Surrogate Ct. 3 Misc (N. Y.)). 567.

experts on what should be the exact uniformity of hairstrokes, base-lines, loops, and slopes. A moment's reflection will show how competent any one of the above circumstances may be to produce alterations in the handwriting which can be rendered apparent by a rapid scrutiny, such as was bestowed on Mr. Taylor's signature; and in this connection I may observe that according to the testimony of one of the witnesses, Mr. Taylor suffered in his shoulder and hands from rheumatic ailment; a fact not known to the experts examined. The fact that such differences were discovered by these experts will lose any significance when it is considered that the process they employed will produce like results when applied to several copies of almost any signature, provided they were made at different times and under different circumstances [19]."

"The slightest peculiarities of circumstance or position" said Sir John Nicholl, "as, for instance, the writer sitting up or reclining, or the paper being placed upon a harder or softer substance, or on a plane more or less inclined—nay, the materials as pen, ink, etc., being different at different times—are amply sufficient to account for the same letters being made variously at different times by the same individual. Independent, however, of anything of this sort, few individuals, it is apprehended, write so uniformly that dissimilar formations of particular letters are grounds for concluding them not to have been made by the same person [20]."

(iii) **Available space for writing.** A person's writing may be more constrained and closer or more open than usual and perhaps may differ in other respects from his ordinary writing because of the limited space allotted to him, or because of an inclination to fill an ample space, such as a space made by an erasure [21].

(iv) **Condition of health.** Physical weakness of a testator when he executed his will would account for a want of firmness in his signature compared with his signatures made when in good health [22].

(v) **Mental condition.** "A man over-whelmed with grief, or furious with anger, or under the effect of stimulants," may write an altered hand [23].

"The momentary vexations of life are sufficient to produce appreciable alterations while even such common occurrences as the pressure of business or the state of the weather are not without influence" on the writings of a person [24].

(vi) **Age and infirmity.** A weak and infirm hand moves with a less erratic motion than under intoxication, but with a waving motion, and the words are more or less broken into letters and syllables. [25].

(vii) **Impairment of sight.** Impairment of a person's sight would explain irregularity in the outlines of his signature [26]. The signature of an aged person of bad eyesight might be scarcely legible. [27].

(viii) **Nervous diseases.** Dr. William Hammond, in his celebrated work on "Nervous Diseases," which is accepted as a standard authority on that class of diseases, instances several cases of the deterioration and ultimate degradation of the writing by persons in neurotic states. He

(19) Matter of Gordon. 50 N. Y. Eq. 397. 26 Atl. Rep. 268. (Per Hutchins J).
(20) Robson v. Rocke, 2 Add. Ecc. 53. (21) Hawkins v. Gremes. 13 B. Mon. (Ky). 257, 264.
(22) In re Berrien, (Surrogate Ct) 5 N. Y. Supp. 37.
(23) Per Surrogate Hutchins in the matter of Gordon, 50. N. G. Eq. 397: 26 Att. Rep. 268.
(24) Ibid. (25) Ames. 51. (26) In re Berrien (Surrogate Ct) 5 N. Y. Supp, 37.
(27) Huble v. Clark. 1 Hag. Ecc. 115.

says: "In nearly all diseases of the spinal cord and brain, the writing is amongst the first voluntary movements to depart from the normal condition of performance. To the trained eye of the graphologists this fact is laden with meaning; but at present it has not occupied the attention due to its importance in the medical profession. There is no doubt whatever that each organic disease is discoverable in the writing of all sick persons who can use the pen; and the higher the grade of the intelligence, the more radical will be the indications."

Not only is the loss of co-ordinate nervous muscular power traceable, as in the case given by Dr. Hammond, but the advance of insidious disease must, to some extent, be a factor in the actual character, and as such should be capable of unerring recognition [28].

**(ix) Hand benumbed with cold.** In one case a witness was unable positively to identify his own signature which was made when his hands were cold [29].

Variation may also be attributable to a change in the physical condition of the writer at a single sitting [30].

**(x) Muscular difficulty.** Writing under extreme muscular difficulty as in the case of intoxication or weakness, indicates that the changes in the direction of the lines are on angles, in place of curves or swings [31].

**(xi) Intoxication.** A person's signature made when he was intoxicated may be satisfactory evidence of his condition by reason of its grotesque appearance compared with his normal signature, as every one knows. But there may be no perceptible difference between the handwriting of a person suffering from mental abberation and his handwriting at a time when his mind was not disturbed [32].

Intoxication manifests itself in loose, vacillating lines that swing and stagger around the characteristic forms of the writer's normal writing, much as do his legs and body along the way, in locomotion. Letters and words tend to begin and end in the same manner as in normal writing; habitual spacings of words and letters are distorted; shades tend to be in their habitual places, though more or less vacillating as to place and degree. The habitual mechanical arrangement is closely normal [33].

**(xii) Literacy or otherwise of the writer.** It has been remarked that the handwriting of a man who writes but little may never acquire any very definite characteristic or any great uniformity [34].

**(xiii) Tremor.** Writing under tremor presents features different from ordinary writing. Tremors in handwriting may be due to several causes. Tremor may be due to the illiteracy of the writer; and it may also be caused by fraud or feebleness.

---

(28) Ames 56. (29) Stevenson v. Kurtz. 116 Mich. 95, 74 N. W. Rep. 304.
(30) Matter of Taylor, 126 Cal, 97, 58, Pac. Rep. 454. (31) Ames 52.
(32) Fay v. Fay, (N. J. 1894) 29 Atl. Rep. 356, 360; Moore on Facts, Vol. I, 621—622.
(33) Ames 51. (34) North American F. Ins. Co. v. Throop, 22 Mich. 146. Thus in a North American case where an aged man of little education wrote but little and with evident effort, confined chiefly to his signature, the court deemed it hardly possible that he could not only depart strikingly from his ordinary signatures, but continue the new handwriting in several signatures *extremely alike* and made at different dates. (See Doty v. Dellinger, 94 N. Y. App. Div. 610.

A man who cannot write or sign cannot forge another man's signature.

The following jotting is cited for the sake of its humour:—

In a case in which a man was accused of forgery, the counsel for the defence drew from a witness the following statement:—

"I know that the prisoner cannot write his own name."

"All that is excluded," said the judge; "the prisoner is not charged with writing his own name, but that of some one else."

The tremor of feebleness occurs in the handwriting of the old, sick and infirm. The tremor of illiteracy is found in the writings of beginners and persons unaccustomed to writing. Of all tremors, those of feebleness show greater constancy and regularity. Tremors of fraud show signs of painstaking and care and they are as a rule not so numerous, owing to their unnaturalness, as in the case of illiteracy and feebleness.

Tremors are best examined under the microscope or with the aid of photo-enlargements [35].

**(xiv) Writing resumed after long vacation.** The accountant or clerk, after a long vacation, may not resume his writing with the accustomed facility [36].

**(xv) Writing at beginning and end.** Writing at the beginning and close of an extended letter or document differs in the degree of its facility.

**(xvi) Filling up of blank spaces in document.** It is rare that blank spaces left in a document can subsequently be so filled, by the same hand, as not to present a difference noticeable to an expert examiner [37].

**(xvii) Writing with left-hand.** The effort of writing with the left hand is exceptional from the fact that in the left hand a new and untrained agent is introduced to do the work of the old and habituated one; a joint mental and physical effort is therefore required to contend with the difficulty. The mind presents the old idealized model of writing, and engages its will and attention in the effort to instruct and impel its new agent to make the nearest possible approach to the habitual work of its former one; the new agent, the left hand, aspiring to the same model under the same tutelage, continues its striving to accomplish the same result, which it will more and more approximate as it gains control of the pen and consequent facility in its movements; and in all its stages, from the first awkward effort to ultimate skill and ease, there will be the old characteristic writing, the same as "Yankee Doodle" is "Yankee Doodle" whether performed by the greatest master or tortured by the merest tyro.

Mr. Ames has examined several cases where persons accustomed to write with their right hand have, from some cause, substituted the left hand. In all cases where a similar slant has been maintained, the writing of the left hand, as it came to be written with a facility approximating that of the right, has assumed a correspondingly close resemblance.

It is said that, late in life, Thomas Jefferson lost the use of his right hand to such a degree as to cause him to substitute his left hand for writing, and that, after a short time, writing with his left hand was scarcely distinguishable from that formerly written with his right. [38].

---

(35) See Hardless pp 105—106. (36) Ames 58. (37) Ibid 58.

(38) Ames 47-48. A victim of the rare disorder known as Mancinism (a condition in which there is a transference of certain motor centres from the left to the right portion of the brain) is at present an in-patient at the Paddington Green Children's Hospital. The child is six years of age and intelligent, but suffers from the peculiar symptoms of mancinism. He has a marked disposition to stammer, writes with his left hand, and his writing runs from right to left. The actual script, a "Morning Post" representative was informed at the hospital, is of the "Alice Through the Looking Glass" order, and to read it is necessary to hold it up to a mirror. The condition is very rare—almost always associated with stammering. The cause of it is not clearly understood, but it must be due to a disordered condition of the association centres of the brain. As is known, it is the right side of the brain which governs the left side of the body, and in the present case what has occurred has been a transposition of the motor centre governing the hand from the left to the right position of the brain. Left-handedness as such cannot be regarded as an infirmity, but the fact is of interest to note that the attempt made to induce right-handedness in naturally left-handed children has been known to induce stammering. In the present case it may be possible to effect improvement by re-education." See *The Hindu* (Educational Supt.) January 1927.

(xviii) Writing with pen held by the teeth or toes.

Even if one were to lose both hands, and write, holding his pen in his teeth or between his toes, the writing would have a distorted resemblance to that written formerly with the hand.

The character and quality of writing in case of a controlled or assisted hand must depend largely upon the relative force exercised by the joint hands. The difficulty in writing arises from the antagonizing motion of one hand upon the other, which is likely to produce an unintelligible scrawl, having little or none of the habitual characteristics of either hand.

(xix) Writing by a guided hand.

Where one hand is more or less passive, the controlling hand doing the writing, its characteristics may be more or less manifest in the writing. But obviously the controlling hand must be seriously obstructed in its motions by even a passive hand; and since the controlling hand can have no proper or customary rest, the motion must be from the shoulder and with the whole arm. The writing will therefore be upon an enlarged scale, loose, sprawling, and can have little, if any, characteristic resemblance to the natural and habitual style of the controlling writer, and of course none of the person's whose hand is passive.

(xx) Writing by a palsied hand.

In palsied writing the lines are more or less zigzag, tending to change their directions on angles rather than curves; shades are abnormal and the writing broken.

(xxi) Writing under Hypnotism or hysteria.

The handwriting of persons who through hypnotism, hysteria, or other causes are made to assume double consciousness (*i.e.*, the hypnotized or hysterical, as well as the normal state), has been discussed more or less, and many theories advanced, but no practical demonstration has hitherto been made or at least made public, so far as one can learn.

All reason would indicate that the characteristics of a person's normal handwriting would remain in the hypnotized writing, because the hypnotic subject does nothing while under the influence of the hypnotist that he is unable to do while in a normal state. For example, the subject could not execute a piece of artistic penwork in the hypnotized state, if he were a poor penman in his normal state.

From the fact that hypnotic subjects (while under the spell) can be and have been made to sign cheques, deeds, wills etc., disposing of property, and write letters that would injure them in various ways, courts have been called upon occasionally to deal with such cases. Frequently a hypnotic subject has denied his genuine signature to a paper, because he had no remembrance of having signed it. Hence it is of the utmost importance to handwriting experts and the courts, to be able to determine whether the writing in question is genuine or not. The question of interest to all students of handwriting is whether the characteristics do or do not remain the same in handwriting produced in both states.

A trial and experiment was made upon a young man, who had never been hypnotized. He was put under hypnotic influence, and was requested to write two specimens of his handwriting. After being awakened, he wrote a specimen in his normal state. He said that he had not written the hypnotized specimens; at least, he did not remember anything about it. A comparison of the two specimens showed that the only difference was in the size and nothing in the general characteristics.

Writing may be changed in its general appearance, as by altering its slope or size, or by using a widely different pen; yet the unconscious habit

(xxii) Writing a disguised hand.

of the writer will remain and be perceptible in all the details of the writing; and such an effort to disguise one's writing could be scarcely more successful than would be an effort to disguise the person by a change of dress. In either case a close inspection reveals the true identity.

(xxiii) Writing with different instruments —pencil, pen and ink.

Pencil or stylograpic writing, by the same person, must differ materially from that written with a two-nibbed pen. Shade, which is usually an important characteristic in writing with a pen, is either absent or greatly modified in pencil or stylographic writing.

A shaded line in writing, in contradistinction to an unshaded line, is one where sufficient pressure is given to open the nibs of the pen on a downward movement, as against a line made with the nibs closed on an upward movement.

When pencil writing is in question the task of the expert is greatly enhanced, from the fact that writing by the same person using a pencil often varies greatly from that with a pen, though this variation is chiefly in facility and shade. Of course it is the same habit and ideal of writing, whether written with pen or pencil. But the pencil, from its round, smooth point, glides easily, regardless of its position as to the paper, but, having a single point, cannot repeat the shades of the two opening nibs of a pen. The expert must therefore rely chiefly upon a comparison of characteristic forms where pencil writing is in question.

From the greater smoothness and gliding qualities of its print, the pencil furnishes a better support to the hand; therefore any characteristic nervousness or muscular difficulties are much better overcome. Consequently it often happens that very bad writers with a pen are passably good writers with a pencil [39].

(39) Ames 50-54.

CHAPTER IV.

# Dual Personality in Handwriting.

CONTENTS:—Mistaking one person for another.—A common occurrence.—Mistaking same person for different individuals—Case of dual personality.—Illustrative cases of dual personality in handwriting.—(a) Among women.—(b) Among men.—Characteristics of dual personality in handwriting.—Possibility of mistake.—Necessity for care and caution.

**Mistaking one person for another.**

Antipholus of Syracuse, the twin brother of Antipholus of Ephesus, looked so like the latter, that he was constantly mistaken for the other, and experienced great inconveniences.

"There's not a man I meet, but doth salute me
As if I were their well-acquainted friend;
And every one doth call me by my name.
Some tender money to me, some invite me;
Some other give me thanks for kindnesses;
Some offer me commodities to buy:
Even now a tailor call'd me in his shop,
And show'd me silks that he had bought for me,
And, therewithal, took measure of my body [1]."

"*Duke.* Antipholus, thou cam'st from Corinth first.
*Ant.* (*Syr*) No, sir, not I; I came from Syracuse.
*Duke.* Stay, stand apart; I know not which is which.
*Ant.* (*Eph*) I came from Corinth, my most gracious lord[2]."

**A common occurrence.**

**Mistaking same person for different individuals—case of dual personality.**

Most of us have had a similar experience, in a greater or less degree, of mistaking one person for another. But instances of the same person being taken for two different individuals on different occasions by the same person is rather rare. Such cases, however do occur. This is known as dual personality. This dual personality sometimes exhibits itself in the writings of certain individuals, (*i.e.*) in a certain mood of their existence, they unconsciously exhibit in their writings features quite different from those of their ordinary writings [2*a*].

**What is dual personality.**

A competent writer, referring to this subject says: What is meant by "dual personality"? Simply that a single person is, at one time or series of times, possessed of one set of mental and nervous attributes, causing his physical acts to run along a certain course, while, at other times, he unconsciously has an essentially different set of attributes, resulting in a characteristically different course of physical acts. In each of his personalities, his thoughts, words and deeds are perfectly natural to him for the time being, and are in no sense a voluntary disguise; but there is still a more or less absolute inconsistency between his two conditions.

---

(1) Comedy of Errors, Act IV, Scene 3. (2) Ibid Act V Scene 1; Ram on Facts p. 67.
Southey gives us an account, cut out of a "Journal of the day," of a coroner's inquest on the body of a girl found drowned, between whom and another young woman living there was a likeness so extraordinary, that a number of witnesses among whom was the mother of the latter, swore positively to the body as that of the girl living. Towards the close of the inquest however, the girl so supposed to be dead walked into the room, and said to one of the most positive of the witnesses: "How could you make such a mistake as to take another body for mine?" The result was, there was no evidence to prove who the deceased was. Cited in Ram on Facts, pp 67-68;
See also Southey: The Doctor Vol VII (1847) p. 474.
(2-*a*) Rob. Louis Stevenson's novel, Dr. Jekyll and Mr. Hyde is based on the fact of dual personality.

Of course, if the variance is sufficiently marked, and results at times, in acts which are generally considered dangerous to the community, the person is at once branded as subject to attacks of temporary insanity. But, after all, insanity is only the state of being unlike what the majority of people consider as normal; and even among the large percentage of people who, by their own judgment, are classified as normal, there will be found all gradations of minor abnormalities, causing them to act, from time to time, as different persons. They may not be recognized as actually dangerous to the welfare of society, and yet they may—and frequently do—commit acts that (if conscious and voluntary) might be classed as dishonourable, immoral, dishonest, or even criminal; and all just because they are the unfortunate victims of double personality [3].

**Illustrative cases of dual personality in handwriting.**

**(a) Among women.**

Some years ago, there was a case of a very prominent religious organization which was disrupted by a series of anonymous letters, received by nearly every active worker therein, and containing the vilest charges against their leaders and co-workers. Matters became so serious that something had to be done, and the governing body quietly obtained samples of the writing of every one connected with the organization and began a process of elimination. This ended in about a dozen specimens being left, as possibly including the writer—which brought the authorities to an impasse; so these remaining samples were again submitted for examination and comparison with the anonymous letters. Here all of the remaining specimen writers were eliminated except one—a lady who was of irreproachable character, so far as known, and one of the most active workers in the church. The report that she had written the offensive letters was met with a unanimous cry of "impossible" on the part of the authorities. It was then explained to them that she was not really responsible for the things she had written because of her abnormal mental and nervous condition at the times of writing—probably due to the occurrence of her menses. After much deliberation, the church authorities decided, with fear and trembling, to call the lady before them, and to submit the report and explanation to her and ask her what, if anything, she had to say about the matter. To their unbounded surprise, she admitted having written the letters under

(3) On the subject matter of this chapter see an interesting article in 21 Cr. L. J. reproduced from American Law Journals, to which the authors owe a great deal in the preparation of this chapter.

As to the history of the phenomenon under discussion, the consequences of the infirmity may be innumerable and past belief, but the result, so far as we now are concerned, is the effect upon the person's handwriting; this is a physical act which is directed by a series of unusual mental impressions and impulses; these in turn are given and actuated by more or less abnormal conditions that are generally physical or nervous. The changed handwriting may have been produced upon but a single occasion (though usually oftener), but it seems that the mental direction and control must have been cultivated by a repetition of the causative conditions; this repetition may have been for a greater or less number of times, but must have been sufficient to train the changed mental control to the necessary degree of perfection required to produce an entirely different style of writing in an entirely natural manner—a result that was claimed by Lombroso and others (but denied by Gross) for hypnotic suggestion without repetition.

The repetition of the causes unconsciously produces what is in effect an abnormal habit which breaks out every now and then, just as we say a person "has a habit of occasionally omitting a letter from words," although he knows perfectly well how to spell them correctly. So, when the habit temporarily gains the ascendancy, it operates on the mind and produces an unusual impulse there, that later results in the writing, with its untoward complications and effects. This entire train of events is out of keeping with the person's ordinary nature and actions, and is an unconscious development of something abnormal in his usual self, and unnatural to his general personality. On the other hand, it is in entire consonance with, and natural to, his occasional, new and extraordinary personality; and as this personality rests entirely on conditions abnormal to the individual, he should not be held accountable for its actions, but should be helped to accomplish its destruction and his own cure.

the circumstances as explained. The shock to the lady, caused by her detection, and the quiet help of the authorities, ended in her cure, and terminated the entire difficulty.

In this case the standard writing of the lady was of a well defined general style, while the writing in all of the anonymous letters was in an entirely different general style, although they were like each other. Both sets of writings were executed freely, and showed no hesitation or disguise; the anonymous letters were all of good length, and (in dates) extended over more than a year, but their dates arranged themselves in periods of about four weeks each. The limitation and powers of the hands and arms in both sets of writings, the actual methods of operating the hands in both, the general nervous features in both, and the dynamic action of the writer's system in both, were alike; so if two persons were thought to be involved, there was no sufficient explanation of this unanimity, while if but one person did all, then something operated upon that person, at monthly intervals, absolutely to change the writer's natural style of writing. Hence it was concluded to be a case of dual personality, due to the menses, and not a voluntary act for which the writer was responsible.

There are also other cases recorded, strongly resembling the foregoing in all essential details; cases where women, under similar conditions, were charged with obtaining, under false pretenses, jewelry and other articles with the aid of which to shine more brightly before the eyes of their male admirers; also others, where the element of jealousy entered into the matter. Many curious phases of female passions and feelings have cropped out in the form of a different personality at times coincident with the establishment, recurrence, or cessation, of their menses; so that whenever a woman—young or old—is suspected of, or charged with some abnormal act, it is well to inquire at the start as to her menstrual development, dates, and conditions. These are by no means the only causes for female changes of personality, but they are mentioned simply as having afforded a ground in many cases, of explanation for such peculiar phenomena.

There is no reason to suppose that such double individuality is confined to women; on the contrary, the same conditions may be found in the case of the opposite sex. The only real difference between the sexes probably lies in the fact that men do not have regularly recurring menstrual periods; wherefore the causes are harder to trace. They often do have, however, various strong cravings, at regular or irregular intervals, which are quite equal to those of females in serving to prompt similar untoward results; in fact, men have been found subject to the same infirmity, directly traceable to sexuality, intoxicants or narcotics, or to various strong physical or mental passions repeatedly affecting the individual; and with men as with women their conditions are similarly liable to be demonstrated in their handwriting.

(*b*) Among men.

In a general sense, the double personalities are distinguished by different courses of conduct naturally pursued in the two conditions. When only the handwriting is to be considered, the difference is the characteristic appearance of the writing done in the different states; the variation is such that one who is actually well acquainted with a person's style of writing in the one state, would utterly fail to recognize as his, the same person's writing in the other state—both seeming to be done quite naturally, the nature of their subject matter being left out of consideration.

Characteristics of dual personality in handwriting.

In this connection it would, therefore, appear that two conditions must concurrently exist in the several separate writings viz.: *First*—the general style of writing in one set must appear radically different from that in the

other set; and, *Second*—The writing in each set must appear to be naturally executed—that is to say, there must be no appearance of voluntary simulation or disguise, or of abnormal hesitation, in either writing.

**Possibility of mistake.**

Given these two conditions, we are at once brought up sharply against a seeming paradox, yet, in fact, a most serious truth: The two sets of writings are as likely to be the product of one individual, written in different personalities as they are to be the result of the efforts of two different individuals!

Under the two pre-requisite conditions named, every disinterested layman would at once declare the writings were by two different persons. Under the same conditions, the disinterested expert, who failed to avail himself fully of scientific methods, or used them only superficially, would probably come to a similar conclusion; the interested expert, who gave less consideration to the writing than to the extraneous history of the case, might give an enthusiastic contrary opinion, based on an alleged disguise claimed to exist in one set of writings, the claim for which would be riddled with holes by a brief but intelligent cross examination, or he might coincide with the layman's opinion, according to the side on which he was engaged.

**Necessity for care and caution.**

The disinterested expert, who considered nothing but the writings themselves, and who went to the limit of scientific examination, would alone, be able to determine correctly whether or not there were two individual writers; and if he found there was but one, he alone could disclose the actuating reasons for the writing, and learn whether the writer was to be held responsible for the act, or was rather to be pitied for his misfortune and assisted in being rid of his infirmity [4].

(4) See Article from Ame. Law. Journal reproduced in 21 Cr. L. J. 46-50.

CHAPTER V.

# Correspondence between Character and Handwriting.

CONTENTS :—Correspondence between character, countenance, habits and handwriting.—Writing as an index to character.—Science of Graphology.—Investigations of professor Lambroso.—Methods of study.—Illustrative case.—Other experiments of study of character from handwriting.

**Correspondence between character, countenance, habits and handwriting.**

It is rather curious that there should be a close correspondence between the character, countenance, habits and handwriting of an individual.

We should not think that the matter is at all worth mentioning in a book on the detection of forgery but for the fact that there are certain well authenticated cases of curious and striking instances of the study of character from handwriting.

It has been said that "the features and character of the person often give a valuable indication as to the style of his writing." There is observable a similarity or contrast between the writings of persons which corresponds with their personal characteristics and physiognomies [1].

**Writing as an index to character.**

Careful investigation has revealed the fact that persons having strong and conspicuous traits of character manifest them in handwriting.

The extent to which this art has been cultivated may be seen from the following remarks made by an expert on the subject. He says "There is no question about the fact that there have been persons who attain the same ability of discovering, from a single specimen of handwriting, the character, the occupation, the habit, the temperament, the health, the age, the sex, the size, the nationality, the benevolence or penuriousness, the boldness or the timidity, the morality, the affection or the hypocrisy, and often the intention, of the writer [2]."

**Science of Graphology.**

Graphology, or the reading of character from handwriting, has had many enthusiastic votaries, some of whom have attained to a marvellous degree of skill in their delineations of character and other personal distinctions from handwriting, rarely, if ever, failing to determine the sex or nationality of the writer, and approximating to the age quite as closely as would be done from seeing the persons themselves.

**Investigations of professor Lambroso.**

Some investigators have detected curious peculiarities in the handwriting of criminals. Professor Lambroso, for instance, divides 520 criminals into two groups, the first of which includes homicides, highway robbers, and brigands.

He says that the greater part of these make letters much lengthened out; the form is more curvilinear than in ordinary writing and at the same time more projecting; in a considerable number the cross for the 't' is heavy and prolonged, and is common also among soldiers and energetic persons. All ornament their signatures with small strokes and flourishes; some terminate their names with a short hook; assassins are apt to end each word with a sharp vertical stroke.

The second group is composed exclusively of thieves, who do not make their letters curvilinear. In their cases the characters are small, and the signature has nothing striking about it. On the whole, the writing is like that of a woman.

(1) Ames 37. (2) See the case cited in Ames, 277—279.

Characteristic of the handwriting of thieves is the bending of almost all the letters.

It is said of Lambroso that he suggested to an irreproachable young man who had been put in the hypnotic state that he was a brigand, where upon his handwriting wholly changed: he made large letters and enormous "T's [3]."

**Methods of study.**

The skill of deciphering character from handwriting has been, in certain rare cases, cultivated to the extent that forgeries could be detected at a glance, and persons passing under assumed names exposed, from the manner in which they wrote their assumed names. A skilfull analyzer of handwriting can point out where a writer is firm in his purpose and his nerves are well braced, or where his fears overcome resolution, where he pauses to recover his courage, where he changes his pen, and the various other contingencies incident to forgery.

**Illustrative case.**

Mr. Ames gives an instance of an individual who often frequented English country fairs, who impressed upon the assembled multitude his extraordinary powers of reading character and establishing personal identity by mere inspection of handwriting. He announced with great vigor that if the ladies and gentlemen gathered together would be so kind as to copy a certain formula and submit the slips while he retired to a neighbouring tent to commune with a Mahatma, or himself, he would undertake, for the modest consideration of twenty-five cents a head, not only to tell the age and the sex of each writer, but to describe his or her station in life, whether married or single, and also to select from the whole body of writers the particular author of each line. The wonderful part of it was the accuracy and approximate truth of the readings and the exceedingly small number of errors in identifying a particular writer. As to how much of this was really based on the handwriting and how much was shrewd guesswork and conclusions arrived at from the appearance, conversation, etc., of the individual writers, is of course a matter for surmise.

**Other experiments of study of character from handwriting.**

"Persons have attained so great a proficiency in reading character from handwriting, that it is recorded of one who made this subject a study, that at a meeting of the directors of a bank, none of whom knew the gentleman, nor were known by him, it was arranged that he should meet them and exhibit his skill. The first experiment was this: Each director wrote on a piece of paper the names of all the board. Eleven lists were handed him, and he specified the writer of each by the manner in which he wrote his own name. He then asked them to write their own or any other names, with as much disguise as they pleased, and in every instance he named the writer. Another experiment was this: The Superscription of a letter was shown him. He began: 'A clergyman, who reads his sermons, and is a little short-sighted; aged sixty-one, six feet high, weighs one hundred and seventy pounds, lean, bony, obstinate, irritable—'; 'Come, come,' said one of them, 'you are disclosing altogether too much of my father-in-law.' The description was all absolutely correct.

"A forged note which had been discounted by the cashier was presented. He (the gentleman) analyzed the forged signature so vividly and truthfully, pointing out one of the members of the board of directors as the executant of the note, and he (the forger) fell to the floor as if dead. What seemed at the time an impossibility to the other members of the board, was, that one

(3) 6 Cr. Bag 539—540

who had stood so high in their estimation, and whose character, had been unimpeached, should be guilty of such a crime. The expert's assertion was pronounced impossible by all, and yet subsequent investigation, and the confession of the forger, proved him to have been correct.

"Such are a few of the alleged facts, corroborative of the claim that handwriting is an index of character. When the subject is fully investigated, it undoubtedly will appear that writing is not a mere chimerical art, but that it is an outburst of the heart, an exponent of life and character, more reliable than the delineations of the countenance to the physiognomist."

At a party of ladies and gentlemen where the reading of the character from handwriting was the subject under discussion, one of the ladies took from her pocket two letters, and handing them over to the expert, asked an expression of his opinion respecting their authors. Inspecting one of them, he said, "The writer was upward of sixty years of age, a careful, methodical, experienced business man, and probably the head of some corporation or large business". Taking the other, he said,—"The writer of this is between thirty and forty years of age, a keen, active man of affairs, probably the secretary or chief clerk of a corporation or large business house." The lady who had solicited the opinion, at once clapped her hands, exclaiming that nothing could be more truthful, adding that the one was president of a savings and loan company and the other was secretary of a corporation. "Now," she said, "I would just like to have you explain to me how you could tell that." The reply was, taking the first one: "Here is a strong, clear, legible, and practised hand, very methodical, without blot, change, or erasure from beginning to end, and is written in a round, shaded hand, which must have been learned more than forty-five years ago, as that school of writing has not been taught in this country within that period. This, with the dignified, deliberate appearance of the writing fixes his age at over sixty years, while the practised style of writing indicates a large experience in the business world. The good judgment, taste, and accuracy manifested in the writing show corresponding traits in business; while the concise, clear, and intelligent statement of the subject-matter is indicative of an able, clear, and comprehensive grasp of business affairs."

As to the other letter he said: "This is an elegant Spencerian hand, which must have been learned at a much more recent date, and hence by a younger man. It is written with great facility, indicating young and trained muscles in immediate practice, and the composition and subject-matter is such as to indicate a mind trained and familiar with the business world. Here, therefore, is a man not above medium life and possessed of the requisite qualifications for the active duties of the secretary or chief clerk of some large business enterprise."

Says Archbishop Whately:—"I had once a remarkable proof that handwriting is, sometimes, at least, an index to character. I had a pupil at Oxford whom I liked in most respects greatly. There was but one thing about him which seriously dissatisfied me and that, I often told him, was his handwriting. It was not bad, as writing, but it had a mean, shuffling character in it, which always inspired me with a feeling of suspicion. While he remained at Oxford I saw nothing to justify this suspicion, but a transaction in which he afterwards engaged, and in which I saw more of his character than I had before, convinced me that the writing had spoken truly."

Another writer mentions this incident:—"A curious case was one in which a celebrated graphologist was able to judge of character more correctly by handwriting than he had been able to do by personal observation. He was on a visit to a friend's house, where among other guests he met a

lady whose conversation and manners greatly impressed him, and for whom he conceived a strong friendship, based on the esteem he felt for her as a singularly truthful, pure-minded, and single-hearted women. The lady of the house, who knew her character to be the very reverse of what she seemed, was curious to know whether Mr.—would be able to discover this by her handwriting. Accordingly, she procured a slip of this lady's writing (having ascertained he had never seen it) and gave it to him one evening as the handwriting of a friend of hers whose character she wished him to decipher. His usual habit, when he undertook to exercise this power, was to take a slip of a letter, cut down lengthwise so as not to show any sentences, to his room at night, and to bring it down the next morning with his judgment on the writing. On this occasion, when the party was seated at the breakfast-table, the lady whose writing he had unwittingly been examining made some observation which particularly struck Mr.—as seeming to betoken a very noble and truthful character. He expessed his admiration for her sentiments very warmly, adding at the same time to the lady of the house: 'Not so, by-the-way, your friend,' and he put into her hand the slip of writing of her guest which she had given him the evening before, over which he had written the words, 'Fascinating, false, and hollow-hearted." The lady of the house kept the secret, and Mr.—never knew that the writing on which he pronounced so severe a judgment was that of the friend he so greatly admired."

No one who has investigated the subject will be disposed to question the fact that a man's handwriting normally takes on the colour of his mental and muscular attributes to a degree sufficient to serve a useful purpose as an index from which may be divined very much respecting his character [4].

Mr. Ames gives us the following instances :—

It has been observed that the hard, wiry, nervous, and intensely marked features of Choate, the Great American Statesman, bespoke the brilliant though eccentric orator, jurist, and statesman, and are in full accord with his autograph.

The portrait of Hancock, in its bold, open, and frank expression, is typical of what the biographer describes as "a man of strong common sense and great decision of character, polished manners, easy address, affable, liberal, and charitable." In his case also portrait, character, and autograph are in full accord.

A close resemblance can be observed between the autograph of John Hancock and that of John Adams, who was also a compatriot of the stirring times of the American Revolution, and a colleague in the Colonial Congress. Both were among the most earnest, bold, and fearless advocates of the Declaration of Independence. The bold, strong, determined character of these men stands out in their autographs.

In marked contrast to these, are the autographs of two of the great American merchants and financiers,—Jacob Aston and Stephen Gerard. These men of affairs have a care for details which enters as minutely and fully into their autographs as into their business. Between their autographs and those of Hancock and Adams are contrasts as striking as were the character and missions in their authors. There is a class of what might be termed parliamentary autographs. Their authors indulge in none of the redundancies or fantastic quirks and eccentricities so common to most

(4) Ames 277—279.

It has however been held that a man cannot be convicted from his appearance and manner of speech. An ugly, stammering, nervous man may be innocent, while a good looking plausible man may be a scoundrel. 23 Cr. L. J. 161—65 I. C. 625.

classes of writers, the autographs seeming to possess a conscious dignity, which like the greatness of their authors is most complete without decoration.

As an illustration of this class of signature, may be given the autograph of Henry Clay, which in its concise, frank, open, and almost laconic style, most faithfully reflects the character of the great statesman, whose life was without equivocation, disguise, or reproach, and concerning whose opinions and purposes his countrymen were never in doubt [5].

The following is a good instance of the cross examination of a graphologist. This was a proceeding to obtain the custody of a child. The question was whether the father, when he executed the deed of guardianship, under which the custody was claimed was sane or insane, at the time of the execution of the deed.

---

(5) For a detailed description of the influence of mental characteristics on the formation of style of signature see Ames on Forgery pp. 37—42.

This matter belongs more to the branch of metaphysics than to the subject matter of this work. We will only mention that the other side of the question has also been very forcibly presented in the writings of some competent writers who have bestowed careful thought on this subject.

Referring to a book by Mr. Schooling, an expert in Chirography, who attempted to study the character of Napoleon from the style of his handwriting, a competent reviewer in the course of an article in the Green Bag says:—

"Every legal practitioner has had occasion to admire or to deprecate the subtlety of experts in handwriting as witnesses. There is no witness wiser in his own conceit. Experts are the bane of courts of justice, and experts in handwriting are in the front rank of these undesirable opinionated witnesses. But there is one class of these experts even more fallible than those who go upon the witness-stand. These are the wiseacres who profess to read a man's character from his handwriting. A striking exemplar of this class seems to be J. Holt Schooling who writes taking well known and celebrated men, in his illustration and setting forth their handwriting and then gravely showing how their characters may be predicated from their handwriting. He may be described as a prophet who foretells past events. His last effort in this direction is an article on the portraits and handwriting of Napoleon. One naturally inquires, if the character is determinable from the handwriting, what is the use of the portraits? It seems that physiognomy is a useful crutch for handwriting. Mr. Schooling also goes considerably into Napoleon's history. So having shown from the facts of his life and the lineaments of his face what a bad and dangerous character he was he is prepared to disclose his traits from a study of his handwriting! His opinion of Napoleon's face is found in the following; "Indeed, all the portraits which may be considered likenesses suggest a powerful and dangerous member of the actively aggressive criminal class, whom one would probably feel shy of, if it were possible to meet him now-a-days as one's *vis-a-vis* inside a London omnibus." This, of a man celebrated for the classic perfection and beauty of his countenance, shown to special advantage by a reproduction in this very article of the English Captain Marryat's sketch of him as he lay dead! Not one of the pictures selected by this writer but contradicts his assertions. Having thus laid the foundation for his deductions, he proceeds to trace Napoleon's character and career from his handwriting, or his "pen-gesture," as he calls it, in the cant of his profession. He has hardly anything but Napoleon's name, in full or abbreviated, or his initial, to show, but this is all-sufficient. When Napoleon is depressed or despondent, it "droops" down; when he is triumphant, it "mounts";—*i.e.*, slants down or up. When he is in a great hurry, or as the professor calls it, abnormally "active" he abbreviates, and when he is at his very worst of tyranny and vindictiveness and triumph he fairly "stabs" the paper with a "terrific N". As the astute professor stultifies his theories of physiognomy with his portraits, so also he destroys his theory of handwriting by his *facsimiles*. * * * The radical trouble with all these wise penmen is that they would test a man's character by his hand as if he always wrote with the same pen and ink, on the same paper, at the same age, in the same health, and in the same circumstances, sitting for a pen-portrait, as it were. Probably every man who reads these lines has seen his own signature—made years before, which he could scarcely recognize; as for example, on a hotel register, his hand tired with lugging his bag, the pen strange, the ink thick, the elevation of the desk inconvenient. Many a man might be sadly misjudged by such a signature. So when Mr. Schooling finds "rage and fury" in the "N" just after Leipsig, he ought to find it in the "N" just after the capture of Paris, but it is singularly calm. No one, however, will gainsay "the most salient quality of Napoleon's handwriting," according to Mr. Schooling—"activity." Napoleon wrote a very "active hand"—it looks frequently as if scrawled by an active spider. Poe, in his writings on autography, says of the manuscript of David Paul Browne: "His chirography has no doubt been strongly modified by the circumstance of his position. No one can expect a lawyer in full practice to give in his manuscript any true indication of his intellect or character." Was not Napoleon in full practice?" 8 Gr. Bag pp. 84—85.

A well-known alienist, who had long appeared in courts upon one side or the other in pretty nearly every important case involving the question of insanity, was retained by the petitioner to sit in court during the trial and observe the actions, demeanour, and testimony of the father, the alleged lunatic, while he was giving his evidence upon the witness-stand.

At the close of the father's testimony this expert witness was himself called upon to testify as to the result of his observation, and was interrogated as follows :—

Counsel.—"Were you present in court yesterday when the defendant in the present case was examined as a witness?"

Witness.—"I was."

Counsel.—"Did you see him about the court room before he took the witness-stand?"

Witness.—"I observed him in this court room and on the witness-stand on Monday."

Counsel.—"You were sitting at the table here during the entire session?"

Witness.—"I was sitting at the table during his examination."

Counsel.—"You heard all his testimony?"

Witness.—"I did."

Counsel.—"Did you observe his manner and behaviour while giving his testimony?"

Witness.—"I did."

Counsel.—"Closely?"

Witness.—"Very closely."

Upon being shown certain specimens of the handwriting of the defendant, the examination proceeded as follows :—

Counsel.—"Now, Doctor, assuming that the addresses on these envelopes were written by the defendant some three or more years ago, and that the other addresses shown you and the signatures attached thereto were written by him within this last year, and taking into consideration at the same time the defendant's manner upon the witness-stand, as you observed it, and his entire deportment while under examination, did you form an opinion as to his present mental condition?"

Witness.—"I formed an estimate of his mental condition from my observation of him in the court room and while he was giving his testimony and from an examination of these specimens of hand-writing taken in connection with my observation of the man himself."

Counsel.—"What in your opinion was his mental condition at the time he gave his testimony?"

The Court.—"I think, Doctor, that before you answer that question it would be well for you to tell us what you observed upon which you based your opinion."

Witness.—"It appears to me that upon the witness-stand the defendant exhibited a *slowness* and *hesitancy* in giving answers to perfectly distinct and easily comprehensible questions which was not consistent with a sound mental condition of a person of his education and station in life. I noted a *forgetfulness*, particularly of recent events. I noted also an expression of face which was peculiary characteristic of a certain form of mental disease; an expression of, I won't say hilarity, but *a fatuous, transitory smile*, and exhibited upon occasions which did not call in my opinion for any such facial expression, and which to alienists possesses a peculiar significance. As regards these specimens of handwriting which I have been shown, particularly the *signature* to the deed, it appears to me *to be tremulous* and to show a want of co-ordinating power over the muscles which were used in making that signature."

In answer to a hypothetical question describing the history of the defendant's life as claimed by the petitioner, the witness replied :—

Witness.—" My opinion is that the person described in the hypothetical question is suffering from a form of insanity known as paresis, in the stage of dementia."

Upon the adjournment of the day's session of the court, the witness was requested to take the deed (the signature to which was the writing which he has described as "Tremulous" and on which he had based his opinion of dementia) and to read it carefully over night. The following morning this witness resumed the stand and gave it as his opinion that the defendant was in such condition of mind that he could not comprehend the full purpose and effect of that paper.

The doctor was here turned over to defendant's counsel for cross-examination. Counsel jumped to his feet and, taking the witness off his guard, rather gruffly shouted :—

Witness.—" In your opinion, what were you employed to come here for ?"

Witness.—(after hesitating a considerable time) " I was employed to come here to listen to the testimony of this defendant, the father of this child, whose guardianship is under dispute."

Counsel.—" Was that a simple question that I put to you ? Did you consider it simple ?"

Witness.—" A perfectly simple question."

Counsel.—(smiling). " Why were you so *slow* about answering it then ?"

Witness.—" I always answer deliberately ; it is my habit."

Counsel.—" Would that be an evidence of derangement in *your* mental faculties, Doctor—the slowness with which you answer ?"

Witness.—" I am making an effort to answer your questions correctly."

Counsel.—" But perhaps the defendant was making an effort to answer questions correctly the other day ?"

Witness.—" He was undoubtedly undeavouring to do so."

Counsel.—" You came here for the avowed purpose of watching the defendant, didn't you ?"

Witness.—" I came here for the purpose of giving an opinion upon his mental condition."

Counsel.—" Did you intend to listen to his testimony before forming any opinion ?"

Witness.—" I did."

Counsel.—(now smiling). " One of the things that you stated as indicating the disease of paresis was the defendant's *slowness* in answering simple questions, wasn't it ?"

Witness.—" It was." * * *

Counsel.—" Now, in forming your opinion, you based it in part on his handwriting, did you not ?"

Witness.—" I did, as I testified yesterday."

Counsel.—" And for that purpose you selected one signature to a particular instrument and threw out of consideration certain envelopes which were handed to you ; is that right ?"

Witness.—" I examined a number of signatures, but there was only one which showed the characteristic tremor of paresis, and that was the signature to the instrument."

The witness was here shown various letters and writings of the defendant, executed at a later date than the deed of guardianship.

Counsel.—" Now, Doctor, what have you to say these later writings ?"

Witness.—" They are specimens of good handwriting. If you wish to draw it out, they do not indicate any disease, paresis or any other disease."

Counsel.—"Do you think there has been an improvement in the defendant's condition meanwhile?"

Witness.—"I don't know. There is certainly a great improvement in his handwriting."

Counsel.—"It would appear, then, Doctor, that you selected from a large mass of papers and letters *only one* which showed nervous trouble, and do you pretend to say that you consider that as fair?"

Witness.—"I do, because I looked for the one that showed the most nervous trouble, although it is true I found only one."

Counsel.—"How many specimens of handwriting were submitted to you from which you made this selection?"

Witness.—"Some fifteen or twenty."

Counsel.—"Doctor, you are getting a little slow in your answers again."

Witness.—"I have a right; my answers go on the record. I have a right to make them as exact and careful as I please."

Counsel.—(sternly). "The defendant was testifying for his liberty and the custody of his child; he had a right to be a little careful; don't you think he had?"

Witness.—"Undoubtedly."

Counsel.—"You also expressed the opinion that the defendant could not understand or comprehend the meaning of the deed of guardianship that has been put in your hands for examination over night?"

Witness.—"That is my opinion."

Counsel.—"What do you understand to be the effect of this paper?"

Witness.—"The effect of that paper is to appoint, for a formal legal consideration, Mrs. Blank as the guardian of defendant's daughter and to empower her and to give her all of the rights and privileges which such guardianship involves, and Mrs. Blank agrees on her part to defend all suits for wrongful detention as if it were done by the defendant himself, and the defendant empowers her to act for him as if it were by himself in that capacity. That is my recollection."

Counsel.—"What that paper really accomplishes is to transfer the management and care and guardianship of the child to Mrs. Blank, isn't it?"

Witness.—"I don't know. I am speaking only as to what bears on his mental condition."

Counsel.—"Do you know whether that is what the paper accomplishes?

Witness.—"I have given my recollection as well as I can. I read the paper over once."

Counsel.—"I am asking you what meaning it conveyed to your mind, because I am going to give the defendant the distinguished honour of contrasting his mind with yours."

Witness.—"I should be very glad to be found inferior to his; I wish he were different."

Counsel.—"When the defendant testified about that paper, he was asked the same question that you were asked, and he said, 'I know it was simply a paper supposed to give Mrs. Blank the management and care of my child.' Don't you think that was a pretty good recollection of the contents of the paper for a man in the state of dementia that you have described?"

Witness.—"Very good."

Counsel.—"Rather remarkable, wasn't it?"

Witness.—"It was a correct interpretation of the paper."

Counsel.—"If he could give that statement on the witness-stand in answer to hostile counsel, do you mean to say that he could not comprehend the meaning of the paper."

Witness.—"He was very uncertain, hesitating, if I recollect it, about that statement. He got it correct, that's true."

Counsel.—" Then it was the manner of his statement and not the substance that you are dealing with ; is that it ? "

Witness.—" He stated that his recollection was not good and he didn't quite recollect what it was, but subsequently he made that statement."

Counsel.—" Don't you think it was remarkable for him to have been able to recollect from the seventh day of June the one great fact concerning this paper, to wit: that he had given the care and maintenance of his daughter to Mrs. Blank ? "

Witness.—" He did recollect it."

Counsel.—" It is a pretty good recollection for a dement, isn't it ? "

Witness.—" He recollected it."

Counsel.—" Is that a good recollection for a dement ? "

Witness.—" It is."

Counsel.—" "Isn't it a good recollection for a man who is not a dement ?"

Witness.—" He recollected it perfectly."

Counsel. " Don't you understand, Doctor, that the man who can describe a paper in one sentence is considered to have a better mind than he who takes half a dozen sentences to describe it ? "

Witness.—" A great deal better mind."

Counsel.—" Then the defendant rather out-distanced you in describing that paper ? "

Witness.—" He was very succinct and accurate."

Counsel.—" And that is in favour of his mind as against yours ? "

Witness.—" As far as that goes."

Counsel.—" Now we will take up the next subject, and see if I cannot bring the defendant's mind up to your level in that particular. The next thing you noticed, you say, was the slowness and hesitancy with which he gave his answers to perfectly distinct and easily comprehended questions ? "

Witness.—" That is correct."

Counsel.—" But you have shown the same slowness and hesitancy today, haven't you ? "

Witness.—" I have shown no hesitancy ; I have been deliberate."

Counsel.—" What is your idea of the difference between hesitancy and deliberation, Doctor ? "

Witness.—" Hesitancy is what I am suffering from now ; I hesitate in finding an answer to that question. "

Counsel.—" You admit there is hesitation ; isn't that so ? "

Witness.—" And slowness is slowness."

Counsel.—" Then we have got them both from you now. You are both slow and you hesitate, on your own statement ; is that so, Doctor ? "

Witness.—" Yes."

Counsel.—" So the defendant and you are quits again on that ; is that right ? "

Witness.—" I admit no slowness and hesitancy. I am giving answers to your questions as carefully and accurately and frankly and promptly as I can."

Counsel.—" Wasn't the defendant doing that ? "

Witness.—" I presume he was."

Counsel.—" What was the next thing that you observed besides his slowness and hesitancy, do you remember ? "

Witness.—" You will have to refresh my memory."

Counsel.—(quoting). " ' I noted a forgetfulness, particularly of recent events.' You think the defendant is even with you now, on forgetfulness, don't you ? "

Witness.—" It looks that way."

Counsel.—" You say further, ' I noted an expression of face which was peculiarly characteristic of a certain form of mental disease ; I noticed

particularly an expression, I won't say hilarity, but a fatuous, transitory of smile, on occasions which did not call, in my opinion, for any such facial expression.' Would you think it was extraordinary that there should be a supercilious smile on the face of a sane man under some circumstances ?"

Witness.—"I should think it would be very extraordinary."

Counsel.—"Doctor, he might have had in mind the fact of the little talk you and I were to have this afternoon. That might have brought a smile to his face, don't you think so ?"

Witness.—"I do not."

Counsel.—"If as he sat there he had any idea of what I would ask you and what your testimony would be, don't you think he was justified in having an ironical expression upon his face ?"

Witness.—"Perhaps."

Counsel.—"It comes to this, then, you selected only one specimen of tremulous handwriting ?"

Witness.—"I said so."

Counsel.—"You yourself have shown slowness in answering my questions ?"

Witness.—"Sometimes."

Counsel.—"And forgetfulness ?"

Witness.—"You said so."

Counsel.—"And you admit that any sane man listening to you would be justified in having an ironical smile on his face ?"

Witness.—(No answer).

Counsel.—"You also admitted that the man you claim to be insane, gave from memory a better idea of the contents of this legal paper than you did, although you had examined and studied it over night ?"

Witness.—"Perhaps."

Counsel (Condescendingly).—"You didn't exactly mean then that the defendant was actually deprived of his mind ?"

Witness.—"No, he is not deprived of his mind, and I never intended to convey any such idea."

Counsel.—"Then after all your answers mean only that the defendant has not got as much mind as some other people ; is that it ?"

Witness.—"Well, my answers mean that he has paresis with mental deterioration, and, if you wish me to say so, not as much mind as some other people ; there are some people who have more and some who have less."

Counsel.—"He has enough mind to escape an expression which would indicate the entire deprivation of the mental faculties ?"

Witness.—"Yes."

Counsel.—"He has enough mind to write the letters of which you have spoken in the highest terms ?"

Witness.—"I have said they were good letters."

Counsel.—"He has enough mind to accurately and logically describe this instrument, the deed of guardianship, which he executed ?"

Witness.—"As I have described."

Counsel.—"He probably knows more about his domestic affairs than you do. That is a fair presumption, isn't it ?"

Witness.—"I know nothing about them."

Counsel.—"For all that you know he may have had excellent reasons for taking the very course he has taken in this case ?"

Witness.—"That is not impossible ; it is none of my affair [6]."

(6) See the same cited in Wellman's Art of Cross-Examination pp. 105-117.

CHAPTER VI.

# Methods of Forgery.

## (Forgery by Tracing and Freehand Forgery)

CONTENTS:—Study of the forger's methods by bankers and their detective agents.—Methods of forgery.—Forgery by tracing and freehand forgery.—Characteristics of traced forgeries.—Physiology of tracing.—Detection of traced forgeries.—Direction of the pen.—Forger himself sometimes produces evidence of his guilt.—Concidence of two signatures on super-imposition, one on the other is conclusive proof of forgery by tracing.—Traced signature need not necessarily be a perfect duplicate of the original.—An illustration.—Counterfeit signatures on Bank-notes and expert testimony thereon.—Retouching.—Other illustrative cases of traced forgery.—Freehand forgery.—Illustrative cases of freehand forgery.—Methods of Examination of freehand forgery.—Characteristics of freehand forgery.—

**Study of the forger's methods by Bankers and their detective agents.**

"The tracing of and apprehension of the forger is a most interesting study," says Col. James R. Branch, secretary of the American Bankers' Association. "The Association's detective agents classify photographs of forgers and group their handwriting so that careful studies on these lines readily develop the origin of forgeries. On examining a forgery the detective, first by comparison, determines if it was traced from a genuine signature or copied by freehand methods. Tracing is a process of actual reproduction, the forger copying the signature on transparent paper and transfering it to the paper to be forged, and is most readily detected, as the carbon or pencil used is sometimes noticeable under the ink. Freehand forgery is a studied copy, and if skilfully executed is quite difficult to detect, sometimes deceiving the writer of a genuine signature whose writing has been imitated.

"The forger leaves behind him documentary evidence of his work, which usually shows the earmarks of a professional. One forger or forger band uses one system and pretext, another a distinctly different one. The handwriting of the forger and presenter offers a good opportunity of detection by comparison with similar forgeries recorded; the presenter's description, in most cases obtainable, is carefully studied, and can many times be associated with some professional forger or middleman. The introducer, or any others who transact business with the presenter are shown by the Association's detective protographs of suspects, from among which the presenter is identified.

"Investigation usually results in his being located, and he is watched, resulting in locating the forger and middleman. The bank from which the small drafts are purchased also furnish a possible clue to the band by describing and identifying a photograph of the purchaser, who is also watched, and who meets the middleman, and presenter, and possibly the forger. The purchaser and presenter are not difficult to convict when collusion can be shown, but conviction of the middleman and forger require considerable effort. All known members of a forgery band are arrested simultaneously, a confession in most cases being obtainable from the presenter or purchaser implicating the middleman and forger. The detectives often find in the forger's rooms the paraphernalia used in committing forgeries, which also materially aid in his conviction [1]."

**Methods of Forgery: Forgery by tracing & Freehand forgery.**

Thus there are two general methods of perpetrating forgeries, one by the aid of tracing, the other by freehand writing. These methods differ widely in details, according to the circumstances of each case [2].

(1) 14 Ame. Lawyer p. 20.

(2) Ames. 68.

Mr. Ames thus describes the process in his work on Forgery :—

"Tracing can only be employed when a signature or writing is present in the exact or approximate form of the desired reproduction. It may then be done by placing the writing to be forged upon a transparency over a strong light, and then superimposing the paper upon which the forgery is to be made. The outline of the writing underneath will then appear sufficiently plain to enable it to be traced with pen or pencil, so as to produce a very accurate copy upon the superimposed paper. If the outline is with a pencil, it is afterwards marked over with ink [3]."

Again, tracings are made by placing transparent tracing paper, over the writing to be copied and then tracing the lines over with a pencil. This tracing is then penciled or blackened upon the obverse side. When it is placed upon the paper on which the forgery is to be made, the lines upon the tracing are retraced with a stylus or other smooth, hard point, which impresses upon the paper underneath a faint outline, which serves as a guide to the forged imitation. In forgeries perpetrated by the aid of tracing, the internal evidence is more or less conclusive, according to the skill of the forger [4].

**Characteristics of traced forgeries.**

Osborne says "a traced forgery from the very nature of its execution must present a more or less strained appearance quite opposed to the easy flow of genuine writing. This method necessarily interferes with the natural writing [5]."

It goes without saying that traced forgeries are more common in the case of signatures than letters and other documents of some length.

Evidence of forgery by tracing is manifest in the formal, broken, nervous lines, the uneven flow of the ink, and the often retouched lines and shades. These evidences are unmistakable when studied with the aid of a microscope. Such forgeries also present a loose resemblance in general form to the genuine, and are therefore most likely to deceive the unfamiliar or casual observer. Again, the forger rarely possesses the requisite skill to exactly reproduce his tracing. Much of the minutiæ of the original writing is more or less microscopic, and for that reason passes unobserved by the forger. Outlines of writing to be forged are sometimes simply drawn with a pencil, and then worked up in ink. Such outlines will not usually furnish so good an imitation as to form, since they depend wholly upon the imitative skill of the forger [6].

"In the Urdu and Hindi speaking parts of India traced forgeries are more usual than freehand forgeries. In one cluster of districts in Upper India, notorious for its achievements in forgery, the several cases that came to light turned out to be forgeries of the traced type [7]."

**Psychology of tracing.**

In the perpetration of a forgery the mind, instead of being occupied in the usual function of supplying matter to be recorded, devotes its special attention to the superintendence of the hand, directing its movements, so that the hand no longer glides naturally and automatically over the paper, but moves slowly with a halting, vacillating motion, as the eye passes to and from the copy to the pen, moving under the specific control of the will [8].

Traced forgeries almost invariably fail in movement, pen-presentation, pen-pressure and execution or speed. They consequently afford means of

(3) Ibid; see also Hardless 83.
(4) Ames 68.
(5) Osborne on Questioned Documents.
(6) Ames 69-70.
(7) Hardless 84.
(8) Ames 69.

**Detection of traced forgeries.**

detection in various ways. (i) They are formal, slow and nervous. (ii) The even flow of the ink which is the result of the slow and evenly drawn lines. (iii) There is absence of natural shading caused by the slow drawing of the pen with regular even pressure; where, as is often done, an attempt is made to rectify this there are the evidences of retouching. (iv) There are also evidences of abnormal pressure at various parts caused by the forger stopping to see whether he is guiding his pen correctly over the lines. (v) There may also be evidence, that while tracing, the person would have to keep his pen upon and press on the paper, thus causing pen-pauses at various places or it may be that instead of pen-pauses there are pen-lifts (in many cases both) caused by the writer. The abnormal pressure caused by pen-pauses or pen-lifts observed in unlikely places, such as in the course of a continuous up or down stroke or curve, where there should be no stoppage or break is one of the surest tests of forgery by tracing. (vi) If tracings are made first in pencil and then inked over, the pencil out-lines would be visible in some places. This is due to the latter not being properly covered with ink. In such cases there may also be erasure, marks and abrasions noticeable on the paper, caused by the rubbing out of the pencil lines which in some cases affect the ink lines as well. (vii) Indentations on the paper may also be visible caused by undue pressure of the pencil in the first act of tracing. Such cases occur where the tracing had been gone over first with some blunt instrument and the marks subsequently inked over. In such cases the document shows deep indentations in the paper, which fact alone may render the questioned signature extremely suspicious [9].

Referring to this subject Ames says:—"Where pencil or carbon guide-lines are used, which must necessarily be removed by rubber, there are liable to remain some slight fragments of the tracing lines, while the mill finish of the paper will be impaired and its fibre more or less torn out, so as to lie loose upon the surface. * * *

"Also the ink will be more or less ground off from the paper, thus giving the lines a gray and lifeless appearance. And as retouchings are usually made after the guide-lines have been removed, the ink, wherever they occur, will have a more black and fresh appearance than elsewhere. All these phenomena are plainly manifest under the microscope.

"Where the tracing is made directly with pen and ink over a transparency, as is often done, no rubbing is necessary, and of course the phenomena from rubbering do not appear." [10]

Another point to be noticed is that the very delicate features of the original writing are more or less obscured by the opaqueness of two sheets of paper, and are therefore changed or omitted from the forged simulation, and their absence is usually supplied, through force of habit, by equally delicate unconscious characteristics from the writing of the forger [11].

**Direction of the Pen.**

The direction of the pen also affords a valuable guide in the detection of forgery by tracing.

Mr. Hardless gives the following instance of detection of a traced forgery:- A zamindar's clerk who transacted all the business affairs of his master happened to fall out with the latter's younger relations and so got dismissed. A few months after his dismissal the zamindar died and the latter's sons and brothers took over the management of the estate. The dismissed clerk, having in his possession several pieces of writings in the shape of letters and memoranda of his late master, he set to and forged, by the tracing process, a number of promotes and also letters in support of the former, all purporting

(9) Ames 69-70, Hardless p. 85. (10) Ames 70, 72. (11) Ibid 70.

to be written to him or in his favour by the deceased. Having accomplished his task the clerk straightway filed suits against the estate for the recovery of his alleged dues, and, in order to prove the authenticity of the handwriting on the pronotes and letters, produced several genuine writings of the deceased, among them some from which the forged documents had been manufactured. The clerk won his case in the lower court, the agreement in the formation of the letters and words in the documents being so very striking. On an appeal being preferred by the relatives of the deceased the District Judge referred the writings to the Government Expert in handwriting and Mr. Hardless examined the case. The tracings were brought to light, with the result that the decision of the lower court was upset, while the clerk himself was successfully prosecuted for forgery.

One noticeable feature in the case was that whereas the zamindar made a particular stroke with the agency of the thumb, that is as an upstroke, the clerk in his tracing made it according to his individual habit, with the action of the finger, that is as a downstroke.

In another case of traced forgery it was found that in the original writing the figure 8 was commenced with a finger curve and ended with a thumb stroke, that is, commenced on the top and ended from the bottom. The forger in his process of tracing formed the figure with a finger stroke and ended it with a thumb curve, that is commenced toward the bottom and ended at the top.

In a third case the signature in the tracing showed that the oval of the capital 'O' was formed from right to left whereas in the original it was made from left to right [12].

**Forger himself sometimes produces evidence of his guilt.**

Ames says:-" It sometimes happens that the original writing from which the tracings were made is discovered, in which case the closely duplicated forms will be positive evidence of forgery. The degree to which one signature or writing duplicates another may be readily seen by placing one over the other, and holding them to a window or other strong light, or by close comparative measurements." It occasionally happens that the original is produced, or caused to be produced by the forger himself, in the hope that the disputed writing may be compared with it, and in the agreement in formation of the traced with the genuine writing, the former will be held to be also genuine [13].

**Coincidence of two signatures, on superimposition one on the other is conclusive proof of forgery by tracing.**

We have already seen that "if it be found that two signatures measure precisely, and when superimposed one over the other they exactly coincide, such a fact is conclusive proof that one or both signatures have been traced. The firmness of the line, quality, execution or speed, and movement, combined with other details will show which one of the signatures is genuine and so distinguish the one which served as a pattern for the other [14].

Courts have uniformly concluded that where two or more supposed signatures, especially if there are more than two, are found to be counterparts, it is certain either that all are spurious and traced from a common original or that one is genuine and the others traced from it [15].

---

(12) Hardless 91—93. (13) Ames 69. (14) Hardless pp. 87—88.

(15) McDonough's Succession, 18 La. Ann. 419, 448; Day v. Cole, 65. Mich. 129, 31 N. W. Rep. 823; Hunt v. Lawless, (N. Y. Super Ct.) 7 Abb. N. Cas. (N. Y.) 113; Matter of Koch, (Surrogate Ct) 33 Misc. (N. Y.) 153, 68 N. Y. Supp. 375. For other cases alluding to this point see Doty v. Dellinger, 94 N. Y. App. Div. 610, 87 N. Y. Supp. 1001; Matter of Burtis, 107 N. Y. App. Div. 51, 94 N. Y. Supp. 961, 968; Hanriot v. Sherwood 82 Va. 1; Moore on Facts, Vol. I. p. 617.

A similar case is recorded by Mr. Hardless to have occurred in the United Provinces where the accused in his cross-interrogatories challenged the expert to point out any differences in the make of the letters in the hundi and those in the admitted writings. Of course there were no such differences because the signature was traced. The tracing, however, was exposed by measurements and superimposition, and the accused was convicted and sentenced [16].

In the celebrated Howland Will Case, tried some years since at New Bedford, Mass, (4 American Law Review, p. 460) because three signatures were, by measurement and superimposition, shown to be identically the same, forgery was alleged. Among numerous other witnesses called as experts to give testimony was Professor Peirce, of the Harvard University, who entered into a complicated mathematical computation to show how many times a man, under the law of chance, would be required to write his autograph composed of fourteen letters before three duplications would occur. He figured the number to be 2,666,000,000,000,000,000,000 times. Conceding the correctness of his conclusion based upon a signature having fourteen letters, the number of chances of exact repetition would be multiplied or diminished according to the greater or lesser number of letters in any given signature, and also as to the degree of eccentricity or caprice in the habit of the writer [17].

In the case of *Hunt* v. *Lawless*, the court said :—

"It is a fact *well* known, and may be readily verified that no two signatures, actually written in the ordinary course of writing them, are precisely alike. The character of a person's signature is generally of uniform appearance, and the resemblance between one and another signature of the same person is thus apparent. But the coincidence is seldom, if ever, known, where a genuine signature of a person, when held up to the window pane, superimposed over another genuine signature of the same person, is such a facsimile that the one is a perfect match to the other in every respect. It may be possible for an expert penman, intentionally to make two signatures so much alike that one will be a counterpart of the other; but the signatures made in the ordinary transactions, written without such studied and careful intention are never counter parts one of another. There is a diversity in the marks of the pen, the size of the letter, the level of the signature, and the space it occupies, that stands as guard over the genuine signature, and characterizes it as a true signature [18]."

In an American case, recently tried, the probate of a holograph will was opposed on the ground that the testator's signature was forged. Every feature of the signature, however minute or apparently insignificant was subjected to a searching examination and analysis by experts. The court said :—"There appears in the case at bar a silent, convincing piece of evidence, furnished by the will itself, which independently of the expert evidence, establishes beyond any reasonable doubt that the signature to the will propounded was not written by the testator. I refer to the startling physical evidence which is disclosed when the disputed signature and the genuine signature at the top of the will are superimposed. Upon a careful inspection of these two signatures, it will be found that they coincide almost exactly—in other words, if we place the disputed signature and the genuine signature near the top of the will, and hold them up to the light, it is difficult to locate any of the genuine signature underneath, for the reason that

(16) Hardless 87.

(17) See 4 American Law Review, pp. 460, 650, 654, see also Ames on Forgery p. 58, Moore on Facts p. 617.

(18) Hunt v. Lawless (N. Y. Super. Ct.) 7 Abb. N. Cas. (N. Y.) 113, 119, per Hon. E. L. Fancher, Refree.

they superimpose with such remarkable exactitude. True, there are slight departures occasionally from the model, but these variations are only in the detail of certain lines—the whole of the disputed signature being structurally the same as the other, and occupying the same physical field. Indeed, it may fairly be said that these very departures tend to indicate the process which has produced the signature, for it will be noticed that after such departure the line of the disputed signature immediately returns to the line of the model showing conclusively, as I think, that there was a model which was steadily operating as a guide to the writer's hand. This coincidence of a disputed signature with a genuine one when superimposed against the light has long been held by the courts to be proof of simulation.

"As the Appellate Division of the Supreme Court says in the Rice Will case [19], it does not need the testimony of experts to demonstrate that the disputed signature is a tracing from the genuine. It is a common occurrence in the speech of people to hear the expression that 'nobody ever writes twice alike.' And that belief has become so well established that, when we find a genuine signature which coincides with the disputed signature, there is but one inference to be drawn, namely, that the one is a tracing from the other. In the Rice case, the Court did not have before it the original model from which the signatures were traced, and came to the conclusion that the four signatures were traced from some unknown genuine signature, from the fact that they all practically coincided. In the case at bar, however, we have the model before us—the genuine signature near the top of the will. We have therefore, in the case at bar, a surer test of the method of production than existed in the Rice case. With both the model and the copy before us, we can, by simply comparing the two, follow each stage in the process and determine with practical certainty whether one has been traced from the other. Another point also apparent from inspection, and which is strongly suggestive in this connection, is the fact that the signature has the appearance of being tilted up to the left, as though made from a copy which was not laid straight on the printed line. In other words the signature starts in at a point somewhat above the printed line and then follows an imaginary line which gradually approaches the printed line until they meet at or near the end of the signature [20]."

**Traced signature need not necessarily be a perfect duplicate of the original.**

Traced signatures and writings need not, in all cases, be perfect duplicates of their original or superimpose exactly, since it is very easy to move the paper by accident or design while making either the tracing or the transfer copy. In addition to the shifting of the paper, the forger may make a particular stroke a little further out than shown in the original or may not proceed sufficiently high or far enough in the case of a curve or connecting stroke. This fact has to be noticed, because in some cases when the traced signatures or writings do not coincide in the matter of every stroke and dot with the original writing, it is not always positive proof that such writings are genuine [21].

Referring to this subject Ames says:—"Traced forgeries, however, are not, as is usually supposed, necessarily exact duplicates of their originals, since it is very easy to move the paper by accident or design while the tracing is being made, or while making the transfer copy from it; so that while it serves as a guide to the general features of the original it will not, when tested, be an exact duplication. The danger of an exact duplication is quite generally understood by persons having any knowledge of forgery and is therefore avoided [22]."

(19) 81 N. Y. (App. Div.) 223. (20) Matter of Burtis (Surrogate Ct.) 43 Misc (N. Y.) 437, 89 N. Y. Supp. 441, 447. (Per Surrogate Woodin)

(21) Hardless 89. (22) Ames 69—70.

In a case which was detected with the aid of Mr. Hardless, the court said:—"Sometimes the paper has been moved after the tracing of each word. Sometimes it has been moved after the tracing of one or two letters, and though the different letters composing the words have been traced the word has not been traced *as a whole*. No doubt this was done of design to baffle detection. It is impossible to explain the exact coincidence, sometimes of words and sometimes of the separate letters, forming the words in the receipts with the same words occurring in the genuine letters, which accused produced from his possession, except by the tracing of words and letters in these receipts from the genuine letters. The quittance (Exhibit 1) and receipts (Exhibits 2 and 3) are forgeries and very clever forgeries. Very possibly all the words occurring in them have been obtained by tracing [23]."

**An illustration: counterfeit signatures on Bank-notes and expert testimony thereon.**

It requires much experience and more than ordinary skill to detect counterfeit signatures to bank notes. The fraudulent ingenuity of men has brought this crime to such perfection that even the signers themselves have sometimes been imposed upon [24]. It is said however that there will probably be a stiffness in a traced writing not observable in a genuine writing [25]. If an alleged spurious signature is not identical in length or spacing with a signature from which it is alleged to have been traced, or if letters with open loops in one are closed in the other, the argument in favour of tracing should not overcome the positive testimony of unimpeached attesting witnesses that they saw the disputed signatures written by the author of the genuine [26].

The opinion of an expert that a person whose ordinary handwriting he has examined would not be able successfully to imitate certain signatures inspected by the witness, might be entitled to some weight; but his opinion that the person could more readily counterfeit one than another of the signatures was thought to be fanciful and entitled to little or no consideration [27].

**Retouching.**

We have seen that one of the tests of traced forgery is the presence of retouching.

But sometimes retouching is natural and genuine, and is made by a writer in the ordinary course of writing. Natural retouchings are usually done for correcting a palpable defect or to supply or form a part of an already written letter, in order to render it more legible and in such cases the strokes are free and bold. In retouching by the forger, the marks are generally more delicate and carefully made and done with the intention of concealing a fault not, as in the case of a genuine writing, of correcting it [28].

Expert Frazer remarks as follows on the subject of retouching: "Many persons contract the bad habit of going over what they have written with a pen to correct blemishes, and this habit sometimes becomes so pronounced that the writer invariably repaints his signature, whether it shows blemishes or not. To a person in the habit of retouching his own writings an unconscious skill is ultimately developed which enables him to put his pen more nearly than another at the exact point required, and to join two disconnected lines with an accuracy far in excess of anything else of the same kind which he is capable of accomplishing."

**Other Illustrative cases of traced forgery.**

The following is an instance of a most ingenious and romantic crime of forgery which, well nigh, had baffled detection and, with great difficulty was traced by expert testimony. The following is from a report of the trial in the Bellows Fall (Vt.) Times:—

(23) Cited in Hardless p. 94. (24) State v. Allen. 1 Hawks (8 N. Car.) 6, 9.
(25) McDonogh's Succession. 18 La. Ann. 419, 452.
(26) Wright v. Flynn, (N. J. 1905) 61 Atl. Rep. 973.
27) Holmes v. Goldsmith 147. U. S. 150, 164, Moore on Facts 617—619. (28) Hardless 90

"Mr. J. A. Dodge was president of the Boston, Concord, and Montreal Railroad, and his business relations were, therefore, very extensive. His health became poor, and in the early part of 1882 he went to California for its improvement, but failed to recover it. Henry Raymond was a confidential clerk or private secretary in his office. Mr. Dodge died in August, 1882, leaving a will and three codicils giving a detailed description of his possessions, and advice to his wife, as the executrix, for the payment of all legacies and other obligations. Raymond presented to the bank and got cashed a cheque for 2,500 dollars a few hours before Mr. Dodge died, the same purporting to have been signed by Mr. Dodge only a few days previous, and immediately after his death he presented a note for 5,000 dollars to the widow for payment. Of course, Raymond claimed that all of this came from the good will which Mr. Dodge, had for him. When Raymond showed his papers to Mrs. Dodge, or announced what he had, she denounced them as forgeries and him as a forger, in no uncertain terms, claiming that as her husband had told her very fully of his affairs it was very strange he had not told her about this. She expressed the same to others, and thereupon Raymond brought a suit against Mrs. Dodge for libel and damages for 5,000 dollars to be followed by suits to recover the amount of the cheque and note. This is a mere brief of the case.

"The trial began on November 17th and continued several days, during which several parties of prominence, who were familiar with the handwriting of Dodge testified to the genuineness of Mr. Dodge's signature to the note and cheque. It will be seen, of course, that the bank which cashed the 2,500 dollars cheque was naturally interested in the result of the case. One of the witnesses (one of the select men of Plymouth) testified how he advised Mrs. Dodge to settle the same, as he believed the signature to be genuine, and 'she would be 5,000 dollars poorer when the case was finished.' At this point counsel for Mrs. Dodge asked 'Why?' 'Because you are going to get beaten,' replied the selectman.

"On the 19th the plaintiff rested and apparently had a strong case. A contest sprang up as to the number of experts and the number of admittedly genuine signatures and other writing of Mr. Dodge that should be allowed, and Judge Smith decided that twenty signatures might be produced by each side, and that three experts and twenty non-professionals should be allowed to testify for each.

"On the 20th the defence opened by a statement from Charles A. Jewell, counsel for the defence. Several witnesses testified, their testimony being mainly circumstantial, among them Mrs. Dodge, the defendant, and also the Hon. Edgar Aldrich, of Littleton, who said he doubted the genuineness of the signatures to both the note and cheque. The testimony of Mrs. Dodge and Raymond were flat contradictions. This and other similar testimony continued, the excitement and attendance increasing every day till Tuesday, the 24th. Now came the 'tug of war'. Mr. D. T. Ames, of New York, (an expert) was put on the stand. Enlarged photographs, nearly three feet long, of the signatures to the codicil of Mr. Dodge's will, written during his illness, and his alleged signatures of the cheque and note were exhibited side by side before the jury, when Mr. Ames instituted a close and telling comparison between the genuine and forged signatures, pointing out clearly and in detail the many evidences of forgery, making at the same time a free and skilful use of a blackboard and crayon for the illustration of the nice characteristic distinctions which he drew between the writing of the genuine and forged signatures. He had examined a letter written by Mr. Dodge in California to Mr. Raymond, and found the figures '26' and the word 'Raymond' in the note the same in every particular, and claimed the forger had

copied the words and date by means of tracing. In twenty-eight capital D's found in the standards written by Mr. Dodge, he had found no one that in all its nice characteristics was like those in the signatures in question.

"As Mr. Ames continued his testimony he most plainly laid open the forgery and plot of Raymond in the most convincing manner. Indeed, he tore all pretension to genuineness to shreds, not only respecting the cheque and note, but showed how Raymond had even fabricated by tracing an entire letter alleged to have been given him by Mr. Dodge, evincing his good will and previous promise to 'do something' for him (Raymond) as furnishing a motive and consideration for the pretended legacy consummated in the giving of the cheque and note.

"Mr. Ames' testimony was as convincing to the plaintiff as to all others. At its close, the attorneys for the plaintiff immediately announced their inability to controvert his testimony, and expressed a willingness that the defence should have a verdict, which the jury rendered without leaving their seats.

"The note was surrendered to Mrs. Dodge's counsel. The case had collapsed; the whole business was admitted to be a forgery, and Raymond was arrested before leaving the court-room, on a warrant issued by the presiding judge, and placed under bonds to appear for trial for forgery.

"In many respects it would be admitted that the forgery was close to the genuine, and the casual reader and many familiar with the handwriting of Mr. Dodge could be well excused for believing the handwriting to be genuine, and yet in the dissection of the letters and words, distances, shadings, and in various other ways, the expert Mr. Ames threw a perfect flood of unquestionable light, covering the entire case, and this is certainly a most remarkable instance of effective expert testimony [28a]."

This is familiarly known as the Dodge Raymond case [29].

The Manchester (N. H.) *Daily Union*, November 25th, 1885, commenting on the Dodge Raymond case, said:—

"The sudden and unexpected turn of affairs in the Dodge-Raymond suit to-day produced a profound sensation, and the case seems destined to become known as one of the most remarkable in the criminal annals of New Hampshire. . . . The case was sharply contested, point by point, by the opposing counsel, and when the court assembled this morning, no one of the crowd of spectators suspected that the end was so near at hand.

"Mr. Ames, the New York expert, resumed his testimony, commenced yesterday, and step by step unfolded and made clear the entire plot of Raymond respecting not only the forgery of the 2,000 dollars cheque and 5,000 dollar note, but of letters purporting to have been signed, and one written and signed by Dodge, intended for the double purpose of showing a reason for his giving to Raymond the cheque and note, and to furnish standard signatures which, when compared with those upon the cheque and the note, should prove their genuineness.

"The evidence produced a profound sensation, but neither court nor spectators were prepared for the surprise that followed when Raymond's counsel, after consultation, announced their agreement that a verdict be entered for Mrs. Dodge in the suit for slander. It was as if a thunderbolt had fallen, and the audience found it difficult to realise that the famous Dodge-Raymond suit had fallen through. The developments in the affair thus far equal Gaboriau's most sensational inventions. [30]."

---

(28-a) Bellows Fall Times; Manchester (N. H.) Daily Union 25 Nov. 1885.
(29) See Ames 161.
(30) For a detailed account of this case with facsimile copies of the forged cheque and note, See Ames on Forgery pp. 160—167.

In another case the chief of the forged instruments was a will disposing of an estate of about twenty millions of dollars, and when it became apparent that the will was not likely to succeed in its purpose, two deeds were placed on record, purporting to have been executed by James G. Fair, conveying to Margaret Craven property in San Francisco valued at a million and a half of dollars. Mrs. Craven also produced an alleged marriage contract between herself and Mr. Fair, and purporting to bear, with hers, his signature. As yet, however, Mrs. Craven had made no legal claim as a widow under the alleged contract.

The expert phase of the contest was chiefly as to the genuineness of the will, it being most lengthy and alleged to be in the pencil-writing of Mr. Fair. It presented an extent of material that admitted of a most conclusive demonstration of its falsity. The will consisted of two full foolscap pages, written with a pencil on one side of two sheets, which presented a condition most practical for tracing, by which means the forgery was largely perpetrated. Had it been attempted to write on both sides of one sheet, the writing on the first page would have so far interfered with that of the second page as to have made it impracticable.

Where a long legal document, especially one so full of technical words and phrases as a will, is to be fabricated, there would be no likelihood that the forger would have sufficient examples of the chirography of the person whose writing was to be simulated as to present models for any considerable portion of the words required in its composition ; and here would be, as it proved in this case, the fatal difficulty. Such words as were found in the model writing could easily be traced in pencil, by placing the paper on which the forgery was being made over the word to be copied, holding it against a sheet of glass upon an incline, and simply tracing over them with a pencil. Since the whole will was in pencil, this was a very simple operation, but when the necessity came to use a word not to be found in his model writing it was more difficult. Such words required to be made up syllable by syllable or letter by letter. Then there would occur not only a difficulty of making the correct forms of letters, but to make the proper and natural connections between the syllables or letters; and as one syllable would be required to be taken from one piece of writing and an adjoining one from another piece, perhaps written upon a different scale, with different pencil, and under different circumstances there would be a discrepancy in size and slant, awkward spacing, vacillation as to shade, base-lines, etc. Again, if the model writing was somewhat limited, it would not furnish examples for all the natural and habitual variations of the writing sought to be imitated, which would lead to an unnatural duplication of such peculiarities as were present in their limited material ; also shades which are not sufficiently heavy would require to be retouched [31].

Attention was called to the vacillating character of the writing in the forgery as regards size, shade, spacing, letters, syllables, words, and lines, and also to the short projections of the loops, as compared with Fair's writing. After the proofs thus afforded there was no doubt about the document being forged [32].

The celebrated facsimile letter published by the Times and which was the chief matter of enquiry by the Parnell commission, is also an instance of forgery by tracing.

When first shown the facsimile print in the *Times*, Mr. Parnell is stated to have put his finger on the 'S' of the signature saying, "I did not make an S like that since 1878," and in his statement in the House he said,

(31) Ames. 145—146. (32) Ibid 147.

I unfortunately write a very cramped hand, my letters huddle into each other and I write with great difficulty and slowness. It is in fact a labour and a toil for me to write anything at all. But the signature in question is written by a ready penman who has evidently covered as many leagues of letter-paper in his life as I have done yards. Of course, this is not the time, as I have said, to enter into full details and *minutae* as to comparisons of handwriting, but if the House could see my signature and the forged fabricated signature they would see that, except as regards two letters, the rest bears no resemblance to mine [33]."

**Freehand forgery.**

European and American experts are of opinion that freehand forgeries, as a rule, are not well executed and that the forger generally is a clumsy workman. Mr. Hardless is of opinion that in India, freehand forgeries, speaking generally, are of tolerably good execution [34].

Where signatures or other writings have been forged by previously making a study and practice of the writing to be copied, until it has been to a greater or less degree idealized, the hand must be trained to its imitation so that it can be written with a more or less approximation as to form and with natural freedom [35].

Forgeries thus made by skilful imitators are the most difficult of detection, as the internal evidence of forgery by tracing is mostly absent [36].

The evidence of freehand forgery is chiefly in the greater liability of the forger to inject into the writing his own unconscious habit, and to fail to reproduce with sufficient accuracy that of the original writing, so that when subjected to rigid analysis and microscopic inspection, the spuriousness is made manifest and demonstrable [37].

Specific attention should be given to any hesitancy in form or movement, manifest in angularity or change of direction of lines, changed relations and proportions of letters, slant of the writing, its mechanical arrangement, disconnected lines, retouched shades, etc. [38].

Photographs, greatly enlarged, of both the signatures in question and the exemplars placed side by side for comparison will greatly aid in making plain any evidences of forgery. If practicable, use may be made for comparison as standards both the imitated writing and that of the imitator. These methods, employed by skilled experienced examiners, will rarely fail in establishing the true relationship between any two disputed handwritings [39].

Traced forgeries are usually confined to mere signatures. If a document of some length has to be forged the freehand method is the one more generally adopted.

Sometimes, entire documents such as letters, pronotes and receipts are found to be freehand forgeries or simulations of other people's handwriting.

In any case, where an entire document is the subject of examination, there would be less difficulty in detecting the forgery in it than in mere signatures, as the materials are more abundant and it is not possible, as already shown, for a man to produce an entire document or any lengthy piece of writing without showing signs of his own individual writing habit [40].

As an instance of freehand forgery we may cite what is generally known as *the Bird Case*. Bird was convicted of forgery in July, 1899. The

(33) O' Brien's life of Russell. See also Hardless 111. (34) Hardless 97.
(35) Ames 72. (36) Ibid. (37) Ibid. (38) Ibid.
(39) Ibid. (40) See Hardless p 113.

**Illustrative case of freehand forgery.**

trial attracted considerable attention from the press and the public. Bird was the private secretary of Griffith, an extensive and wealthy real-estate holder and dealer and had the full confidence of his employer, being entrusted with the entire charge of the affairs of his office, as book-keeper and cashier. Before detection, Bird had forged Griffith's name to cheques aggregating to several thousand dollars, on which he had received the cash from the First National Bank of Los Angeles, where Griffith kept his account. Bird was well known at the bank where, as Griffith's secretary, he frequently made deposits and procured cash on Griffith's cheques. The forgery was written freehand, and in its general pictorial effect was a very close simulation of Griffith's genuine signature but as is inevitable to a free-hand forgery, certain peculiarities in forms of letters, their combination and shade, were over-looked by the forger, and his own unconscious habit was injected into their places. Griffith threw out the cheques, chiefly from his knowledge of not having signed cheques for such amounts in favour of Bird at the time of their dates. The suspected signatures were submitted to A. W. Seaver, a well known local expert, who decided them to be forgeries. Bird was indicted and brought to trial. He was ably defended by Ex-Judge Dillon of Los Angeles. The trial continued over two weeks. He had a powerful ally in the bank which had cashed the forged cheques, for there was pending a civil suit brought by Griffith against the bank for the recovery of the amount of the forged cheques. It was alleged by Griffith that the aggregation of the forgeries was far greater than the amount of the cheques which came into Griffith's possession, as Bird, while acting as secretary, received all the returned cheques from the bank, and thus had opportunity to destroy any that he had forged. At the trial the American expert, Mr. Ames, was called by the District Attorney to give testimony in the case. He presented cuts of five of the forged signatures, with an equal number of genuine. Photographs were placed in the hands of each of the jury, while their differences were pointed out and illustrated upon a blackboard, thus enabling the jury to exercise their own vision and judgment as to the truthfulness and value of the reasons presented to sustain the expert's opinion that the signatures were forgeries [41].

As was stated by the expert to the jury, while no one of these variances might be sufficient to sustain the allegation of forgery, such a long series of variances from Mr. Griffith's habit of writing, with marked uniformity running through a number of disputed signatures, constituted the most conclusive proof of forgery [42].

**Methods of examination of freehand forgery.**

For the detection of freehand forgery the methods of comparison by characteristics should be observed, and the movement, penscope, pen-presentation, pen-pressure, direction, execution, alignment, arrangement, comparative sizing and the makes of the curves and angles must also be tested. In the cases of the questioned signatures, close attention must be paid to writings alleged to be forged or simulated, as well as the handwriting of the person or persons suspected of committing the forgery. Such examination will help to disclose whether the questioned signature or writings are actual forgeries committed by some other person or merely the disguised handwriting of the writer himself [43].

In freehand forgeries, special attention is also to be paid to the concluding portion which, as a rule, affords easier clue than the commencing portion. This is due to the writer being less able to maintain the disguise

(41) Ames 106—107. (42) Ames 109. (43). See Hardless 98.

as he proceeds in his writing, and consequently he lapses more and more to his natural or individual style [44].

**Characteristics of freehand forgery.**

The following [45] are some of the characteristics presented by freehand forgeries :—(i) Like traced forgeries, freehand forgeries also are usually slower in execution, just as they are very frequently of greater length than the genuine signatures.

(ii) Like traced signatures, freehand forgeries also show nervousness of the lines and slowing down of the pen and also a strained appearance, the latter especially in the course of the upstrokes, curves and base lines.

(iii) Freehand forged signatures also just as traced ones often exhibit unusually large number of breaks or divisions of the letters or characters in words.

(iv) The unusual number of pen-lifts and pen-pressure is also a feature in which both freehand forgeries and traced ones agree.

In one case, the court said :—"The Government Expert has drawn attention to the much greater number of pen-lifts in the forged receipt (by freehand process) and an examination with a lens shows that in several instances a stroke has been gone over twice—first sketched and then inked over [46]."

(v) Freehand forgeries also frequently show signs of tremor, that is deviations from the uniformity of the strokes and lines of writing. This tremor is the result of the consciousness of guilt.

There is however, a difference between a freehand forger for effecting a scheme of fraud and one who makes a display of his powers at a public exhibition or for purposes of entertainment. In the latter case there is a greater ease of movement, and there is not perceivable that tremor and hesitation which is produced by the consciousness of fraud and the fear of its consequences. It is also to be noted that some people whom nature has endowed with extraordinary powers of closely imitating the signature of other persons, do not employ it to carry out a scheme of fraud or to conceal a crime.

(vi) Slow and deliberate writing lends itself to easier and better imitation than rapid writing.

(vii) A strong, smooth, free and rapid hand is the most difficult to forge.

(viii) Flourishy signatures, bristling with several ornamental curves, though apparently difficult to imitate, can, in practice, be better worked up by the forger and given a closer pictorial effect of similarity to the original than a clear, clean-cut, simple signature in comparison with which the nervousness and unevenness of the forgery will show out at once.

(ix) In freehand forgery there is always the danger of the forger injecting, in a greater and more prominent degree than in traced forgery, his own writing characteristics. This accounts for the fact that while sometimes the forger cannot be identified in the case of a traced forgery and all that can be said is that it is a tracing, in cases of freehand forgeries it is frequently possible to say, on examination of the writings of the suspected persons, whether any of them committed the forgery.

(44). Ibid 14. (45). These rules and principles will be found elaborated in Hardless pp. 101—104; and Ames. pp. 106—107. (46) Cited in Hardless p. 107.

CHAPTER VII.

# Forgery by Imitation.

CONTENTS:—Similarity in handwriting.—Difficulty of discriminating between genuine and forged signatures and writings.—Signature can be more easily imitated than a holograph.—Successful Imitation of signatures.—Illustrative cases.—(i) A note that misled a banker's clerk.—(ii) Abel swearing the forged deed was genuine and vice versa.—(iii) A deed which Lord Eldon was alleged to have attested.—(iv) A case that put the whole office in a dilemma.—(v) A case where the expert solved the riddle.—(vi) Expert helps to bring back to remembrance what was forgotten by lapse of time.—Sometimes resemblance is so perfect that forg ery can be proved only by independent evidence of surrounding circumstances.—Signature presenting appearance of a laboured production, generally suspicious.

**Similarity in handwriting.**

In the matter of recognizing handwriting, an abundant source of mistake is, that many persons write very much alike; so much so, that it is often difficult to distinguish one person's handwriting from that of another [1].

**Difficulty of discriminating between genuine and forged signatures and writings.**

It is easy to forge the handwriting of almost any man, "so that it may be almost impossible for the best judges to discriminate between the false and the true," said Mr. Justice Grier, "and it is too true that persons may be found willing for a sufficient consideration, to swear to any statement of facts [2]."

"The skill in imitating the writing of another is sometimes so perfect that the most experienced are at fault in detecting the falsehood [3]."

**Signature can be more easily imitated than a holograph.**

"It is evident that a signature may be more easily and exactly imitated than a holograph composition consisting of several words [4]."

An alleged holograph will of Mrs. Myra Clark Gains, which was offered for probate, had a general resemblance and bore a striking similarity to her genuine writing. But the forgery was detected by certain features and peculiarities in her genuine writings which had not been successfully imitated in the document, although one of the judges, disclaiming to be an expert in handwriting said that the instrument was too skilful an imitation to enable him to pronounce from mere inspection and comparison that it was a forgery [5].

**Successful Imitation of signatures—illustrative cases: (i) A note that misled a banker's clerk.**

Handwriting is sometimes most successfully imitated. On a trial for forgery of bank-notes, a banker's clerk whose name was on one of the notes swore distinctly that it was his handwriting, although as a matter of fact it was forged, while he spoke hesitatingly with respect to his genuine subscription [6].

**(ii) Abel swearing the forged deed was genuine and vice versa.**

A solicitor was tried at Derby, in 1861, on a number of indictments for forgery. One of them related to a deed which purported to be executed by a client of his named Abel. Abel had executed a genuine mortgage, and the solicitor had forged another in his name. The client, *Abel, swore to the forgery as his genuine signature, and swore that the genuine signature was not his.* He gave this evidence before the magistrate and the grand jury. But he had made a mistake, and in an action, tried on

(1) Ram on Facts, p. 53.
(2) Truner v. Hand. 3 Wall. Jr. (C. C.). 88, 24 Fed. Cas. No. 14, 257.
(3) Murati v. Luciani, 1 Bal. (U. S.). 49, 17 Fed. Cas. No. 9,936 per Hopkinson J.
(4) Constable. v. Steibel. 1 Hag. Ecc. 56, per Sir John Nicholl.
(5) Gaines's Succession, 38 La. Ann 123, 134.
(6) Rex. v. Carsewell, Burnett's Criminal Law of Scotland, 502.

the forged deed, it was conclusively established by the evidence, corroborated by a variety of circumstances, that Abel had sworn to the wrong deed as his own [7].

(iii) A deed which Lord Eldon was alleged to have attested.

Lord Eldon mentioned a very remarkable instance of the uncertainty of this kind of evidence. A deed was produced at a trial on which much doubt was thrown as a discreditable transaction. The solicitor was a very respectable man, and had confidence in the character of his attesting witnesses. One of them purported to be Lord Eldon himself, and the solicitor, who had referred to his signature in his pleadings, had no doubt of its authenticity. Yet Lord Eldon declared that he had never attested a deed in his life [8].

The following case cited in Ames' work on Forgery is well worth careful study:

(iv) A case that put a whole office in a dilemma.

A few years since there were delivered from the New York Custom house, on apparently proper orders, two bales of valuable silk. Shortly after the delivery the importing merchant presented his regular orders for the silk, which could not be found. The two orders upon which it already had been delivered were found upon the file. Obviously one set of orders was forged. All were written upon the regular Custom House blanks and purported to bear the initials or signatures, of the heads of the several departments of the Custom House through which such papers are required to pass. On being submitted to these several persons each unhesitatingly pronounced his signature to be genuine, but no one was found who admitted having written the body of the suspected orders. At this stage of the case an expert was called to the Custom House. The suspected orders, together with specimens of the writing of every employee of the Custom House who, from his position, could have written the orders, were submitted to him, with a request that he discover, if possible, the person who had written the body of the orders. The expert was told at the same time by the Collector, that he need give no attention to the signatures, as they were all admittedly genuine, only the written filling-in of the orders being unidentified. The papers were taken to the private office of the Collector for examination. Immediately upon inspection of the writing under microscope it was evident to the expert that not only the writing in the body, but all the signatures were skilfully executed forgeries. This was reported to the Collector, who excitedly declared that it was simply folly for an expert to set his opinion against the positive admission of the genuineness of their signatures by the several implicated writers.

On the persistence of the expert, however, the several alleged writers of the signatures were called to the office, where each reaffirmed that his signature was genuine. Each was then requested to look at the writing through the microscope and observe the uneven, tremulous, broken lines and retouched shades, (one of which was the heavy staff of a capital J, which had first been made with a light stroke, and then re-enforced by another, the two strokes being separated a portion of the way by a white line), and say if that was in accordance with their style of writing. Each became immediately convinced that he had been deceived, and that his "admittedly genuine signature", was really a very clever forgery.

When questioned originally as to how it was that they had signed the forged orders, the first on the list replied that in the routine of busines the orders came to him in a package bundled together. As he turned them up

(7) Painter v. Abel, Coram Erle, C. J. Derby Summer Assizes, 1862, 2 H. & C. 113; 33 L. J. Exch. 60.

(8) Eagleton v. Kingston, 8 Ves. at p. 476.

to initial them occasionally two would come up together, one of which would escape the initials, and on its discovery and return to him, he initialed it simply in a formal and perfunctory manner. He presumed that it was in this manner that these spurious orders had received his initials. The second accounted for the presence of his initials from the fact that it came in the usual way, indorsed by his subordinate. In a similar manner each one accounted for the presence of his name upon the forged papers. The stolen silk was traced and recovered. Suspicion soon rested upon a well-known forger as the author of the scheme for robbery and of the spurious orders. Specimens of his writing were secured, and upon comparison it was identified with that upon the orders. He was tried, convicted, and sent to prison. After conviction he confessed to the forgery and the entire scheme for robbery [9].

(v) A case where the expert solved the riddle.

Some years since one of the best known American bankers John J. Cisco, testified in court in a very positive manner, even alleging that he could not be mistaken, that he had written a certain signature in question which an expert had just declared to be a forgery. While Mr. Cisco was giving his testimony, the expert, Mr. Joseph E. Paine, sitting at a table in the court-room, wrote an imitation of the signature, which was handed to Mr. Cisco (the paper being so covered that the signature only was visible). When he was asked concerning it, he with equal positiveness pronounced it to be genuine. His surprise may be imagined when on the removal of the surrounding cover he perceived it to be written upon a scrap of paper, and was informed as to how it had been written [10].

But on a prosecution for forgery it was held erroneous to allow an expert, on behalf of the prosecution, to make an imitation, of a genuine signature of the person whose name was alleged to have been forged, and to hand it to the jury for their inspection and comparison. The fact that it was easy for the expert to counterfeit the signature of any other, did not tend in the slightest degree, said the court, to prove that the defendant did it or even that he was competent to do it [11].

(vi) Expert helps to bring back to remembrance what was forgotten by lapse of time.

A wealthy merchant of Washington, denied the genuineness of his signature upon an indemnity bond, where it purported to have been written fifteen years before. The expert gave testimony showing the signature to be genuine. The merchant had listened attentively to the evidence presented, and his attorneys thought that he would take the stand and reaffirm his denial of its genuineness; but to their utter consternation and that of several witnesses present, including one handwriting expert called to sustain the expected denial, the merchant when he took the stand, stated that he had changed his belief respecting his signature, and said, "I now believe it to be genuine." A verdict was at once rendered accordingly [12].

"One who is not so much accustomed to write might find it difficult or impossible to detect a carefully made imitation of some of his writings [13]."

Sometimes resemblance is so perfect that forgery can be proved only by independent evidence of surrounding circumstances.

"The worst forgery this court was ever required to pass upon," said Chief Justice Campbell of Michigan, "was one where the fact was proved beyond any doubt, and yet the signatures were so perfect that their genuiness—without conclusive proof of other facts—could not have been overthrown [14]."

(9) Ames 59—60. (10) Ibid 61. (11) Thomas v. State. 18 Tex. App. 213, 223.
(12) The Gault case cited in Ames 61.
(13) North American F. Ins. Co. v. Throop, 22 Mich. 146, 162 per Cooley, J.
(14) Matteson v. Morris. 40 Mich. 52, 58. Per Campbell C. J.

In passing upon the validity of signatures in a case in the New Jersey Court of Chancery, Vice Chancellor Pitney said "I have myself recently had a case before me where a signature was forged six times with such consummate skill that the same distinguished expert who assisted me here was unable to point out any difference between the signatures and the standards in that case, and yet the forgery was established beyond all doubt, and so strongly and clearly that the counsel who supported their genuineness substantially threw up his brief, and the utterer has since been convicted of the crime [15]."

In a case involving the genuineness of a signature, it has been held that an expert may be permitted to testify that signatures can be so perfectly imitated by an adroit penman as to render detection extremely difficult [16].

"The hand of an old and decrepit person would probably be unequal to the task of executing a very clever forgery [17]." But it is possible for a young man to simulate the hand of the old and the infirm.

"Those who have seen the genuine signature of the patriot Stephen Hopkins, upon the Declaration of our Independence, and have compared it with Benjamin O. Tyler's admirable facsimile of the signatures to that instrument, can see at once that the hand of age and disease may be successfully imitated by one in the prime of life and in the full possession of his muscular powers. But the venerable patriot whose head and whose heart were still strong and sound although his hand trembled from age and disease, could not have imitated successfully, the natural signature of B. O. Tyler [18]."

Commenting upon a disputed signature which was very unlike the genuine standards, and was pronounced a forgery, the Court said: "Perhaps the most striking feature about it is that it lacks the life of the genuine signature. It presents the appearance of a laboured and dead production [19]."

**Signature presenting appearance of a laboured production, generally suspicious.**

It must be however noticed that a laboured signature is not always a sure test of forgery; it may be accounted for by other circumstances [20].

Upon comparison of genuine signatures of the plaintiff with one which he pronounced a forgery, Judge Deady said that over and above various dissimilarities which he mentioned "there is a difference in the general effect and appearance of the signatures that is more readily felt than expressed. One may see at a glance that two pictures, which have a general similarity, are not portraits of the same person, when it might be difficult to give a satisfactory reason for the conclusion. The disputed signature is evidently the work of a skilful penman. The lines are comparatively smooth and steady, while the exact contrary is characteristic of the plaintiff's writing. Indeed, I very much doubt if he could write such a signature as the one attached to (the disputed writing) [21]."

---

(15) Greenwood v. Henry. (N. J.) 1894, 28 Atl. Rep. 1053, 1057.
(16) Page v. Homans. 14 Me. 478. (17) Moore on Facts, Vol 1, p. 615.
(18) Lansing v. Russell, 3 Barb. Ch. (N. Y.) 325, 336.
(19) Matter of Gordon. 50 N. J. Eq. 397, 26 Atl. Rep. 268. See also Wills. Cir. Evi. 237—239.
(20) See the judgment in Boylan v. Meeker, 28 N. J. L. 274 (460) etc. Seq. cited in chap. X on "Forged wills". (21) Sharon v. Hill, 26 Fed. Rep. 337, 360.

CHAPTER VIII.

# Disguised Handwriting.

CONTENTS:—Nature's impress of individuality not obliterated by disguise.–Disguised writing, Examples of—Anonymous letters.—Points to be attended to in the examination of disguised handwriting.–Comparison of disguised writing with imitated writing.—An illustrative case.—Detection of disguise, methods of.—Attention to peculiarity of spelling.—Opinion evidence of experts as to whether signature is natural or simulated.—Junius' letters as an illustration of disguised handwriting.—

**Nature's impress of individuality not obliterated by disguise.**

Years might have rolled; stature might have changed; the hair might have turned gray; care and trouble might have wrought wrinkles on the once blooming face; foreign travel might have altered the habits and accents of the man; and yet nature's stamp on the human countenance is too well impressed for all these great changes to obliterate so completely as to make it impossible for friends and neighbours, by close observation, to recognise that the apparent stranger who comes back from his travels on foreign shores and in distant lands is after all their playmate in childhood.

Even, so, one may disguise his writing ever so much; time and trouble might have left their marks; the hand once firm and fair might have become shaky and cramped; yet, with all these, careful study and also comparison cannot fail to detect the identity of a common hand being the author of both the writings [1].

Yet, in spite of all this nature's impress of identity, mistakes occur in the recognition of persons. In the same manner, mistakes occur in the identity of handwriting, due either to accidental similarity of style, or designed imitation [2].

"Olivia.—How now, Malvolio?
Malvolio.—Madam, you have done me wrong,
Notorious wrong.

---

(1) A letter in a number of the Spectator contains the following very remarkable instance of the recognition of a schoolfellow:—

"Every one, who is acquainted with Westminister School, knows that there is a curtain, which used to be drawn across the room, to separate the upper school from the lower. A youth happened, by some mischance, to tear the above-mentioned curtain. The severity of the master was too well known for the criminal to expect any pardon for such a fault; so that the boy, who was of a meek temper, was terrified to death at the thoughts of his appearance; when his friend, who sat next to him, bade him be of good cheer, for that he would take the fault on himself. He kept his word accordingly. As soon as they were grown up to be men, the Civil War broke out, in which our two friends took the opposite sides; one of them followed the Parliament, the other the Royal party. As their tempers were different, the youth, who had torn the curtain, endeavoured to raise himself on the civil list; and the other, who had borne the blame of it, on the military. The first succeeded so well, that he was in a short time made a judge under the Protector. The other was engaged in the unhappy enterprise of Penruddock and Grove in the West. I suppose, Sir, I need not acquaint you with the event of that undertaking. Every one knows that the Royal party was routed, and all the heads of them, among whom was the curtain champion, imprisoned at Exeter. It happened to be his friend's lot at that time to go the Western circuit. The trial of the rebels, as they were then called, was very short, and nothing now remained but to pass sentence on them; when the judge hearing the name of his old friend, and observing his face more attentively, which he had not seen for many years, asked him if he was not formerly a Westminister scholar. By the answer, he was soon convinced that it was his former generous friend; and, without saying anything more at that time, made the best of his way to London, where employing all his power and interest with the Protector, he saved his friend from the fate of his unhappy associates." *The Spectator, No. 313. Ram on Facts 65—66.*

(2) Ram on Facts p. 53.

Olivia.—Have I, Malvolio? No.
Malvolio.—Lady, you have. Pray you, peruse that letter:
You must not now deny it is your hand,
Write from it, if you can, in hand, or phrase.
Olivia.—Alas, Malvolio, this is not my writing,
Though, I confess, much like the character:
But, out of question, 'tis Maria's hand [3]."

A singular circumstance relating to handwriting happened to Lord Eldon. It is thus mentioned by himself:—"A deed was tried in Westminister Hall, stated to have been executed under circumstances throwing a good deal of blot upon the persons, who had obtained it. The solicitor, who was a very respectable man, said, he felt satisfaction, that there were respectable witnesses. One was the town-clerk of Newcastle, and I was the other. I could undertake to a certainty, that the signature was not mine, having never attested a deed in my life. He looked back to my pleadings, and was sure it was my signature; and, if I had been dead, would have sworn to conscientiously [4]."

**Disguised writing, examples of: Anonymous letters.**

The most frequent cases in which handwriting is brought into question in various forms of disguise, arise in the form of anonymous letters.

Where the natural writing of their authors has been procured for comparison, by skilled experts it is always possible to reveal the identity of the writing; the writers' care never being able to successfully conceal their identity through any considerable composition [5].

Of course, every conceivable method is resorted to for a disguise:—Pen-printing, reverse of slope, change of pens, distortion of letters, introduction of new and grotesque types of letters, etc. But if the well-nigh infinite personalities that go to make up a natural and habitual handwriting, and the overwhelming power of acquired habit, which, as Dryden says, "is ten times nature," are borne in mind, the disguise will be easily penetrated and the true characteristics recognized.

**Points to be attended to in the examination of disguised handwriting.**

With all the effort to disguise one's writing, the warp and woof will continue to be of the old habitual hand, through which the identity of the writer will be as inevitably manifest as he himself would be through any disguise of his person [6].

In disguised writing the writer seeks to impart an appearance as unlike his own habitual writing as possible, and yet have the disguised writing legible. In imitated writing, the writer seeks to reproduce, as perfectly as possible, the habitual handwriting of another person. The effort at disguised writing fails from the inability of the writer to avoid his own unconscious and habitual characteristics. In imitated writing, the writer fails from a two-fold cause. He can neither avoid all his own unconscious habits, nor reproduce all those of the imitated writing; nor can he assume the unhesitating and natural facility with which natural writing is executed.

**Comparison of disguised writing with imitated writing.**

In forged or imitated writing, the more obvious and conspicuous things become objects of special attention, and are therefore usually unduly emphasized, while the more numerous minor peculiarities go unobserved and are substituted by those of the forger. In disguised writing, the reverse is true. The more conspicuous things will be known, and can therefore be

(3) Twelfth Night, Act. v; Ram on Facts, page 54.
(4) 8 Vesey, 476. Ram on Facts, page 54—55. (5) Ames 93. (6) Ibid 94.

omitted, while the multitude of minor and unknown peculiarities remain to betray the identity of their author [7].

**An illustrative case.**

The case of Everett v. Wilkinson, lately tried in Jersey City, N. J, is presented as a specimen of anonymous and disguised letter-writing. Both parties were well-known practicing physicians, and the case attracted wide-spread attention. A considerable number of very offensive anonymous letters were received by a druggist, reflecting seriously upon the character and professional skill of one Dr. Everett. Circumstances led Dr. Everett to attribute their authorship to a certain limited number of persons, among whom was Dr. Wilkinson. Measures were taken which resulted in securing the writing of several suspected parties. These specimens were submitted with the anonymous letters to the expert Mr. Ames, who selected the writing of Dr. Wilkinson as being the same as the disguised writing of the anonymous letters. After a hotly-contested trial Dr. Everett was awarded damages to the amount of 2,500 dollars which was paid [8].

In their pictorial effect there was no observable resemblance between the genuine and the disguised writing any more than between a white and black man, yet mainly on expert testimony the identity of the anonymous writing was so very thoroughly demonstrated as to secure a large verdict as damages against the author for criminal libel [9].

**Detection of disguise, methods of:**

**Attention to peculiarity of spelling.**

The difficulty of proving handwriting is greatly increased where it is studiously disguised; but such is the power of habit, that though persons may succeed to a certain extent in disguising their writing, they commonly fall in to their natural manner and characteristic peculiarities; such peculiarities being most commonly manifested in the formation and spelling of particular words [10].

Cresswel v. Jackson, is a case which presented a curious instance of characteristic spelling. The person alleged to be the writer of the incriminated documents (with only one discovered exception) invariably spelled "daughter" "doughter," a phonetic way of spelling the word after the pronounciation common in the district. The testator never made this mistake. So also in Ryves v. The Attorney General, (of which there is an account in Lord Selborne's Memorials, Personal and Political, 26-34.) certain documents which were undoubtedly forgeries were attributed by the Attorney General to Mrs. Serres, the mother of Mrs. Ryves, the plaintiff. In two of them professing to be signed by persons of high rank and station, the word "off-spring" was used, but spelled "of-spring". These letters were produced by the Attorney General which were admitted by the plaintiff to be in her mother's handwriting, in each of which the same misspelling occurred [11].

A tailor, of the name of Alexander, having learned that a person of the same name had died, leaving considerable property without any apparent heirs existing, obtained access to a garret in the family mansion; and it was said, found there a collection of old letters about the family. These he carried off, and with their aid fabricated a mass of similar productions, which, it was said, clearly proved his connection with the family of the deceased, and Lord Ordinary decided the cause in his favour; the case however was carried to the Inner House. When it came into Court, certain circumstances led Lord Meadowbank, then a young man at the bar, to doubt the authenticity of the documents. One circumstance was that there were

(7) Ibid 94—95. (8) Ibid 95-96. (9) Ibid 99.
(10) Per Macdonald, L C B. in Rex v. Bingham, Horsham Spring Assizes, 1811, Shorthand Report, 106; Wills Cir, Evi. 239-240. (11) Wills Cir. Evi. 239-240.

a number of words in the letters purporting to be from different individuals, spelt, or rather misspelt, in the same way, and some of them so peculiar, that on examining them minutely, there was no doubt that they were all written by the same hand. The case attracted the attention of the Inner House. The party was brought to the clerk's table, and was examined in the presence of the Court. He was desired to write to dictation and he misspelt all the words that were misspelt in the letters in precisely the same way; and this and other circumstances proved that he had fabricated all of them himself. He then confessed the truth of his having written the letters on old paper, which he had found in the garret and this result was arrived at in the teeth of the testimony of half-a-dozen engravers, all of whom said that they thought the letters were written by different hands [12].

**Opinion evidence of experts as to whether signature is natural or simulated.**

In one of the English cases at *nisi prius* an expert, being called as a witness and requested to look at a disputed writing, was asked: "From your knowledge of handwriting in general, do you believe that writing to be a natural or fictitious hand?" Baron Hotham said: "His science, his knowledge, his habit, all entitle him, to say, 'I am confident it is a feigned hand.' To that there is no objection; and so far as that goes, I see no reason for rejecting that evidence [13]."

It is now generally held that a witness professing to have skill in the knowledge of handwriting may be permitted to give an opinion from mere inspection whether a writing in question is a free, natural and genuine hand or whether it is an imitated, simulated, or disguised hand [14]. But "it is agreed on all hands," said Chief Justice Shaw, "that such evidence is in general deserving of little consideration [15]."

"On the whole, I think, the weight of authority is against receiving such evidence," said Chief Justice Bronson "and that it should be rejected. There are many things which affect the genuine handwriting of a party, such as his age, health, habits, state of mind, position, haste, penmanship, and writing materials, and the opinion or belief of a witness who judges solely from an inspection of the instrument alleged to be forged rests on no solid foundation. It is impossible that he should know whether an instrument or signature is genuine or only an imitation, when he has never seen the original. At the best he can only give us a conjectural opinion, which is much too loose and unsatisfactory to lay the foundation for a judicial decision [16]."

Holroyd J. said in Gurney v. Langlands [17]: "It is impossible for any person to speak to handwriting being an imitation unless he has seen the original."

"On the other hand," the Chief Justice Tilghman said, "it is easier in the nature of the thing to discover that writing is an imitated hand than to ascertain a forgery by comparing the genuine writing of the person supposed to have written it with the writing supposed to be forged. In an imitated hand there is generally a stiffness, which a very acute observer may perhaps distinguish; but when a writing is forged the forger will endeavour to conceal his natural hand, so that the difficulty of judging by comparison only must be very great [18]."

One of the most celebrated cases in history of successful writing under disguise, which has baffled the efforts and enquiries of several generations

(12) Reg. v. Humphreys, see Wills pp. 243-247.
(13) Rex v. Cator, 4 Esp. 117, 145, Moore on Facts, 619.
(14) Lyon v. Lyman, 9 Conn. 55.
(15) Moody v. Rowell, 17 Pick., Moore or Facts, 619.
(16) People v. Spooner 1 Den. (N. Y.) 343, (346).
(17) 5 B. and Ald. 330, 7 E. C. L. 118.
(18) Lodge v. Pipher, 11 S. and R. (Pa), 33, 336.

**Junius' letters as an illustration of disguised handwriting.**

of experts is what is commonly known as Junius' letters. 'Junius' is the signature of an unknown writer who, after exciting and baffling the curiosity of three or four generations of critics, has been allowed to take rank amongst English classics under a pseudonym. The first of the published letters with this signature was dated January 21, 1769; the last, January 21, 1772. The entire series appeared in the *Public Advertiser*, a popular newspaper edited by Woodfall, to whom a number private letters were also addressed by the same writer. These are included in the collected and complete editions, as well as a number of letters attributed on varying grounds, more or less satisfactory, to Junius.

The first of the letters was a sweeping attack on the Government for the time being. Its spirit may be judged from the concluding sentence: "They (posterity) will not believe it possible that their ancestors could have survived or recovered from so desperate a condition while a Duke of Grafton was prime minister, a Lord North chancellor of the exchequer, a Weymouth and a Hillsborough secretaries of state, a Granby commander-in-chief, and a Mansfield chief criminal judge of the kingdom!" He does not condescend to particulars, and the letter might have passed unnoticed if Sir William Draper, a man of considerable note, had not undertaken the defence of Lord Granby in answer to it. A bitter controversy ensued, which rapidly degenerated into an exchange of personalities, much to the disadvantage of Sir William. Then came letters to the duke of Grafton, the prime minister, directed more against his private character and conduct than his policy, the main charge against his Grace being his abandonment of Wilkes, whom Junius treats throughout the letters as the champion of the constitution, to be supported against the ministry and the crown. He takes Blackstone, the author of the Commentaries, severely to task for justifying the expulsion of Wilkes.

Junius relies little on argument or proof. His force is in his style. He commonly assumes his victim to be what he wishes him to be thought, and produces the desired effect by irony, sarcasm, or polished invective. One of his happiest figures of speech is in the letter on the affair of the Falkland Islands: "Private credit is wealth; public honour is security; the feather that adorns the royal bird supports his flight; strip him of his plumage, and you fix him to the earth."

The sensation Junius created in the political world may be inferred from the manner in which the leading orators and statesmen of the day spoke of him "How comes this Junius," exclaimed Burke, addressing the speaker, "to have broke through the cobwebs of the law, and to range uncontrolled, unpunished, through the land? The myrmidons of the court have been long, and are still, pursuing him in vain. They will not spend their time upon me or you. No, sir, they disdain such vermin, when the mighty boar of the forest who has broke through all their toils is before them. But what will all their efforts avail? No sooner has he wounded one than he lays down another dead at his feet. For my part, when I read his attack upon the king, I own, my blood ran cold. Nor has he dreaded the terrors of your brow, but he has attacked even you—he has—and I believe you have no reason to triumph in the encounter. In short, after carrying away our royal eagle in his pounces and dashing him against a rock, he has laid you prostrate. King, lords, and commons are but the sport of his fury. Were he a member of this House, what might not be expected from his knowledge, his firmness, and integrity? He would be easily known by his contempt of all danger, by his pointed penetration and activity." Lord North spoke in the same strain: "Why should we wonder that the great boar of the wood, this mighty Junius, has broke through the toils and foiled the hunters? Though there may be at

present no spear that will reach him, yet he may be some time or other caught."

What added signally to his influence was the general belief of his contemporaries that he was a man of rank and position, familiar with what was passing behind the scenes in high places; and this belief arose not simply from the intimate knowledge he showed of things and persons about the court and the principal departments of the state, but from the lofty and independent tone that was habitual and seemed natural to him.

In his private letters to the publisher, after waiving all right to the profits of the publication, he says: "As for myself, be assured that I am far above all pecuniary views." "You, I think, sir, may be satisfied that my rank and fortune place me above a common bribe."

In the preface to the second volume of Bohn's edition of 1855, no less than thirty-seven persons are enumerated to whom the authorship has been attributed. Contemporary opinion strongly inclined to Burke, whose power of assuming or disguising style is proved by his *Vindication of Natural Society*; and, as his biographer Prior pointedly remarks, "contemporary opinion, as formed from a variety of minor circumstances which do not come within the knowledge of future inquiries, is perhaps, on such occasions the truest." Dr. Johnson, who had entered the lists against Junius, told Boswell: "I should have believed Burke to be Junius, because I know no man but Burke who is capable of writing these letters; but Burke spontaneously denied it to me." Burke told Reynolds that he knew Junius, and uniformly spoke of him as he would hardly have spoken of himself. A very strong case was made out for Lord George Sacville, on whom, after Burke's denial, Sir William Draper's suspicions permanently fixed. Boyd is another candidate who did not lack supporters. A plausible claim was advanced for the American General Lee, backed by three experts who pretended to detect him by the handwriting. A famous expert, Imbert, gave a written certificate on the same ground in favour of Horne Tooke; and another, Netherclift, declared that there was more of the Junius character in the handwriting of Mrs. Dayrolles (the alleged amanuensis of Lord Chesterfield) than in any other specimen submitted to him as a possible performance by the great unknown. Other experts declared confidently for other claimants. But the identity remained an open question, and case after case was pronounced not proven, till the appearance of Mr. Taylor's *Junius Identified* in 1816, when Sir Philip Francis immediately become the favourite, and during the next half century the problem was pretty generally considered at an end.

Mr. Chabot, another expert, who undertook this enquiry at a later period was also led to the same result—about the authorship of Francis.

As far as expert opinion goes, it may safely be asserted that the preponderance of authority is in favour of the Franciscan theory [19].

(19) Mr. Ames is of opinion that the authorship of Francis is conclusively established by the book entitled: "The handwriting of Junius as Professionally Investigated by Mr. Charles Chabot, Expert: With Preface and Collateral Evidence by the Hon. Edward Twisleton." "The result of this investigation," he says, "is that the Junius Letters are attributed to Sir Philip Francis with a degree of positiveness that would warrant a jury's verdict in an ordinary case, and the mystery of a century is cleared away. Probably there is not recorded a greater triumph for expert testimony in respect of evidence from handwriting.

The work of Messrs. Chabot and Twisleton, says the editor of the *Quarterly Review*, possesses a value quite independent of the immediate question which it discusses. Its direct object is to prove by a minute and exhaustive examination of the Junian manuscripts and of the letters of Sir Philip Francis that both of them were written by the same person; but indirectly it supplies most valuable information and rules for guidance to those engaged in the investigation of subjects in which a comparison of handwriting is more or less involved.

Mr. Twisleton closes his review of Chabot's report as to the authorship of these letters with the following instructive remarks :—

"It sometimes happens that it is impossible to detect the author of anonymous letters or of a forged signature, except by a comparison of handwritings A bad and base man may successfully have taken such precautions that no human eye saw his hand while it was penning a particular document, and that no external evidence is in existence to trace that document into his possession. In such a case, everything in a trial may depend on the special knowledge which is brought to bear on the internal evidence of the document itself by the advocates, the jury and the judge. From ignorance of the subject an advocate sometimes does not ask the proper questions of an expert whose evidence is favourable to his cause. From similar ignorance an advocate on the other side is frequently driven into the subterfuge of declaiming against experts, when, if he had a little knowledge of the subject, he might weaken the force of adverse evidence by two or three reasonable objections. And if in a trial either the judge or a single prejudiced juryman held the opinion that no certainty could be arrived at by comparison of handwritings, or that in such comparison it was a better test to look to general character than to individual letters, there might easily be an absolute miscarriage of justice. If accused of writing malicious and libelous anonymous letters, a guilty man might escape, or an innocent man might be condemmed. When important interests were at stake a genuine will might be rejected while one that was forged might be accepted [20]."

This is the opinion generally entertained by experts. But Mr. Hayward in his article contributed to the Encyclopaedia adduces numerous

---

In the book are presented eighty-five lithographed plates of the writing of Sir Philip Francis and eighty-three plates of the Junian writing. It is by far the most voluminous and most profusely illustrated work yet published upon expert comparison of handwriting.

In seeking to prove that two different handwritings have been made use of by the same person, it is important to observe the method pursued in the investigation. Most persons are content with a general comparison, without endeavouring to ascertain the principles which govern the handwriting, or the characteristic habits in the two handwritings under discussion. They thus form their judgment by the impression left upon their minds by general similarity, without that careful examination of the peculiar and distinctive formations of individual letters which characterize the writing. "The principles which underlie all proof by comparison of handwritings are very simple, and when distinctly enunciated, appear to be self-evident. To prove that two documents were written by the same hand, coincidences must be shown to exist in them which cannot be accidental. To prove that two documents were written by different hands, discrepancies must be pointed out in them which cannot be accounted for by accident or by disguise. These principles are easy to understand, but to exemplify them in observations is by no means always easy." It is the merit of these reports that they gave a minute analysis of the handwriting by examining separately the elements or letters of which it is composed. In approaching this branch of the subject, Mr. Chabot says :—

"I find generally in the writing of the letters of Sir Philip Francis so much variety in the formation of all letters which admit of variety as to render his handwriting difficult to disguise in any ordinary manner, and consequently easy to identify. I discover also in the writing of the letters and manuscripts of Junius variations in the formations of certain letters, in some cases very multifarious, and of frequent occurrence, and that these variations closely correspond with those observed in the writing of Sir Philip Francis. They are, however, chiefly confined to the small letters in both handwritings ; the habitual formation of capital letters being seldem departed from in any essential particular in either. I find also, in some instances, wherein Junius makes exaggerated formations of certain letters, exact counterparts of them are to be found in the writing of Sir Philip Francis, and in some cases as nearly as possible with the same frequency. I further find in the handwriting of Sir Philip Francis, a repetition of all, or nearly all, the leading features and peculiar habits of writing, independent of the formations of letters, which so distinguish the Junian writing. These are so numerous, so varied, and in some cases so distinctive, that, when taken collectively, it is scarcely within the limits of possibility that they can be found in the handwriting of any two persons. I am, therefore, irresistibly driven to the conclusion that the Junian manuscripts and the forty-four letters of Francis have all been written by one and the same hand."

(20) Ames. pp. 244—254.

proofs that Francis could not be the author of these letters; and that it is more probable that Mr. Stowe, a member of the Grenville family was the real author. In any event he is of opinion that the authorship of these letters is far from being established beyond doubt, and that the thing remains the same mystery to day as it ever was. He mentions the following facts that are opposed to the authorship of Francis :—

Pitt told Lord Aberdeen (the fourth earl) that he knew who Junius was, and that it was not Francis. On its being objected that the Franciscan theory had not been started till after Pitt's death, Lord Aberdeen replied "*that's stuff*," and proceeded to relate that he himself had once dined in company with Francis when proofs of his being Junius were adduced before him, that he had listened with evident pleasure, and at last exclaimed in a stilted theatrical manner, "God! if men force laurels on my head, I'll wear them." His immediate contemporaries remained unconvinced. Sir Fortunatus Dwarris states broadly that no one who knew, heard, or read Francis thought him capable of producing Junius. Lord Broughton confirmed this. Tierney said: "I know no better reason for believing the fellow to be Junius than that he was always confoundedly proud of something, and no one could ever guess what it could be."

Lord Stanhope, however, would admit no shadow of doubt upon the point, and Lord Macaulay declared that "all reasoning from circumstantial evidence was at an end unless Francis were admitted to be Junius. Both these eminent authorities agree in resting their case on similarity of handwriting, on the internal evidence of style, and on five points which are summarily stated by Lord Macaulay in his easay on Warren Hastings. As regards similarity of handwriting, there is one plain test on which experts are agreed, namely, that "it is impossible for a man, in order to disguise his writing, to write better than he does habitually;" and the best penmanship of Junius is incomparably superior in fineness, delicacy, and grace to the best of Francis, who wrote a large, coarse, clerk-like hand.

These views as to the authorship of Francis remained untouched till the publication of the memoirs of Sir Philip Francis by Parkes and Merivale in 1867. This book entirely changed the aspect of the controversy by showing that Francis's position, opinions, interests, manner of life, and tone during the Junian period were the reverse of what those of Junius might be supposed to have been.

The habits of his set may be collected from his letters, *e.g.*, "January 4, 1769: I am just returned from spending a riotous fortnight at Bath. Gravier and two others filled a post-coach, which was dragged with no small velocity by four horses. We travelled like gentlemen, and lived like rakes." February 12, 1771: "Tilman dined with me yesterday, swallowed a moiety of two bottles of claret.". . . "We lead a jolly kind of life. This night to a concert, on Thursday to a ridotto, on Saturday the opera, and on Tuesday following grand private ball at the London Tavern." July 26, 1771: "To-morrow Godfrey, Tilman, another gent, and I set out upon a tour through Derbyshire, and propose to reach Manchester." They did not return till August 13, the day on which Junius's reply to Horne Tooke appeared. On June 25, 1771, in the very thick of the Junian correspondence, Francis writes to a friend abroad: "For the next three years I am likely enough to remain in my present state of uninteresting indolence."

There is no trace at this time of any connection with the newspapers, nor of any earnest or sustained literary occupation. The only political personage we find him in communication with was Calcraft, to whom he occasionally supplied scraps of official news.

By a startling coincidence, all the persons who had been kind or useful to him in promoting his advancement, including Wood (to whom he owed his clerkship), his chief (Lord Barrington,) and Calcraft, were bitterly assailed by Junius. The predilections of the pair, the substance and the shadow, are as hard to reconcile as their antipathies.

Junius had a high respect for Wilkes' judgment, and avows a liking for both the cause and the man. On November 8, 1771, he writes to Woodfall: "Show the dedication and preface of the letters to Mr. Wilkes, and, if he has any material objection, let me know." Francis, in his private correspondence, uniformly expresses the most unmitigated contempt for Wilkes. He writes like one of the general public about Junius. Thus, on June 12, 1770, to his brother-in-law: "Junius is not known, and that circumstance is perhaps as curious as any of his writings. I have always suspected Burke; but, whoever he is, it is impossible he can ever discover himself." Sir William Draper, Junius's first victim, was an old friend of the Francis family, and in a letter dated Bath, January 28,1769, Dr. Francis writes to Philip: "Give my love to Mr. Calcraft. Tell him to expect a very spirited and exceeding honourable defence of L. G—y (Granby) against the virulent Junius, by our friend Sir W. D—r. I truly honour him for it." Again, February 11, 1769: "Poor Sir William! I am glad he is gone to Clifton, where he may eat his own heart in peace. When he repeated to me some passages of his letter, I bid him prepare his best philosophy for an answer. But who is this devil Junius, or rather legion of devils? Is it not B—rke's pen dipped in the gall of Sa—lle's heart? Poor Sir William!" "It is the imputed folly," urge the opponents of the Franciscan theory, "not merely the imputed baseness of Francis that startles us. He is represented systematically writing against every friend, benefactor, and patron in succession, without a rational motive or an intelligible cause."

That Earl Temple wrote or inspired Junius is a theory which has been maintained in two able essays, and it derives plausibility from Pitt's assertion that he knew who Junius was, as well as from the language of the Grenville family, which all points to Stowe as the seat of the mystery. The Right Hon. T. Grenville told the first Duke of Buckingham, who thought he had discovered the secret, that it was no news to him, but for family reasons the secret must be kept. He also stated to other members of the family, subsequently to the publication of '*Junius Identified*' that Junius was not either of the persons to whom the letters had been popularly ascribed. Lord Grenville told Lord Sidmouth that he (Lord G.) knew who Junius was. Lady Grenville told Sir Henry Holland and Dr. James Ferguson that she had heard Lord Grenville state that he knew who Junius was, and that it was not Francis. The handwriting of Countess Temple (supposed to have acted as the amanuensis of her lord) comes for the nearest to the Junian hand of any that have been produced as similar to it, especially as regards powers of penmanship; but evidence is altogether wanting that Earl Temple, or any one about him, possessed the required literary qualifications and capacity.

The authorship of the letters, therefore, remains a mystery, and *Stat Nominis Umbra* is still the befitting motto for the title-page [21].

(21) Ency. Bri. Title "Junius" For the authorship of these letters see John Wade: Junius, including Letters by the same writer under other Signatures, &c., 2 vols. 1850; Parkes and Merivale, Memoirs of Sir Philip Francis, K. C. B., with Correspondence and Journals, 2 vols. 1867; John Taylor, Junius Identified, 1816; A. Hayward, More about Junius, 1868; Charles Chabot, The Handwriting of Junius Professionally Investigated, with preface and collateral evidence by the Hon. E. Twisleton. 1871.

CHAPTER IX.

# Other Methods of Forgery.

CONTENTS :—Nature sets no bounds on the ingenuity of man for accomplishment of fraud.—Forgery by (i) erasure.—Methods of erasure.—Erasure of words or figures and substitution of new ones in their stead.—Causing re-appearance of effaced writing.—Erasures by scratching.—Resizing paper after erasures.—Deciphering pencil erasures.—Ink & pencil erasures.—(ii) Insertions and interlineations.—Illustrative cases.—(iii) Alteration of figures in account books.—Expert evidence as to erasures, alterations and interpolations.

**Nature sets no bounds on the ingenuity of man for accomplishment of fraud.**

Numerous are the methods by which forgeries are effected. Nature has placed no limits on the ingenuity of man; nor is any placed on the ways and means which human ingenuity invents for the accomplishment of fraudulent forgery. An important word in a document may be erased and another word substituted. Some words or figures may be interpolated which may change the character and effect of the document. Entries in books of account may be altered and entire sheets in documents or books may be removed and new ones substituted. We shall examine some of these ingenuous frauds of the forger in the course of this chapter. It is very seldom that writing can be changed by erasure so as not to leave sufficient traces to lead to detection and demonstration though a skilful examination.

**Forgery by (i) Erasure.**

Erasures on written documents with fraudulent intent may be committed in either of two ways; mechanical, such as the use of a rubber or knife, or by the use of some chemical. Mechanical erasures as a rule always remove a portion of the surface of the paper thereby destroying part of its polish known as the mill-finish. By this kind of an erasure a portion of the substance of the paper is usually removed, making it thinner at the point of the erasure. An attempt is usually made in such cases to restore the polish by rubbing or by the application of some kind of sizing followed by rubbing, but as a general rule forgeries of this sort are easily detected, it being difficult, if not impossible, to restore the point treated to its original condition. At times where the erasure is not complete a portion of the writing removed may be made out, and even if this is impossible, the thinning of the paper is usually easily detected.

**Methods of Erasure.**

Chemical erasures are usually made by the use of chlorine. In this case the liquid will always remove or dull the mill-finish of the paper or render the paper thinner. In such cases it is very difficult to restore the mill-finish so as to obliterate the traces left by the chemical. In most cases the application of the chemical simply renders the chemical constitutents of the ink invisible without entirely removing them from the substance of the paper, and in such case the application of an appropriate chemical will restore the writing to legibility in whole or in part and frequently it will be almost as legible after such restoration as before the erasure. Should it happen that the application of the removing agent is so thorough and complete as to prevent the restoration of the writing to legibility, which is possible, though not common, it is usually possible, to show that the spot upon which the writing originally was has been chemically treated. It thus appears that it is at the least very difficult for the forger so to remove written words from paper as not to leave thereon some evidence of the fraud. Cases of erasure by the application of chemicals are quite common and much more frequent than those by the use of mechanical means. Many attempts have been made by the use of specially prepared paper to render

difficult or impossible this sort of fraud, and some of them are practically successful, except in the hands of the most skilful forgers [1].

Referring to this subject Mr. Carvalho, an expert in handwriting in America, in his book entitled "Forty centuries of ink" has the following [2]:—

**Erasure of words or figures and substitution of new ones in their stead.**

The process of bleaching or 'removal' of ink marks from paper is frequently employed in the attempted eradication of words or figures and substitution of others on monitary instruments, commonly called "raising". In such a process, nothing has in fact been absolutely removed or eradicated, but it is a mere change of form, a sort of re-arrangement of the particles, the ingredients which formed the original colour being still present, but in such a condition that they are invisible to the eye. A restoration of the invisible ink marks so that they can be observed, becomes possible by the use of chemical re-agents and is the reverse of the one of erasure or bleaching, and changes the constituents again into a compound which has colour from the one which has none. It does not, however, reproduce the exact composition originally existing. Such a re-agent simply goes to the basis of the material as first used, takes up what was left and reforms the particles sufficiently to make them abundantly recognizable. A popular material for the purpose of making chemical erasures is chlorinated lime or soda, which becomes more active by first touching the ink mark to be removed with a one half strength solution of acetic acid; this hastens the liberation of chlorine gas, the active agent, which causes the "bleaching" to take place. Hydrogen peroxide, also a bleaching compound, is less rapid in its action than chlorinate of soda; the same may be said of combinations of oxalic and sulphurous acids.

The most effective re-agent for the restoration of a chemically "bleached" iron ink mark is the sulphide or sulphuret of ammonia (it has several names). This penetrating chemical blackens metals or their salts, whether visible or not, if brought together. It must not be used by direct contact, the best and safest plan being to place a quantity in a small saucer, to be set on the floor of a closed box; to fasten to the box lid the specimen to be operated on; in this way the restoration is due to the fumes of the chemical and a possible danger of destruction of the specimen much lessened, especially if the marks are very light or delicate ones. The restoration of colour under particular conditions may also be obtained by treatment with tannic acid, potassium ferrocyanide (acidulated) or a week solution of an infusion of galls.

**Causing reappearance of effaced writing.**

An old article in a French Journal has the following "On the Means to be Employed for Detecting and Rendering Perceptible Fraudulent Alterations in Public and Private Documents":—

"The numerous experiments which have been already tried at various times, have made known the processes which may frequently be put in practice for causing the re-appearance of traces of writing effaced by chemical re-actions, and for throwing light on the work of the guilty. Even in cases where it is not possible to cause the reappearace of the effaced writing, for which written words have been substituted, it is at least possible to recognize, by some effects which are manifest on the surface of the altered paper, the places where the criminal act has been performed. The surface of the paper which has been moistened by various liquids, or left in contact for a certain time with agents capable of removing or destroying the characters which have been traced on it with ink, would not present with

(1) Cited in Chicago Legal News. (2) Chapter on ink Phenomena pp. 167—169.

certain reactions, the same uniformity throughout. The surface of the paper which is not partially altered by the contact of liquids (water, alcohol, salt water, vinegar, saliva, tears, urine, acid salts and alkaline salts), would take a uniform yellowish coloration on being exposed, to the action of the vapour of iodine disengaged at the ordinary temperature from a flask containing a portion of the metalloid. In the contrary case, the surface which has been moistened, and afterwards dried in the open air, is perfectly distinguished by a different and well circumscribed tint. In a particular variety of papers (papers into which paste starch and resin have been introduced), the stains present such delicate reactions that we may sometimes distinguish by their colour the portion of the paper which has been moistened with alcohol from that which has been moistered with water. Thus we are always able to recognize by the action of the vapour of iodine the parts of the paper which have been put in contact with chemical agents, the energy of which has been arrested by washing in cold water. This method points out at once the place in the paper, in which any alteration may be suspected, and also enables us to act afterwards with the re-agents proper for causing the reappearace of the traces of ink, when that is possible. This proof becomes, therefore, a weapon which the guilty person cannot avoid. But might not the presence of a stain, or several stains, developed by a vapour of iodine, in different parts of a public or private deed, have perhaps been occasioned by the spilling of some liquid on the surface of the paper? And would it not be rash and unjust to raise an accusation from such a fact? There would indeed be a great temerity in drawing such a conclusion from a fortuitous circumstance; but the inference which may be drawn from the place occupied by these stains on the surface of the paper, from the more or less significant words found in those places, would not permit an accusation to be so lightly brought, where simple reasoning would be sufficient to destroy its basis.

The applications made to the surface of a sheet of paper, with a view of covering it again at certain parts with a fine layer of gum, gelatine, starch or flour paste, or in other places to cause other sheets of paper to adhere, may be recognized not only by the reflection of light falling upon the paper inclined at a certain degree of obliquity, and by the transmission of light through the paper, but also by the varying action which the vapour of iodine exerts on the surface which is not homogeneous."

Mr. Carvalho, declares in his book entitled "Forty Centuries of Ink" that his own investigations confirm to a great extent the value of these experiments and the accuracy of the deductions, in so far as they relate to "linen" paper; but they do not always obtain when made in connection with paper of inferior grades. The coloration produced on the surface of the paper by the vapour of iodine would also vary with different kinds of paper.

In cases where pencil writing has been removed with a soft rubber, the parts thus erased will assume, when subjected to iodine fumes, a brown colour tending towards violet and much darker than the undisturbed portions of the paper [3].

**Erasures by scratching.**

By holding the sheet of paper between the eye and the light, any thin places will appear, and if erasures by scratching have been made, the smooth calendered surface of the paper, together with with ths sizing, will be disturbed. The fibres will also exhibit a torn-up appearance, especially if a strong microscope is used in making the examination [4].

(3) "Forty Centuries of ink" by Carvalho, Chapter XIX, pp. 177 to 182.
(4) Ames 274; Hardless 123.

A blurred appearance of the ink-lines will appear whenever an attempt has been made to write over an erasure of this kind. The colour of the ink will also differ.

**Resizing paper over Erasures.**

Sometimes attempts are made to resize papers over erasures. If this is suspected, Tarry recommends moistening the spot with alcohol. If paste and resin, both, have been used in the resizing it will be necessary to apply lukewarm water first, then alcohol. After the paste and resin have been removed, the ink spreads or blurs. The water and alcohol applied to another ink-line in the same document where there has been no erasure will serve to show the contrast [5].

**Deciphering Pencil Erasures.**

It is often desirable to decipher pencil-writing which has been removed, or partially so, by rubbing. This is often accomplished through the proper study of the indented lines, which will remain more or less in the paper after the graphite or plumbago has all been removed. By examining the furrows under a strong side or horizontal light, their shadows will sometimes reveal the outlines of the former writing. Frequently a greatly enlarged photograph will aid in the deciphering [6].

**Ink and Pencil Erasures.**

It is probable that ink erasures are more frequently made with a sharp steel scraper and ink-erasing sand rubber than otherwise. By these methods the evidence is:—*first*, the removal of the lustre or mill-finish from the surface of the paper; *second*, the disturbance of the fibre of the paper, manifest under a microscope; *third*, if written over, the ink will run or spread more or less in the paper, presenting a heavier appearance, and the edges of the lines will be less sharply defined; *fourth*, if erasure is made on ruled paper, the base-line will be broken or destroyed over the scraped or rubbed surface; and *fifth*, the paper, since it has been more or less reduced in thickness where the erasure has been made, when held to the light, will show more or less transparency.

When erasures have been thus made, the surface of the paper may be resized and polished, by applying white glue, and rubbing it over with a burnisher. When thus treated it may be again written over with difficulty [7].

When erasures have been made with acids, there is a removal of the gloss, or mill-finish; and there is also more or less discoloration of the paper, which will vary according to the kind of paper, ink, and acid used, and the skill with which it has been applied. If the acid-treated surface is again written over, the writing will present a more or less ragged and heavy appearance, if the paper has not been first skilfully resized and burnished [8].

**(ii) Insertions and interlineations.**

Another method is by insertion or interlineation of important words and figures. Fraudulent insertions are, as a general rule, clearer and more carefully and legibly written than genuine writing. In such cases attention should first be directed to folds in the paper to see whether the writing was made after the folds in the paper were made or prior to the folds; and secondly to the crossings of ink-lines, to determine which line was first made and which afterwards made. The determination of the kind of pen used for the original writing and that used for the interlineation will also afford useful test.

"In a Madras Presidency case, cited by Mr. Hardless, among other alleged forgeries there was the recorded deposition of a witness, which was alleged to have been tampered with by means of interlineations altering

(5) Ames 274-275.

(6) As to the method of determining whether or not papers contain erasures, see Ames on Forgery p. 269.

(7) Ames 116-117.

(8) Ibid.

Illustrative cases.

the sense of certain portions of the deposition. The defence urged that the interlineations were in the handwriting of the trying magistrate who recorded the deposition, while the magistrate on a reference to his notes was equally positive that he never wrote the interlineations. The Government Expert in handwriting who appeared in the case, among other differences found that while the deposition as a whole was written with a stylo the interlineations were made with a pen [9]."

The contention in what is called the Baker Will Case in America which was tried in Toronto, Ontario, before Judge Ferguson, was over a single word interlineated in the body of a will. Although only a single word, it changed the disposition of something over 30,000 dollars. Mr. Baker died in Georgetown, Ontario, leaving a will bequeathing a large estate to two sons and two daughters. The sons were named in the will as the executors. Upon examination of the will after the decease of Mr. Baker, the word, "between" was found to be interlineated so as to direct over 30,000 dollars, a residue of the estate after payment of all debts and specified legacies, to be divided *between* the executors: "The residue of my estate shall be equally divided between my executors".

The sons were charged with inserting the interlineation in the will, it having been in a safe at the paternal home, where the sons continued to reside. The writer of the will, a Mr. Knight, was consulted as to the interlineation, also the two witnesses to the will. Knight declared that the interlineation was not written by him, nor was it in the will at the time of the signing. The witnesses did not observe the will sufficiently close to know whether or not the interlineation was in the will when signed and witnessed.

The sense of the will being incomplete without the interlineation, it was claimed by the contestants that the word "by" should have been written in place of "between". By the sons it was claimed that in as much as the father had previously made large bequests to the daughters at the time of their marriage, it seemed probable, as it was alleged, that his purpose was to equalize the shares of the sons with those of the daughters, by dividing between the sons the residue of his estate.

The will was submitted to the expert for an opinion as to whether or not the interlined word was written by Mr. Knight, and was consequently in the will when it was signed. Upon the examination of a large number of documents written by Knight it was discovered,—*first*, that wherever he made an interlineation it was in back-hand, the reverse of his habitual slant; *second*, that he had a peculiar habit of sometimes omitting the loop from extended letters, and afterward putting it on (this was done in the *b* in "between," and also in the word "*be*" at the beginning of the line in which the interlineation occurred); *third*, Knight had a muscular difficulty in his fingers that frequently produced an involuntary jerk at the base of his extended letters which was manifest also at the base of the *b* in "between"; *fourth*, the characteristic cross of the *t* in "between", coincident with other crosses in the will. These and some other reasons proved conclusively that the interlineation was placed there by Knight, and the will was admitted to probate as interlined [10].

(iii) Alteration of figures in account books.

Books of accounts are often changed by adding fictitious or fraudulent entries in such spaces as may have been left between the regular entries or at the bottom of the pages where there is vacant space. Where such entries are suspected, there should be at first a careful inspection of the writing as to its general harmony with that which precedes and follows,

(9) See on this point Hardless pp. 119—123. (10) Ames 171.

as to its size, slope, spacing, ink and pen used, and if in a book of original entry, the suspected entry should be traced through other books, to see if it is properly entered as to time and place, or *vice versa*. If a suspicious entry is found in a book of subsequent entry, it should be traced and verified in every respect through the books of previous entry, Such an examination will rarely fail to determine the integrity or otherwise of any suspected entry. The writing of such entries is likely to differ from the adjacent writing in size, slope, spacing, facility, and shade of ink [11].

When books are fraudulently made up, many entries, and even pages, are likely to be written continuously at one writing without the customary change of pen and ink or their change of condition ; and hence the constantly varying conditions and circumstances of the writer, which must be manifest as between entries written from time to time according to exigencies of business, will not appear. The books, too, will not show the soil and wear and tear necessarily incident to the constant and frequent handling in making daily entries and the frequent references necessary in business [12].

**Expert Evidence as to erasures, alterations and interpolations.**

The question has also been considered whether an expert may testify as to the existence or time of erasures, alterations, or interpolations. Such testimony is often not to be distinguished practically from testimony deciphering illegible writing, which has uniformly been held proper. There is, at any rate, no scintilla of reason for doubt [13].

**(iv) Insertion of sheets.**

It is not an uncommon occurrence that wills, account books and other public documents are changed by the insertion of extra or substituted pages, thereby changing the character of the instrument. Where this is suspected careful inspection of the paper should be made—*first*, as to its shade of colour and fibre, under a microscope ; *second*, as to its ruling ; *third*, as to its water-mark ; *fourth*, as to any indications that the sheets have been separated since their original attachment ; *fifth*, as to the writing—whether or not it bears the harmonious character of the continuous writing, with the same pen and ink, and coincident circumstances, or if type-written, whether or not by the same operator or the same machine. It would be a remarkable fact if such change were to be made without betraying some tangible proof in some one or more of the above enumerated respects.

Suspected books and documents skilfully examined upon the above-mentioned points must certainly betray unmistakable evidence of fraud if it exists [14].

---

(11) Ames 115. (12) Ibid 116.

(13) Wigmore on Evidence, Vol III, 2691 ; Evidence was admitted as to the following facts. Norman v. Morrell, 4 Ves. Jr. 770 (alteration) ; Tally v. Cross, 124 Ala. 567, 26 So. 912 (whether two papers were written at the same time) ; Pate v. People, 8 Ill. 664 (erasure) ; Rass v. Sebastian, 160 id, 604, 43 N. E. 708 (time of alteration) ; Black v. Dale, 18 Ind. 384 (alteration) ; Hawkins v. Grimes, 13 B. Monr. 261 (erasure) ; Fee v. Taylor, 83 Ky. 263 (erasure) ; Com. v. Webster, 5 Cush. 301 (Evidence of the instrument used in alteration) ; Vinton v. Peck, 14 Mich. 287 (alteration before or after execution); Ives v. Leonard, 50 in. 298,15 N. W. 463 (alteration) ; Moye v. Herndon, 30 Miss. 118 (alteration) ; Dubois v. Baker, 30 N. Y. 361 (erasure, before or after execution) ; Fulton v. Hood, 34 Pa. 370 (whether a concluding sentence was written at the same time as the body of the writing) ; Travis v, Brown, 43 Pa. 9 (whether a hand is feigned) ; Ballentine v. White, 77 id. 26 (whether an alteration was made at the time of execution) ;

Evidence of the following facts were excluded : Jewett v. Draper, 6 All. 436 (that certain words were interpolated). In Missouri, Swan v. Polk 7 Mo. 237 excluded such testimony ; but in Wagner v. Jacoby, 26 id. 531 this decision was erroneously taken to exclude only the opinion of non-experts, and the use of expert testimony in such cases was declared permissible ; non-expert testimony alone being properly excluded ; State v. Tompkins, 71 id. 617 ; State v. Owen, 73 id. 441. For a case in which under special circumstances a non-expert wasallowed to say whether there had beenan erasure, *see* Yeates v. Waugh, 1 Jones L. 483.

(14) Ames 115—116.

CHAPTER X.

# Forged Wills

## (and claims against estates of deceased persons).

CONTENTS :—Forged wills present a special difficulty.—Illustrative cases —Judicial explanations of certain peculiarities of testamentary signatures.—Illustrative cases.—The claim against the Erwin estate.—Miser Russell case.—A clever scheme.

Forged Wills, as distinguished from other forged documents, present certain peculiar difficulties. The one voice that can speak with confidence is hushed for ever. The motives and other springs of action that might have dictated the various testamentary dispositions lie sealed from the sight of man underneath the silent grave.

**Forged wills present a special difficulty.**

Other voices must speak for him who can speak no more. The mind of the maker, his likes and dislikes, the centres of his affection, his ideas as to disposition, the putting of his hand and seal on the particular instrument—all that is a matter of judicial conjecture based on the testimony of witnesses, who most often are far from being disinterested in the result of the pending litigation.

But even in the midst of the most complicated mystery, we often find that "in the moment of our dark extremity, succour often dawns from Heaven." At the psychological moment a kind Providence shows some sudden signal, and throws a flood of light, as if by a momentary lightning flash, exposing the naked truth.

Here is a curious case, but not without its instruction, which came before Sir Henry Hawkins on the Western Circuit. A solicitor was charged with forging the will of a lady, which devised to him a considerable amount of her property; but as the case proceeded it became clear that the will was signed after the lady's death, and then with a dry pen held in the hand of the deceased, by the accused himself, whilst he guided it over a signature which he had craftily forged. A woman was present when this was done, and as she had attested the execution of the will, she was a necessary witness for the prisoner, and in examination-in-chief she was very clear indeed that it was by *the hand of* the deceased that the will was signed, and that she herself had seen the deceased sign it. Suspicion only existed as to what the real facts were until this woman went into the box, and then a scene, highly dramatic, occurred in the course of her cross-examination by Mr. Charles Mathews, who held the brief for the prosecution.

**Illustrative cases.**

The woman positively swore that she saw the testatrix sign the will *with her own hand*, and no amount of the rough-and-ready, inartistic, and disingenious "Will you swear this?" and "Are you prepared to swear that?" would have been of any avail. She had sworn it, and was prepared to swear it, in her own way, any number of times that any counsel might desire.

The only mode of dealing with her was adopted. She was asked:

"Where was the will signed?"

"On the bed."

"Was any one near?"

"Yes, the prisoner."

"How near?"

"Quite close."

"So that he could hand the ink if necessary?"
"Oh yes."
"And the pen?"
"Oh yes."
"*Did he hand the pen*?"
"He did."
"*And the ink*?"
"Yes."
"There was no one else to do so except you?"
"No."
"Did he put the pen into her hand?"
"Yes."
"And assist her while she signed the will?"
"Yes."
"How did he assist her?"
"*By raising her in the bed and supporting her when he had raised her.*"
"Did he guide her hand?"
"No."
"Did he touch her hand at all?"
"*I think he did just touch her hand.*"
"When he did touch her hand *was she dead*?"

At this last question the woman turned terribly pale, was seen to falter, and fell in a swoon on the ground, and so *revealed the truth which she had come to deny* [1].

We are also indebted to Sir Henry Hawkins for the following case illustrative of the same principle. Sir Henry says in his Reminiscences:—

I was sometimes in the Divorce Court, and old Jack Holker was generally my opponent. No case is interesting unless it is outside the ordinary stock-in-trade of the Law Courts, and I think this was. The details are not worth telling, and I therefore pass them by. Cresswell was the President, and the future President, Hannen, my junior. We won a great victory through the remarkable over-confidence and indiscretion of Edwin James, Q. C., who opposed us. James' client was the husband of the deceased. By her will the lady had left him the whole of her property, amounting to nearly £ 100,000. The case we set up was that the wife had been improperly influenced by her husband in making it, and that her mind was coerced into doing what she did not intend to do, and so we ought to set aside the will on that ground.

Edwin James had proved a very strong case on behalf of the validity of the will. He had called the attesting witnesses, and they, respectable gentlemen as they undoubtedly were, had proved all that was necessary—namely, that the testator, notwithstanding that she was in a feeble condition and almost at the last stage, was perfectly calm and capable in mind and understanding—exactly in fact, as a testator ought to be who wills her property to her husband if he retains her affection.

The witnesses had been cross-examined by me, and nothing had been elicited that cast the least doubt upon their character or credibility. Had the matter been left where it was, the £100,000 would have been secured. But James, whatever may have been his brilliance, was wanting in tact. He would not leave well alone, but resolved to call the Rev. Mr. Faker, a distinguished Dissenting minister.

In fiction this gentleman would have appeared in the melodramatic guise of a spangled tunic, sugar-loaf hat, with party-coloured ribbons, purple or

(1) Hawkins, pp. 315—316.

green breeches, and motley hose but in the witness-box he was in clerical uniform, a long coat and white cravat with corresponding long face and hair, especially at the back of his head. A soberer style of a stage bandit was never seen. He was just the man for cross-examination. I saw at a glance—a fancy witness, and, I believe, a Welshman. As he was a christian warrior, I had to find out the weak places in his armour. But little he knew of courts of law and the penetrating art of cross-examination, which could make a hole in the triple-plated coat of fraud, hypocrisy, and cunning. I was in no such panopy. I fought only with my little pebble-stone and sling, but took good aim, and then the missile flew with well directed speed.

I had to throw at a venture at first, because, happily, there were no instructions how to cross-examine. Not that I should have followed them if there had been; but I might have got a FACT or two from them.

It is well known that artifice is the resource of cunning, whether it acts on the principle of concealing truth or boldly asserting falsehood. Here the reverend strategist did both; he knew how a little truth could deceive. You must remember that at this point of the case, when the Rev. Faker was called, there was nothing to cross-examine about. I knew nothing of the parties, the witnesses, the solicitors, or any one except my learned friends. It would not have been discreditable to my advocacy if I had submitted to a verdict. I will, therefore, give the points of the questions which elicited the truth from the christian warrior; and probably the non-legal reader of these memoirs may be interested in seeing what may sometimes be done by a few judicious questions.

"Mr. Faker," I said.

"Sir," says Faker.

"You have told us you acted as the adviser of the testatrix."

"Yes, sir."

"Spiritual adviser of course?"

A Spiritual bow

"You advised the deceased lady, probably, as to her duties as a dying woman?"

"Certainly."

"Duty to her husband—was that one?"

A slight hesitation in Mr. Faker revealed the vast amount of fraud of which he was capable. It was the smallest peep-hole, but I saw a good way. Till then there was nothing to cross-examine about, but after that hesitation there was £100,000 worth! He had betrayed himself. At last Faker said,—

"Yes, Mr. Hawkins; yes, sir—her duty to her husband."

"In the way of PROVIDING for him?" was my next question.

"On yes; quite so."

"You were careful, of course, as you told your learned counsel, to avoid any undue influence?"

"Certainly."

"The will was not completed, I think, when you first saw the dying woman—on the day, I mean, of her death?"

"No, not at that time."

"Was it kept in a little bag by the pillow of the testatrix? Did she retain the keys of the bag herself?"

"That is quite right."

"Had it been executed at this time? I think you said not?"

"Not at this time; it had to be revised."

"How did you obtain possession of the keys?"

"I obtained them."

"Yes, I know; but without her knowledge?"

It was awkward for Faker, but he had to confess that he was not sure. Then he frankly admitted that the will was taken out of the bag—in the lady's presence of course, but whether she was quite dead or almost alive was uncertain ; and then he and the husband spiritually conferred as to what the real intention of the dying woman in the circumstances was LIKELY TO BE and having ascertained that, they made ANOTHER WILL, which they called "settling the former one" by carrying out the lady's intentions, the lady being now dead to all intentions whatsoever.

This was the will which was offered for probate!

Cresswell thought it was a curious state of affairs, and listened with much interest to the further cross-examination.

"Had you ever seen any other will?" I inquired. It was quite an accidental question, as one would put in a desultory sort of conversation with a friend.

"Er—yes—I have." said Faker.

"What was that?"

"Well, it was a will, to tell you the truth, Mr. Hawkins, executed in my favour for £ 5,000."

"Where is it?"

"I have not the original," said the minister, "but I have a copy of it."

"Copy! But where is the original?"

"Original?" repeats Faker.

"Yes, the original ; there must have been an original if you have a copy."

"Oh," said the Rev. Faker, "I remember, the original was destroyed after the testatrix's death."

"How?"

"Burnt."

Even the very grave Hannen, my ever-respected friend and junior smiled ; Cresswell, never prone to smile at villany, smiled also.

"The original burnt, and only a copy produced! What do you mean, Sir?"

The situation was dramatic.

"Is it not strange," I asked, "even in YOUR view of things, that the original will should be burnt and the copy preserved?"

"Yes" answered the reverend gentleman, "perhaps it would have been better.. ....."

"To have burnt the copy and given us the original, and more especially after the lady was dead. But, let me ask you, WHY did you destroy the original will?"

I pressed him again and again, but he could not answer. The reason was plain. His ingenuity was exhausted, and so I gave him the finishing stroke with this question.

"Will you swear, sir, that an original will ever existed?"

The answer was, "No."

I knew it MUST be the answer, because there could be no other that would not betray him.

"What is your explanation?" asked Cresswell.

"My explanation, my lord, is that the testatrix had often expressed to me her intention to leave me £ 5,000, and I wrote the codicil which was destroyed to carry out her wishes."

Cresswell had warned James early in the case as to the futility of calling witnesses after the two who alone were necessary but to no purpose ; he hurried his client to destruction, and I have never been able to understand

his conduct. The most that can be said for him is that he did not suspect any danger, and took no trouble to avoid incurring it.

It is curious enough that on the morning of the trial we had tried to compromise the matter by offering £ 10,000. The refusal of the offer shows how little they thought that any cross-examination could injure their cause. Hannen said he could not have believed a cross-examination could be conducted in that manner without any knowledge of the facts, and paid me the compliment of saying it was worth at the least £ 80,000 [2].

Referring to this subject Ames says :—

" A disproportionately large number of cases of forgery arise from forged and fictitious claims against the estates of deceased people. This results, first, from the fact that such claims are more easily established, as there is usually no one by whom they can be directly contradicted and secondly, for the reason that administrators are less liable to exercise the highest degree of caution than are persons who pay out their own money [3].

In some instances these claims rest upon the alleged genuineness of a single signature ; in others, where it was necessary to show some peculiar consideration for the claim, whole series of papers and letters have been forged, sometimes simply in the disguised hand of the forger, then again in the simulated style of other persons [4].

In one case a note for $10,000 was presented against the estate of a wealthy bachelor by a widow, who alleged that the note had been given in consideration of her marriage engagement with the deceased, which only failed of consummation through his unexpected death. In vindication of her claim she produced numerous letters, couched in terms of endearment, which she alleged she had received from him prior to and during their engagement. These letters, all but two of which related to purely business transactions, were demonstrated by experts to have been forged simulations of his writing by the claimant, as was the signature to the note, the body being confessedly in her own writing.

As another instance, a woman presented a claim for some $30,000 against the estate of a millionaire, for money alleged to have been placed in the hands of the deceased some years before for investment and safe-keeping. As vouchers for her claim she produced a receipt and contract, alleged to have been drawn by her lately deceased attorney, and signed by the testator, setting forth explicitly the terms of payment of principal and interest. The executors of the estate also received through the mail a long series of letters, purporting to have been written by several different unknown parties, tending to support this claim against the estate. The receipt, contract, and all the letters, together with several letters admittedly written by the claimant, were placed in the hands of the handwriting expert for examination and comparison, when it was demonstrated that every line of the writing in the letters, receipt, and contract, as well as their signatures, were written by the claimant in a forged or disguised hand, and that the whole claim was a very skilful fabrication.

It transpired from the testimony in the case that the claimant had for quite a period of her life been a professional teacher of writing, and that subsequently she gained a livelihood by writing novels. Thus the romancer and artist conspired in a most ingenious scheme of forgery [5].

In all instances where a forgery extends to the manufacturing of any considerable piece of writing, it is certain of being detected and demonstrated when subjected to a skilled expert examination ; but *where forgery is confined*

(2) Hawkins 105—110.
(3) Ames. 119.
(4) Ibid.
(5) Ibid 120—121.

*to a single signature, and that perhaps of such a character as to be easily simulated, detection is at times difficult, and expert demonstrations less certain or convincing* [6].

Yet instances are rare in which the forger of even a signature does not leave some unconscious traces that will betray him to the real expert, while in most instances forgery will be at once so apparent to an expert as to admit of a demonstration more trustworthy and convincing to court and jury than is the testimony of witnesses to alleged facts, who may be deceived, or even lie.

**Judicial explanations of certain peculiarities of testamentary signatures:—Illustrative cases.**

In a fiercely contested American will case, it was claimed that the instrument was a fabrication. The writer of the body of the will was never discovered. Several witnesses for the party assailing the will expressed the opinion that the aged testator's signatures were not genuine, putting their doubts upon the ground that they were smoother and better than they had seen him write lately, or within the last three or four years of his life; and upon comparison with the admitted genuine signatures, such did appear to be the case. The will was executed according to the testimony—and this the court found to be true, and therefore established the will—at the home and in the presence of a family consisting of a Mr. and Mrs. Hoyt and their daughters. The circumstance that the signature appeared to be exceptionally smooth and the adverse inference thereby suggested, was debated by Judge Vredenburgh as follows:—"Now is not this precisely what we would expect to see in the circumstances under which this will was executed? The testator was evidently familiar at Hoyt's, and liked to visit there. The evidence of Mr. Valentine, one of the plaintiff's witnesses would show that. He probably received from Hoyt and the females who were, if we are allowed to judge from their evidence, ladies in every sense of the term, a deference and respectful attention it was his fortune rarely to receive. He was universally voted a bore. Valentine and Bonnell refused to keep him company at five dollars per day. Gen Runyon charged him ten dollars an hour for letting him talk in his office. Even Key, the landlord, congratulated himself to use his own words, on getting clear of that old customer. The old gentleman was not wanting in sagacity. He was quick to see outside things. The misfortune was, he never looked into himself. He was conscious of this repugnance to his company, but could not divine the cause. Those ladies were too well bred to exhibit it. They were probably amused at his eccentricities, but as Mrs. O'Shannessy, one of the plaintiff's witnesses, says, they said to her, 'We must not mind what an old gentleman should say' and treated him with the respect due to his age. The old gentleman was consequently fond of visiting there, enjoying a luxury there, he very much valued but received nowhere else. On the evening in question, when he came to sign the will, he had been peculiarly happy. He had for the whole evening enjoyed an interested audience. It had flowed in an uninterrupted current of enjoyment in explaining to them the subject he most delighted to converse upon, his property and the mode he meant to dispose of it, unbroken by any rude impatience of his auditors or any intruding spectre of lawyers' charges at the close. So agreeable an impression had their polite and considerate attention made upon him, that after he left, his imagination became so extravagant that he thought he had actually kissed them, and when he got home tried to make his old wife jealous by telling her so. In this mood the hero of the evening, he came to the final crowning solemn act of the signature to the will. He would naturally, under such circumstances and in such a presence

(6) Ibid.

want to make no mean signature. Other witnesses besides the Hoyts say he prided himself upon his handwriting. Other writings before us show that he had been in the habit of writing a good deal, and been a good penman. He asked the ladies for pen and ink to write his name. They at first brought him steel pens. He pushed them away, saying he had tried them before, and could not use them; and his signatures of his later years, brought here by the plaintiffs, show upon their face the scraggy steel pen corroding for weeks in the turbid ink. He asked for a quill pen. It was the quill pen he had learned to write with in his youth, and had used generally through life, and with which he thought he could best demonstrate his good penmanship. They found a quill, but such was the change of habits, no penknife was to be found. The ladies thereupon brought their gold pens The nature of their correspondence admitted of no turbid ink or harsh corroded iron pen. Their ink must be of the most fluid, and their gold pens of the smoothest and softest patents. He selected one, aud dipped it in the fluid ink. But he was not yet ready to risk his reputation before the ladies by rashly venturing on the documentary signature. He gets another piece of paper, and tries the gold pen on it several times. It comes up to his expectations and he then spreads the will out before him on the round table to sign it in a hand in sympathy with the importance of the occasion. After so halcyon an evening, in the happiest mood, with instruments and materials the most perfect of their kind, in the warm furnace-heated parlour, with the will spread out before him, with the lamp casting its bright light upon the white page, and conscious that faces still brighter were peering over his shoulders, he makes the signatures, and triumphantly contemplating his successful exploit, looking up exclaims, 'I can beat any of you.' Elizabeth says, after he had tried the gold pen several times, he said he could write better than any of us. Mrs. Hoyt says, when the paper was executed he said he could write better than any of them. Mary says, he tried several pens before he found one to suit him, and said he was a good writer, and could beat any of us. Would we not expect to see, as the plaintiffs' witnesses say a signature smoother and better than they had seen him write lately? Who does not know the difference made in a signature even of young people by care, materials, and mood? And such, so far as we can judge by comparison and inspection, is the signature in controversy, and accounts for the discrepancy in the opinions of the witnesses. The signatures bear upon their face the evidence of this care. Every letter and every ornamental touch has the full development of his more careful signatures. Every marginal signature carefully humors the creases of the papers. A question is made of the dot at the end of the middle marginal signature. But this was an easy thing to happen, as he contemplated for a moment his success in the signature, especially as he had just seen Miss Anna do the same thing"[7].

In another case of a contested will where it was unsuccessfully contended that the signature of the testator, Mr. Taylor, was forged, Surrogate Hutchings of New York observed that ordinary every day occurrence produces among the signatures of every person greater or less alterations, and that expert testimony to a forgery deduced from minute dissimilarities is not entitled to any weight unless supported by strong corraborative proof. Discussing the manifold causes of dissimilarities in a person's handwriting the Judge observed as follows:—"In the first place it appears to me that the mental condition of an individual must necessarily have an important influence upon the character of his writing. Instances of this nature are so common as scarcely to need illustration. Imagine a man overwhelmed with grief, or

(7) Boylan. v. Meeker, 28 N. J. L. 274, 460. et. seq.

furious with anger, or under the effect of stimulants, attempting to write his name. The momentary vexations of life are sufficient to produce appreciable alterations while even such common place occurrences as the pressure of business or the state of the weather are not without influence. Taking for example, the theory of the contestant that the signature to the will is written with more steadiness and regularity than the five signatures which are in evidence as exhibits in the case (one is an indorsement on a promissory note, and the other four letters to his grand-daughter when in Europe). May not this be considered as an evidence of the effect of mental condition upon handwriting? Is it improbable that a man of Mr. Taylor's years who, so far as it appears from any evidence, had never before affixed his signature to so solemn a document as a will, an act which brought vividly before him, as it brings to all men, the certainty of death, and that death is necessary to ratify the decrees therein expressed, should write that signature with more deliberation than the many signatures which he was in the habit of hastily and automatically affixing to cheques, notes, letters, bills, etc [8] ?"

It is not at all improbable that a woman engaged in the laborious task of writing her own will would pass from a condition of healthy muscular movement to one of extreme nervousness. Such change of condition may occur within the minute and this might explain a difference in the style of writing on different sheets of the will [9].

**The claim against the Erwin estate.**

The Erwin case is an interesting and important case of a forged note for $ 4,000 against the estate of Jacob Erwin, which was tried before Vice-Chancellor Van Fleet, at Jersey City. The note was presented to the executor by a woman who alleged that it had been presented to her by Mr. Erwin just prior to his death. On being disallowed by the executor, suit was brought for its collection. When submitted by the executor to the expert Mr. Ames for examination, he pronounced the signature to be a forgery, the body of the note being confessedly in the handwriting of the claimant. It was observed that while the alleged signature bore a close resemblance in form to Mr. Erwin's genuine writing, it was not a good imitation of his signature. Besides, in its drawn, hesitating and tremulous lines it did not properly represent his ordinary and natural facility of movement.

During the trial the attorney for the claimant put into the case, as a standard for comparison, a receipt, the body of which was written by

(8) Matter of Gordon, 50 N. J. Eq. 397: 26 Atl. Rep. 268. (9) Moore on Facts, Vol. I p. 629.

Speaking of his professional recollections, 'OConnel mentioned a curious fraud which had sent him many applicants who dreamed of participating in enormous wealth, the visionary hope of which was excited by the following device:—A smart attorney's clerk, who had a mind for a cheap summer's ramble, forged a document purporting to be the will of a certain Duke O'Neill, who had died childless in Spain, having amassed 1,200,0001 dollars, which enormous sum he bequeathed to be equally divided between all his Irish cousins bearing the name of O'Neill, within the fortieth degree of kindred! The fabricator bent his course to the north, and introduced himself at many houses where the plausibility with which he supported his statement gained him a hospitable reception. He also made money by selling copies of the forgery at half a crown each, to all such O'Neills as were fools enough to buy. His trick had considerable success; several sturdy farmers from the north, and a merchant residing in Liverpool, bearing the name of their imaginary ducal kinsman, applied to O'Connell for his professional aid in recovering their proportions of the 1,200,0001 dollars, bequeathed them by the honoured defunct.

"Nothing," said O'Connel, "could exceed their astonishment, when I assured them the whole thing was a delusion. 'Do you really tell us so, counsellor?'— 'Indeed I do,' said I. 'And now we hope you wouldn't lay it on your conscience to deceive us—do you really tell us, after all, that there's nothing at all to be got?' 'Indeed, I can assure you, with a very safe conscience,' said I, 'that it is all a fabrication and if an oath was required to confirm the fact, I could very safely give one.' So away they went regretting they had ever put faith in the tale of the old duke."

Mr. Erwin, and which had been in possession of the claimant. In the body of the receipt Mr. Erwin had written his name not as a signature, but as body-writing. On inspecting this writing, it was at once apparent to the expert that the name as written in the receipt had been used as a copy for the forged signature to the note, and had been transferred by a tracing, thus giving an outline so perfect that, when superimposed one upon the other, one outline only was visible. The forger evidently did not know, or had overlooked, the well-known fact that with nearly all writers an autograph, from its more frequent writing and for a special purpose, becomes more specialized and monogrammic in its character than are the same words when written merely as body-writing.

These facts were made so apparent by the expert that the Chancellor turning to the plaintiff's attorney, said, "Do you desire to continue this case further?" The attorney replied that he did not, whereupon the Chancellor immediately pronounced the signature a forgery [10].

**Miser Russell case.**

A miser Mr. Russell, was for many years a printer in New York, and at the time of his death left about $ 30,000 deposited in various savings banks. He was known among his friends as a bachelor, and he had frequently said he had no relatives living. So far as his friends and acquaintances knew, this was the fact; but immediately upon his death, a lawyer, appeared representing a woman residing in Michigan, who laid claim, to Russell's estate on the ground of being his daughter. To sustain this claim she produced several letters which she alleged she had received from him at intervals during several years and one just previous to his death, which were addressed to her as "My Dear Daughter." These letters were submitted to the American expert Mr. Ames for comparison with the genuine writing of Mr. Russell to ascertain whether or not he had written them. They were pronounced and proven to be forgeries, thus disproving the claim, and the $ 30,000 went into the public treasury, as in the case of estates left by persons who are without heirs [11].

**A clever scheme.**

Some years ago several notes were presented to the executors of a large estate, under circumstances that had awakened suspicion as to their genuineness. Upon a careful examination and comparison of the handwriting in the body and signatures on the notes with that of the testator, it was very apparent that the notes in question were forgeries. The circumstances attending the discovery and presentation of the notes were indeed romantic. It seemed that the testator, who had been a farmer and speculator, left an estate valued at about $ 200,000. The nearest of kin were nephews and nieces, among whom, after leaving several legacies, the estate, by the will, was to be divided equally. For many years there had been employed as housekeeper by the testator, a bright young woman who had frequently been called upon by him to do writing and not unfrequently at his request to sign papers for him. There was also a hired man upon the farm, who finally married the young woman, both continuing to be servants of the testator until his death, and to each of whom he willed $ 1,000, besides $500 to each to their several children. It would seem that the entire family had become, as it were, pets of the old gentleman. Time passed on, and some two years after the decease of the testator the husband called upon the executors and presented a note for quite a large sum of money, alleging as his reason for its possession, that just previous to the testator's death, he and his wife being present, the old gentleman handed him a sealed envelope, saying: "John, take good care of this, and do not open it until after I am dead, when it may be of great service to you." He took the envelope home and placed it in his bureau

(10) Ames 125. (11) Ibid 126.

drawer, with other valuable papers, where it lay until the fact of its possession passed out of his mind. A few months previous to the discovery of the note he said his house was entered and robbed by burglars, and that shortly after the robbery he found lying in his front room, near the window, several valuable papers, among which was this note, also a letter purporting to have been written by the burglars, which said, "These papers are of no value to us; we therefore return them, as they may be of use to you," signed "The Burglar." The papers had, as he supposed, been shoved into the room by raising the window from the outside. It then occurred to him that this note was a part of the contents of the envelope which had been presented to him by the testator. These circumstances appearing so plausible, the note was at once allowed and paid by the executors.

A few days afterward the man called with another note, which he said his children had found under the edge of the house, near the window through which the returned papers had been put. He supposed that this note had accidentally in the darkness dropped from the hand of the burglar to the ground instead of going through the window as was intended, and that the wind had blown it under the edge of the house, where it had lain until found. That story also appearing plausible, and the note appearing to be in the genuine handwriting of the testator, it was allowed by the executors. Shortly after this he presented a note for a much larger sum, which he said the children had found under the edge of the horse-barn. This, he said, he supposed had dropped accidentally and the wind had blown it to the place where it was found. The third being for a larger sum, caused the executors to hesitate and take counsel before its payment. It was at this time that the notes which had been paid, together with the one which had been presented, were submitted to the American expert Mr. Ames. The payment of the third note was declined and suit was brought for its collection, when the demonstration of the forgery to court and jury was so complete that a verdict of forgery was almost instantly rendered, not only as to the notes in suit, but those which had been paid. The parties therefore not only failed in their claim upon the third note, but also were compelled to return the money which had already been paid on the previous ones. These notes with the interest aggregated to about $ 13,000 [12].

(12) Ibid 127

CHAPTER XI.

# Detection of Forgery.

## (i) By Comparison with Genuine Writing.

CONTENTS :—Psychology of identification of things by comparison.—As applied to handwriting.—Attention to be paid to the inherent and enduring attributes rather than to the transient.—Rationale of comparison of handwriting.—Circumstances from which identity may be inferred.—General characteristics.—What constitute general characteristics.—Much importance not to be attached to the form of a particular letter.—Practice of receiving other genuine instruments for purpose of comparison.—Certain dangers to be guarded against.—Selection of standards.—Effect of lapse of time.—Illustrations.—Letter-press copies.—Writing with chalk on black-board.—Value of expert testimony based on comparison.—Effect of disagreement among experts.—Cross examination of experts.—Failure to cross examine expert.—Presumption to be drawn therefrom.—Peculiarity of person and thing as fixing special attention.—Illustrated by special devices adopted by business men.—Appreciation of evidence as to comparison.

**Psychology of identification of things by comparison.**

In some cases a thing is singular or rare; in such cases the singularity or rarity may make such an impression on the mind that it can be identified at any time afterwards with a degree of certainty.

Often a thing is neither singular nor rare, but one of a multitude of other things in most respects like it: as the manufactured goods of particular trades, be they clothing, household furniture, tools of trade or husbandry, or things of any other kind; and in this case, if the particular thing possesses a striking difference, distinguishing it from others of its kind or species, as something wanting or superflous in it, or some mark purposely made on, or accidentally acquired by it, as a stamp or stain, that difference may be strongly impressed on the mind, and being remembered will much facilitate the power to recognise the particular thing[1].

Again, as no two things are perfectly alike, there always are between several things some points of difference; in each will be found some peculiarity not seen in any of the others. The thing itself may be very minute, and its peculiarity extremely so, as in the instance of a pea or pin. And in a thing of greater size, and even of large bulk, its difference seen by a casual, hasty, or careless observer, may make no impression on him. He sees the thing without noticing its peculiarity, which therefore makes no impression on him. After leaving it he may retain some impression of it, as a whole, as of its size, its shape, or colour, but having no impression of any peculiar quality in it, he is unable to distinguish it from other things of the same kind, and consequently cannot recognise it. It is not always that the difference is such that it appeals to the ordinary mind. A familiar example of such a thing is the coin in circulation:—

"They were all like one another, as half-pence are [2]."

But small, even nice, points of difference, distinguishing one thing from others of the same kind, may merely by the frequent sight of them, and without any especial attention to them, make an impression on the mind. They are component parts of the thing, and go to make up the whole, of which the mind receives an impression. In these cases, the impression is of the general appearance of the thing. This sort of impression is exceedingly common; a workman has it of his tools, and most people have it of their dress and other things they are frequently seeing, handling, or using. It

(1) Ram on Facts p. 55.

(2) As you like it. Act iii S. 2.

occurs every day, that by remembrance of their general appearance, a carpenter, mason, or other workman recognises his tools, and dress or other property is known again by its owner.

**As applied to handwriting.**

Like other things, handwriting may be recognised. A person recognises a letter which he himself has written, or another person's letter which he has before seen. And then he does it from his previous impression of the very writing recognised. And not only the very same, or identical, writing, but also a person's manner or style of writing may be recognised. Almost everybody's usual handwriting possesses a peculiarity in it, and distinguishing it from other people's writing. The peculiarity may be extremely nice, and scarcely discernible, but still it is there, and capable of being detected. And not only the writer himself, as A, but another person, B, accustomed to see it, may have in his mind an impression of the writer's usual writing and its peculiarity—in other words, his manner or style of writing. And if a letter or other paper written by A is presented to B, who has not seen it before, to prove it to be in the handwriting of A, the impression which B has of A's usual writing, and its peculiar character, may enable him, not to recognise the very same or identical writing, but to recognise the style of A's writing, and express his belief that it is the writing of A. In this case, it is comparison and judgment, which enables B to give the evidence required. He compares the style of the writing in question with the impression he has before received into his mind of A's style of writing, and on that comparison he can come to the conclusion and belief, that the writing in question is in the handwriting of A.

"*Gloster.* You know the character to be your brother's?

*Edmund.* If the matter were good, my lord, I durst swear it were his; but, in respect of that, I would fain think it were not.

*Gloster.* It is his.

*Edmund.* It is his hand, my lord [3]."

"Hours and hours and hours have I spent in endeavours, altogether fruitless, to trace the writer of the letter that I send, by a minute examination of the character, and never did it strike me till this moment, that your father wrote it. In the style I discover him, in the scoring of the emphatical words—his never-failing practice—in the formation of many of the letters, and in the adieu; at the bottom so plainly, that I could hardly be more convinced had I seen him write it [4]."

**Attention to be paid to the inherent and enduring attributes rather than to the transient.**

Comparison of person or thing or writings always implies that there is a mental standard on the basis of which the comparison is made. It often happens that in forming this standard attention is paid to immaterial particulars of a transient nature rather than to the dominant and permanent attributes.

Thus in forming an impression of a person, dress is sometimes more noticed than the person is, who is wearing it, especially if the observer's daily occupation is connected with dress:—

"May I ask her appearance, sir?' said Tressilian.

'O, sir,' replied Master Goldthred, 'I promise you she was in Gentlewomen's attire—a very quaint and pleasing dress, that might have served the Queen herself; for she had a forepart with body and sleeves, of ginger-coloured satin, lined with murrey taffeta, and laid down and guarded with two broad laces of gold and silver. And her hat, sir, was truly the best

(3) King Lear, Act I, Scene 2; Ram on Facts 51—52.
(4) Cowper's works (Letters), Vol. V. p. 217, ed. 1836.

fashioned thing that I have seen, being of tawny taffeta, embroidered with scorpions of Venice gold, and having a border garnished with gold fringe. Touching her skirts, they were in the old pass-devant fashion'

'I did not ask you of her attire, sir,' said Tressilian, 'but of her complexion—the colour of her hair, her features.'

'Touching her complexion,' answered the mercer, 'I am not so special certain: but I marked that her fan had an ivory handle, curiously inlaid;—and then again, as to the colour of her hair, why, I can warrant, be its hue what it might, that she wore above it a net of green silk, parcel twisted with gold.'

'A most mercer-like memory,' said Lambourne; 'the gentleman asks him of the lady's beauty, and he talks of her fine clothes [5]'"

When one at the same time takes an impression of a person, and of the dress he is then wearing, a recollection of the dress may be an auxiliary power to identify the person; yet it is obvious that this identification ought mainly to rest on the remembrance of the person, independently of the dress; for the dress, of which the impression was taken, may have many likenesses; as, for instance, soldiers' uniform, labourers' frocks; and the dress supposed to be the one remembered, and used to identify it may be one of those likenesses; and in proportion to their number will be the danger of mistaken identity of person. And besides admitting the dress to be rightly identified, it does not follow that the person who wore it when the impression of it was taken, is the man who owns and now wears it, and whose identity is in question; for it might have been lent by him, or stolen from him, and by one of these, or some other means, have clothed another person, when the impression of the dress was taken [6].

Similarly, in forming an idea as to the handwriting, it is no use fixing attention on slight external peculiarities to the exclusion of the general inherent and permanent characteristics of the writing.

**Rationale of comparison of handwriting.**

Sometimes the skill of the forger is so great as to nearly baffle that of the expert. Such circumstances, however, are the exception.

Some handwritings are characterized by few or no striking peculiarities that radically distinguish them from one another, and may be casually mistaken in their identity, while other writings consist of a continuous series of extravagant eccentricities such as to cause them to stand out as grotesque, unique, and unmistakable among other writings. It follows that the personality of some handwritings, like some physiognomies, is more marked and unmistakable than that of others, and the more rare and exceptional are the characteristics either of the person or of the writing, the less liable are accidental coincidences between them and others, or that any mistake can occur respecting their own identity.

As these peculiarities multiply, either as to writing or the person, the chance of their recurrence in another diminishes on a ratio far beyond the simple law of permutation. Suppose, for example, that among ten thousand persons there is one hunchback, one person minus a right leg, one person minus a left arm, one person with one eye, one person with a broken nose. To find one person having *two* of these peculiarities would require probably one hundred thousand people; *three* of them, a hundred millions; *four*, a thousand millions, while one having all five might not be found in the entire fourteen hundred million people on earth. While it cannot be positively alleged that no one person can possibly possess all these peculiarities, the

(5) Kenilworth, Chapter II. Ram on Facts 69—70. (6) Ram on Facts page 68—69.

improbability is so great as to invade the realm of the impossible. Precisely so it is in the comparison of handwriting.

As we have said, one peculiarity does not decide. It simply counts for what it may be worth; *two* count not twice as much, but many fold more, and so on. By each added peculiarity the strength of the evidence is multiplied far beyond the rule of geometrical progression; and although a point may not be reached where it can be said that all of a series of like or different characteristics, as the case may be, could not possibly occur, the probabilities for or against the accidental recurrence of all the series is such as to justify decisive judgment [7].

**Circumstances from which identity may be inferred: General Characteristics.**

In a leading English case, Coleridge. J, speaking of handwriting, said: "Test of genuineness ought to be the resemblance, not to the formation of the letters in some other specimen or specimens, but to the general character of writing, which is impressed on it as the involuntary and unconscious result of constitution, habit, or other permanent cause and is therefore itself permanent [8].

Sir John Nicholl said that "the best, usually perhaps the only proper evidence of handwriting, is that of persons who have acquired a previous knowledge of the party's handwriting from seeing him write, and who form their opinion from the general character and manner and not from criticising particular letters [9]."

Opinions as to handwriting "should depend not so much upon mathematical measurements and minute criticisms of lines, nor their exact correspondence in detail when placed in juxtaposition with other specimens, [10] as upon its general character and features, as in the recognition of the human face. [11]"

**What constitute general characteristics**

"It is impossible to describe exactly what in handwriting may be pronounced general similitude or dissimilitude. In express conformity to the rule just stated, a court took especial notice of a "dash and swing about the stroke" in certain genuine signatures, while in the disputed writing although it simulated the standard, the strokes appeared to be laboured and lacking the clean-cut appearance of the true signatures [12]."

**Much importance not to be attached to the form of a particular letter.**

The particular form of a letter is not a very sure test of handwriting. "Accident, haste, the position of the paper, the presence of a hair in the nib of the pen, or its more or less free discharge of ink, might essentially vary the turn of the letters [13]."

**Practice of receiving other genuine instruments for purpose of comparison Certain dangers to be guarded against— Selection of standards. Effect of lapse of time.**

One of the objections which have been urged against receiving other instruments for the purpose of comparison has been the danger of fraud or unfairness in selecting instruments for that purpose, from the fact that handwriting is not always the same, and is affected by age and by the various circumstances which may attend the writing [14].

Signature and handwriting change as one grows older. There is sometimes a marked difference between the signatures of the same person signed at dates not far

(7) Ames 101—102. (8) Doe v. Suckermore, 5 Ad & El. 705, 31 E. C. L. 406.
(9) Robson v. Rocke. 2 Add. Ecc. 53.
(10) Ibid. (11) Miles v. Loomis. 75 N. Y. 288, 296.
(12) Matter of Albinger (Surrogate Ct.) 30 Misc (N. Y.) 187, 63 N. Y. Supp. 744.
(13) Murphy v. Hagerman, Wright (Ohio) 294, 298.
(14) Morrison v. Porter. 35 Minn. 425, 29 N. W. Rep. 54

distant one from the other. Handwriting changes with increasing years, infirmity, and habit [15].

**Illustrations.**

Where a girl sixteen years old testified that when she was ten years old she wrote, for her father, an indorsement introduced in evidence, but that her handwriting had very much changed and improved since then, it was a proper exercise of discretion for the trial court to refuse to require her, on cross-examination, to rewrite the indorsement in the presence of the jury for the purpose of using it in evidence [16].

In commenting upon the testimony of a renowned expert who testified for the contestant of a will in a case before Chancellor McGill of new Jersey the learned judge said:—"When it is remembered that the signatures to the bond and mortgage were written at least eleven years before the signature to the will, the difference insisted upon may be accounted for. The first two signatures may have been an effort of the labourer Michael Conway, whose hands and arm were deprived of nervous flexibility by continued manual work, while after the lapse of eleven years the signature to the will may have been an effort of the Watchman Conway, freed from continued manual labour, and more accustomed to write. In short the signatures to the bond and mortgage were made at too remote a period before the disputed signatures to furnish entirely reliable standards for comparison" [17].

But it was one of Lord Brougham's confident assertions, that we ought to presume that if a person learned to write in his childhood under a preceptor, the general features of his handwriting will ever remain the same [18].

In a contested will case where scores of genuine signatures were in evidence for the purpose of comparison, it appeared that the testator wrote an exceptionally scrawly, irregular, awkward hand. The Court said: "In the shape of the letters, their size, their slant, their distance apart, the fashion of their junction, in divers respects besides, in almost every respect indeed, where there was room for variation his writing at one time seemed to differ not a little from his writing at another. A signature chosen at random from the multitude before me would be likely, I think, to show quite as marked points of dissimilarity, if compared with any of the rest as would the signature on the will subjected to the same test." And the court did not distrust the genuineness of the will signature [19].

---

(15) Barlaw v. Harrison. 51 La. Ann. 875, 25 So. Rep. 378.
(16) Williams. v. Riches. 77 Vis. 569, 46 N. W. Rep. 817.
(17) Conway v. Ewald. (N. J. 1899) 42 Atl. Rep. 338.

(18) Observe his statement at the conclusion of the following colloquy: *Lord Brougham*:—"It is in the evidence of Sir T. Phillips. 'Do you think that that could be the handwriting of a gentleman of education who was born in the year 1692'? 'No, I do not think it could'" *The Lord Chancellor*.—"I think he said also that it might be the handwriting of a person living in 1730." *Lord Campbell*.—"That it might be the handwriting of a person living in 1730, but not of a person born so long ago as the seventeenth century." *Lord Brougham*.—"He is asked: 'You assign to this writing a period from 1740—1750?' His answer is: 'About the middle of last century.' To be sure, a person born in 1692 might have been living in 1750; he would be only 58 years of age; but he would retain the character of the writing as he learned and practised writing when a boy. I do not think this evidence is much to be depended upon." (Cited in Moore on Facts Vol. I. S. 607. P. 626.

(19) Hagan. v. Yates, 1 Dem. (N. Y.). 584, 589.
But, of course, a writing may be satisfactorily proved to be a forgery, although the differences between genuine standards in evidence are as marked as those between the disputed writing and the standards.

"Known writings, termed either "standards" or "exemplars," should be selected with great care. The greater the number and the nearer the date and character of the disputed writing, the better. Signatures to legal papers, deeds, mortgages, wills, leases, etc., as well as notes, receipts, and cheques, are best. Courts are exceedingly careful, and rightly so, about the writings admitted as "standards."

Nothing but original signatures can be used as standards for comparison for the use of experts [20]. Impression of writings produced by means of a press, or duplicate copies made by a machine, are not admissible for this purpose [21], because the machanical process to which the writing is subjected in transferring it would, by spreading the ink and blurring the letters, necessarily somewhat affect its general appearance [22]. But such copies when offered in evidence for other purposes may be identified by witness familiar with the handwriting of the person who wrote the original. The transfer does not destroy the identity of the handwriting as shown on the impression, or render it unrecognizable by persons acquainted with its characteristics. These, to a considerable extent, it must necessarily still retain, so that a person having adequate knowledge could testify to its genuineness with quite as much accuracy as if he had before him the original sheets on which the letters were first written.

**Letter-press copies.**

Writings thus transferred are not unlike written documents which have been defaced or partially obliterated by exposure to dampness, rough usage, or the wasting effect of time. Such papers may not possess all the distinctive features of the original handwriting, but their partial destruction or obliteration will not render them inadmissible as evidence, *if duly* identified by testimony [23].

**Writing with chalk on black-board.**

Comparison of handwriting in ink with that in chalk on a black-board is impossible [24].

**Value of expert testimony based on comparison.**

In a case in the English Ecclesiastical Court, where Sir John Nicholl admitted a will to probate on conflicting evidence of expert and non-expert witnesses as to forgery he concluded his opinion as follows :—

"Of the evidence to handwriting, thus far, this then is the general account. Three witnesses are produced to prove this signature a forgery, no one of whom was intimately acquainted with the handwriting of the deceased, or had seen him write for a number of years. Two of the three have doubts, but concur in the general similarity of this to the deceased's admitted signatures; the third disbelieves, but assigns reasons for that disbelief in no degree valid, in my judgment, to justify and sustain it. On the other hand there are five witnesses of as high respectability, deposing from an intimate and much more recent intercourse and acquaintance with the deceased and his subscriptions (and this, too, after doubts had been suggested of its genuineness) to this being his actual signature; and so

---

An expert should not be asked to use as standard a single signature or piece of writing where more can be obtained, because some of the characteristics of the writing in question may be lacking from any particular piece, or it may embody other accidental peculiarities foreign to the habit of the writer. In the absence of proper material for comparison, an expert should decline to give his opinion or testimony. A large number of specimens will show the general handwriting of the individual, and preclude the probability of a mistake being made in passing judgment, which might occur were the examination confined to a single brief specimen, which might not properly represent the range of the person's writing habit.

If the disputed writing is in lead-pencil, by all means secure some lead-pencil standards, if possible; also some ink standards. But do not use lead-pencil standards (unless compelled to by necessity) for comparison with disputed ink writings, as it is obvious that writing with a pencil cannot contain all the characteristics of pen and ink writing. Especially is this true of shading, which is an important factor in the comparison of writing." Ames 257.

(20) Ames 257.

(21) Spottiswood v. Weir, 66 Cal. 525, 6 Pac. Rep. 381, where the expert stated on cross-examination that "it would be very dangerous to decide on a press copy for sure;" Com. v. Eastman, 1 Cush. (Mass) 189.

(22) Com. v. Jeffries, 7 Allen (Mass.) 548, 562; Cohen v. Teller, 93 Pa. St. 123, 128.

(23) Com. v. Jeffries. 7 Allen (Mass.) 548, 561, per Bigelow, C. J.

(24) Sanyal v. Emp. 13 Cr. L. J. 289 : 14 I. C. 753 : 16 C. W. N. 812 : 39 Cal. 606.

deposing from similarity not of particular letters, but of general character, ordinarily the only safe criterion upon which to form an opinion upon such a subject. It would surely be waste of time to attempt to sum up this evidence on both sides, in order to strike a balance. But the opposers of the will have obtruded on the notice of the court evidence (if it should be so called), to this part of the case, of a somewhat different species. I mean, the opinions of persons who, without any previous knowledge of a party's handwriting, think they can judge, from their skill and experience in such matters, whether a signature for instance, said to be his, be so or not, by comparing it with other, his admitted signatures; and who also undertake, by certain indications, to determine from the general appearance of handwriting, whether it be written in a natural or an imitated character. This species of evidence has been constantly held the lowest and weakest that can possibly be offered. Inclining strongly to this view of the subject the court so far as regards the present case, might say at once that the effect of this evidence, be what it may, would fail to bring the scale as to proof of handwriting even to an equal balance; much more would fail to turn it, and convict this instrument of fabrication and forgery. But evidence of this species actually adduced in the present case suggests some considerations into which the court may not unusefully enter, as applicable to this subject generally. Here are seven witnesses of this class examined in the present case, five of the seven being persons in official situations (three in the post-office, and two in the bank); added to these are an engraver and a law stationer. Now to what, taken in its general result, does their evidence amount? In sustaining the cause which they have propounded, namely that *this* signature is a forgery, these gentleman all agree. To that end in common they all arrive. But, though they agree in their conclusions, they differ so widely in their premises; the reasons comparatively few, which they assign in common, are so vague and unsatisfactory; in many, not unimportant particulars, they so flatly contradict each other and in others, most if not all of them, in turn, are so flatly contradicted by admitted facts in the case, that their evidence taken as a whole fails to induce any suspicion even upon my mind of this instrument being, what they so confidently pronounce it, a forgery. For instance as to the vague and inconclusive character of most of their common reasons, the circumstances I observe which they nearly all assign as their reasons for deeming this signature to be written in a feigned and not in a natural hand, may be amply accounted for by the deceased's state and condition at the time of this instrument being signed. Many persons have a trick, or knack, or habit of retouching their letters; It may happen to any person not in the habit of it, to pass over his letters a second time, from a failure of ink in the pen, that traced them in the first instance. In short, this circumstance of painting is itself extremely trivial. Again as to contradicting each other, some of these witnesses are confident that certain letters, exhibited by the opposers of the will, are not of the handwriting of the deceased; others are as confident that they are of his handwriting. Lastly as to the contradiction which certain of the witnesses experience from admitted facts in the case, there are several of them pretty confident that the body of the will, the subscription to it, the pencil instructions and the indorsement of the envelope were all written by one and the same individual, namely Croft. With reference to the general practice, I earnestly recommend that no attempts should be made to obtrude such evidence on the court in any future case. It occasions considerable certain expense; that any benefit should result from it is most unlikely, and it may be safely pronounced nearly impossible. In aid of a good case it is wholly superfluous. That, in support of a bad case, it is at best unavailing, this very case may serve to show. Meantime these professors ordinarily, as in this instance, speak their opinions with a confidence which renders the admission

of their testimony in such cases even highly mischievous from its probable tendency to mislead not indeed the court but its suitors, to the almost unavoidable creation of expense and delay and inconvenience to both parties. If it should be asked, of what use, then, is the art which these gentlemen profess if it can never be depended upon, in what cases may it be fairly invoked, and to what objects safely applied, I answer, its legitimate use I take to be this: it may be reasonably resorted to by parties whom a suspicious or suspected instrument purports to deprive of a legal benefit, for their own private information, in the first instance; it may be safely relied on to the extent of suggesting the propriety on their part, of caution, doubt and inquiry. But whether evidence as to handwriting of this species can ever of much, if any, avail under circumstances not very extraordinary, when the authenticity of the instrument comes to be finally determined upon by the competent forum (a matter which must depend upon almost infinite, more stringent, considerations), is what, for reasons sufficiently apparent, I much incline to doubt. Still with all this, this court which is subordinate to a higher tribunal, may not feel itself warranted in altogether rejecting such evidence, if tendered to and pressed upon it, against the uniform course of at least, its modern practice. But this court would not regret having the sanction of the superior tribunal, the Court of Delegates, either to reject such evidence altogether or at least to confine its admission to those (perhaps nearly unsupposable) cases of such high doubt and nicety that a mere feather-weight would give a preponderancy to the evidence for or against the instrument when it might be resorted to after publication, by direction of the court itself for its own information; which I incline to think was actually the old mode of introducing such evidence into these cases [25]."

The maxim *falsus in uno, falsus in omnibus*, [26] applies, but with less force, to the statements of a witness which, although not intentionally false, are in fact untrue, especially when they involve matters of judgment and skill [27].

Where bank officers, who testified as experts, doubtless had reasonable skill in judging of handwriting in their business, but made mistakes in identifying signatures in a case, the court said that "the result is that their opinion, given in the utmost good faith, is none the less not satisfactory and conclusive [28]."

In a case where it was contended that a disputed writing was a tracing from a genuine, and an expert who on his direct examination declared that he could detect any tracings at a glance sulked and wriggled when asked on cross-examination to point out which of two writings exhibited to him was an original and which a tracing, his judgment was of course decidedly impeached [29].

Even if the experts are shown by rigid cross examination to have been mistaken in some of their elements and modes of comparison, the court may be thoroughly convinced by its own examination of the writings that in the leading facts the testimony of the experts is correct [30].

"Where experts disagree it may be quite evident that those on one side are entitled to greater consideration because of their superior experience,

(25) Robson v. Rocke. 2 Add. Ecc. 53; Moore on Facts Vol. I. pp. 631—635.
(26) Moore on Facts, p. 682.
(27) Hoag v. Wright, 174 N. Y. 36, 66 N. E. Rep. 579.
(28) Barlaw v. Harrison, 51 La. Ann. 875, 25 So. Rep. 378, per Breaux, J. Moore on Facts, p 683
(29) Sharon v. Hill, 26 Fed. Rep. 337. 357.
(30) Gaines's Succession, 38 La. Ann., Moore on Facts 683.

**Effect of disagreement among experts.**

or the conflict may be so great as to make it futile for the court to attempt to form any satisfactory conclusion from the expert testimony alone. Where two experts concurred in pronouncing a signature a forgery, one of them expressing the opinion that it was an imitation made by the person suspected of forgery because it showed characteristics of his handwriting, and the other expressing the opinion that the disputed signature was traced from a genuine original, these opinions would seem to neutralise each other, since a tracing is not supposed to exhibit characteristics foreign to the original [31]." On conflicting testimony of experts a jury would not be justified in finding a verdict which in effect pronounces a reputable man guilty of forgery [32].

**Cross Examination of experts.**

The right to cross examine handwriting experts is of great importance and while it should be confined within reasonable limits, it should not be so restricted as to deprive it of all value, and courts are not disposed to limit the opportunities for testing and determining the accuracy and value of testimony, or the reasons for the witness's belief [33].

It was held by the New York Court of Appeals, where the effort of the cross examiner was to show, not that the expert witness had been mistaken as to the signature of some third person, or even as to some signature not in evidence but with reference to the very signatures which were then th subject of investigation, that the witness might properly be asked, "Did you not on another trial swear that these bogus signatures were genuine?" The Court said "Owing to the dangerous nature of expert evidence and the necessity of testing it in the most thorough manner in order to prevent injustice we are disposed to go farther and to hold that where a witness makes a mistake in his effort to distinguish spurious from genuine signatures and he does not acknowledge his error, it may be shown by other testimony. . . . It is better to take a little time to see whether the opinion of the witness is worth anything rather than to hazard life, liberty, or property upon an opinion that is worth nothing. The evils and injustice arising from the use and abuse of opinion evidence in relation to handwriting are so grave that we feel compelled to depart from our own precedents to some extent and to establish further safeguards for the protection of the public. As the hostility of witnesses to a party may be shown as an independent fact, although it protracts the trial by introducing a new issue, so, as we think, the incompetency of a professed expert may be shown in the same way and for the same reason; that is because it demonstrates that testimony otherwise persuasive, cannot be relied upon [34].

**Failure to cross examine expert: presumption to be drawn therefrom.**

Failure to cross examine a witness sometimes raises a presumption that the party entitled to cross examine deems that if the right were exercised, the witness's testimony against his client would be strengthened [35].

The extent of such presumption upon failure to cross examine an expert witness to handwriting was measured in a prosecution for forgery which came before the United States Circuit Court of Appeals. The following is from the opinion of Circuit Judge Van Devanter in that Court:—"Complaint is made of the instructions given to the jury concerning the unspoken reasons of the Government's expert witness for the opinion expressed by him as to the similarity or identity of the handwriting in the papers exhibited to him. As appears in the statement heretofore made, a ruling of the Court, fully

(31) Sarvent v. Hesdra. 5 Redf. (N. Y.). 47, 58. Moore on Facts p. 681.
(32) Scott v. New Brunswick Bank. 31 N. Bruns. 21. (33) Moore on Facts, 682.
(34) Hoag v. Wright. 174. N. Y. 36. 66. N. E. Rep. 579. (35) Moore on Facts S. 1275.

acquiesced in by defendant's counsel, prevented the Government from placing this information before the jury during the examination-in-chief of the witness and the defendant did not avail himself of the privilege expressly accorded to him of calling it out upon cross examination. Defendant's Counsel was therefore not in a position to subsequently urge before the jury that the witness's opinion was unexplained or inexplicable. And whether this was done or not it was entirely appropriate, in view of the situation which the matter had assumed, that the court should call the attention of the jury thereto, and state that presumably the witness would have been able to declare the reasons upon which he proceeded in pronouncing his opinion. Men are so generally able to declare the reasons for their opinions, that where, in testifying as an expert, one has given an opinion from the witness stand, and has expressed himself as willing and able to explain the opinion, but has been prevented from doing so, it may well be said that presumably he would have been able to declare upon what reasons his opinion rested. Thus far the instruction is not subject to criticism. But it is also said to the jury that presumably the witness would have told you how every stroke of the pen was made and how it would be impossible, or at least not a matter to be believed, that another person than the prisoner could have made the writing upon the back of the cheque. It is not a matter of common experience or observation that the opinions of men, or of those men who speak as experts in handwriting, are so unerring, or that the reasons for their opinions are so well founded, convincing and conclusive as the opinion and reasons of this witness were assumed to be in this instruction. The law does not permit presumptions to be entertained in judicial proceedings which do not comport with or are contrary to the common experience or observation of men. The effect of the instruction was to convey to the jury the impression that, as a matter of law, the failure of the defendant to exercise the full right of cross examination accorded to him by the Court's ruling was a confession that the reasons in the mind of the witness for the opinion expressed by him were so well founded, convincing and conclusive as to demonstrate if stated, that it was impossible or at least incredible that the forgery charged was the act of another person than the defendant. It was equivalent to putting into the mouth of the witness and before the jury the matters to which the witness had not testified and which did not presumptively flow or result from the testimony which he had given. This was an error [36]."

"There is no calling in life, however intellectual or advanced or profoundly scientific, in which men of undoubted integrity do not differ somewhat, not only in opinions, but on questions of pure fact. Eye-witnesses to ordinary occurrences, people whose veracity is beyond reproach, often differ as to exact details as to what took place [37]."

**Peculiarity of person and thing as fixing special attention.**

With regard to person or writings when there is something attracting particular notice, as stature, feature, some defect, deformity, blemish, or other thing, natural or accidental, this seen by any one, whether frequently or not, and in some cases even once only, make such an impression on him, as will enable him long after to remember it, and through that remembrance to recognise the person or writing.

"*Cymbeline*: Guiderius had upon his neck a mole, a sanguine star: It was mark of wonder *Belarius*: This is he; who hath upon him still that natural stamp; It was wise nature's end in the donation to be his evidence now [38]."

(36) Withaup v. U. S. (C. C. A.) 127. Fed. Rep. 530, 537. Moore on Facts Vol. I. p. 684.
(37) Ames p. 111.
(38) Cymbeline. Act v. S. 5. Ram on Facts pp. 57—58.

**Illustrated by special devices adopted by business men.**

Thus several devices are resorted to by persons with large banking accounts to protect their signatures on cheques and to prevent the bank mistaking a forgery of such signature to be genuine. These devices, peculiar as they are to each person, may help in the identification of such person's writing.

Mr. Hardless mentions the following among such devices:-(i) Some people sign differently on cheques to their usual signature. (ii) Others again vary the mode of writing their names as for instance signing their full name or the first or second name instead of employing only initials. (iii) In some cases secret marks used by the drawer and known to his bankers are employed. (iv) Tiny ink blots are favourite devices and sometimes these are made in a special place or spot on the reverse of the cheque. (v) One stock broker as a preventive of forgery is stated to have used a stamp on which his signature was embossed in cork, never employing a pen at all [39].

**Appreciation of evidence as to comparison**

The following extract from a learned judgment of Sir John Nicholl embodies many instructive observations upon this kind of evidence: "This Court has often had occasion to observe that evidence to handwriting is at best, in its own nature, very inconclusive; affirmative from the exactness with which handwriting may be imitated; and negative from the dissimilarity which is often discoverable in the handwriting of the same person under different circumstances. Without knowing very precisely the state and condition of the writer at the time, and exercising a very discriminating judgment upon these, persons deposing, especially, to a mere signature not being that of such or such a person from its dissimilarity—howsoever ascertained or supposed to be—to his usual handwriting, are so likely to err that negative evidence to a mere subscription, or signature, can seldom, if ever, under ordinary circumstances, avail in proof against the final authenticity of the instrument to which that subscription or signature is attached. But such evidence is peculiarly fallacious where the dissimilarity relied upon is not that of general character, but merely of particular letters; for the slightest peculiarities of circumstance or position—as, for instance, the writer sitting up or reclining, or the paper being placed upon a harder or softer substance or on a plane more or less inclined—nay, the materials, as pen, ink, etc., being different at different times—are amply sufficient to account for the same letters being made variously at the different times by the same individuals. Independently, however of anything of this sort, few individuals, it is apprehended, write so uniformly that dissimilar formations of particular letters are grounds for concluding them not to have been made by the same person." [40]

It still remains a question in any individual case, how far such general observations can be of any assistance. Each case depends upon its own circumstances. If, for instance, a clear dissimilarity of habit can be traced through numerous writings of two persons, written on different occasions and on different subjects, it would be very difficult to suppose that the explanation was that the same person wrote them all, sometimes standing and sometimes sitting and so forth; and all evidence which goes to show a habit in one set of writings which cannot be found in the other is of importance, even though it may relate only to single letters [41].

(39) Hardless 116.
(40) Robson v. Rocke, 2 Addams, at p. 79.
(41) See Wills Cir. Evi. pp, 237—238.

# CHAPTER XII.

# Detection of Forgery.

## (ii) By Comparison by Judge and Jury.

CONTENTS :—Comparison of disputed writings with genuine ones.—Judicial dicta.—Comparison by Judge *Vs* Comparison by Expert.—Comparison by Jury.—Comparison of writings by Appellate Court.—

**Comparison of disputed writings with genuine ones.**

It has always been held that the disputed writing is open to the inspection of the trial Judge and Jury, for comparison with the genuine ones [1].

**Judicial dicta.**

"We are all, in certain degrees, experts on handwriting, and I have never yet found it safe to subordinate my own judgment to that of an expert," said Surrogate Coffin of New York [2].

In a case where bank cashiers and tellers and other business men familiar with a person's handwriting expressed a decided opinion that a disputed signature was his, Vice Chancellor Pitney said: "I am not aware that their evidence is of any more value, in that respect, than my own inspection of the documents and comparison of them with the standards. That inspection and comparison alone, would lead me to the conclusion that they are genuine [3]."

**Comparison by Judge *versus* comparison by Expert.**

"It is seldom that we have a juryman upon a panel who is not capable of comparing and judging with a good degree of correctness, and very many of our jurymen are able to make a comparison with skill and accuracy," said Judge Eastman of the New Hampshire Supreme Court [4].

**Comparison by Jury.**

The same confidence of the jury has been expressed by other courts [5].

"A witness may be prejudiced; the jury are presumed to be impartial. They can decide, by inspection, on the weight to be given to his testimony, and that too, generally, with a good degree of accuracy. The witness describes how the person made his letters, wherein the writing is disguised, and the result of his opinion. Why not permit the jury to see the grounds of his conclusion by examining those writings from which he has derived it?" [6]

Maps, plates, charts, survey plans, and models of machines are constantly given to the jury to form their opinions in cases where they apply; but jurors are not generally more skilled in mathematics, surveying, and mechanism than in writing [7].

"Generally, when the jury have acknowledged signatures for comparison they can judge as well of the character of the disputed signature as if they had seen the party write a hundred or a thousand times. .....The witness compares with his remembered original; the juror has the actual original before his eye [8]."

---

(1) Comparison by Judge and Jury is allowed under the English law (see Com. Law Pro. Act, 17 and 18 Vic. c. 125 s. 27); also under the Indian Evidence Act. For a complete collection of cases on this subject see Wigmore on Evidence, Vol. III. pp. 2680—2685. See also S. 73 Indian Evidence Act; 14 M. L. J. 424—14 Indian Cases 741.

(2) Whelpley v. Loder, 1 Dem. (N. Y.) 368, 378.

(3) Greenwood v. Henry, (N. Y. 1894) 28 Atl. Rep. 1053, 1057.

(4) Bowman v. Sanborn 25 N. H. 87, 111,

(5) Calkins v. State, 14 Chic St. 222, 227.

(6) Lyon v. Lyman, 9 Conn. 55, 62 per Daggett, J.

(7) Per Daggett, J. Lyon v. Lyman, 9 Conn. 55, 63,

(8) Turner v. Hand, 3 Wall. Jr. (C. C.) 89, 24 Fed. Cas. No. 14,257.

It is "more satisfactory to submit a genuine paper as a standard and let the jury compare that with the paper in question and judge of the similitude, than the evidence continually received of allowing a witness who has seen the party write once to compare the disputed paper with the feeble impression and transient view the writing may have made in his memory. This is by no means so well calculated to ascertain the truth, the object of all evidence, as to suffer the jury to compare the paper with writings proved to be authentic, present in court, and open for inspection.....There may be particularity in the handwriting so distinct and convincing as to leave the mind in no doubt, on examining that which was admitted to be the genuine handwriting with the disputed instrument, as to its being authentic or spurious, or the resemblance so weak as not to satisfy the mind. The jury inspect, examine; they would not be bound to give a verdict according to the opinion of any witness against their own senses; and if the witnesses are equal in number, in character, in intelligence, and means of information, there the jury must decide by their own comparison, trust their own eyes, and draw their own conclusions, by comparing the standard, the handwriting acknowledged, with the contested paper" [9].

It has been remarked, however, that "from the constitution of the human mind a jury might be expected to feel some gratification of curiosity in the discovery of minute coincidences in handwriting, and that this feeling might often mislead them, even where the coincidences were fanciful or accidental [10]."

In a case in Michigan where the trial court refused permission to have the jury take a contested will to the jury room to compare its body with the signature, no application having been made by the jury, and the opposite counsel not assenting unless the jury desired to see it, the refusal was held not to be contrary to law or practice. Chief Justice Campbell said: "It has never been questioned whether it could properly be allowed at all, but this seems to be rather disfavoured than absolutely erroneous. Much may be said on both sides of such a question. But the purposes avowed in this cause, of having the jury use the document to look for resemblances between the body and the signature for the purpose of inferring forgery, indicates some danger in permitting it. When a juror is to give testimony he must do it in open court. Yet practically this jury room inquest would involve the expression of opinions belonging somewhat to the domain of expert evidence, and having the force of facts; when if it were assumed the jury were competent to settle such matters by their own skill, it might not be competent to examine witnesses upon it at all. Nothing can be more dangerous than to allow the suspicions and surmises of men whose opinions could not often be received as witnesses, to fix the rights of parties by their fanciful notions of resemblances or differences. In this country most jurors are not illiterate, but it would be very strange if the average members of juries could be regarded as qualified to form safe opinions on an inspection of papers upon nice points of identity in handwriting, especially when the whole case may depend upon their correctness [11]. Juries can undoubtedly, and must use their judgment more or less concerning documents laid before them, and have it in their power to rely on their own views very much if they see fit. But the law presumes they will act on testimony chiefly, if not entirely, and it would not be proper to assume that they all have equal knowledge or skill in such inquires, or that, when they consult together, the opinions of one would not have more influence than those of another, when the opinions operate as facts in the cause. If a verdict were formed on

(9) Per Duncan J. in Farmers' Bank v. Whitehill, 10 S. & R. (Pa.) 110, 112.
(10) Crist v. State, 1 Ala. 137, 146, per Ligon J.
(11) See also Vinton v. Peck, 14 Mich. 287, 294.

statements of ordinary facts by one juror to his fellows, it would be a violation of their oaths. When opinions are such as to stand in the same light, the result cannot be much less dangerous. No harm can usually result from the possession of documents in the jury room, because they seldom call for examination of their genuineness, and are usually only important for their contents. When their genuineness is in controversy, and that is to be judged by resemblances and peculiarities on which witnesses have been examined as experts, their inspection alone may become one of the means of evidence requiring skill to deduce its results. Every one knows how very unsafe it is to rely upon any one's opinions concerning the niceties of penmanship. The introduction of professional experts has only added to the mischief, instead of palliating it, and the results of litigation have shown that these are often the merest pretenders to knowledge, whose notions are pure speculation. Opinions are necessarily received and may be valuable, but at best this kind of testimony is a necessary evil. Those who have had personal acquaintance with the handwriting of a person are not always reliable in their views, and single signatures apart from some known surroundings are not always recognized by the one who made them. Every degree of removal beyond personal knowledge, into the domain of what is sometimes called with great liberality scientific opinion, is a step towards greater uncertainty, and the science which is so generally diffused is of very moderate value. Subjected to cross examination, it may be reduced to the minimum of danger. In a jury room, without any check or corrective it would be very dangerous indeed [12]."

**Comparison of Writings by Appellate Court.**

An appellate court reviewing the evidence and pronouncing upon its weight will compare for itself a disputed writing with genuine writings, if all are before the court in their original form or if the record contains photographic copies properly admitted in evidence [13].

If the appearance of the writing is described by witnesses on the trial, whose testimony is embodied in the record, perhaps the appellate court will feel at liberty to form an independant judgment without the originals [14]. But in reviewing the evidence in so far as the verdict may possibly have been affected by comparison of writings, where the originals, or a description of them, are not incorporated in the record, "how can we say that the jury's conclusion is unsupported by sufficient competent evidence?" asked the Supreme Court of Nebraska [15].

(12) Matter of Foster, 34 Mich. 21, 24. See also 12 Encyc. of Pr. and Pr. 593, note. 4.
(13) Borland v. Walrath, 33 Iowa. 130, 134; Heaphy v. Metropolitan I. Ins. Co., 25 N. Y. App. Div. 420, 49 N. Y. Supp. 466, granting a new trial for verdict against evidence.
(14) Dubois v. Baker, 30 N. Y. 355, 364.
(15) Risee v. Gash, 43 Neb. 287, 61 N. W. Rep. 616

# CHAPTER XIII.

# Detection of Forgery.

## (iii) By Examination of Document.

CONTENTS:—Necessity for close scrutiny of document.—Illustrative cases.—(i) Age of document.—(ii) Time of manufacture of paper.—(iii) Examination of folds of paper, size and appearance.—(iv) Chemical test.—(v) Sizing of paper and erasure.—(vi) Ink.—(vii) Knowledge comes occasionally by accident.—(viii) Binding of books.—(ix) Peculiarities of spelling.—(x) Warren's case—Wax or wafer.

**Necessity for close scrutiny of documents.**

It is always necessary that great care and pains must be bestowed by counsel upon documentary evidence, before he is qualified to estimate it accurately.

**Illustrative cases.**

We will enforce our counsels by giving a few examples of miscarriage resulting from neglect to make a proper examination of the testimony before it was offered.

**(i) Age of document.**

On a trial of an ejectment suit, the counsel making the general reply for the plaintiff pointed out that the grant which the defendant claimed to have received from a county under a law of the state authorising it, purported on its face to be some years older than the Act of the legislature organising the county and thus convinced the jury that the grant was a clumsy forgery.

The blunders of relying on documents written upon paper manufactured after their alleged execution, and of resting a defence upon a grant which was palpable forgery, would have been avoided if the lawyers when first consulted had kept their eyes open, and industriously looked into facts. There occur in ordinary practice but few parallels of the great carelessness just exemplified. Yet there are not many lawyers who study the case enough before they advise action. The positiveness and confidence of the client should be disregarded. He should be used mainly as an index and guide to the evidence; and all accessible information should be collected, every pertinent document scrutinized, and every possible witness exhaustively questioned, before the lawyer confidently advises to litigate or not.

**(ii) Time of Manufacture of paper.**

The internal evidence of a document has often been more convincing than the evidence of eye-witnesses, and on many occasions has been the only evidence obtainable. For instance forged historical autographs have been detected through having been written upon paper having a water mark of a later period than the alleged date of the writing.

An instance of the kind is cited by Wills in his Circumstantial Evidence where a trial is mentioned at which evidence was given that a letter, alleged to have been sent from Venice, had been written upon paper made in England at a later date [1].

The evidence of the water mark, however, is not always conclusive as to the date of the paper, since, manufacturers may intentionally use moulds of a wrong date. Thus in a trial which took place in 1834 in Edinburgh, evidence was given by the paper manufacturers that they were post-dating their paper, and were using moulds with water marks of 1828 pattern to supply a special order. It is only a clumsy forger who will lose sight of the silent testimony of the water mark, and the fabricators of spurious ancient documents have been known to buy old paper of the right quality and having the correct water mark of the paper used at the period to which their forgeries were supposed to belong [2].

(1) Mitchell on Experts p. 110. (2) Ibid.

There have been cases where a "writing put in evidence recited that it was executed anterior to 1861, but which was disproved because the paper was an inferior and unmistakable kind manufactured by the southern mills during the last years of the late American civil war."

Valuable information may sometimes be gathered from a microscopical examination of the paper of a document, interpreted by a knowledge of the development of the industry. For example, in the old type of paper, made from rags, the linen or cotton fibres, show distinctive features plainly recognizable under the microscope and absolutely different from the modern wood pulp papers. It is obvious that a document dated, say, at the earliest part of last century, could not be genuine if written upon paper the fibres of which showed the characteristic structure of wood cells [3].

**(iii) Examination of folds of paper. Its size and appearance.**

The folds of the document, its size, appearance, fresh or old, must also be carefully scrutinized [4].

Chemical tests may also be of service in proving the similiarity or dissimilarity of two papers. For example, there are pronounced differences in the amounts of mineral matter in papers and in the nature of the constituents of the ash, whilst a very sensitive test has been based upon the varying proportions of sulpher in paper, which can be accurately estimated by means of a colour reaction [5].

**(iv) Chemical test.**

Further valuable information may be gained from an examination of the sizing. It has not infrequently happened that a slight erasure has changed the whole sense of a letter. An instance of the kind came within the writer's experience, where a letter containing the words "our house" was put forward as evidence as to the ownership of the property.

**(v) Sizing of paper and erasure.**

When this document was examined under the microscope it showed unmistakable signs of erasure in front of the word "our," the sizing having been removed and the fibres scratched up, apparently with the point of a knife. The paper was also more transparent at the place where the erasure had taken place. These facts supported the contention of the other side that the original reading had been "your" and that the "y" had been erased.

To lessen the chance of a detection from such a trail, skilful forgers paint the place over with a resinous solution, so that superficially it has the appearance of the rest of the surface of the paper. The dodge may be detected by an examination of the sizing, the patched place being stripped by brushing it over with alcohol or other solvent.

Tests have also been devised for distinguishing between papers sized with material of animal and of vegetable origin, and for recognizing the presence of undecomposed alum in the paper. Evidence based on these tests was given in a trial for the forgery of letters of credit, and it was proved that the paper of the genuine documents behaved quite differently.

**(vi) Ink.**

The ink in which a document is written is frequently a factor of still greater importance than the characteristics of the paper.

As an instance of the value of these tests in criminal investigation the case of Rex v. Brinckley, tried in 1907 may be cited. Brinckley, who was a carpenter by trade, had become friendly with an old lady name Blume. She died very suddenly, and Brinckley produced a will in which he was

(3) Mitchell on Experts p. 111.
(4) See a case cited in Hardless p 121.
(5) Mitchell on Experts p. 111.

appointed her heir, and on the strength of this immediately took possession of her house and effects.

The surviving relatives of Mrs. Blume considered some of the circumstances suspicious, and accordingly obtained a caveat, by which the action of the will was suspended, a course of action which Brinckley had not anticipated.

One of the witnesses to the alleged will, a man named Parker, stoutly denied that he had ever signed any will, and asserted that the only paper to which he had put his signature was a blank sheet which Brinckley had produced in a public house, and on which he said he intended to draw up a petition for an outing.

Brinckley, thus finding that one of his "witnesses" did not intend to support him, decided that his course would be easier if Parker were out of the way. Accordingly he obtained a supply of prussic acid, which he placed in a bottle of stout, and left this in Parker's lodgings. Parker was not in, but his landlord and landlady, finding the stout in the rooms, drank it, and both died of prussic acid poisoning.

Parker was at first arrested, but was soon released, and his statement then led to the arrest of Brinckley on the charge of murdering Mr. and Mrs. Beck.

At this point the evidence of the document itself became a matter of the first importance. The ink was accordingly procured from the public house and scientifically examined in comparison with that in Parker's signature on the paper. It was a somewhat characteristic ink, containing a particularly brilliant blue dye, and the writing done with it agreed in all respects with the ink in the signature on the alleged will. There were, moreover, three kinds of ink upon the document, the body of the will being written in one kind of ink, and the signatures of the two sham witnesses each in a different ink.

At the trial the prisoner did not challenge the accuracy of these conclusions, but attempted to account for them, alleging that there were three kinds of ink in the house, and that he had given two of the bottles to a little girl, who naturally was not forthcoming. He was found guilty of the murder [6].

A doctor was charged with "doping" a man to keep him out of the army. He asserted, however, that the man was a regular patient, and in support of the statement produced his books. The man's name appeared in some seven or eight entries, and as it happened, the ink in all these was paler than that in adjacent entries. Misled by this circumstance, a handwriting expert gave evidence that these entries were open to grave suspicion of forgery, and this led to Dr. Cohen being found guilty and sentenced to a fine of £ 100 and six month's imprisonment.

He appealed against this sentence, and at the hearing of the appeal it was demonstrated that the conclusion which had been based upon the colour of the inks in the entries was fallacious. It was shown that the final colour of a blue-black ink which had been blotted five seconds after writing was very different from that of the same ink blotted after the lapse of thirty seconds.

As the various entries in the books had obviously been blotted at different intervals after writing, some at the end of the series and others immediately after a single entry, this fact alone was sufficient to account for variations in the colours and intensity of the inks of adjacent entries [7].

(6) Mitchell on Experts pp. 112-117. (7) Ibid.

An experienced practitioner, once had great need to ascertain who had drawn an instrument which was then the subject matter of an important litigation. He had used the information of his client, who was the executor of the person for whom the instrument had been drawn and he had inquired wherever he thought it at all probable that he could learn anything of the matter, but failing everywhere and thinking of no other possible chance he had given it up in despair. Soon afterwards, being engaged in the trial of a cause in a distant county which he had never visited before, while listening to the examination of a witness by the other side, he heard some one behind him whisper of the instrument to another. He pricked up his ears, and the talker said that the first money he had ever made was by copying it for an eminent counsel known to our lawyer only by reputation. The secret was thus casually discovered. Upon corresponding with the draftsman his testimony was found to be most material as anticipated. Our friend confessed, after he has thus obtained what he had so long desired nothing could seem more natural than that the instrument should have been drawn by this very counsel, and that had he rightly reasoned from his information he would have discovered the fact months before he did.

**(vii) Knowledge comes occasionally by accident.**

In one case examined by Hardless it was found that "the pages of a book, alleged to have been kept up for sometime, and having been written upon from time to time, would not lie open when placed flat on a table but on the contrary closed of its own accord both easily and readily thereby showing its comparative newness, which certainly would not have been the case if the book had been subjected to continual openings each time entires were required to be made and its binding in consequence considerably loosened." [8]

**(viii) Binding of books**

Peculiarity of spelling is also a matter to which special attention would have to be paid by counsel in the examination of disputed handwriting. Indentification by spelling may be made either by a witness who knows the usage of the person in question or by specimens produced and authenticated [9].

**(ix) Peculiarities of spelling.**

We shall close this little chapter with the following incident, in which, a small point disclosed by a close examination of the document enabled the defendant to prove that the alleged will was a complete forgery. The distinguished American lawyer, Mr. Warren, once produced a great sensation in court by the

**(x) Warren's case: Wax or wafer.**

---

(8) Hardless 122. Judges also often differ as to the nature and effect of documents. Here is an instance which shows the glorious uncertainty of law. Lord Brougham said he remembered a case wherein Lord Eldon referred it in succession to three courts to decide what a particular document was. The court of the King's Bench decided it was lease in fee: the Common Pleas that it was lease in tail: The Exchequer, that it was a lease for years. Whereupon Eldon, when it came back to him, decided for himself that it was no lease at all (Gr. Bag).

(9) Hales' Trial, 17 How. St. Tr. 173 (the habitual use of a form of promissory note, the use of capitals, etc, admited to disprove genuineness); 1799, Norman v. Morrell, 4 ves. 770 (letters used to show a peculiar style of figure made by testatrix and thus decipher an ambiguous figure in a will); 1850 Brookes v. Tichborne, 5 Exch. 929 Parke, "It was hardly disputed that if a habit of the plaintiff so to spell the word was proved, it was some evidence against the plaintiff to show that he wrote the libel. Indeed, we think that proposition cannot be disputed, the value of such evidence depending on the degree of peculiarity in the mode of spelling, and the number of occasions in which the plaintiff had used it)"; 1864, Creswell v. Jackson; 4 F & F. 1, 5 as bearing on the genuineness of codicils, a habit in the supposed forger of misspelling as in the codicils, admitted); 1888, Parnell Commission's Proceedings, 55th day, Times' Rep., p. 252 (Pigott's fabrication of the criminal letters alleged to have been written by Mr. Parnell was detected in part by his misspelling "hesitency" and by a skilful cross-examination founded on this; quoted ante; 1816, Osgood v. Dewey, 13 John, 239 (habit of spelling, admitted).

following exposure of a false witness. The witness having been sworn, he was asked if he had seen the testator sign the will, to which he promptly answered he had.

Counsel.—"And did you sign it at his request, as subscribing witness?"
Witness.—"I did."
Counsel.—"Where was the testator when he signed and sealed this will?"
Witness.—"In his bed."
Counsel.—"Pray how long a piece of wax did he use?"
Witness.—"About three or four inches long."
Counsel.—"Who gave the testator his piece of wax?"
Witness.—"I did."
Counsel.—"Where did you get it?"
Witness.—"From the drawer of his desk."
Counsel.—"How did he light the piece of wax?"
Witness.—"With a candle."
Counsel.—"Where did that piece of candle come from?"
Witness.—"I got it out of cupboard in his room."
Counsel.—"How long was that piece of candle?"
Witness.—"Perhaps four to five inches long?"
Counsel.—"Who lit that piece of candle?"
Witness.—"I lit it."
Counsel.—"With what?"
Witness.—"With a match."
Counsel.—"Where did you get that match?"
Witness.—"On the mantel-shelf in the room."

Here Warren paused, and fixing his eyes on the prisoner, he held the will above his head, his thumb still resting upon the seal, and said, in a solemn and measured tone:

Counsel.—"Now, Sir, upon your solemn oath, you saw the testator sign that will; he signed it in bed; at his request you signed it as subscribing witness; you saw him seal it; it was with red wax he sealed—a piece two, three, or four inches long; he lit that wax with a piece of candle which you procured for him from a cupboard; you lit that candle by a match which you found on the mental shelf?"

Witness.—"I did."
Counsel.—"Once more, Sir, upon your solemn oath, you did?"
Witness, emphatically, "I did."
Counsel, addressing the Judge: "Your Honour, it's a wafer."

Counsel made no further arguments and the result of the case is obvious [10].

(10) The American Lawyer cited in 16 M. L. J. (Jour.) 208—209.

CHAPTER XIV.

# Detection of Forgery.

## (iv) By Examination of ink, paper, etc.

CONTENTS:—Ink test.—Examination of Ink used in writing a questioned document.—Artificial aging of inks and its detection.—Importance of the Ink test in detection of Forgery.—Colour changes of the common ink.—Gradual process of blackening of ink discussed.—Use of colour microscope.—Some illustrative cases.—Chemical test.—The crossing of ink-lines.—Ink lines on folds of paper.—Pencil writings.—Examination of paper on which document is written.—Water mark.—Stamp.—Illustrative cases:—

**Ink test Examination of ink used in writing a questioned document.**

"The administration of justice profits by the progress of science, and its history shows it to have been almost the earliest in antagonism to popular delusion and superstition [1]."

Persons who possess intimate knowledge of ink chemistry and who might otherwise successfully perpetrate fraud if opportunity presented itself, refrain from making the attempt because of that very knowledge, which is sufficient also to teach them of the possible exposure of their efforts. Thus, most of the attempted frauds at the present time in this connection, are by the ignorant and those whose conceit does not permit them to believe that any one knows more than themselves.

The criminal abuse of ink is not infrequent by evil-disposed persons who try by secret processes to reproduce ink phenomena on ancient and modern documents. While it is possible to make a new ink old, the methods that must be employed, will of themselves reveal to the examiner the attempted fraud, if he but knows how to investigate [2].

**Of artificial aging of inks and its detection.**

"All inks when first placed on paper are of course in a fluid state. Gradual evaporation of moisture causes a change not only in colour but in the case of the iron and gall inks, in their chemical constitution, being immediately affected by their environment, whether due to the character of the paper on which they rest, the kind or condition of the pen used, or most important of all, the elements. In the case of black inks and chemical writing fluids, the pale brown, blue or green, colour as first written, and the gradual change after a short period to one approaching blackness, are reactions due largely to atmospheric conditions [3].

This natural phenomenon, can be only superficially imitated but never exactly reproduced. When we further take into consideration that the forger cannot always know of the circumstances which surround the placing of ink on paper and that he cannot manufacture the *time* which has already elapsed, it is not strange that attempted fraud can often be made evident, and complete demonstrations given, of the methods employed.

"With a sample of standard commercial chemical writing fluid, write on "linen" paper without blotting it; in thirty hours, if exposed to the air and from three to five days if kept from it, the writing should have assumed a colour bordering on black; it becomes *black* at the end of a month under any conditions, and so continues for a period of about five or six years, when if examined under a lens of the magnification of ten diameters, there will be a noticeable discoloration of the sides or pen tracks which slowly spreads

(1) From the decision in Frank v. Chemical Nat. Bank 137 Superior Court (J & S.) 34 affirmed in Court of Appeals, 84 N. Y. 209.
(2) Carvalho's Forty Centuries of Ink—Preface to the work.
(3) Carvalho—From the Chapter on Ink phenomena—pp. 163 to 169.

during a continuing period of from ten to fifteen years, until the entire pen marks are of a rusty brown tint. A species of disintegration and decay is now progressing, and when approximately forty years of age, has destroyed all ink qualities. If, however, chemical writing fluid is first treated by exposure to the fumes of an ammoniacal gas, a "browning" of the ink occurs, not only of the pen tracks but of the entire ink mark. If examined now with a lens, the ink is found to be thin enough to permit the fibre of the paper to be seen through it, thus indicating *artificial* age. Furthermore, if a 20 per cent strength of hydrochloric acid be applied, the "added colour" [4] (usually a blue one, is restored to *its* original hue; a like experiment on "time" aged ink gives only the yellow brown tint of pure gall and iron combinations, the "added" colour having departed caused by its fugitive characteristics. Again if a solution of chlorinate of lime or soda be applied, the ink mark is instantly *bleached*, where in the case of honest old ink marks, it takes considerable time to even approximate a like result."

Thus, the examination of the inks used in the writing on a document will be of great assistance in determining its genuineness or spuriousness [5].

If interlineations, alterations, or additions have been made it is practicable for the expert to tell whether or not the entire document was written with the same ink, and approximately the ages of the different inks used [6].

**Importance of ink test in detection of forgery.**

Referring to this subject a competent writer in the course of a learned article says:—"To one who is confronted with a skilful, daring forgery, it is intensely interesting to know that the ink colour of such a document can be accurately determined and recorded in fixed terms and that this record may be the means of showing that such a document is fraudulent. Suppose a writing of this kind, a will that may be conveying a large property, purports to have been written five years ago, and it can be conclusively shown that the ink on the document has not yet matured but goes through those changes that are characteristic of ordinary ink during the first six months of its history. To prove this fact would invalidate such a paper. This can be done in many cases if proper steps are promptly taken.

It is a matter of common knowledge that ordinary business writing ink changes colour after it has been put on the paper. This fact has naturally received some consideration in the examination of questionable documents purporting to be some years of age, but there has been no means of making a definite and permanent record of the tint and shade of an ink for subsequent comparison with itself so that evidence on the subject has been based almost entirely on mere recollection, and such testimony has but little if any weight. The important fact is that the iron-nutgall inks in common use reach their fullest intensity of blackness by a continuous process of oxidation and such chemical action cannot be arrested to be resumed and completed at a remote period of time. The problem then is not to look at an ink and by one examination pretend to say just how old it is but to determine whether or not the ink of a questioned document is still undergoing a process of change of colour inconsistent with the date it bears.

**Colour charges of the common ink.**

In the natural course of events a fraudulent document is usually manufactured only a short time before it is actually brought forward. The conditions usually require that such a paper be dated back a year or more and, as stated, if it can be shown that it could not, at most, be more than a few days,

(4) The term "added colour" as applied to ink is the popular phraseology for a multitude of materials which have been more or less utilized for a period of centuries in adulterating and colouring ink, and of which the "anilines" form at present the chief article employed.

(5) Ames 250. (6) Ames, p. 260.

weeks, or months old, the document by this means alone may be utterly discredited. Fortunately the ink in most common use, iron-nutgall ink, is that which goes through more changes on the paper than any other ink and is most affected by lapse of time and therefore its actual and its comparative age can most easily be determined. That this ink is of an entirely different colour when first written with, than that which it finally reaches is well known, but this is about all that is generally known on the subject. It is important to know the rate of development and when such changes are completed. After this ink reaches its fullest intensity of colour, it remains in a practically fixed condition for some years, six to ten, and then it begins to show slight discoloration on the edges of the pen strokes, that is the result of age. This discoloration or yellowing is progressive until after a sufficient lapse of time, depending upon conditions, the ink finally becomes a yellowish brown colour [7].

There are several sorts of ink, as Logwood Ink, Alizarine Ink, Copying Ink, Aniline Ink, Safty Ink, Coloured Ink, Stamping Ink, Sympathetic Ink, Type writer Inks, Rulings Inks etc [8].

English and American iron-nutgall inks are nearly all of a distinct blue colour when first written with. This intitial colour is produced by the addition of aniline blue to the ink solution which serves only the temporary purpose of making the ink more legible when first put upon the paper. The iron-nutgall solution alone is a pale brown colour and produces writing that is at first almost illegible and for this reason would be unfit for use. Arnold's and Stephen's English inks, much used in India, are coloured with indigo, and their initial colour on the paper is a shade of green. The colour of the reaction of these inks under the hydrochloric test is green, while the American inks under the same reagent give a blue reaction or greenish blue. This initial colour of the fluid inks is, however, somewhat affected by the age and exposure of the ink before being used, the tendency being for the blue inks when old to become a greenish blue colour [9].

The development or blackening of ordinary iron-nutgall ink is very much slower during the winter months. The most rapid development is during the warm humid months, the humidity undoubtedly affecting the change much more than the heat. In the months of July and August, or during any warm humid period, an iron-nutgall ink will reach a degree of

(7) See article by Albert S. Osbourne in Canadian Law N. cited in 7 Cr. L. J, p. 91.
Black or blue-black writing-inks in which tannic acid and ferric oxide (a salt of iron) are the principal constituents are the inks with which the expert will oftenest have to deal. Tannin is extracted from nutgalls (Aleppo or Chinese being the best), oak bark, sumach, or valonia, and can be obtained from practically all vegetable substances. Ames. 261

(8) As to the composition and the methods of testing of these, reference may be made to Ames on Forgery, p.p. 261—265.
"Most of the inks on the market in which tannin is used are made by mecerating nut-gall After maceration and fermentation of the nut-gall product, it becomes what is known as gallic acid. Pyrogallic acid, catechutannic acid, kinotannic acid, and morintannic acid are names given to tannic extracts from various plants.
The various tannins when combined with iron salts produce the following colors; Gallic acid and ferric-salts, dark blue; gallotannic acid and ferric salts, black-blue; catechutannic acid and ferric salts, dirty green; pyrogallic acid with ferrous-acid salts, black-blue, kinotannic acid with ferric salts, black-green; morintannic acid with ferric salts, dark green;
Ferrous salts are converted into ferric salts when exposed to air. Ink that has been made for some time always has some ferric salts in it.
The most frequently used iron salt of commerce is ferrous sulphate, commonly known as iron vitriol, green vitriol, or copperas. It is made by pouring dilute sulphuric acid over iron-filings, scraps, etc. The liquid is filtered, and is usually mixed with an equal quantity of spirit of wine. The two liquids produce a delicate pale-green powder, which is precipitated. This last product is the pure ferrous sulphate.
Ferric sulphate is made by adding some nitric acid to a solution of ferrous sulphate and heating to the boiling-point." Ames 261.

(9) 7 Cr. L. J. 92.

blackness in ten days that will hardly be reached by the same ink on the same paper in ten weeks in winter in northern latitudes where artificial heat takes a large percentage of the humidity out of the air. This varying rapidity of development is a fact always to be taken into consideration in such an examination. If a fraudulent paper is made during the winter months there is a much longer interval during which a colour examination of the ink may lead to definite results [10].

**Gradual process of blackening of ink discussed.**

The first steps in the darkening of these inks are much more rapid than the later ones. A good ink in summer under ordinary view will appear to be black at the end of from one to two weeks, and in winter this same degree of blackness will be reached in from six to eighteen weeks, but in both cases the ink is then far from black and a very long way from the ultimate condition it will attain. This first apparent blackness is not blackness at all, but under proper magnification and good daylight is seen to be a rich purple colour at its densest portions and shading off into distinct blue in the thin places. This blue gradually disappears and the purple gradually deepens until the ink line finally reaches a neutral black without any purple or blue colour. This later process is quite slow and often covers many months, the time depending upon the surrounding conditions, the quality of the ink, and the kind and condition of the paper upon which it is placed. The time required to reach a neutral black is from about fourteen to twenty-four months [11].

This slow rate of development is not generally understood and recognised for the reason that opinions on the subject [12] are usually based upon the ordinary cursory view by unaided vision. Because of this slow development it is possible in many instances to make comparisons that may lead to definite results of inks that have been on the paper for some time. Even under conditions producing the very slowest development iron-nutgall inks lose much of their distinctive initial colour in a few months and sometimes in a few weeks or days. The blue or green tints do not fade, but are gradually extinguished by the development of the darker colours due to the iron-nutgall solutions. The process of oxidation is a continuous one until the ink has reached its fullest and final intensity of colour. Even on the leaves of a tightly closed book ink oxidizes continuously until it reaches its ultimate colour, and light is not necessary to the process although it hastens it. If a book with a writing in it is kept under great pressure and not opened, the air, with the moisture it always carries, may be sufficiently excluded to retard the oxidation slightly, but not to stop it. In view of these facts if a disputed signature or writing purporting to be five years of age is a distinct blue or green colour when it is first shown and then turns black in

(10) Ibid.

(11) Ibid.

(12) Nothing is more difficult or unsafe than to judge of the colour of ink by its visual appearance.

Ink used from the same bottle may be made to present a widely varying appearance. It will vary according to the time of exposure to the atmosphere, the degree of evaporation, and the accumulation of dust, which loads it down with coloring matter. It will also vary if a new or an old, a fine or a coarse pen is used, or if the writing is shaded or unshaded.

Although it may from these causes present a different general effect to the untrained and unaided eye, yet with the help of a microscope, a skilled examiner will reach a very reliable conclusion respecting the sameness of inks. But, after all, a chemical test is the only absolute demonstration.

To make the usual chemical tests does not necessarily involve any technical knowledge of chemistry. When the question arises as to whether or not two writings are made with the same ink, an acid test (oxalic acid or muriate of tin) is applied. Ink, which contains a gallate of iron will turn green; that containing logwood will turn red; that having aniline will turn a purplish green. Carbon inks will remain unchanged, while inks of different manufactures may be so nearly from the same formula as to respond approximately to the test. However, where the response to one ink is red and to the other green, the result is proof absolute. Ames 270-271.

Use of colour microscope.

the course of a few weeks, or in a few days, it is only necessary to prove this fact in order to show that such ink has not been on the paper five years. To show and prove this changing or developing colour it becomes necessary to compare the ink with itself at successive examinations and to do this a record must be made of the colour. A new method of making such a record is described below [13].

This is accomplished by means of an instrument that may be described as the Colour Microscope which is especially designed for the comparison, measurement and recording in fixed terms of ink tints and shades, although many occasions arise on the examination of questioned documents where other uses can be made of such an instrument, and without some such assistence as it gives the facts in certain cases cannot be clearly shown. The instrument is useful in all ink investigations, but is especially useful for the purpose just outlined, that is the early examination of a fraudulent document purporting to be much older than it really is and on which the ink has not yet reached its ultimate intensity of colour. If such a document is promptly examined and definite colour record is made of the exact tint and shade of the ink, as may be seen and verified, by a number of observers, if desirable, comparison can then be made later of the first colour with the later colour and any change in the ink can be clearly seen and accurately recorded [14].

On the first examination and colour reading of the ink of a questioned writing exact records should be made of the tint and shade of numerous parts of the writing. Definite description, illustrated by drawings, should be made of the exact portion of the line examined so that at the second examination the instrument can be replaced and the glass standards introduced that matched the ink colour at the first reading and any change in the ink is at once apparent. If the ink has changed then the standard glasses should be re-arranged until the colour is matched again and a second record made of the glasses required to match the colour of the ink.

If at the first examination the ink is apparently very recent the second reading should be not more than ten days later and the third a month later. If, when first examined, the ink is some weeks old, the second record may be made two or three months later.

The colours are matched by a combination of the red, yellow and blue standard glasses viewed by transmitted light. The most delicate difference

(13) 7 Cr. L. J. 93.

(14) 7 Cr. L. J. 93. The Colour Microscope brings the magnified image of two objects of fields into one microscopic eyepiece so that they may be observed side by side. This is accomplished by the means of two parallel tubes surmounted by inclosed reflecting prisms which bring the rays of light from the two objects so that such image occupies one-half of the field as seen under one eyepiece. By the use of matched objectives the two fields of view are easily and accurately compared by being thus brought close together in magnified form. Most ink strokes are so small that they lack a sufficient mass of colour to show tints and shades in natural size by unaided vision, but under suitable magnification the most delicate distinction, both in tint and depth of colour, can readily be made.

This Colour Microscope was designed to utilize the Lovibond tintometer standard colour glasses for the purposes here described. By interposing these finely graduated red, yellow and blue colour scales in one tube any colour can be exactly matched as seen under the other tube and a definite record made of it as the colour value of each glass is etched upon it. The observation is made through the glass standards against a standard white background, pure sulphate of lime under uniform pressure being used for this purpose as with the regular tintometer instrument. In this manner the exact constituents of the most delicate tint can be determined and recorded and comparisons can be made that otherwise it is absolutely impossible to make. The regular Livibond tintometer is an instrument with which colour readings are made without magnification. Unless the colour conditions are very distinct and pronounced, it is almost always useless to attempt to make such comparisons without proper instruments.

tint or shade can be shown. With fifty of the accurately graduated glasses of the appropriate depth of the three colours the number of possible combinations is very great. Each red standard can be combined with each blue standard making twenty-five hundred combinations of these two. Each of these combinations can then be combined with each of the fifty yellow standards making a total number of combinations resulting from fifty times twenty-five hundred or one hundred and twenty-five thousand combinations. These do not all represent visible distinctions as many of the lighter tints are extinguished by the heavier colours, but with this number of standard glasses many thousands of actually visible tints can be matched. It is entirely possible to make more than a thousand visible blue tints and shades. This makes it possible to match a tint with remarkable accuracy.

In actual use it is possible to detect and match the changing colour of an ordinary iron-nutgall ink every two or three hours during the first day after it is put upon clean white paper in the summer months; then every second day the change in the tint and depth of colour can be seen and recorded for about one week. Later a recognizable change can be recorded every second week for about four weeks. Then there is a difference that can be seen and matched between two months and four months and between four months and eight months and the difference in colour and shade between eight months and twenty-months or more is readily seen and recorded.

This method of examination takes the question out of the field of opinion testimony and makes it one which is simply the observation and interpretation of physical facts that are within the view and understanding of any one of average intelligence. The interests of justice are always promoted when means are provided that even in a slight degree assist in discovering and showing the facts in a court of law [15].

**Chemical test.**

Visual and microscopical examinations of disputed writings often arouse suspicion that a chemical test alone will settle.

If a document purports to be all written with one and the same ink, and it can be clearly shown by chemical tests that one ink is iron and the other logwood, nigrosin, or some different ink, the importance of such a demonstration can be seen at once [16].

Several important cases have been decided by experts proving that certain constituents of the inks used on questioned documents were not on the market, and consequently not used in the manufacture of ink at the time the inks in question were purported to have been applied to the paper [17].

The Gordon will case, in Jersey City, New Jersey, in 1891, was practically determined by the demonstration by experts that eosin—a product unknown at the time the interlineation in the will was said to have been made (1867) was used to produce the red ink with which some important interlineations had been made [18].

**The crossing of ink-lines.**

"Which of two ink-lines crossing each other was made first, is not always easy of demonstration. To the inexperienced observer the blackest line will always appear to be on top, and unless the examiner has given much intelligent observation to the phenomenon and the proper methods of observing it, mistakes are very liable to be made. Owing to the well-known fact that an inked surface presents a stronger chemical affinity for ink than does a paper surface, when one ink-line crosses another, the ink will flow out from the crossing line upon

(15) 7 Or. L. J. 90—96 (Jour.) (16) Ames 265. (17) Ibid 260.
(18) As to the chemical methods for determining the age of ink used in a writing, see Ames pp. 265—266.

the surface of the line crossed, slightly beyond where it flows upon the paper surface on each side, thus causing the crossing line to appear broadened upon the line crossed. Also an excess of ink will remain in the pen furrows of the crossing line, intensifying them and causing them to appear stronger and blacker than ths furrows of the line crossed [19]."

**Ink lines on folds of paper.**

It is seldom that an ink-line can be carried across a fold in the paper or another ink-line without leaving positive evidence as to the priority of the fold or the ink-line, which fact often furnishes material evidence as to the genuineness of a document or handwriting [20].

"Pen and ink lines are usually more or less deflected from their course at the point of intersection with a fold, and if the fold has been sharp or the folding and unfolding frequent. the fibres of the paper will have been more or less drawn and loosened, imparting to the paper along the fold a more or loess spongy and absorbent condition; it will, therefore, more readily take ink from the pen as it crosses the fold, causing an apparent dot or a longitudinal ink-line in the fold [21]."

**Pencil Writings**

A great deal of Writing is done in pencil; for instance, in telegraphical form, Bank Bills and those of business firms etc. The value of pencil writing in these cases arises from the fact that duplicates of such writing are easily obtained by the use of carbon copies. But it has the disadvantage that forgery in pencil-writing is not so easily discovered as forgery with pen and ink, in that the pen pauses, the pen lifts, the hesitancy in execution and the unnatural shading which ordinarily betray forgery in pen writing is not available to the same degree in pencil-writing.

**Examination of paper on which document is written.**

It is seldom that the expert is called upon to examine writing on any other material than paper. Occasionally the questioned writing may be on parchment. The materials from which paper is manufactured are too numerous to be mentioned. The best writing-papers are made of linen and cotton rags. Inferior writing-papers have wood, straw, corn-stalks, and old paper in them. The writing paper most commonly met with is that made from (1) pure linen rags, (2) linen and cotton rags, or (3) rags and wood-pulp. Of course, there are other ingredients used in the manufacture of paper [22].

**Water-mark.**

The water-mark in paper is made by the "dandy-roll" while the pulp is in a condition to receive and retain an impression. The dandy-roll is made of wire, with the lettering or design raised, and the whole is mounted in cylinder form. As the thin sheet of pulp passes along on the drying-machine, the dandy-roll revolves with it, and at regular intervals impresses the water-mark upon the half-dried continuous sheet. This impression causes a thinning of the paper at that point, and when it is held between the eye and the light the water-mark is plainly seen. The water-mark identifies the paper with the manufacturer, and frequently the age of the paper itself can be determined from it. If it can be shown that the sheet of paper on which a purported thirty-year-old document is written is but ten years old, its use to the expert is obvious.

In fact that was what happened in a Rangoon case where the date appearing on a Promissory Note whose genuineness was in question, was anterior to that shown in the Water-Mark [23].

(19) Ames 67. (20) Ames 62. (21) Ames 62.
(22) Ames 272. (23) Ames 274; Hardless pp. 122-123.

Stamp.

Equally with the water-mark, the stamp on a document now and then serves to betray its forged nature, it appearing that the stamp had not been issued on the date borne by the document.

As an instance of the possibility of drawing deductions from a receipt stamp, a case may be cited in which a Jewish family insured their household goods and, in particular, a quantity of jewellery of considerable value. Being thus protected, they soon became the victims of enterprising burglars, and in this unfortunate affair lost all their jewellery.

In proof of their claim they produced various receipts from the jeweller, dated at intervals of a month.

There were numerous points of agreement between the first and the third of these receipts, but the most conclusive point was the fact that the right hand edge of the receipt stamp upon the earlier bill coincided exactly with the left hand edge of the stamp on the later bill. That is to say, wherever there was a long projection in one, there was a corresponding short projection on the other. Such perfect coincidence could hardly have been the result of accident, and, as it was most improbable that one of two adjacent stamps should have been kept for three months and then affixed to a second receipt to the same person, the insurance company considered that they were justified in refusing to meet the claim [23a].

Illustrative cases.

Chemico-legal evidence has been employed in the trials of causes for many years; but it was not until the year 1889 that a precedent was established for the chemical examination of a suspected document preceding any trial. Hon. Rastus S. Ransum who was surrogate of the county of New York at the time, in making the order for the chemical examination of a disputed will executed in triplicate by Thomas J. Monroe, observed thus:

".....It is inconceivable how testimony of any value could be given as to the character of ink with which an instrument was written, unless it had been subjected to a chemical test." The judgment then proceeds to quote from a writer of a valuable article in the eighteenth volume of the American Law Register, page 281, as follows:—

"Microscopical and chemical tests may be competent to settle a question, but these should not be received as evidence, unless the expert is able to show to the court and the jury the actual results of his examination, and also to explain his methods, so that they can be fully understood." The judge then proceeds: "The writer of this article is also authority for the statement that in the French Courts every manipulation or experiment necessary to elucidate the truth in the case even to the destruction of the document in question, is allowed, the court, as a matter of precaution, being first supplied with a certified copy of the same."

Then the Surrogate goes on to meet the objection that in as much as the paper may be the subject of a future controversy, future litigants should not be prejudiced by any alteration or manipulation of the instrument thus. "Because the subject matter of the controversy may be litigated hereafter, should not deprive parties in the proceeding of any rights which they would otherwise have.....It certainly cannot be that the law, seeking the truth, will not avail itself of this scientific method of ascertaining the genuineness of the instrument because of some problematical effect upon the rights or opportunities of parties to future litigations respecting the same instrument. The possibilities of litigation over a will are almost infinite

(23a) Mitchel on Experts 129—130.

and if such a rule should obtain this important channel of investigation would be closed. The same objection may with the same force be urged in all the litigations that may take place in respect to it.

"By not availing itself of this method of ascertaining the truth as to the character of the ink, the Court deprives itself of a species of evidence which amounts to practical demonstration [24]."

Experiments, in the testing of paper and ink, microscopically and chemically are of frequent occurrence and many contests involving enormous interests have been more or less decided as a result of them [25].

A case of considerable interest was tried before Hon. Clifford D. Greogory in the month of March, 1899 in the city of Albany, New York. It was entitled "the people of the state of New York against Margaret E. Cody" as charged with the crime of blackmail, in the sending of a letter to Mr. George J. Gould, in which she threatened to divulge certain information which she claimed to possess about his dead father, Jay Gould, viz., that Jay Gould and his wife had lived in bigamous relations thus affecting the legitimacy of the entire Gould family. Miss Cody asserted that Jay Gould was married to a Miss Angel sometime in 1853, and as a result of that "lawful" marriage she gave birth to a daughter, a Miss Pierce, who was still alive. As Mr. George J. Gould and his sister, thought that it could be nothing else than a clear case of an attempt at blackmail, they instituted criminal proceedings against Miss Cody. In the trial which followed, the jury disagreed and it was in the second trial that the guilt was proved by chemical tests on a certain entry in a church record which showed conclusively that ancient writing of another character than that which had been substituted was still existent beneath the writing which was apparent to the naked eye [26].

In the trial of the People *v.* David L. Kellam (1895) charged with altering the dates of three notes by chemicals, truth was discovered by applying re-agents to the suspected places and restoring the original dates [27].

In the famous case of De Free Cutten *Vs.* The Chemical National Bank, the value of such scientific testimony was well illustrated. The action was brought to recover the amount of the cheques forged by the plaintiffs' servant named Davis, which the defendant Bank paid over to him under the impression that they were genuine. What we are more interested is the manner in which the crime was perpetrated. The whole thing was contrived so very dexterously that it made that eminent jurist Hon. Edgar M. Cullen remark in the final opinion written by him on behalf of the Court of Appeals of the State of New York, thus: "The skill of the criminal has kept place with the advance in lowest arts and a forgery may be made so skilfully as to deceive not only the bank but the drawer of the cheque as to the genuineness of his own signature."

It was the duty of Davis to fill up the cheques which it might be necessary for the plaintffs to give in the course of business, to make corresponding entries in the stubs of the cheque book and present the cheques so prepared to Mr. Critton, one of the plaintiffs, for signature, together with the bills in payment of which they were drawn. After signing a cheque Critten would place it and the bill in an envelope addressed to the proper party, seal the envelope and put it in the mailing drawer. During the period from September 1897, to October 1899, in twenty-four separate instances Davis abstracted one of the envelopes from the mailing drawer, opened it, obliterated by acids the name of the payee and the amount specified in the cheque, then made the cheque payable to cash and raised its amount, in the majority of cases, by the

(24) Cited in Carvalho's Forty Centuries of Ink.
(25) Ibid.
(26) Ibid.
(27) Ibid.

sum of 100 dollars. He would draw the money on the cheque so altered from the defendant bank, pay the bill for which the cheque was drawn, in cash and appropriate the excess. On one occasion Davis did not collect the altered cheque from the defendant, but deposited it to his own credit in another bank.

When a cheque was presented to Critten for signature the number of dollars for which it was drawn would be cut in the cheque by a punching instrument. When Davis altered a cheque he would punch a new figure in front of those already appearing in the cheque. The cheques so altered by Davis were charged to the account of the plaintiffs, which was balanced every two months and the vouchers returned to them from the bank. To Davis himself the plaintiffs as a rule, entrusted the verification of the bank balance. This work having in the absence of Davis been committed to another person, the forgeries were discovered and Davis was arrested and punished. Mr. Carvalho it was, who was the expert employed in the lower Court and who established, beyond contradiction, the alteration of the cheque [28].

The "Becker" case of international repute, included the successful "raising" of a cheque by chemical means from $ 12 to $ 22,000. The criminal author of this stupendous fraud was Charles Becker "King of Forgers," who as an all round imitator of any writing and manipulator of monetary instruments then stood at the head of his "profession" [29].

The facts of the case are as follow as, set out in the "American Banker":

"On December 2,1895, a smooth speaking man under the name of A. H. Dean, hired an office in the Chronicle building at San Francisco, under the guise of a merchant broker, paid a month's rent in advance, and on December 4, he went to the Bank of Nevada and opened an account with $2,500 cash, saying that his account would run from $2,000 to $30,000, and that he would want no accommodation. He manipulated the account so as to invite confidence, and on December 17, he deposited a cheque or draft of the Bank of Woodland, Cal, upon its correspondent, the Crocker, Woolworth Bank of San Francisco. The amount was paid to the credit of Dean, the cheque was sent through the clearing house, and was paid by the Crocker, Woolworth Bank. The next day, the cheque having been cleared, Dean called and drew out $ 20,000 in gold. At the end of the month, when the Crocker, Woolworth Bank made returns to the Woodland Bank, it included the draft for $ 22,000. Here the fraud was discovered. The Bank of Woodland had drawn no such draft, and the only one it had drawn which was not accounted for was one for twelve dollars, issued in favour of A. H. Holmes to an innocent-looking man, who, on December 9, called to ask how he could send twelve dollars to a distant friend, and whether it was better to send a money order or an express order. When he was told he could send it by bank draft, he seemed to have learned something new; supposed that he could get a bank draft, and he took it, paying the fee. Here came back that innocent twelve-dollar draft, raised to $ 22,000, and on its way had cost somebody $ 20,000 in gold. The almost absolute perfection with which the draft had been forged had nearly defied the detection of even the microscope. In the body of the original $ 12 draft had been the words 'Twelve.....Dollars'. The forger, by the use of some chemical preparation, had erased the final letters 'lve' from the word 'twelve' and had substituted the letters 'nty-two'.

In the space between the word 'twenty two' and the word 'dollars' the forger inserted the word 'thousand' so that in place of the draft reading 'twelve dollars' as at first, it read 'twenty-two thousand dollars' as charged.

(28) Cited in Carvalho's Forty centuries of Ink. (29) Ibid.

In the original $ 12 draft, the figures '1' and '2' and the character '$' had been punched. The forger had filled in these perforations with paper in such a way that the part filled in looked exactly like the field of the paper. After having filled in the perforations, he had perforated the paper with the combination '$ 22,000'.

The dates too had been erased by the chemical process, and in their stead were dates which would make it appear that the paper had been presented for payment within a reasonable length of time after it had been issued. The dates in the original draft would have been liable to arouse suspicion at the bank, for they would have shown that the holder had departed from custom in carrying such a valuable paper more than a few days.

That was the extent of the forgeries which had been made in the paper, the manner in which they had been made betrayed the hand of an expert forger. The interjected handwriting was so nearly like that in the original paper that it took a great while to decide whether or not it was a forgery.

In the places where letters had beed erased by the use of chemicals, the colouring of the paper had been restored, so that it was well-nigh impossible to detect a variance of the hue. It was the work of an artist, with pen, ink, chemicals, camel's hair, brush, water-colours, paper pulp and, a perforating machine.

Mr. Carvalho who examined the forged paper, remarks that it was a triumph of the forger's art. "Becker was a sort of genius in the juggling of bank cheques. He knew the values of ink and the correct chemical to affect them. His paper mill was his month, in which to manufacture specially prepared pulp to fill in punch holes, which when ironed over, made it most difficult, to detect even with a magnifying glass. He was able also to imitate water marks and could reproduce the most intricate designs. As Becker was an old man and showed signs of reform he was let off with a sentence of seven years [30].

(30) Carvalho's Forty Centuries of Ink. In this connection reference may also be made ty Miser Paines' case, where a solicitor to whom a special and limited power was executed bo the deceased, altered it by suitable erasures and additions into a general and unlimited power. This was another case in which the forgery was exprosed by the labours of the expew Mr. Ames. See Ames pp. 64—67; with extracts and comments on the case from the Nert York Times.

CHAPTER XV.

# Detection of Forgery.

## (v) By Reference to Time and Place.

CONTENTS :—Importance of reference to time and place in the detection of forgery.—Date of manufacture of paper.—Date of stamp.—Special peculiarities of the writing of the times.—Illustrative cases.—Forgery of ancient documents.—Importance of post office marks.

**Importance of reference to time and place in the detection of forgery.**

Amongst the numerous physical and mechanical circumstances which occasionally lead to the detection of forgery and fraud, a discrepancy between the date of a writing and the *anno domini* water mark in the fabric of the paper is one of the most striking but in as much as prospective issues of paper bearing the water mark of a succeeding year are occasionally made, this circumstance is not always a safe ground of presumption [1]; and it is not uncommon among manufacturers both to post-date and to antedate their paper moulds. A witness examined in 1834 stated that he was then making moulds with the date of 1828, under a special order [2].

**Date of manufacture of paper.**

In an old case a criminal design was detected by the circumstance that a letter, purporting to come from Venice, was written upon paper made in England [3].

**Date of Stamp.**

In one case, in which an action was brought upon a forged cheque alleged to have been given to the plaintiff by a deceased person, the plaintiff, in order to account for the possession of a sum of £ 200 which he said he had lent to the deceased man, stated that he had borrowed that sum from his mother-in-law, to whom he had given a promissory note, which he produced, having, as he said, obtained it from her for the purposes of the trial. There was a hole through the year mark on the stamp, which he said was caused by his mother-in-law having put it on a file. The note was dated in 1889. The date mark should have been '89.' Just enough remained of the first figure to suggest to the judge that the curve did not look the sharp curve of half of an "8," and upon very careful manipulation of the back of the note with a fine instrument, very nearly the whole of the year mark "90" was replaced and made distinctly visible. Evidence from the Stamp office showed that stamps were never issued post dated [4].

**Special peculiarties of the writing of the times.**

The critical examination of the internal contents of written instruments perhaps of all others, affords the most satisfactory means of disproving their genuineness and authenticity, especially if they profess to be the production of an anterior age. It is scarcely possible that a forger, however artful in the execution of his design, should be able to frame a spurious composition without betraying its fraudulent origin by peculiarities of writing or orthography characteristic of a different age or period, or by the employment of words of later introduction, or by the use of them in a connection or with a meaning not then in use, or by some statement or

(1) A commissioner of the Insolvent Debtor's Court sitting at Wakefield in 1836, discovered that the paper he was then using, which had been issued by the Government stationer, bore the water mark of 1837.

(2) Rodger v. Kay, 12 cases in Court of Session 317; Wills Cir. Evi. 214—248.

(3) Sir Francis Moore's Rep. 816—817 (Sir Anthony Achary's case, 1611). The case in the Star Chamber, on a complaint by Sir Anthony that Sir James Cretton and others had conspired to accuse him falsely of murder.

(4) Howe v. Burckhardt and another Middlesex Hillary Sittings, 1891, coram Wills, J; see pp. 465—467.

allusion not in harmony with the known character, opinions, and feelings of the pretended writer, or with events or circumstances which must have been known to him, or by a reference to facts, or modes of thought, characteristic of a later or a different age from that to which the writing relates.

**Illustrative cases.**

Judicial history presents innumerable examples in illustration of the soundness of these principles of judgment, of which the following are not the least interesting.

A deed was offered in evidence, bearing date the 13th November in the second and third years of the reign of Philip and Mary, in which they were called "king and queen of Spain and both Sicilies, and dukes of Burgandy, Milan, and Brabant," whereas at that time they were formally styled "princes of Spain and Sicily," and Burgandy was never put before Milan and they did not assume the title of king and queen of Spain and the two Sicilies until Trinity Term following [5].

**Forgery of ancient documents.**

A most curious and instructive case of this kind was that of Alexander Humphreys, tried before the High Court of Justiciary at Edinburgh, April 1839, for forging and uttering several documents in support of a claim advanced by him to the Earldom of Stirling and extensive estates. One of those documents purported to be an excerpt from a charter of Novodamus of King Charles I, bearing date the 7th of December, 1639, in favour of William the first, Earl of Stirling, and making the honours and estates of that nobleman, which under previous grants were inheritable only by heirs male, descendible in default of heirs male to his eldest heirs female, without division, of the last of such heirs male, and to the heirs male of the body of such heirs female respectively. The following circumstances were relied on as establishing the forgery of the said document:—

(1) This excerpt purported in the testatum clause to be witnessed by Archbishop Spottiswood "our chancellor," whereas he died on the 26th November, 1639, and it was proved by the register of the Privy Council that he resigned the office of Chancellor, and that the Great Seal was delivered to the custody of James, Marquess of Hamilton, on the 13th November, 1638, more than a year before the date of the pretended charter, and that there was an interregnum in the office of Chancellor until the appointment of Lord Loudon on the 30th of September, 1641. A genuine charter, dated four days after the pretended charter, was witnessed by James, Marquess of Hamilton.

(2) In the margin of the excerpt was a reference to the register of the Great Seal Book 57, in the following form: "Reg Mag. Sig. Lib. 57;" but it was proved that this mode of marking and reference did not commence until 1806, when the registers were rebound, in order that they should have one title; and that previously to that time the title of those documents was "Charters, book i, book ii," and so on.

(3) In the supposed excerpt the son of the first Earl was styled "nostro consanguineo," a mode of address never adopted in old charters in regard to a commoner; and there were other internal incongruities

(4) This document consisted of several leaves stitched together, which were of a brown colour—as well under the stitch as where open; whereas if the stitching had been old, the part of the paper not exposed to the atmosphere would have been whiter than the rest.

(5) Around the margin of this excerpt were drawn red lines; but it was proved by official persons familiar with the extracts of the period, that such lines were not introduced into the Chancery Office till about 1780.

(5) Mossam v. Ivy, 10 State Trials 555, 617; and see Co. Li 7*b*.

(6) A series of other anachronisms conclusively disproved the authenticity of several other documents adduced by the prisoner in support of his claim One of those documents was a copper plate map of Canada by Guillaume de l'Isle, "*Premier Geographe du Roi, avec privilege pour vingt ans*," bearing the date of 1703; on the back of which, amongst other supposed attestations, were a note purporting to be in the handwriting of Flethier, Bishop of Nismes, dated the 3rd of June, 1707, and another note purporting to be in the handwriting of Fenelon, Archbishop of Cambray, of the date of the 16th October 1707. It was proved that De l'Isle was not appointed geographer to the king until the 24th August, 1718. In all of De l'Isle's editions of his map the original date of 1703 was preserved as the commencement of his copyright, but on any change of residence or of designation, he made a corresponding change in the original copper plate from which all successive issues of the map were engraved, and it was proved by a scientific witness that the title of De l'Isle had been actually altered on the copper plate of the map since 1818. It was also proved that Flechier died in 1711 (the letters patent for the installation of his successor in the bishopric of Nismes being produced, bearing date the 26th February in that year), and that Fenelon died on the 7th of January, 1715. Of course a map issued prior to 1718 could refer to his appointment of geographer to the king, and any attestation of the date of 1707, or by a person who died before 1718, to a map containing a recognition of that appointment must of necessity be spurious. The forger of the map must have been ignorant of the fact that De l'Isle was not appointed geographer to the king until 1718, and misled by the date of 1703 upon his maps; so difficult is it to preserve consistency in an attempt to impose by means of forgery.

(7) The very ink with which some of the pretended attestations were made was not the usual ink of the period, but a modern composition made to imitate ink aged by time.

There were other strong grounds for impugning the genuineness of these various documents, which the jury unanimously found to be forged [6].

**Importance of post office marks.**

Post-office marks are often of great importance in fixing disputed dates; but the defective manner in which they are impressed frequently renders them useless, and this has been from time to time the subject of judicial animadversion [7].

(6) See Report of the Trial by Archbald Swinton (2 Swinton Just. Rep. Sc.); another report by William Turnbull; Remarks on the Trial, by an English lawyer; 1 Townsends Modern State Trials, 403; and 1 Dickson's Law of Evidence in Scotland, 289, p. 17.

(7) See on the point of this chapter Wills, Cir. Evi. pp. 241—248.

CHAPTER XVI.

# Detection of Forgery.

## (v) By the use of Photography and Microscope.

CONTENTS:—Detection of crime, a matter of fascinating interest both in fact and fiction.—Romance and reality—Truth stranger than fiction.—Wonders of the camera.—Investigations of Dr. Paul Jeserich.—Illustrative cases.—Use of photography in the Administration of Justice.—Applied to cases of reproduction of the originals of documents.—Use of photography in Forgery cases.—Detection of falsification of handwriting and figures by means of photography.—Use of colour photography.—Alteration of figures.—Falsification of wills, postal orders, permits etc.—Use of photography in saving the innocent.—Necessity for caution in taking photographs.—Uses of enlarged photographs.—Use of microscope.—Use of spectroscope.—Judicial dicta as to value of photographs.

**Detection of crime, a matter of fascinating interest both in fact and fiction.**

The detection of crime is a matter of fascinating interest to all but those who, unhappily for themselves, have to pay the penalty of wrong-doing. The novelist, as well as the dramatist, knows well that a crime round which a mystery hangs, or which involves the detection or pursuit of a suspected individual, is a theme which will at once secure the attention of those for whom he caters. In one respect it is a misfortune that this should be so; for there has arisen a copious supply of gutter-literature, which, by its stories of wonderful escapes and lawless doings of notorious thieves and other vagabonds arouses the emulation of youthful readers, and often, as the records of our police courts too frequently prove, tempts them to go and do likewise. On the other hand, we cannot look without admiration at such a wonderful word-picture as that given us in "Oliver Twist," where the wretched Sikes wanders with the brand of Cain upon him, haunted by the visionary form of his victim.

Both novelists and playwrights have many clever ways of tracking their puppets and hounding them to death. Some of these are hackneyed enough,—such as the foot mark in the soil, the dirty thumb-mark on the paper, etc.; and he who can conceive a new way of bringing about the inevitable detection is surely half-way toward success.

**Romance and Reality.**

**Truth stranger than fiction.**

**Wonders of the camera.**

**Investigation of Dr. Paul Jeserich.**

Once again has romance been beaten by reality. In this matter of the detection of criminals, the photographic camera has lately performed such novel feats that quite a fresh set of ideas is placed at the disposal of fiction mongers. The subject recently came before the Photographic Society of Great Britain in the form of a paper by Dr. Paul Jeserich of Berlin, a chemist who has devoted his attention for many years to the detection of crime by scientific means, and more especially by the means of photography. This paper was illustrated by a remarkable collection of photographs, which were projected by means of an optical lantern. Some of the wonderful results obtained by this indefatigable worker we will now briefly place before our readers.

Most persons are aware that for many years it has been the practice in this and many countries to take the portraits of criminals when they become the unwilling tenants of the State, and such portraits have proved most useful in subsequent identification. There is little doubt, thinks Dr. Jeserich, that this system might with advantage be extended to the photographing of the scene of the crime; for the camera will faithfully record little details,

at the time considered to be unimportant, but which may supply a valuable link in the chain of evidence later on. Thus, he refers to a case of murder, when, in the course of a terrible struggle, the contents of a room were upturned—a clock, among other things, being hurled from its place and stopped. A photograph would have shown the hour at which the deed was done,—a fact of first importance, as every prisoner who has endeavoured to establish an ALIBI knows well enough. But it is in microscopical examination, and in the subsequent photographing of the object examined in much magnified form, that Dr. Jeserich had done his most noteworthy work. Such a photograph will often afford evidence of the most positive kind, which can be readily comprehended and duly appraised by judge and jury alike. Let us now see, by a few examples, how the method works out.

**Illustrative cases.**

The first criminal case brought forward by Dr. Jeserich was one in which the liberty of a suspected man literally "hung upon a hair"; for by a single hair was he tracked. The case was one of assault, and two men were suspected of the deed. A single hair was found upon the clothing ef the victim, and this hair was duly pictured in the form of photo-micrograph (It may be as well, perhaps, to point out here that by this term is meant the enlarged image of a microscopic object, the term " micro-photograph " being applied to those tiny specks of pictures which can only be seen when magnified in a microscope). A, one of the suspected men, had a grey beard ; and a hair from his chin was photographed and compared with the first picture taken. The difference in structure, tint, and general appearance was so marked that the man was at once liberated. The hair of the other man, B, was also examined, and bore little resemblance to that found on the victim. The latter was now more carefully scrutinized, and compared with other specimens. The photograph clearly showed, for one thing, that the hair was pointed,—it had never been cut. Gradually the conclusion was arrived at that it belonged to a DOG,— " an old yellow, smooth-haired, and comparatively short-haired dog," Further inquiry revealed the fact that B owned such a dog, a fresh hair from which agreed in every detail with the original photograph, and the man was convicted. He subsequently confessed that he alone committed the crime [1].

**Use of photography in the administration of justice**

**applied to cases of reproduction of the original of documents.**

In the administration of the law photography has long played an important part. Plans and models have their distinctive uses in civil cases ; chemical analysis is frequently of the utmost service in criminal trials, but photography, in the hands of the technical expert, is, it may safely be said, of more assistance to the administration of justice than any other art or science. Its advantages are obvious in certain classes of cases. In light and air cases, for instance there is nothing, apart from a personal view, by which the Court can obtain a clearer idea of the alleged obstruction than by a properly authenticated photograph of the buildings with which the dispute is concerned. In every action about damaged articles which cannot be produced in Court, photography is of invaluable help. The torn side of a ship damaged in a collision ; the broken railings of a private house into which a motor car has run ; the cracking walls of a newly erected building that suggest the negligence of the builder ; the scene of the collision in a running-down case, or of an accident arising out of the bad condition of the road—these are among the litigious things in which photography is obviously of the greatest use. Not less serviceable is it in the reproduction of original documents, letters, telegrams, etc. The photograph of a will, for instance, is immeasurably more useful than a type-written copy. It is a

(1) 4 Green Bag 516—520.

faithful reproduction of the document and of any corrections and marginal notes the testator may have made, and it affords a wider opportunity of testing the genuineness of the signature of the testator.

Largely as lawyers now recognise the utility of photography, they might advantageously make a more frequent use of it. Correspondence, upon which so many legal issues depend, easily lends itself to photographic treatment. This is true of all classes of litigation, from a contract case to a divorce suit. The original letters may be destroyed or stolen; they may, by frequent handling, become torn or illegible. Photographic copies may, in the event of the originals being lost, be accepted as secondary evidence. They are, moreover, easier to handle than the originals, while enlarged photographs may be taken of letters with writing so small or careless as to be almost undecipherable. Another advantage—which belongs to photography in all the legal uses to which it is put—is that, when photographic copies are in their hands, Judge, Jury and Counsel can see simultaneously what the originals are like. Some leading firms of solicitors make it a practice, even when there is no immediate prospect of litigation, to have photographs taken of all the most important documents that come into their possession. Their example, where the issues warrant it, might well be followed more generally [2].

**Use of photography in forgery cases.**

So far as the administration of the criminal law is concerned, the supreme value of photography lies in the ready assistance it renders in forgery cases. Here it is that enlargement is of special use. A forged imitation of a signature must necessarily be written slowly, while a genuine signature is generally written quickly. Usually an enlarged photograph of a forged signature shows traces of the heart pulsations of the perpetrator of the forgery. This is practically true of capital letters with long downward strokes involving an extra pressure on the pen. So marked are these traces of pulsation in some enlargements that they have been known to constitute a conclusive proof of the want of genuineness. What is true of signatures is, of course, equally true of all documents the genuineness of which is in doubt.

One great merit of a photographic copy of a questionable document or signature is that it may be so underlined and marked that its salient points leap to the eye. It admits, too, of marginal comments, which will render easier the task of those engaged in conducting and determining the case. And this is an advantage which belongs to photography in relation to all original documents, whether in criminal or civil cases [3].

**Detection of falsification of handwriting and figures by means of photography.**

The most important section of Dr. Jeserich's work above mentioned is the detection of falsification of handwriting and figures by means of photography. Crimes of this nature are far more common than deeds of violence; and, judging by the heavy punishment meted out to the offenders, in comparison to the mild sentences often passed upon men, whom, to call brutes would be base flattery, the law would seem to consider such sins worse than those committed against the person. However, this may be, it is a most important thing that this very dangerous class of crime should be subject to ready detection.

The photographic plates by which these records have been accomplished are the ordinary gelatine plates which are being used in the present day by thousands of amateur workers. By special preparation, these plates can be made to afford evidence of a far more wonderful kind, and can in certain

(2) 20 M. L. J. 234. (3) London Law Journal. (20 M. L. J. Jr. 234—236.)

cases be made to yield a clear image of the writing which has been completely covered with fresh characters by the hand of the forger. In this way the true and the false are distinctly revealed, together with the peculiarities belonging to each, clearly defined.

**Use of colour photography.**

The word "ordinary" has a special significance to photographers, and is used by them in contradistinction to a colour-sensitive (orthochromatic) plate. This second kind of sensitive surface is of comparatively recent date, and the great advantage in its use is, that it renders colours more according to their relative brightness, just in fact as an engraver would express them by different depths of "tint". These plates are especially useful in photographing coloured objects, such as paintings in oil or water colour. Dr. Jeserich has, however, pointed out an entirely new use for them, and has shown that they will differentiate between black inks of different composition.

The oft-quoted line, "things are not always as they seem" is very true of what we call black ink. It is generally not black, although it assumes that appearance on paper. Taking for experiment, the black inks made by three different manufacturers, and dropping a little of each into a test-tube half-full of water, Dr. Jeserich found that one was distinctly blue, another red, and the third brown. Each was an excellent writing fluid and looked as black as night when applied to paper. Now, Dr. Jeserich prepares his colour-sensitive plates in such a way that they will reveal a difference in tone or tint between inks of this description, while an ordinary plate is powerless to do anything of the kind. Among other examples, he shows the photograph of a certain bill of exchange, whereon the date of payment is written April. The drawer of this bill had declared that it was not payable until May; whereupon Dr. Jeserich photographed it a second time, with a colour-sensitive plate. The new photograph gives a revelation of the true state of affairs. The word "May" had been altered to "April" by a little clever manipulation of the pen, and the fraud was not evident to the eye, to the microscope, or to the ordinary photographic process. But the colour-sensitive film tells us that the ink with which the original word "May" was written was of a different black hue from that employed by the forger when he wrote over it and partly formed out of it the word "April." The consequence is that one word is much fainter than the other, each stroke of alteration being plainly discernible and detecting the forgery. Another case is presented where a bill already paid, let us say, in favour of one Schmidt, is again presented with the signature Fabian. Here, again, the photographic evidence shows in the most conclusive manner that the first word is still readable under the altered conditions. In this case, when the accused was told that by scientific treatment the first name had been thus revealed, he confessed to the fraud, and was duly punished.

**Alteration of figures.**

Alterations in figures have naturally come under Jeserich's observation; figures being, as a rule, far more easy to tamper with than words,—especially where careless writers of cheques leave blank spaces in front of numerals, to tempt the skill of those whose ways are crooked. Dr. Jeserich shows a document which is drawn apparently for a sum of money represented by the figures 20,200. The amount was disputed by the payer, and hence the document was submitted to the photographic test. As a result, it was found that the original figures had been 1,200, and that the payee had altered the first figure to 0, and had placed a 2 in front of it. The result to him was four years' penal servitude; and it is satisfactory to note that after sentence had been passed upon him, he confessed that the photograph had revealed the truth.

The following two cases in which fabrication of documents was rendered evident by the camera are of a somewhat amusing nature. Two citizens of Berlin had been summoned for nonpayment of taxes, and had quite forgotten the day upon which the summonses were returnable,—thus rendering themselves liable to increased expenses. It was a comparatively easy matter, and one which did not lie very heavily on their consciences, to alter the 24 which denoted the day of the month into 26. But that terrible photographic plate found them out; and the small fine which they hoped to evade was superseded in favour of imprisonment for the grave offence of falsifying an official document. In another case, a receipt for debts contracted up to 1881, was altered to 1884 by the simple addition of two strokes in an ink which was of a different photographic value from the ink which had been used by the author of the document.

**Falsification of wills, postal orders, permits etc.**

Many cases like these, relating to falsifications of wills, postal orders, permits, and other documents, have come under official notice. One of these is especially noteworthy, because the accused was made to give evidence against himself in a novel manner. He was a cattle-dealer, and had altered a permit for passing animals across the Austrian frontier at a time when the prevalance of disease necessitated a certain period for quarantine. The photographic evidence showed that a 3 had been added to the original figures and it was necessary to ascertain whether the prisoner had inserted this numeral. To do this, he was made to write several 3's, and these were photographed on a film of gelatine. This transparent film, was now placed over the impounded document, and it was found that any of the images of the newly written figures would very nicely fit over the disputed 3 on the paper. Such a test as this, it is obvious, is far more conclusive and satisfactory in every way than the somewhat doubtful testimony of experts in handwriting, the actual value of whose evidence was so clearly set forth during the celebrated Parnell inquiry.

**Use of photography in saving the innocent.**

It is refreshing to turn to an instance in which the photographic evidence had the effect, not of convicting a person, but of clearing him from suspicion. The dead body of a man was found near the outskirts of a wood, and its appearance indicated that he had been the victim of foul play. An acquaintance of his had been arrested on suspicion, and a vulcanite match-box believed to belong to the accused—an assertion which, however, he denied—seemed to strengthen the case against him. The box was then subjected to careful examination. It was certainly the worse for wear, for its lid was covered with innumerable scratches. Amid these markings it was thought that there were traces of a name; but what the name was it was quite impossible to guess. Dr. Jeserich now took the matter in hand, and rubbed the box with a fine, impalpable powder, which insinuated itself into every crevice. He next photographed the box, while a strong side-light was thrown upon its surface so as to show up every depression, when the name of the owner stood plainly revealed. This was not that of the prisoner, but belonged to a man who had dropped the box near the spot where it was found many weeks before the suspected crime had been committed. The accused was at once released [4].

**Necessity for caution in taking photographs.**

Great care should be exercised that photographs be correcly made. The first requisites are that the writing to be copied be at exact right angles to the lens of the camera, that the lens be adopted to a perfect reproduction of a flat surface, and that it be in perfect focus. The photopraphic reproduction must then be

(4) 4 Green Bag 516—520.

absolutely perfect as to outlines and measurements. As to time of exposure, toning, and finishing, these are dependant upon the skill and experience of the operating photographer [5].

**Uses of enlarged photographs.**

Enlarged photographs are often of great use, not only to show the patching and painting which sometimes accompany a forgery but also to indicate diversities of ink or half-erased pencil marks—such variations depending upon differences in the chemical composition of the substances remaining upon the paper which affect the actinic effect of the rays reflected from them.

Effective use was made of enlarged photographs in investigating the Pigott forgeries. They were conclusive, but were not used in Court as the case for the forgeries broke down upon the cross examination of Pigott.

**Use of microscope.**

The microscope alone will not aid us as much as the photograph although we can detect by its aid places in paper where erasures have been made. If any one will take the trouble to examine microscopically the paper on which these words are pointed, using quite a low-power object-glass, he will note that its smooth surface altogether disappears, and that it seems to be as coarse as a blanket. This being the case, it will be readily understood that an erasure with a knife, which would be imperceptible to the unaided eye, becomes so exaggerated when viewed with the microscope that there can be no mistake about it. In examining writing by this searching aid to vision, the finest lines appear thick and coarse. It is also possible to ascertain whether an alteration has been made in a word before the ink first applied has become dry, or whether the amendment has been an afterthought. In the former case, the previously applied ink will more or less amalgamate with and run into the other, as will be clearly seen under the microscope; while in the latter case, each ink-mark will preserve its own unbroken outline. The use of this observation in cases of suspected wrongdoing is obvious. Dr. Jeserich shows two photographs which illustrate these differences. In the first, a document dated early in January is marked 1884 the 4 having been altered into a 5 as soon as written, so as to correct a mistake which most of us make a dozen times or more at the beginning of each new year. In the other picture, the date had been altered fraudulently and long after the original words had been traced, in order to gain some unworthy advantage [6].

In an old English case however the judge while examining a questioned document declined the use of a glass of high power to be used by professional witnesses, observing, in substance, that glasses of high power, however fitly applied to the inspection of natural objects, rather tend to distort and misrepresent than to place objects of the kind in question in their true light; especially when used (their ordinary application in the hands of prejudiced persons) to confirm some theory or preconceived opinion [7].

The distrust of magnifying glasses above alluded to was perhaps natural a century ago, seeing what they were. A glass of high power and with a narrow area of undistorted vision may very well still convey an erroneous impression to the observer. But with such excellent instruments as are readily at command at the present day the old fashioned distrust has disappeared, and such aids to the eyesights are of the utmost value.

The microscope is exceedingly valuable in detecting erasures or other changes, in revealing the actual sequence or order of writing, of additions

(5) Ames 91. (6) Ibid.
(7) Robson v. Rock, 2 Addams, 53, at pp. 85, 88 (a) 89.

and interlineations, which touch a signature or writing above which they are placed, and in the examination of crossed lines, traces of pencil marks, line edges, paper fibre, retouching, and ink condition [8].

It has however been held that magnifying glasses may be used in connection with the testimony of witnesses [9] but not by the jury during or after the argument, when the glasses have not been used on the trial [10] and highly satisfactory results are sometimes obtained in this way [11].

In conclusion, we may quote one more case of identification, which, although it does not depend upon the camera, is full of interest and is associated with that other wonderful instrument known as the spectroscope. Solutions of logwood, carmine, and blood have to the eye exactly the same appearance; but when the liquids are examined by the spectroscope, absorption bands are shown, which have for each liquid a characteristic form. In the case of blood, the character of the absorption bands alters if the liquid be associated with certain gases, such as those which are given off during the combustion of carbonaceous material. Now, let us see how this knowledge was applied in a case which came under Dr. Jeserich's official scrutiny. A cottage was burned down and the body of the owner was found in the ruins in such a charred condition that he was hardly recognizable. A relative was, in consequence of certain incriminating circumstances, suspected of having murdered the man, and then set fire to the building in order to hide every trace of his crime,—thinking, no doubt, that the conflagration would be ascribed to accident The dead body was removed, and a drop or two of blood was taken from the lungs and examined spectroscopically, with a view to finding out whether death had taken place as was believed before the house was set on fire. The absorption spectrum showed the blood to be that of normal blood, and the suspicion against the accused was thus strengthened. He ultimately confessed to having first committed the murder, and then set fire to the building, according to the theory adopted by the prosecution.

**Use of spectroscope.**

The proverb tells us that "the way of transgressors is hard". The science of photography has made it harder still [12].

---

(8) See a very instructive and admirably illustrated article on "The Microscope and Expert Testimony", by Albert S. Osborn, in the JOURNAL OF APPLIED MISCROSCOPY AND LABORATORY METHODS (Rochester, N. Y.) Vol. vi., No. 12 p. 2637. The article has been reprinted as a pamphlet. See also Wenchell v. Stevens, 30 Pa. Super. Ct. 527.

(9) Howell V. Hartford F. Ins. Co., 12 Fed. Cas No. 6,780

(10) Ibid. (11) Re. Gammell, 19 Nova Scotia 265, 282

(12) As to judicial dicta regarding the evidentiary value of photographs see Moore on Facts Vol. I pp. 704—710.

CHAPTER XVII.

# Detection of Forgery.

## (vii) By Reference to Surrounding Circumstances. (Circumstantial Evidence.)

CONTENTS:—Nature and variety of circumstantial evidence—Illustrations.—Cumulative force of circumstantial evidence, illustrated from Daniel O'Connells Theory of Burke's authorship of Junius' letters.—Conduct of the alleged forger.—Internal evidence of forgery.—Internal evidence sometimes conflicts with the result of comparison by experts.—Illustrative cases.—(i) The Matlock will case.—(ii) In the matter of Theophilus Young.—(iii) Lewis will contest case.—(iv) A case related by Hawkins in his Reminiscenses.

**Nature and variety of circumstantial evidence.**

It would be impracticable to enumerate the infinite variety of circumstantial evidentiary facts, which of necessity are as various as the modifications and combinations of events in actual life. "All the acts of the party, all things that explain or throw light on these acts, all the acts of others relative to the affair, that come to his knowledge and may influence him,—his friendships and enmities, his promises, his threats, the truth of his discourses, the falsehood of his apologies, pretences, and explanations; his looks, his speech, his silence where he was called to speak; everything which tends to establish the connection between all these particulars; every circumstance, precedent, concomitant, and subsequent,—become part of circumstantial evidence. These are in their nature infinite, and cannot be comprehended within any rule, or brought under any classification [1]."

**Illustrations.**

Upon a charge of uttering forged bank-notes, knowing them to be forged, evidence may be given that the prisoner uttered other forged bank-notes either before or after the uttering of the note in question, or that other forged bank-notes were found upon his person, or that other forged notes of the same kind were found in the bank with the prisoner's handwriting upon them [2].

**Cumulative force of circumstantial evidence—Illustrated from Daniel O'Connell's theory of Burke's authorship of Junius' letters.**

"It is my decided opinion," said O'Connell in the course of a conversation referring to the authorship of the letters of the Junius "that Edmund Burke was the author of the 'Letters of Junius.' There are many considerations which compel me to form that opinion. Burke was the only man who made that figure in the world that the author of Juinus must have made, if engaged in public life; and the entirety of Junius' letters evinces that close acquaintance with the springs of political machinery which no man could possess, unless actively engaged in politics. Again—Burke was fond of chemical similes; now, chemical similes are frequent in Junius. Again—Burke was an Irishman; now, Junius speaking of the Government of Ireland, twice calls it 'the Castle', a familiar phrase amongst Irish politicians but one which an Englishman in those days never would have used. Again—Burke had this peculiarity of lifting the pen from the paper. The very same peculiarity existed in the manuscripts of Junius, although they were written in a feigned hand. Again it may be said that the style is not Burke's. In reply, I would say that Burke was master of

(1) Burke's Works, ed. 1852, vol. viii, p. 95, (Impeachment of Warren Hastings); Wills Cir. Evi. 235.

(2) See Rex. v. Wylie, and Rex. v. Tattersall, 1 B. & P. N. R. 92, 93, n; Wills Cir. Evi. 71-72.

many styles. His work on Natural Society, in imitation of Lord Bolingbroke, is as different in point of style from his work on the French Revolution, as both are from the 'Letters of Junius'. Again—Junius speaks of the king's insanity as a devine visitation; Burke said the very same thing in the House of Commons. Again—had any one of the other men, to whom the letters are with any show of probability ascribed, been really the author, such author would have had no reason for disowning the book or remaining incognito. Any one of them but Burke would have claimed the authorship as fame—and proud fame. But Burke had a very cogent reason for remaining incognito. In claiming Junius, he would have claimed his own condemnation and dishonour—for Burke died a pensioner. Burke, moreover, was the only pensioner who had the commanding talent displayed in the writings of Junius. Now, when I lay all these considerations together, and especially when I reflect that a cogent reason exists for Burke's silence as to his own authorship, I confess, I think I have got a presumptive proof of the very strongest nature that Burke was the writer [3]."

The following is an important case which is well worth careful attention, in dealing with the subject of circumstantial evidence, where the accumulated weight of facts, one following the other in logical sequence, brought home the crime, with irresistable force, on the secret perpetrator of the same. The case is also worth citation as showing the excellent method by which the Attorney General built up the case for the crown, almost taking the jury, as it were, step by step, and making them co-investigators in the case, and leading them gently and unconsciously to the same position and the same conclusion to which the Attorney General had himself arrived.

The history and the development of the case was thus presented to the jury by Assistant District Attorney, Osborne, in his very able opening address to the jury. He said:—

"On December 28, 1878, the citizens of New York were shocked by the discovery that a woman had been poisoned. She was a woman who had lived on the west side of New York with her daughter, a Mrs. Rogers, with a grown son, and who was an occupant in the house of Harry S. Cornish—a connection, by marriage, of the family. They had formerly lived together in Hartford, Conecticut.

"On December 24th of last year, just the day before Christmas, Harry S. Cornish, at the Knickerbocker Athletic Club, received a package through the mail. This package was taken by him to his desk, and in the presence of other persons he opened it.

"It was a Christmas present, no doubt, he thought. There was a Tiffany box and a blank envelope. Inclosed in the box was a silver article, a bottle-holder, and in it was what purported to be a bromoseltzer bottle. There were some pieces of paper in the box, and the box itself was wrapped up in manilla paper. On it was written the address, 'Mr. Harry Cornish, Knickerbocker Athletic Club, Madison Ave., and Forty-fifth St., New York City.'

"Cornish carried this box and its contents home on the evening of December 27th. These dumb instruments one by one will make up this story. It was at the request of Mrs. Adams' only daughter, Mrs. Rogers, that Cornish gave to Mrs. Adams, at the time when she was preparing the breakfast,—this good old woman was acting as the cook next morning,—the fatal dose, and after partaking of it she complained of a bitter taste, and Cornish tasted it himself. Mrs. Adams was imediately taken alarmingly ill.

"Then the doctors were hurriedly called, and within half an hour afterward Mrs. Adams was dead. Cornish went to the Knickerbocker Athletic

(3) Daniel O'Connell's life 208-210.

Club. His life at one time was almost despaired of. Here was a man—Cornish—who preserved the bottle holder, the envelope, the paper, the writing,—he took good care of it,—and in broad daylight he had administered the fatal dose.

"I wish to say here that if there ever was a man in this wide world who has been thoroughly investigated by myself and by Captain McClusky, the chief of detectives, it is this Harry S. Cornish, and I will say that we satisfied ourselves that Cornish, who gave the fatal dose, did not do so with any guilty intent.

"Now, let us see what Captain McClusky had in his possession at the time he started out to investigate the mystery surrounding the murder of Mrs. Katharine J. Adams. He knew that a woman had been poisoned; that Cornish gave her that poison; and he had before him a bottle-holder, an envelope and box, and the written address upon the wrapper of the poison package; from those articles he must find the poisoner.

"How did he proceed? Captain McClusky investigated each object step by step. And I say to you, gentlemen, that if you will follow me in the evidence which Captain McClusky gave to me, you will each one of you become a judicial Frankenstein, and little by little, you will be able to construct the man who murdered this woman.

"In this evidence you will see the body, the soul, the features of this poisoner, and if you do not, then you will acquit this defendant. This poisoner struck from a distance. He said to himself, 'It is impossible for anybody to trace this poison to me. I have so disguised the handwriting that nobody can trace that to me. The silver bottle-holder and the poison were obtained in such a way as not to be traced to me.'

"Cyanide of mercury is a chemical rarity. There are only three cases of such poison on record. Your may be sure at the outset that you cannot trace that cyanide of mercury to him, nor that silver bottle-holder, because they are monuments toward a pathway on which one can read the way of the poisoner.

"But the poisoner no doubt felt that he had discovered the secret to poison without detection. Captain McClusky had no difficulty in tracing the bottle-holder to the store of Hartegen and Company, Newark, New Jersey; but you will not be able to trace the body of the poisoner to that store. You must be able to trace the mind of the poisoner to the store where the bottle-holder was bought. It was traced to Newark. In order to trace the cyanide of mercury you must find out who uses this poison.

"Now, in order to find the man who sent this bottle-holder and the cyanide of mercury, you must find the man who had a business in Newark, and who knew about cyanide of mercury, and who handled it in his business. That is the kind of man Captain McClusky had to look for. Consequently, you must look for a chemist who is engaged in the manufacture of colours.

"The man who wrote tbe address upon the poison package did not try to imitate anybode else's characteristics, but he did try to leave out of his writing all his own characteristics. Did he do so? That is the question for us to decide.

"The District Attorney is going to make his garment out of the stitches which he dropped. In writing the address the poisoner dropped the first stitch and left enough of his characteristics to show who he is.

"We must now look for a man who had a motive to dispose of Cornish. We must look for a man who lived partly in Newark and partly in New York. At once everybody began to investigate as to who it was who hated

Cornish—who had a long-standing hatred for him. If you gentlemen of the jury will, after hearing all of this evidence, say we will not convict, then what will you say to the criminals at large ?

"You would then turn society over to the criminals. But fortunately this is not the case, because this poisoner dropped more stitches,—yes, a spool of thread,—and this case, which at one time was a mystery, is actually the simplest case I have prepared in my life ; and if you don't say so, I shall be very much disappointed.

"Now, captain McClusky had a talk with the physician who attended Cornish, and who had treated another man who had suffered from cyanide of mercury poisoning, and this man was Henry C. Barnet.

"Here is another name in this case. Who is Barnet ? How is it that his name is introduced into this case ? Barnet lived at the Knickerbocker Athletic Club. Barnet received poison mixed with Kutnow powder, from which he had died only a few weeks prior to the death of Mrs. Adams. Barnet received this poison in the mail. Now, here we have use of the mail, cyanide of mercury and the Knickerbocker Athletic Club.

"There is not a man on the earth so stupid who would not know that the same man who perpetrated one crime committed the other.

"If this defendant does not fit the description I give of this poisoner, then Mr. Weeks (the attorney for the prisoner) ought to be pleased. I tell you, produce the whole garment and you will find the guilty man. On December 20, 1898, there was a letter sent to the Kutnow people asking that a sample of their powder be sent to H. Cornish at No. 1620 Broadway. Now we see the light of day.

"This spool of thread begins to unwind. He wrote to the Marsden Remedy Company, in this city, and in asking for treatment gave the company a complete description of himself. He inclosed five dollars, and asked them to send to him the remedy, and they sent to him a blank form which he had to fill ; and here we have the man who committed these double crimes fully describing himself.

"There is no doubt that he who killed Barnet also sent the poison to Cornish. Everybody must see that. Now, what have we on this paper which this poisoner filled out ?"

"I object !" shouted Mr. Weeks. "It is unfair to this client for the District Attorney to make statements of this character in the presence of the jury"

Recorder Goff replied that the jury must not be pejudiced against the defendant by any statement of the District Attorney ; it is not for them to infer that the person who poisoned Barnet poisoned Mrs. Adams.

Mr. Osborne continued :—"Now, I must find this man—the poisoner. Here the diagnosis blank shows that he gave his age as thirty-one. We cannot look for anybody who is over thirty-one or who is under thirty-one. If this prisoner at the bar does not fit in that respect, we do not want him. I must show you a man of that age.

"Then we find that the man says he was contemplating matrimony. Now, we must find such a man. All married men are excluded. Then there is a query. 'Was there any consumption in the family ?' which is answered 'Yes.' We must find a man in whose family there was consumption.

"Then we must find a man who measures thirty-seven inches around the chest and thirty-two inches around the waist. Smaller men or bigger men are out of the question. Then there is a query as to complexion—answer, 'Yellow.' Look for such a man. Then we must find a man who mails

his letters at the General Post Office at 5 P. M. on week-days and earlier on Saturdays."

(Mr. Osborne announced that he would now go into the matter of handwriting. He called one of his assistants, who started to put up an easel stand, upon which a blackboard was to be placed. Mr. Weeks objected to Mr. Osborne's illustrating to the jury upon a blackboard matters in connection with handwriting, and Recorder Goff sustained him).

"I wish to say (continued Mr. Osborne, shouting) that any expert in this country—every expert in America—including the expert who appears here for the defence, will testify that the 'H. Cornish' and the 'H. C. Barnet' letters and the address on the poison package were written by the same man.

"The experts will tell you the peculiarities of the handwriting—they will very plainly show you that there are enough characteristics left to prove that all these (the address upon the poison package, the Barnet and Cornish letters) were written by the same man; and if I do not show all of this to be a fact, then this defendant will walk out of court a free man.

"When you and I fail to write like a copy book, then you and I show our characteristics. Now, take the letter *a*, for instance—*a*, in the word 'trial.' The poisoner wrote 'trial' thus—'tri-al.' There was a break between the *i* and the *a*. He does not make the upward stroke to connect the *i* and the *a*, but simply stops at the letter *i*, and then begins a new *a*, as though there were two words 'tri'-'al.' In 'confidential' we find there is a break between the *i* and the *d*. In 'which' there is a break between the *i* and the *c*. Thus you see there is always a break after an *i* when it is before an *a*, *c*, *d*, and *g*, as in 'oblige.'

"Look,—look, I say, at all the handwriting since Adam or the Phoenicians, or whoever invented handwriting, and show me a man who makes these breaks. It is the most astonishing thing. Now, the man who wrote these letters did not know he had these characteristics, and if I find the man who wrote the Barnet letter I have the man who intended to kill Cornish.

"Then we find that he has three ways of writing the word 'oblige.' And if I don't find the man who has three ways of writing the word 'oblige' then I do not find the man who is guilty of this murder. When he writes the word 'oblige' slowly, he writes it 'obli-ge' with a break between the *i* and the *g*. When he is in a hurry he writes 'oblige' 'obli-g' with a little tick at the end, indicating the *e*, but does not write the *e*, and then he writes 'oblige' at times 'obli—' and makes the *g* like a *q* with a little tick at the end.

"This letter was written on blue paper with three crescents, manufactured by Whiting & Company, and sold in four department stores, and—now mark me, gentlemen—in two stores in Newark, and one of these stores ought to be a store which the poisoner had in his mind. One was that of Plum & Company, and the other of Hayne & Company, in Newark. In December 1898, a man had taken a letter-box at No. 1620, Broadway, under the name of Harry Cornish, but he was not Harry Cornish. And there was a letter written to Detroit, and one to Frederick Stearns & Company, in Detroit, and another letter written to the Von Mohl Company, in Cincinnati.

"The Von Mohl Company were manufacturers of patent medicines, and the letter sent to them asked for a sample of their medicines. Another letter was an inquiry about A. Harpster, saying that Harpster had applied to Harry Cornish for a position as collector, and that all information sent to Harry Cornish, No. 1620 Broadway, concerning the said Harpster, would be considered as confidential. Why did the writer inquire about Harpster—amiable, calm, quiet Harpster—more stout than anything else?

"Now we must look for a man who had reason to dislike Harpster. Harpster some time before had been an employee in the Knickerbocker Athletic Club at the time when Cornish and Barnet were there together. Now, you must find a man—the poisoner—who knew all three of these men at one time. Take these three men. They all moved in different social circles, and the only thing that bound them together was their common interest in the Knickerbocker Athletic club.

"We have reached the point now in our investigation where the silver bottle-holder was discovered at Hartegen & Company, Silver-smiths, of Newark. The letter-box was hired on December 21st, the same day the bottle-holder was purchased."

(Mr. Osborne then explained at length the various methods employed by dealers in patent medicines as to preserving the letters they received from their clients.)

"The man (he said) who once seeks advertisements for a remedy is forever marked by firms dealing in such remedies. In other words, he has acquired what is known as the patent-medicine habit, one that is bad to contract and that cannot be lost. We will show to you that the man who wrote this and other letters was not H. C. Barnet.

"All over the country we have found letters asking for certain kinds of patent medicines. The letters signed 'H. Cornish' were dated from the letter-box place, at No. 1620 Broadway. Other letters were found signed 'H. C. Barnet,' asking for the same kind of medicine, and the writer of these letters asked that the samples be sent to Louis Heckmann's letter-box place, in Forty-second Street.

"On May 28th a man went to this place and rented a letter-box in the name of H. C. Barnet. We will show that this man was not H. C. Barnet. By singular coincidence another letter signed Barnet was also sent to the Von Mohl Company in Cincinnati, to whom a letter signed 'H. Cornish' had also been sent. All of these letters asked for medicines of one kind.

"The general scheme of the two murders was the same: letter-boxes were taken in the names of the two men; the same poison was sent to them both; the mails were used in sending the poison. They were generated by the same brain, the same ideas—the adopting of the names, the letter-boxes, the remedies, cyanide of mercury, the United States mails. Here was the scheme.

"Take the name of your enemy. Take the letter-box in the same name, and dead men tell no tales. Barnet could not come back from his grave and say, 'I never took another man's name; I never wrote for these remedies.'

"The poisoner used that scheme in both cases, but here again we find that this poisoner did not have universal knowledge, for he dropped another strand of this spool of thread.

"Who in every conceivable way—residence, business, environment hatred, hand-writing, complies with the absolute description of the poisoner? There is but one human being on the space of this whole earth, and that man is the defendant at the bar."

H. C. Barnet, whose name was brought into prominence during the trial, was a fellow member of the Knickerbocker Athletic Club with Molineux, Cornish, and Harpster. It appeared from the evidence adduced at the trial that Barnet was a favoured rival lover of Molineux for the woman whom Molineux married nineteen days after Barnet's death.

At the time of Barnet's death, diphtheria was attributed as the cause; but after the death of Mrs. Adams from poison evidently intended for Cornish, the circumstances of Barnet's death were recalled as being suspiciously akin

to the attempt upon the life of Cornish. Barnet's illness was preceded by the taking of Kutnow powder, a portion of which still remained. This powder was subjected to a chemical analysis, and it was found to contain cyanide of mercury, the same deadly poison that was found mixed with the bromo-seltzer sent to Cornish. The package containing the powder was also received by Barnet through the mail. A post-mortem examination and chemical analysis revealed the presence of the poison in the body of Barnet.

Barnet was a dangerous rival in love, Cornish was a hated enemy in the Club, and Harpster was Cornish's friend. Here was at once shown the motive on the part of Molineux for striking all three. The correspondence carried on in the names of Barnet and Cornish through the secretary of private letter-boxes was of such a nature that the writer would naturally wish to be unknown. The tracing of this correspondence to the private letter-boxes and the identity of Molineux as the party who rented them and received the mail addressed thereto, not only of themselves were strong links in the testimony, but the disguised writing of Molineux upon the so-called Barnet and Cornish letters was a powerful aid in fastening upon Molineux the authorship of the writing on the wrapper of the poison package.

Eleven of the best known handwriting experts of the country, a large number of bank cashiers, and several persons (including the secretary of the Athletic Club) who were familiar with Molineux's writing, testified most positively that he wrote, in a disguised hand the address upon the wrapper, and also the Barnet and Cornish letters [4].

**Conduct of the alleged forger.**

The conduct of the suspected forger is also a matter of primary importance. There are three occasions upon which every man who is tried upon indictment has had the opportunity of giving any explanation of his conduct or of mentioning any defence he may have: first when he is originally charged, whether by an employer or other person having legitimate occasion to speak to him upon the subject of the charge, or by a police officer making enquiries or effecting his arrest; secondly, when formally charged at the police station; and thirdly, after the evidence has been given against him before the magistrates and he is offered the choice whether he wishes to say anything in answer to the charge or not. The last is of course the most important of these occasions. It is a common trick of criminal advocacy to say in answer, "I reserve my defence; I call no witnesses here, and I offer no evidence," and the criminal classes themselves have caught it from their advisers, and largely make use of the phrase [5].

Such a beginning is, to say the very least, a bad introduction to a true story. Occasionally, the explanation or defence is nevertheless true, and the suspicion with which, under such circumstances, it ought to be regarded is due to very bad advice; but this is a rare exception, and usually such an answer given before committal means that there is no defence, or that a story is in contemplation which will not bear investigation.

The most ignorant man in the world, accused of committing a crime in London the day before yesterday, if he had really been in Birmingham at the time in question, could scarcely fail to say so [6].

But cunning is "a sinister or crooked wisdom," and not unfrequently the very means employed to prevent suspicion lead to the discovery of the truth [7].

(4) Ames 216—229.

(5) Wills. Cir. Evi. 102—103; The Court of Criminal Appeal has however lately given expression to a view that in the case of an innocent man such a course was in most instances a very unwise one. See Rex v. Mc.Nair, 2 Cr. App. Rep. 2, 4 (1909); Rex v. Winkworth, 1 Cr. App. Rep. 129, 130 (1908); Rex v. Rodder, 5 Cr. App. Rep. 85, 89 (1910) and passim?

(6) Wills. Cir. Evi. 104.

(7) Wills. Cir. Evi. 140.

Professor Hugo Mumsterbery of Harward University, gave a most interesting address on "Psychology and Crime" at the City Club in Chicago, recently. He advanced some new theories for the detection of criminals by psychological methods.

"An interesting way of detecting crime might be known as the 'Association of the ideas method.' Every time a word is spoken the hearer at once associates some other idea with it. I say 'door'; you think of 'house' or 'room,' or what-ever other notion flits into your head.

"To show you how this will work in the detection of crime, let me tell you of an experience I had. A suspect had been brought to me for psychological test. He was perfectly frank, and said he did not even know why he should be suspected of anything wrong. I repeated to him a list of 100 common words and asked him to name the first thing that occurred to his mind in connection with each word. Then I noted the length it took him to answer, by means of a stop watch. Out of the 100 words he replied to 94 with normal swiftness, between three-fifths and one and one-quarter seconds.

"But there were six words at which his mind halted for more than two and a half seconds. He did not know that he took longer to answer to these words, nor did he know that I noticed it. But the words were 'money,' 'bank,' 'cheque,' 'forger,' 'prison,' 'theft.' Future criminal proceedings were the results of this test.

"I have found that any man who has committed a crime always keeps in the back-ground of his mind the memory of that crime as an idea he wants to suppress. When anything is suggested which in any way is connected with the idea he is trying to suppress, his mind becomes confused and slow. Or it may become unduly excited, and he may blurt out a word suggested only because of the crime.

"Such a test is one against which no shrewdness of the witness and no skill of his lawyer can protect a suspect The more he tries to guard himself the more certain he is to betray himself [8]."

**Internal evidence of forgery.**

Sometimes a very small matter is conclusive as to the genuineness or otherwise of documents of disputed origin [9].

In Cresswell v. Jackson [10], certain codicils, an interlineation in a will and part of an epitome of will and the first codicil were successfully shown to be forgeries. It turned out that the method of crossing the letter "t" in the word "to" was an absolute key to the handwritings of the testator and the forger.

Similarly in Howe v. Burckhardt [11], the method of making the upper part of the figure 7 was demonstrated to be a crucial test as to whether the incriminated document was genuine or not.

As regards handwriting evidence, in the old days, evidence of similitude in handwriting such as is now tendered by experts was inadmissible. The witness must have seen a person write, and by this means have acquired a general knowledge of his hand. The subject was discussed at the trial of the Seven Bishops. The present state of the Junius controversy certainly does not tend to induce much belief in evidence of similitude in handwriting. The private letters of Junius to Woodfall provide ample material, and it has been said that Chabot's analysis is the most painstaking treatment of the question of an individual's handwriting

**Internal evidence sometimes conflicts with the result of comparison by experts**

(8) 7 Cri. L. J. 106—108
(9) Wills. Cir. Evi. 235.
(10) N. P. (1864) 235, 239.
(11) N. P. (1891) 235, 294 242.

that has ever been made. Yet, though Mr. Lecky says this, all the internal evidence derived from the admissions of Junius himself are inconsistent to the degree of contradiction with the conclusion to which all Chabot's labours tended, namely, that Francis was Junius. The anonymous writer virtually admitted to advancing years and the possession of very considerable independent means, and these are two marks that it is in vain to look for in Philip Francis in 1769. It indicates the absolute inconclusiveness of opinions derived from similitude in handwriting, that no less than forty persons have been supposed to be Junius; and, from a legal point of view, the only evidence that can be procured is circumstantial evidence as to handwriting, and internal evidence arising in the few admissions he did indubitably make. Wilkes and Almon, the publisher, who, of all living men, might have known the whole truth about the question of the identity of Junius, proceeded upon mere handwriting evidence to advance conjectures that are universally discredited. The late metropolitan magistrate and famous criminal advocate, Montague Williams, K. C, after great experience of expert evidence in handwriting, professed little belief in it. The late Mr. Justice Grantham, in giving evidence before the Beck Commission, mentioned that he told the jury to altogether discard the evidence of handwriting, as it was not any way reliable [12].

**Illustrative cases: The Matlock Will case.**

Perhaps one of the most extraordinary civil causes, in which the truth has been manifest by the force of circumstancial evidence, was "the Great Matlock Will Case" [14] tried before Lord Chief Justice Cockburn in February, 1864.

The testator, George Nuttall, lived and died a bachelor at Matlock, and was possessed of real and personal estate worth in the aggregate some where about £ 60,000. He was a land surveyor, and had been in good practice, and, though not of scholarly education, was very intelligent, widely self-instructed, and an excellent man of business. He lived a somewhat secluded life, and had no near or intimate relations. The only person besides himself who lived in the house was Catherine Marsden, his house keeper. Her sister was the wife of John Else, who as the person chiefly benefiting by the codicils figures largely in this story. Else also lived at Matlock, and was assistant overseer and county court bailiff there. He was in a great measure brought up by the testator, and from boyhood has been employed to do writing and copying for him. The testator had two styles of handwriting, a free and running hand, like that of an educated man, and a more formal and clerk-like hand. Else's writing so closely resembled Mr. Nuttall's more formal hand that persons who were in the habit of corresponding upon business matters with Mr. Nuttall were often unable to tell whether he or Else had written the body of a letter.

The testator died on the 7th March, 1856. His will had been drafted by his attorney, Mr. Newbold, and had been copied out by his own hand in duplicate. Immediately after his death one of these holograph copies was found in a cupboard in his room. It was dated 15th September, 1854, and under it John Nuttall, a distant cousin of the testator, took the bulk of the real estate and was residuary legatee of the personalty. Amongst many gifts was one to Catherine Marsdon of the house for life, of the furniture, and of £ 200 a year. To Else was left tithe property which, after making allowance for certain charges, amounted to about £140 a year. On the day of the funeral a further search was made in the cupboard, whereupon a second holograph

(12) 13 Cr. L. J. (journal portion).

(14) 12 C. C. C. Sess. Pap. 216 (1840); 2 Townshend Mod. St. Tr. 244. Cresswell and others v. Jackson and another contemporaneous report published in 1864, Derby, Richard Keene. The editor of the present volume was one of the counsel in the case.

copy of the will was found in a packet sealed and marked "This is my right (sic) will." This duplicate bore the same date as the will first found and was similar to it in every particular except that the duplicate had an interlineation by which Else was to have a charge of £ 100 per annum, and Catherine Marsdon a charge of £ 50 per annum, upon some property given to another legatee. This interlineation was the first of the imputed forgeries, and became a very important factor in the case. It was, however, inoperative in itself, in-as-much as it was not initialled by the attesting witnesses nor noticed in the attestation clause.

In April, 1856, Mr. Newbold asked John Else for a voucher for some account which had been paid. A mass of the testator's papers had been conveyed to Else's house; amongst them, search being made for the voucher, Else asserted that he found the first codicil dated the 27th of October, 1855. It was gummed up in an envelope which contained, besides the codicil an epitome, upon half a sheet of note-paper, of the will and first codicil. The epitome, so far as it related to the will, was undoubtedly genuine. So also was an erasure of a devise to S. H. (Sarah Holmes) who had died in February, 1855. The rest, relating to the first codicil, was alleged to be a forgery. The effect of this codicil was to revoke a devise in the will, and to give property worth about £ 550 a year to Else, subject to four annuities of £ 20 each to four brothers of Catherine Marsdon. An annuity of £50 a year was given to Mr. Newbold; there was also a devise to a son of Mr. Newbold of the property which under the will was left to Sarah Holmes, and further dispositions in favour of Catherine Marsdon. Eight months afterwards, on the 16th of December, 1856, Else professed to have found another codicil, dated the 6th January, 1856. He had been appointed to succeed Mr. Nuttall as surveyor of highways; a question arose as to the price of teamwork. The book containing this information was alleged to be at Mr. Newbold's office, and Mr. Newbold told Else to search amongst a number of Mr. Nuttall's papers which were there. Else found the book, as was stated, in the presence of Mr. Newbold and his son. In it was pinned the second codicil. Roughly speaking, the first codicil diverted from the original dispositions about one third of Mr. George Nuttall's property, and the second codicil disposed of about another third—(except for some small annuities, including one of £ 20 to the son of Job Knowles, one of the attesting witnesses)—in favour of Else and the Marsdons.

The circumstances under which the third codicil was found on the 9th October, 1857, were even more startling. It was discovered in a hayloft, which, it was suggested, the testator had used as a secret room. Else's account was that he desired to have the place cleaned; that he took a boy with him and told him to clean the window; that the boy asked him, Else, to open the window; that he took hold of the window board to help himself up, when it came out; that he was about to replace it when the boy exclaimed "What's that?" Whereupon he looked and found a hole inside the wall containing a jar. In the jar were a canvas bag and a paper. In the canvas bag were twenty sovereigns; the paper was the third codicil dated the 12th January 1856, six days later than the date of the second codicil. As to its dispositions, it is only necessary to say that the net result of the three codicils, so far as the interest of John Nuttall and his children was concerned, was to reduce the large property left to him to about the value of £ 210 a year, and, so far as Else was concerned, to increase his interest of £ 140 a year under the will to about £ 1,200 a year under both will and codicils.

John Nuttall, the original devisee, died about six weeks after the testator. He died of consumption, and was either dead or moribund when the first codicil came to light. He was a stone mason by trade. His children were very young, and he appointed as executors and trustees of his

will two friends and fellow workmen, Jackson and Shaw. They were at the times when the first and second codicils were put forward unable to afford litigation. When, however, the third codicil turned up, they, greatly to their credit, determined at all hazards to dispute the codicils. It is interesting to be able to add that before the long litigation came to an end they were in business on their own accounts, and one of them ultimately became contractor for some of the largest works, public and other, carried out in his day.

The first codicil purported to be witnessed by two labourers in the testator's employment; they proved unsatisfactory witnesses and had to be examined adversely by the plaintiffs who sought to establish the codicil. They contradicted one another and themselves, and prevaricated to the last extent. There can be little doubt that they had been called in by the testator to witness something, probably a codicil; and the suggestion made was that that codicil was found by Else, and suppressed by him, and that the attesting witnesses to the first codicil had really witnessed a codicil executed by the testator, which they knew to be different from the one to which they were asked to swear as being the testator's. The second and third codicils were both attested by Job Knowles, a farmer and neighbour of the testator, and John Adams, an elderly surgeon in the neighbourhood. Both these witnesses said they were at the testator's house and signed as witnesses on the 6th and 12th of January, 1856, respectively. Catherine Marsdon was not called as a witness, a fact which caused much comment; Else appeared and swore to finding the codicils, and a few other witnesses were called as to various circumstances, including a bank clerk who declared that the signatures were genuine, and that he would have paid cheque so signed by the testator.

The defendants' case involved, as the Lord Chief Justice remarked, charges of conspiracy to commit fraud, forgery, and perjury. Stress was of course laid on the extraordinary character of the circumstances under which the codicils were produced, their appearance at intervals, each in the order of date and their uniform tenor in favour of Else and the Marsdons. These incidents, as the Lord Chief Justice subsequently pointed out to the jury, strange as they might be, were not impossible and might be accepted if the jury were satisfied by the rest of the evidence that the codicils themselves were genuine. The real strength of the defendents' case lay in the documents themselves and the conclusion to be gathered from their contents. This part of the case was worked up with minute care, and the details are instructive in showing the steps by which circumstantial proof becomes irresistible.

The will and codicils were obviously in different styles of writing; but the testator wrote in two styles, and the codicils, as well as the interlineation in the will, were alleged to be in his more formal style, which resembled John Else's writing. Hence it became necessary to examine the genuine and disputed documents for further distinctions, and to compare them with undisputed writing of the testator and John Else.

There were mistakes in spelling in both the will and the codicils. In the will, which was as long as the three codicils taken together, appeared three words misspelt, viz., "surgion" "debth," "oweing," and in some fifty or sixty letters and other undisputed writings of the testator (some of great length, and all obtained and put in without any selection) "chage" (for charge), "stile" for style," "rabbitts," "untill," "strengh," "seperate," "exhempt," and perhaps some others; but those here given were the most striking. The codicils contained many more blunders, and of a much grosser and more ignorant kind; for example, "executers" "conferm," "hears" (heirs), "contiguaes" (contiguous), "annexd," all of which were spelt correctly

in the will. Great emphasis was laid upon two mistakes which appeared in the codicils in respect of words which were spelt correctly in the will. These were "doughter" for "daughter," which the testator always spelt correctly, but which, from a comparison with very many of his writings, it was shown that Else always spelt with an "o", except upon one single occasion when he wrote "dughter," and "tith commuation"—for "tithe commutation." Some twenty-eight letters were produced written by the testator to the Tithe Commutation Commissioners, in which the expression was never incorrectly spelt.

Many gross mistakes in spelling were adduced from other documents in Else's handwriting—such blunders as "pursons," "shuld," "gitting," "usuel," and so forth, of a different character from most of the testator's mistakes, which were often mere slips of a rapid penman, or archaisms, as "oweing," "untill," and "musick."

Else very frequently put a strong comma after the signature of his own name; Mr. Nuttall occasionally put a light full stop after his signature, but never a comma; the signatures to the three codicils had a strong comma after "George Nuttall". In respect of handwriting, perhaps the most cogent proof of all was discovered in the crossing of the "t" in the simple word "to" when standing by itself. In the will the "t" was uncrossed fifty-one times, whole crossed five times, but half-crossed never; so in fifty of the testator's letters the "t" was uncrossed one hundred and thirty one times, whole-crossed fourteen times, but again, never half-crossed. In fact, throughout a very large quantity of undisputed writings of the testator *only two* half half-crossed "t's" in the word "to" were discovered, and they were in two instances in which the writing was of the stiffest and most formal kind—one of them occurring in the phrase "Schedule to the....."; the words being almost a kind of print. On the other hand, a great number of Else's writings showed that half-crossing the "t" in "to" was his habit. In one document of Else's—a will which he had written for one Luke Wilson—twenty-six out of twenty-eight "t's" in the word "to" were half crossed, and in another fifteen out of sixteen. In the interlineation of the will "to" occurred three times, and each time the "t" was half-crossed; and in the three codicils there were sixteen half-crossed "t's", twelve uncrossed, and thirty-three whole crossed. The epitome of the will and the first codicil presented so small a field for criticism of handwriting that it had always been a difficulty in the way of the defendants. The disputed portions were far more like the running hand of the undisputed part, and presented a closer general resemblance to the handwriting of the testator than any other of the incriminated documents. It had, therefore, been greatly relied upon by the plaintiff, and it had this cordinal importance: that, if the whole of it were genuine it followed almost for a certainty that the first codicil, with all its solecisms and mistakes in spelling was genuine. If so, a great difficulty was removed from the acceptance of the second and third. The fact that the crossing of the "t" in the preposition "to" was really a key to the two handwritings was discovered between the second and third trials. The epitome contained fourteen "t's" relating to the will; of these, one was whole-crossed, and thirteen uncrossed. It was Mr. Nuttall's prevailing habit to leave the "t" (in "to") uncrossed. The disputed portions of the epitome contained the word "to" seven times. In every instance the "t" was half-crossed, and the half-page of note-paper, which had been more or less of a stumbling block in the way of the defendants, became one of their strongest pieces of evidence. Indeed, when carefully considered it is of irresistible force.....it is one of these circumstances "which never lie." The Lord Chief Justice said, in the course of his summing up, that the habit of crossing a "t" in "to" in a particular way might at first sight appear to be a

small matter; but that in a case which was full of wonders, this was, perhaps, the most remarkable as well as the most convincing incident.

A curiously similar instance, in which a single stroke was again decisive as to the genuiness of a disputed document, occurred in the case Howe v. Burckhardt and another, which was tried before Mr. Justice Wills at Middlesex Sittings in February, 1891.

The plaintiff Howe brought an action against the executors of a Mr. Ashton on a cheque for £ 1375, which he alleged that the testator had given to him three or four days before his death. The body of the cheque was admittedly written by the plaintiff, but, as he alleged, at the request of the testator. In order to show how the sum of £ 1,375 was arrived at, Howe produced a memorandum, which he alleged the testator had written, containing a number of figures. There happened to be amongst these figures several sevens. Mr. Ashton was a comparatively well educated man, who wrote with the free pen of a rapid writer. Howe had been originally a railway porter, who had raised himself somewhat in the world and was then carrying on a small business. He wrote the laboured hand of an uneducated man. Many hundreds of sevens written severally by Ashton and by Howe were produced. They were found in account books, upon paying-in slips, in letters and many other documents. Ashton always made his seven by one continuous action of the pen; Howe always by two, invariably making at the beginning of his figure a heavy vertical bar which crossed the short horizontal stroke at the top of the seven. In no instance could any deviation from this law be discovered. The cheque sued upon contained two sevens, and the memorandam showing how the £1375 was arrived at several more, all made in Howe's fashion. Some other documents were in dispute, as to which the same observation applied.

Another notable and interesting fact in the same case, which bore directly upon the genuineness of the cheque, was that the cheque was signed "B. Ashton." Mr. Ashton was in the habit of signing his letters in that way but his cheques were always signed "Benj. Ashton" and a letter was produced upon the trial which was admitted to have been in the possession of the plaintiff shortly after the death of the testator, signed "B. Ashton" bearing so striking a resemblance to the signature on the cheque that it was alleged by the defendants to have been the original from which the forged signature had been traced. Mr. Ashton's bankers produced more than 870 of his cheques, extending over five years, including several signed within a very few days of his death, none of which were signed "B. Ashton." Howe was unaware of this fact. The case was a complicated one, and involved a series of inventions by the plaintiff of the most ingenious and audacious kind, the exposure of which required twelve days of patient investigation [15].

**In the mattter Theophilus Youngs.**

In this case an application was made for the revocation of letters of administration which had been granted to Mary I. C. Youngs on the goods, chattels, and credits of Theophilus Youngs, alleged to be deceased. The revocation was opposed, and met with counter allegation that Theophilus Youngs was still living; and to the astonishment of the applicants, a man calling himself by that name appeared in the court, and was there identified, by his alleged brother and a fellow workman,as the Theophilus Youngs named in the letters of administration and the application for revocation. His identification was denied by his wife and numerous other relatives, each affirming that this man was not the Theophilus Youngs they had known,

(15) Howe was afterwards tried at the Old Bailey, before Mr. Justice Charles, for forgery and convicted. See also Wills Cir. Evi. p. 242, where another fraudulent device in this case is related.

and the same as was named in the letters of administration and application. Some weeks of time was consumed in taking testimony pro and con, and yet it was an open question as to "who was Theophilus Youngs." While upon the witness-stand the alleged brother was asked if he had any other means of proving the identity of Theophilus than his personal recognition, to which he replied that he had letters which he had received from him since the time of his alleged death, one of which, of considerable length, he produced. The genuineness of this letter was also denied by the applicant, whereupon the Surrogate directed the letter to be read to the claimant, and that he be required to rewrite the same. When the original letter with the copy thus made was placed in the hands of the expert with a request that he compare the same and report to the Surrogate as to the identity of the two writings, on submission of his report with the analysis of the writings sustaining the same, the identity was so completely proven that the Surrogate at once decided that the claimant was the real Theophilus Youngs [16].

**A case related by Hawkins in his Reminiscences.**

The accused, Walter Horsford, aged thirty-six, was a farmer of Spaldwick. The person murdered, Annie Holmes, was a widow whose age was thirty-eight years. She had resided for several months at St. Neots, where she died on the night of January 7. She had been married, and lost her husband thirteen years ago. On his death he left two children, Annie and Percy. The latter was sixteen years of age and the girl fourteen. The prisoner was a cousin of the deceased woman. While she lived at Stonely the man had been in the habit of visiting her, and had become an intimate member of the family.

In the month of October the prisoner was married to a young woman named Bessie—. The widow with her two children, and a third, which it would be idle affectation to suggest was the off-spring of her late husband, went to reside at Neots in a cottage rented at about £8 a year. The prisoner wrote to Annie Holmes on at least two occasions.

Towards the close of the year Annie Holmes suspected herself to be pregnant. She was anxious not to bring another child into the world, and had some communication with the prisoner on the subject.

On January 5, he wrote to her that he would come and make some arrangements. The woman was deceived as to her condition, but that made no difference with regard to the crime. The letter went on to state: "You must remember I paid you for what I have done; don't write any more letters, for I don't want Bessie to know."

On December 28 he purchased from a chemist to whom he was a stranger and who lived at Thrapston, a quantity of poison, alleging that he wanted to poison rats. Prisoner called in a gentleman as a reference to his respectability, as the chemist had refused to sell him the poison. At last a small parcel was supplied. It was entered in a book with the prisoner's name, and he signed the book, as did also the gentleman who was his introducer. The poison was strychnine, arsenic, prussic acid, and carbolic acid. No less than 90 grains of strychnine were supplied. He had written to say he would come over on the Friday which followed January 5. There is no reason to suppose he did not fulfil his promise. On the Friday the woman was suffering from neuralgia. In the evening, however, she was in her usual health and spirits, and did her ironing upto eight o'clock. She went to bed between half-past nine and ten, and took with her a tumbler of water. In ten minutes the little girl and her brother went upstairs. They went to the mother, who was in bed with her child. The tumbler was nearly empty. The mother asked for a "sweet," which the little girl gave. After this Annie

(16) Ames 82.

got into bed; the mother began to twitch her arms and legs, and seemed in great pain. Dr. Turner was sent for, as she got worse. His assistant Dr. Anderson, came, and, watching the patient, noticed that the symptoms were those of strychnine poisoning. She was dying. Before he could get to the surgery and return with an antidote the woman was dead! She who had been well at half-past nine was dead before eleven.

The police were communicated with, and a constable searched the house. Turning up the valances of the bed, he found a piece of paper crumpled up; this was sent to an analyst on the following day. An inquest was held and a post-mortem directed.

Horsford at the inquest swore that he had never written to the deceased or visited her.

On the evening of Saturday the 8th, after the post-mortem, Mrs. Hensman and another woman found between the mattress and the bed a packet of papers. These were also submitted for analysis. One of them contained 35 grains of strychnine; another had crystals of strychnine upon it. There was writing on one of the packets, and it was the handwriting of the prisoner; it said, "Take in a little water; it is quite harmless. Will come over in a day or two." On another packet was written: "one dose, take as told," also in the prisoner's handwriting.

The body had been buried and was exhumed. Three grains of strychnine were found by the country analyst in such parts of the stomach as were submitted to him. Dr. Stevenson took other parts to London, and the conclusion he came to was that at least 10 grains must have been in the body at the time of death, while ½ grain has been known to be fatal [17].

Mr. Henry Hawkins thus summed up the case to the Jury:—

"The law is that if a man deliberately or designedly administers, or causes to be administered, a fatal poison to procure abortion, whether the woman be pregnant or not, and she dies of it, the crime is wilful murder.

"You have been asked to form a bad opinion of this deceased woman' but she had brought up her children respectably on her slender means, and there was no evidence that she was a loose woman. It more than pained me when I heard the learned counsel, *instructed by the prisoner*, cross-examine that poor little girl, left an orphan by the death of the mother, with a view to creating an impression that the poor dead creature was a person of shameless character.

"Again, counsel has commented in unkind terms on the deceased woman, and said the prisoner *had no motive* in committing this crime on a woman whom he valued at half a crown. He might not, it is true, care half a crown for her. It is not a question as to what he valued the woman at; we are not trying that at all; but it showed there was a motive.

"I have not admitted a statement which the woman made while in her dying state, because she may not fully have realized her condition. Probably you will have no doubt that, by whom-so-ever this fatal dose was adminstered, there is only known to medical science one poison which will produce the symptoms of this woman's dying agonies. One thing is surprising at this stage that immediately after death the door of the house was not locked, and while the body was upon the bed a paper of no importance was found, and that afterwards several relatives went in. The object of the cross-examination was to show that some evil-disposed person had entered the house and placed things there *without any motive*. But whoever may have gone into that house, there was one person *who did not go*—one, who, above all others,

(17) Hawkins 273—276.

owed deceased some respect and that is the prisoner; and unless you can wipe out the half-crown letter from your mind, you would have expected, a man on those intimate terms with the poor woman, to have gone and made some inquiries concerning her death. He did not go; he was at the Falcon hotel at Huntingdon, and a telegram was sent telling him not to fail to be at the inquest.

"At the inquest he told a deliberate lie, for he swore he had never written to the woman, or sent her anything, or been on familiar terms with her. He had written to her, and if his letter did not prove familiar terms, there was no meaning in language.

"With regard to the prisoner's alleged handwriting on the packets and papers found under the woman's bed and elsewhere, I must point out to you that here is one on which is written: 'Take in a little water; it is quite harmless. Will come over in a day or two.' This was written on a buff paper, which Dr. Stevenson said must have contained 35 grains of strychnine, sufficient to kill thirty-five persons, and the direction written was: 'One dose: take as told.' These inscriptions were sworn to by experts as being in the prisoner's handwriting."

Here was pointed out the alleged resemblances in the characters of the letters, so that the jury might judge if the prisoner wrote them.

"If the prisoner wrote the words 'take as told,' you must ask yourselves the meaning of it.

"Also, you will ask whether it was not a little strange that the death occurred on that very Friday night when he said he would go over and see her. Again the word 'harmless' is of the gravest character, seeing that within the folds of that paper were 35 grains of a deadly powder which even for rat powder would be mixed with something else.

"Again, as to motive, upon which so much stress has been laid by the defendant's counsel. If the prisioner had no motive, who else had? Is there a human being on earth who had ill-will towards her, or anything to gain by her death? I will dismiss the theory that some one had imitated the prisioner's writing in order to do him an injury, and ask if you can see any reason for any one else giving the woman the powder.

"There is one fact beyond all dispute: in December the prisoner bought a shilling's worth of strychnine. He said he bought it for rats, but no one on the farm had been called to prove it. What has been done with the rest of the powder?

"Where was he on that Friday? His counsel said he could not prove an ALIBI. But if he was going to St. Neots to see this poor woman, he *could* have proved it.

"The prisioner's counsel said that the accused did not speak of the woman's murder after the inquest, and said it was not necessary; he did not understand the 'familiar jargon' of the Law Courts. The familiar jargons of the Law Courts, gentlemen, is not quite the phrase to use with reference to our judicial proceedings. The Law Courts are the bulwark of our liberties, our life, and our property. Our welfare would be jeopardized, indeed, if you dismiss what takes place in them as 'familiar jargon.'

"The question is whether the charge has been so reasonably brought home to the prisoner as to lead you in your consciences to believe that he is guilty. If so, it is your duty to God, your duty to society, and your duty to yourselves, to say so."

The jury, on retiring, deposited every one on a slip of paper the word "Guilty" without any previous consultation [18].

(18) Hawkins' Reminiscence, 276-279.

CHAPTER XVIII.

# Evidence as to Handwriting.

CONTENTS :—Evidence of Handwriting.—Evidence of the writer.—Evidence of persons who saw the party write.—And of persons acquainted with the party's handwriting.—Evidence of attesting witnesses not always conclusive.—Evidence of unwilling witnesses.—Examination of the writing by Judge and Jury.—Evidence of Experts.—Number of witnesses.—Presumption from non-production of evidence.

**Evidence of Handwriting.**

Strictly speaking, the only evidence of handwriting which is entitled to be called direct, is the evidence of a witness who proves that he himself wrote or signed the document in question, or that of a witness who proves that he saw the document written or signed. All other evidence of handwriting must rest in greater or less degree upon inferences drawn from the appearance of the writing in question or other circumstances [1].

**Evidence of the writer.**

Speaking of the testimony of the writer, Chief Justice Taylor said :— "Whether a signature is proved by the person who made it, or by one acquainted with his handwriting, the kind of proof is exactly the same. They are both primary, since the knowledge of both is acquired by the same means, although it may be that the evidence of the writer is, in a degree, stronger than the other [2]."

Possibly the failure to call the writer as a witness, if he is available, might create a suspicion that his testimony would not be satisfactory to the party who contents himself with the testimony of others [3].

When a person swears that he was not the author of a particular writing, he speaks to a fact of which his knowledge is more perfect than that of any other witness or of all other witnesses who did not see him write it. Even though he is a party to the suit, if he bears himself like an honest witness, and his testimony as a whole seems to be reasonable, probable, and truthful, and if, notwithstanding a strong bias of interest he appears willing to tell the whole truth, whether it helps or hurts him, his testimony ought, in virtue of its intrinsic force, to outweigh any amount of counter-proof consisting merely of opinions of experts or of non-experts [4].

The foregoing observation applies more especially to the alleged writer's testimony to the transaction as a substantive fact; for if he speaks merely to his opinion of the handwriting, he is not necessarily the best judge of that [5] and would hardly be better qualified than anyone else to detect a forgery made by tracing his genuine signature [6].

Wills have been probated in several instances where the evidence of valid execution and attestation by the witnesses was deemed sufficient to overcome the positive denial by the witnesses of the genuineness of their signatures. [7]

If a party's denial of his signature is not positive, but only inferential or amounting to no more than absence of recollection, it may not be entitled to much or any weight. [8]

(1) Wills Cir. Evi. 227, 248.
(2) Ainsworth v. Greenlee, 1 Hawks' (8N. Car.) 190, per Taylor, C. J.
(3) McCully V. Malcom. 9 Humph (Tenn.) 187, 193.
(4) Black v. Black. 30 N. J. Eq. 215, 223, per Van Fleet, V. C.
(5) See Moore on Facts 666. (6) See Ibid 604.
(7) Peebles v. Case, 2 Bradf. (N. Y.) 226; Matter of Cottrell, 95 N. Y. 329.
(8) Magee v. Osborn, 32 N. Y. 669, 676.

A party's denial of his signature is not likely to make much impression, if it appears that he was not able to determine the question until he had obtained the opinion of experts. [9]

A bank cashier testified that a signature which undoubtedly had been "touched up" was his genuine signature, and his testimony was attacked because of a letter which he wrote in reference to the signature, in which he did not express himself in as positive terms as he did on the witness stand. "This fact in no manner discredited the evidence," said the court. "On the contrary, it added to its weight, in that examination and consideration seem to have confirmed first impressions." [10]

Testimony of an interested old man in impeachment of his signature was deemed unreliable where he denied with great positiveness the genuineness of his other signatures, which were conclusively proved to be genuine. [11]

In a similiar case the court said that "a witness who denies with almost imprecatory solemnity his own acts in important transactions, which he must recollect if he has any memory at all, cannot be believed in anything he affirms. [12]

In a case where the United States Supreme Court held that a Mexican grant of a great tract of land was a forgery, the governor whose signature purported to be affixed to the document testified by deposition in support of its validity. Mr. Justice Grier spoke of his testimony as follows: "He appears to testify with great caution. He seems to have drawn out a certain formulae of words, on which it is clear that a conviction of perjury could never be sustained, whether his testimony was true or false. The answer is in these words, and three times repeated in the very same words: "*I cannot now remember* in regard to the original document mentioned in said interrogatory, but the signature, as appears in the traced copy, *appears to be my signature and I believe* it was placed there by me at the time the document bears date". His memory appears to be much weaker than his faith, as it might have been supposed that such a sale of territory would have attracted his attention sufficiently to be remembered for ever after." [13]

So, where a party denied his signature to a receipt, but refused to swear to or deny his signature to other receipts shown to him until he could examine his books to see the entries he had made of payments received, the court said this either showed that he was so ignorant he did not know his own signature or was so untruthful that he would not testify to what he knew to be true; and whether his refusal should be attributed to one reason or the other, it rendered his testimony of slight value. "If he did not know whether the signature was or was not genuine to those receipts, how could he know whether his signature to this.....receipt was a forgery? Such ignorance certainly militates strongly against his evidence on that question. [14]"

The alleged writer's denial of the genuinenss of a writing, when he is a party to the suit, neutralizes the affirmative testimony of the opposite party if there is no extraneous evidence that awards superior credibility to either; and the denial may distinctly preponderate if the opposing party has vastly greater stake in the suit and a besmirched character [15].

(9) Augustine v. Wolf, 215 Pa. St. 558, 64 Atl. Rep. 777.
(10) U. S. National Bank v. National Park Bank, 595 Hun. (N. Y.) 495, 13 N. Y. Supp. 411, per Van Brunt, P. J.
(11) Brown v. Mutual Ben. L. Ins. Co., 32 N. J. Eq. 812.
(12) Mutual Ben. L. Ins. Co. v. Brown, 30 N. J. Eq. 193, 200 per Van Fleet, V. C.
(13) Luco v. U. S., 23 How. (U. S.) 515, 541.
(14) Brobston v. 64 Ill. 356, per Walker, J.
(15) Sharon v. Hill. 26 Fed. Rep. 337. where the testimony of the affirmative witness was improbable and in some instances undoubtedly false.

Where such direct testimony is not available, the best and usual mode of proving handwriting is, by the direct testimony of some witness who has either seen the party write, or acquired a knowledge of his handwriting from having corresponded with him, and had transactions in business with him on the faith that letters purporting to have been written or signed by him were genuine. In either case, the witness is supposed to have received into his mind an exampler of the general character of the handwriting of the party, and he is called on to speak to the writing in question by reference to the standard so formed in his mind [16].

**Evidence of persons who saw the party write and of the persons acquainted with the party's handwriting.**

The value of such evidence depends not merely upon the fact that the witness has seen the party write, or has corresponded with him, but also upon the extent of the opportunities he has had of becoming familiar with the handwriting in question, and upon his own habits of accurate observation [17].

Referring to this subject Ram in his work on Facts says :—

"One way to obtain a knowledge of a person's style of handwriting is to see him write, to look over him while he is writing, and observe the manner in which he forms his letters. But this observation of writing is very rarely made. Commonly you see a man in the act of writing, but you do not observe the manner in which he forms his letters; and if evidence of handwriting depended on such observation, it could very seldom be given. But writing can be sufficiently well known in other ways; as, for instance, if you have received numerous letters from a person, and you have sufficient reason to believe he himself wrote them. This reason and belief are essential, because one person may, and often does, write letters for another [18]."

"You must bear in mind," said Mr. Justice Grier, instructing a jury in the Federal Circuit Court, "that the best possible evidence of the execution of any instrument of writing is that of the subscribing witnesses and other persons present, who swear that they saw it signed. They swear to facts, and not to opinions and if they are credible witnesses, whose character for veracity stands unimpeached, it is only the safe and reliable evidence of the execution of such instrument. Opinions with regard to handwriting are the weakest and least reliable of all evidence as against direct proof of the execution of an instrument [19]."

The testimony of one unimpeached and uncontradicted witness swearing positively, directly, and unequivocably that he saw the party sign the paper,

---

(16) Per Coleridge, J, in Doe d. Mudd v. Suckermore, 5 A. & Eat p. 705.

(17) Wills Cir. Evi. 228.

(18) Ram on Facts, p. 53.

(19) Turner v. Hand, 3 Wall. Jr. (C. C.) 88, 24 Fed. Cas. No. 14,257. "But there may possibly be such glaring marks of forgery on the face of an instrument as to condemn it" he continued "especially if proved by witnesses of doubtful character, and connected with other suspicious circumstances as to the persons and place where it had its origin; and these marks may be so strong, and circumstances so convincing, that a paper may be pronounced a forgery in the face of the testimony of witnesses whose previous character cannot be otherwise impeached."

Sir John Nicholl, speaking of handwriting opinion evidence where a will was offered for probate said: "Affirmative may be produced by the parties setting up the instrument, and negative by those whose object it is to impeach it. The advantage to be derived from either is, in a great measure, dependant on circumstances. Where neither the character of the transaction nor the credit of the witnesses is materially affected, affirmative evidence upon this is unnecessary, and negative is unavailing: the most converse of both these almost necessarily follows, where the transaction is suspicious and where the witnesses are discredited" Saph v. Atkinson, 1 Add. Ecc. 162. 2 Eng. Ecc. 64, 87.

"The most direct and satisfactory proof of the genuineness of a writing is the testimony, of one who was present and saw the writing executed." Nenedict v. Flanigan, 18 S. Car. 506 per Simson, C. J.

and added his own name at the time as a witness, is entitled to more weight than the doubting, uncertain guesses of a hundred witnesses who are equally divided, or nearly so, among themselves [20]."

"The testimony of a witness who speaks from his own personal knowledge is more satisfactory and convincing than the testimony of another who speaks to matters which lie in opinion only. If a witness swears that he was present and saw a party sign a disputed instrument of writing, his evidence ought to outweigh the statement of another (both witnesses being equally credible) who testifies that he is acquainted with the handwriting of the alleged signer and that he does not believe the signature is genuine." This was said by Judge Gresham of the Federal District Court in the course of his instruction to a jury [21].

This rule is adopted by courts when weighing direct testimony to a writing as against opinions whether of non-experts or of experts, [22] even in cases where the disputed writing materially differs from, or bears little resemblance to, genuine writings in the case. [23]

Thus in a case, where experts testified that a signature to an instrument was not genuine, the court said: "The opinions of experts, however skilful they may be, are weaker in degree of certainty than the direct evidence of the subscribing witness, who swore to the genuineness of both signatures when he proved the execution [24].

Similarly Justice Adams said in the case of State v. Townsend "Take a case involving the question of the genuineness of a signature: expert evidence would be of a low grade as compared with the testimony of credible witnesses who testifiy to having seen the signature written." [25]

In accordance with the general rule that perjury is not to be imputed to witnesses upon uncertain grounds, the positive and circumstantial testimony of unimpeached witnesses that they saw a signature made, who must be declared guilty of deliberate perjury unless their testimony is true, is entitled to greater weight than the testimony of expert or non-expert witnesses who state that in their opinion the writing is a forgery [26].

In a contested will case Chancellor Magie of New Jersey said:—"It is undoubtedly true that clear and reliable proof that the signature was actually made by testator will overcome any inference which might be drawn by the court upon its inspection of the disputed signature, and also by any opinion proof given by persons acquainted with his genuine signature, to the effect, that this is not a genuine signature of deceased [27]."

An opinion, it has been said, though of an expert has less weight than testimony to a fact, as it can seldom be the subject of a prosecution for perjury [28].

A witness is also much more likely to be mistaken in his opinion than another witness to err in his observation of a fact, especially where attendant circumstances specially impressed the fact upon the attention and memory of the witness [29].

(20) Boylan V. Meeker, 28 N. J. E. T. 274, 327, per Vredenburg, J.
(21) Risley v. Indianapolis, etc., R. Co., J. Biss. (U. S.) 408, 20 Fed. Cas. No. 11. 859.
(22) Blackan v. Hawks, 89, 111. 512; Gaines's Succession, 38 La. Ann. 123, 133; Bell v. Norwood, 7 La. 95, 103.
(23) Bell v. Norwood, 7 La. 95.
(24) Brown v. Mutual Ben. L. Ins. Co., 32 N. J. Eq. 812, per Souder, J.
(25) State v. Townsend, 66 Lowa 741, 24 N. W. Rep. 535, per Adams, J.
(26) Roberts v. Woods, 82 Ill. A. p. 632.
(27) Skillman v. Lanehart, N. J. Prerog. Ct. 1907 67 Atl. Rep. 182, 183.
(28) Newton v. Carbery, 5 Cranch (C. C.) 626, 18 Fed. Cas. No. 10, 189, per Cranch, C. J.
(29) Farmers' etc., Bank v. Young, 36 Iowa 44.

If there is any reason to distrust the recollection, integrity, or accuracy of observation of the witness, his testimony is not necessarily sufficient to overcome all evidence tending to a contrary conclusion based upon the opinion of witnesses familiar with the handwriting; for if such a principle should prevail, the proof by a living witness of the signature of a deceased claimed to have been made in the presence of the witness only, would place the matter beyond the reach of contradiction or discredit, and foreclose all possible inquiry upon the subject [30].

**Evidence of attesting witnesses not always conclusive.**

Where an instrument is under grave suspicion, testimony of honest witnesses that they saw it executed should be closely scrutinized. Thus, it might be possible for a witness to be purposely placed in such a position that while the signature to a will had been previously written, and a mere dry pen put into the testator's hand, the witness might suppose that he wrote the signature then and there [31].

If the testimony of an unwilling witness, under circumstances giving rise to suspicion that the opposite party has tampered with him, is less explicit and pointed than would be expected in view of his means of knowledge, it is fair to add something to the face value of his opinion [32]. Thus, a witness, being called to prove the handwriting of the defendant to an indorsement, stated, on his examination-in-chief, after much hesitation, that he believed it was the defendant's handwriting; upon his cross-examination, after again hesitating several minutes, he said that he believed it was not, and acknowledged that he was one of the defendant's bail in the action; and, upon his re-examination, he again hesitatingly stated that he believed it was. There was no other evidence to the handwriting, and it was objected for the defendant that the plaintiff must be nonsuited and that on either of two grounds this evidence was not of a nature to go to the jury; for either the witness was, from some undue and interested motive, grossly prevaricating in his answers, or he was so ignorant and vacillating that his knowledge or even opinion, of the fact in question could not be depended upon. But the court held that it was the province of the jury to decide upon the credit due to such a witness, and refused to stop the cause [33].

**Evidence of unwilling witnesses.**

In cases where evidence of the kinds above described was lacking or required corroboration, the court and jury may themselves judge of the genuineness of a writing in dispute from its likeness or unlikeness to other writings, the genuineness of which was capable of proof in other ways [34].

**Examination of the writing by Judge and Jury.**

In certain cases witnesses called experts who are specially skilled in the examination of handwriting, are called for the purpose of proving the effect of comparison of the disputed writings with other writings of the same person, the genuiness of which is either admitted or proved beyond all doubt [35].

**Evidence of experts.**

It is not often that any issue of fact is determined solely by a preponderance in number of the witnesses. So a minority of non-expert witnesses who testified that they believed a disputed signature to be genuine prevailed over a majority who testified to the contrary, where the former were more familiar with the party's handwriting and familiar for the longer period of time [36].

**Number of witnesses.**

(30) Servant v. Hesdra, 5 Redf. (N. Y.) 47, 60, per Surrogate Calvine.
(31) Brydges v. King, 1 Hag. Ecc. 256. (32) Mullen v. McKelvy, 5 Watts (Pa.) 399, 403.
(33) Beauchamp v. Cash, Dowl. & R. N. P. 3; 16 E. C. L. 410. per Abbott, C. J.
(34) Wills Cir. Evi. (35) See Chap. XX *infra*. (36) Merchants Will. Tuck. (N. Y.) 151, 168.

Where the witness in a large majority had far better opportunities to acquire a knowledge of the handwriting than the minority, a verdict in accordance with the testimony of the latter was set aside as against the evidence [37].

In a close case the fact that a verdict was rendered against the opinion of a very large numerical majority of experts might have some influence in persuading an appellate court that a new trial should be granted [38].

If the disputed and the genuine papers are before the jury, and the witnesses are equal in number, character, intelligence, and means of information, the jury must decide by their own comparison, trust their own eyes, and draw their own conclusions by comparing the standard with the contested paper.[39]

If a party denies his signature, and numerous non-expert witnesses sustain him, and the experts are equally divided, it may be well be decided that the burden of proving the genuineness of the signature is not discharged.[40]

In an American case, were two alleged experts testified that in their opinion a will was forged, and thirty-one intelligent and reliable witnesses familiar with the testator's signature testified that it was genuine, the Supreme Court agreed with the court below that "no court would allow a verdict against this will to stand." [41]

**Presumption from non-production Evidence.**

Where the evidence tends to show that a disputed writing is that of a party to the suit, and he fails to take the stand and testify to the contrary, the conclusion is almost irresistible that the writing is genuine [42].

A similar inference is justified where his own witnesses testifying to other facts are familiar with his handwriting, but are not interrogated as to their opinion of the disputed handwriting [43].

An executor who was sued on his testator's note claimed that it was a forgery, but he failed to produce any of the testator's handwriting to compare with the signature to the note. "That neglect is most significant; almost an express admission that the note sued upon is genuine," said the court [44].

(37) Long v. Little, 119, 111 600. 8. N. E. Rep, 194.
(38) See Davis v. Lambert. 69 Neb. 242, 95 N. W. Rep. 592.
(39) Farmer's Bank v. Whitehill, 10 S. & R. (Pa.) 110. 113.
(40) Land Mort Invest. Agency v. Preston, 119 Ala. 290, 24 So. Rep. 707.
(41) Masson's Estate, 198 Pa. St. 636. 48 Atl. Rep. 811.
(42) Peck v. Beldon, 6 Dem. (N. Y.) 299.
(43) Northern Bank v. Buford. 1 Duv. (Ky.) 335, 337; Doty v. Dellinger, 94 N. Y. App. Div. 610, 87 N. Y. Supp. 1001.
(44) Meyers v. Hunt, (Supm. Ct. Gen. T.) 17 N. Y. Supp. 637, per Pratt, J.

CHAPTER XIX.

# Non-expert Evidence.

CONTENTS :—Value of non-expert testimony.—(i) Evidence of person who has seen a person write.—(ii) Evidence of person who has gained knowledge of a person's handwriting by correspondence with him.—(iii) Non-expert witness refreshing his memory.—(iv) Various circumstances affecting the weight to be attached to non-expert testimony as to handwriting.—Non-expert's courage of conviction.—Witnesses with judgement unfairly tutored.—Moral character of witnesses testifying to opinion.—Positiveness of non-experts generally.

**Value of non-expert testimony: (i) Evidence of person who has seen a person write.**

A person who has seen a party write, although but once and has in this mode acquired a knowledge of the general character of his handwriting is competent to testify with respect to its genuineness [1].

Where the knowledge of the handwriting of a party is acquired by having seen him write, the usual enquiry of the witness is whether he has seen the party write, and afterwards, whether he believes the paper in dispute to be his handwriting. The course of examination involves two questions, first whether the supposed writer is the person of whom the witness speaks: secondly, if he is the person, whether he wrote the paper in dispute. The first is a question of identity. The second is a question of judgment or a comparison in the mind of the witness between the general standard and the writing produced. This kind of evidence admits of every possible degree from the lowest presumption to the highest moral evidence. It may be so weak as to be unsafe to act upon, or so strong as in the mind of every reasonable man to produce conviction [2].

Dr. Lushington observed: "It very seldom happens that witnesses follow the precise movement of a pen in the hand of the writer [3]."

It would be very unsafe to consider the execution of a deed is efficiently proved by the testimony of a witness who identifies the grantor's signature from knowledge of his handwriting acquired by seeing him write his name twice or thrice, a year or two before the trial [4].

In a criminal case in the Federal District Court, the judge instructed the jury concerning the testimony of a non-expert witness as follows:—"It is not enough that he has seen the person, as in the proof in this case, write but once and then under circumstances showing that the attention of the witness was not specially directed to the peculiarities of the penmanship. It would be dangerous in a criminal case, to rely on such vague and unsatisfactory evidence as the basis of a verdict which will subject the accused to severe punishment and operate as a perpetual brand of infamy on his character [5]".

**(ii) Evidence of person who has gained knowledge of a person's handwriting by corresponding with him.**

Acquaintance with handwriting need not come from having seen the person write. It may be formed from seeing writing under such circumstances as to put it beyond doubt that it was genuine [6]. The character of a handwriting may be known by one who never saw the party write, as well as or even better than by one who has. Cases of this kind occur in the course of long correspondence between persons who never saw each other write. In this way the individual hand can be distinguished from any other with as much certainty as if the witness

(1) Burr v. Harper Holt. N. P. 420 3 E. C. L. 161.
(2) Hopper v. Ash 15 All 457 (462).
(3) Thompson v. Hall 2 Rob. Ecc. 426, 435.
(4) Moore v. Livingston 28 Barb (N. Y.) 543, 561.
(5) U. S. V. Grow 1 Bond (U. S.) 51 (55).

had been accustomed to see the party write. Indeed, the witness is much more competent than one who has seen him write but seldem [7].

**(iii) Non-expert witness refreshing his memory.**

It can hardly be expected that any cautious and conscientious man would speak promptly and confidently upon the subject of handwriting, which is at best only a matter of belief and opinion without a close inspection of the writing and refreshing his memory by all means in his power [8].

A witness is called on to identify a man he had before known: but before he sees him, he looks at a picture which he recognizes to be a likeness, which recalls the features and expression of countenance and, not-withstanding alterations by age etc, he testifies to his identity. He might have been able to identify him without having looked at the picture. Yet he may think that was a material aid to him, in doing so. He knew him, however formally, and on the whole thinks he is the man. This would be a different thing from the evidence of one who never knew him but who identifies him by a mere comparison with the picture [9].

**(iv) Various circumstances affecting the weight to be attached to non-expert testimony as to handwriting.**

The weight and value of non-expert opinion evidence to handwriting depends in some degree upon the frequency with which the witnesses have had occasion to notice and carefully observe the handwriting and how recent their opportunites for noticing the same have been [10].

The weight to be given to the opinion of a witness who bases his opinion upon familiarity with handwriting depends largely upon the extent of his familiarity [11].

A witness who has seen a party write several times is a good witness to prove his handwriting. But a clerk in the counting room of the party, who has seen him write innumerable times would be in many cases a more satisfactory witness to prove the handwriting [12]

Upon the point of the witness's knowledge of the handwriting he may be asked the nature of the signatures he has seen and the number of times he has seen. [13]

A witness who has seen only a party write his name may not be able to form a reliable opinion as to the handwriting of the body of a disputed paper. [14]

**Non-expert's courage of conviction.**

Where a witness testified that he believed a signature was genuine, and was then asked whether he would act upon the signature if it had come to him in an ordinary business transaction, it was held that while the question standing alone might be objectionable, it was allowable as a means of showing the strength aud value of his opinion. [15]

The strength of this view is that while he may have a strong or a feeble opinion, yet he must express what amounts to an opinion one way or the other; else he furnishes nothing which can enlighten the jury. [16]

(6) Hynes v. Mc. Der Mott 82 N. Y. 41 (52). (7) Rowt v. Kela 1 Leigh 216 (226).
(8) Moore on Facts Vol. 1, Sec. 624, p. 651. (9) Redford v. Peggy. 6 Rand. (Va). 316, 346.
(10) Green v. Terwillinger 56 Bed. 384 (401). (11) State v. Hopkins 50 Vt, 316, 331.
(12) U. S. v. Gilbert, 2 Sumn. (U. S). 19, 81, 25 Ecc. Cas. No. 15, 204.
(13) Moore on Facts. Vol. 1. Sec. 625 & 653.
(14) Recford v. Peggy. 6 Rand (va) 316. 345.
(15) Holmes v. Goldsmith, 147 U. S. 150, 163.
(16) Foster v. Jenkins, 30 Ga. 436, 478, But see Oommon Wealth Bank v. Mudget, 44 N. Y. 514.

In a case where great interest had been excited on behalf of the proponents and the contestants of a codicil, so that it was almost impossible for the witnesses to come forward totally unprejudiced and unbiased Sir Herbert Jenner criticised their testimony as follows: "I must say that in this case there is on the part of those who sustain the affirmative side of the proposition, this favourable circumstance, that they do not appear to have entered into much discussion with each other as to the particular points on which their evidence should be grounded. They have a prejudice undoubtedly in their minds in favour of the instrument; they believe it to be, and I have no doubt, conscientiously believe it to be, the act of the testator himself, and they depose almost uniformly in concurrence with that belief and with that impression upon their minds. But still that impression is created in a considerable degree by the circumstances of the case, or from thinking that the paper itself is a natural disposition as connected with the individuals purporting to be benefited by it, or from some other circumstances which induced them to believe that it is the act of the testator himself. Upon the other side I must say that the same degree of avoidance of discussion, as between the witnesses themselves, does not appear to have been practices, for almost all these witnesses have come to inspect this paper with their minds already impressed with the notion that it was, as Mr. Chadborn described it, an atrocious forgery; and with respect to many of the witnesses, and impression had been made upon their minds by the exhibition of what was said to be a facsimile copy of this codicil made by persons employed on their behalf and further than this by the meeting together of those persons who were called upon to depose to the handwriting, discussing the minute particulars in which it was supposed to differ from the deceased's general character of handwriting, pointing out to each other the difference of formation of certain letters as compared with some letters in other papers written by the deceased himself, and upon those minute particulars, many of the witnesses found their belief that this is not a genuine instrument but a forged one. Under these circumstances, the court can place no reliance upon the evidence of persons so differing amongst themselves, who have formed this opinion, after having met together to discuss the particulars in which they have, as they fancy, discovered discrepancies; having, as I have already stated, had their minds impressed in the first instance with the notion of the invalidity of the paper, by hearing it said that it is a forgery, and also by the exhibition of the facsimile copy from which they took their first impression as to the handwriting not being that of the deceased ..... It is imposible therefore, that persons who had such facsimile copies exhibited before them, being necessarily different in appearance from the original itself, having that first impression made upon their minds, could come forward to pronounce a fair and unbiased opinion upon the genuineness of the instrument upon which they were called to pronounce." [17]

**Witnesses with judgments unfairly tutored.**

**Moral Character of Witnesses testifying to opinion.**

In many cases cashiers of banks or other persons, who testifying as experts or as non-experts, are personally and favourably known to the jury, and it is not unlikely that the high character of the witnesses may give undue weight to their opinions [18].

As Mr. Adam argued to the jury in defence of Mr. Justice Johnson, [19] opinion evidence to handwriting is marked with this most material and important distinction, namely, that you cannot depend on the truth of the fact, though you may depend on the truth of the witness."

(17) Wood v. Goodlake, 2 Cur. Ecc. 82, 180.
(18) Hakins v. Arimes, 13 B. Mon. (Ky) 257. 265. per Marshall J.
(19) Trial of Mr. Justice Johnson, 29 How. St. Tr. 475.

An expert came from a remote part of the country, and was a comparative stranger in the community where his testimony was given, and on cross examination he was very properly asked concerning the antecedent circumstances of his life. The court took notice of the fact that he failed to give an account of his life for a period of several years after his majority and his graduation from a medical school. [20]

**Positiveness of non-experts generally.**

The witness must have an opinion, and not much a vague in distinct impression. [21]

To entitle testimony of the witness to any consideration, he must swear to his opinion or belief with some degree of positiveness. [22]

It was said in an American case that "to enquire of a witness in such case what is his impression is descending to a test too vague to form a judgment upon. It is like asking a witness what was his understanding of a conversation, instead of inquiring what the parties said. [23]

It is difficult to swear positively to handwriting of any person, however well it may be known. [24]

"No prudent witness will undertake to swear that any signature or document was written by the person by whom it purports to have been written, unless he saw it written. [25]

A witness testified that it was his strong impression that a disputed endorsement was in the handwriting of the party, that it looked like his, but that he could not swear to it. This evidence was held admissible. "All that a witness, called in such cases, can be expected to testify is that the handwriting in question resembles that of the person whose it purports to be; in other words, that it looks like it," said the court. From the resemblence between the signature before him as compared with those of the same person previously observed, the witness has drawn the inference that they were made by one and the same individual. The strength of his belief will depend on the greater or less degree of similarity. He can only testify to his own state of mind on this question. The language used as indicative of the strength of his belief was properly before the jury for their consideration and it was for them to determine its sufficiency to establish the fact which it was offered to prove.

In another American case where a witness swore positively to the identity of certain handwriting, the court said: "In whatever language it may be couched, it is evident that such testimony is mere opinion; it is nothing more than a comparison in the mind, by the aid of former experience. The vividness of this comparison so made, or the strength of the opinion entertained may depend upon the superior opportunities afforded for the formation of a correct judgment, or it may be influenced by the habit and disposition of the witness. One person will decide positively on slight resemblences, whilst another will require something like mathematical proof, demonstration, as the basis of his judgment; not to speak of the influence which moral consideration would exert over different persons, in swearing to facts which would not be known with certainty." [26]

(20) Sharon v. Hill, 26 Fed. Rep. 337. 358.
(21) Burnham v. Ayer. 36 N. H. 182; Wiggins v. Plumer, 31 N. H. 251 See also Bell v. Shields, 19 M. J. L. 93.
(22) U. S. v. Crow, 1 Bond (U. S.) 51, 25 Fed. Cas. No. 14, 895.
(23) Carter v. Connel, 1 Whart. (Pa.) 392, 399, per Sergeant, J. But see comments upon this case in Hooper v. Ashley. 15 Ala 457, 463'
(24) Fash v. Blake, 38 Ill. 368, Breese, J.
(25) Travis v. Brown, 43 Pa. St. 9, 12, per Woodward, J.
(26) Brandon v. Cabiness, 10 Ala. 155, 160.

CHAPTER XX.

# Expert Evidence.

CONTENTS :—"Expert" who is.–Nature and admissibility of evidence of handwriting experts.–Handwriting experts compared with other classes of experts.—Certain rules of caution.—Relative value of expert and non-expert testimony as to handwriting.—Use of expert evidence in respect of handwriting in India.—Judcial dicta against basing verdict solely on the opinion of experts as to handwriting.—Positiveness of expert witness.—Weighing expert evidence.

**"Expert" who is.**

Mr. Twiston, in the course of his review of Chabot's report on the authorship of Junius' letters, referring to the evidence of experts in respect of handwriting says :—"The word "expert" is often used very loosely. It is frequently used to designate lithographers, or gentlemen connected with banks, who come forward as witnesses once or twice in their lives to express their belief that a particular document was or was not written by a certain individual. The word has, then, a meaning very different from that of general experts in handwriting, recognised as such in courts of justice, to whom cases of disputed writing are systematically submitted, from time to time, for their professional opinion and who are prepared to state detailed reasons for every such opinion which they give. Such experts have always been very few, and there are only few such experts in practice now. Hence, tales about experts should be received with distrust, unless names and particulars are mentioned, so that it may be ascertained in what sense the word "expert" is used." [1]

**Nature and admissibility of evidence of handwriting experts.**

Mr. MacMurdy writing of the handwriting expert says: "The expert witness in matters of handwriting is the great bugbear to judges, lawyers and laymen. Indeed, able judges and thoughtful lawyers have gone so far as to declare that expert testimony in regard to matters of handwriting is not evidence at all in any proper sense of the word and should not be laid before a jury. But, should it be excluded entirely? And if not, where shall one draw the line?" "Now, all evidence as to the identity of handwriting, except that of the person who saw the document written, is a mere matter of opinion; and the question at last is,—Whose opinion shall be received in evidence and in what way the witness must be qualified to express it? One way, the one to which no objection is urged, the one most universally in use, whereby the witness has qualifed himself to express an opinion, is by having seen the reputed author write, or having seen or received writings which the reputed author admitted or recognized as having been written by him." "The next step is by comparison of handwriting, and hearin is the basis for the introduction of expert testimony. It is founded on a comparison between specimens of handwriting admitted as genuine and the one in dispute, and I can see no reason why it is not of equal or higher credit than the other kind."

"Handwriting, even if artificial, is to some extent a reflex of the nervous organization of the writer. There is a distinctive characteristic, which, being the reflex of the nervous organization, is more or less independent of the writer's will and shows in his handwriting; and the aid of one specially trained in discovering the presence or the absence of these characteristics and the similarities, seems to me not only unobjectionable, but that to exclude it would justly bring on the law the reproach that it shuts its eyes to the truth." [2]

(1) London Quarterly Review. (2) 17 Green Bag 174—175.

On the causes of the admitted evils of expert testimony Mr. MacMurdy says :—" The reasons why the expert witness is so often merely a hired advocate, are, it seems to me, first, the unlimited freedom given to each party to select and call without limit as to number, his own expert witnesses; second, the absence of any regulation as the amount of pay or the manner of making it."

Further " it may not be amiss to call attention to the fact that this system of evidence has stood the test of time and experience, better than any other department of the English law. The substantive law itself has changed greatly in the two centuries and is destined to change even more in the years that are to come. Methods of pleading have been entirely changed. There has been but one important or fundamental change made in the law of evidence, and that has consisted in removing disabilities on the competency of witnesses, in order that even the doubtful evidence of interested persons might not be kept from the jury." [3]

**Handwriting experts compared with other classes of experts.**

In the Taylor will case in New York, Surrogate Hutchings stated that handwriting experts are an inferior class of experts and drew a contrast between the basis of facts which underlie the testimony of experts in handwriting, and the foundation upon which scientific experts build their opinions, and discussed some of the sources of fallacy, which, if they do not entirely vitiate, yet render the former less reliable than the latter. " It is the practice of the courts, when it is necessary for their aid to receive the evidence of men skilled in the various arts and sources of knowledge as experts to elucidate the general principles or practical data upon which their science or art is based. In this manner chemists, civil engineers, physicians, or the representatives of any vocation or calling may be brought to the witness stand to testify in regard to the facts of their various professions. The chemist, in his particular business, may be asked to state the manner adopted in which poisons can be detected in food or eliminated from the human body. Again his opinion may be desired upon the sufficiency of certain procedures to attain certain results. In either case it is necessary to remember that he is guided by common universal laws known to every chemist and that his testimony relates to their application. In this manner it is occasionally necessary for a Court to require information from a civil engineer. It is the province of this profession to take cognizance of the effects of the elements upon material used in constructing works; to know the effect of the tides and of running waters; to be able to estimate the durability and safety of structures erected in a particular manner etc.

But the value and weight of this kind of testimony are best exemplified in the evidence of physicians skilled in mental diseases in cases where the question of responsibility is involved. In these cases an expert can furnish information attainable in no other manner. The causes and progress of the disease, its development and modes of expression, together with the manner of determining its presence, can alone be furnished by those individuals whose profession it is to study and understand the diverse methods in which diseases of the mind and brain can be manifested. The facts which the medical expert is called upon to ellucidate are those parts of the common knowledge of his profession which relate to or have a bearing on mental disease. Those general principles which enable him, as a physician, to form a judgment upon particular cases are explained to the Court, and it may be that his professional opinion is solicited as to the bearing and significance of certain matters in evidence. In all cases it must be borne in mind, the expert simply reflects the lights of his own calling upon

(3) Ibid.

matters which properly come within it. He refers to a series of analogous cases and he supports himself by the opioions of the recognised standard authors on mental diseases. His opinion is valuable according to his experience and position. And his opinion moreover supported by the analogy of cases and the agreement of the standard writers on the diseases of mind that certain acts, characteristics, and appearance of a man whose sanity is disputed, are evidence of a certain disease. How different is the case with any attempt to found a scientific basis for a system of expert evidence in handwriting will now be evident. In the testimony of the witnesses called experts both on the part of the proponents and contestant, we have an illustration of the manner in which careful and painstaking study will discover alterations and differences imperceptible to the ordinary observer. These differences have been magnified, dwelt upon, and finally collated and submitted as proof of the non-genuineness of the signature of James B. Taylor to the propounded will. Are these witnesses who call themselves experts properly entitled to the appellation? They claim to have made the question of handwriting a speciality and profession and it is contended that they are as properly experts as those in chemistry and diseases of the mind. How true this is can be seen when we reflect that it is not the mere profession and assumptions that are put forward, which entitle any individual to be considered an authority upon any point. The chemist who searches the viscera of a human being who has died with the symptoms of poisoning looks for a substance which all chemists agree is detrimental to the human body and acts in a certain manner. In his mode of procedure he is sustained by all of his profession, any one of whom knows the value and importance of each of his steps. In other words all steps are guided by general laws, the common property of all chemists. When his investigations have been pursued to a successful termination and he has found the poisonous substance he can demonstrate not only the steps of his progres but the ingredients of the substance he has found. The expert in diseases of the mind does not pretend to testify as to the mental condition of an individual unless he has made a personal examination, or in the absence of that, he bases his opinions upon the whole evidence in the case, the language, acts, and physical appearance of the person whose sanity is to be decided. What does the expert in handwriting profess to do? He has no scientifc basis of education, experience or laws, to build on. As in this case, he simply compares one signature with others and notes some differences, the causes of which he does not attempt to explain and which from our point of view are entirely unimportant in arriving at the conclusion that the same hand which wrote the signature to the will did not write the other five signatures. He is entirely ignorant how, when and where those signatures were written, the mental, nervous, or physical condition of the writer or any of the influences which practical common sense teaches have an effect on handwriting. The mental and material influences are unknown to him. In fine, the writer was to him a stranger. It appears by the evidence of one of the experts in reply to a question from the court, that the signature to the will is written on a blue ruled line, while in the cases of four of the exhibits the signatures are written on unruled paper. How is it possible for them to tell the influence upon a man with whom they are unacquainted, of being obliged to write his signature on a ruled line, when he may have been accustomed to write on unruled paper as to its effect upon either rapidity or steadiness of motion? Here is one of the, but important, material circumstances which concur to affect the handwriting and which may be in itself sufficient to destroy all the theories of experts. Moreover, after a careful consideration of the evidence of these experts covering several hundred folios, it appears to me that the tendency of their system is so analytical as to weaken, if not to lose, the power of generalization

While successful in pointing out the most minute differences and variations between certain letters and their lines and strokes, they completely fail to take, that comprehensive view of any of the signatures in question which is so apparent to a practical man. It appears to me that the intutive generalization made by any one of the witnesses speaking from personal knowledge of the handwriting of Mr. Taylor either on the part of the proponent or contestant, is of more valuable assistance in the investigation as to the genuineness of the signature to the document here propounded than either of the two experts called for the contestant or of the expert called on the part of the proponent."[4]

**Certain rules of caution.**

The following cautionary rules are recommended to be adopted in the examination and cross examination of experts, by a writer of experience in the course of an article contributed to the Central Law Journal, 1908. "Court and counsel should be advised :

(1) Of the ordinary rules of evidence—
- (*a*) As to relevency ;
- (*b*) As to limitations upon competency of opinion ;
- (*c*) As to extent of admissibility of admission ;
- (*d*) Qualifications of witness, proper foundations, and preliminary matters ;
- (*e*) Standards of comparison, and statutory or other legal modifications thereof, as hypotheses ;
- (*f*) Extent of cross examination as to expert and other opinion evidence;
- (*g*) Requiring production of scientific or other means employed in arriving at conclusions ;
- (*h*) As to admissibility of secondary evidence when non-production of best or primary evidence excusable ;
- (*i*) That all preliminary questions, both as to proper qualifications of the witness and competency of proposed proof are exclusively for the court, and not the jury.

(2) Of the means and methods employed by the expert—
- (*a*) Magnifying instrumentalities and artifical light used or available;
- (*b*) Photographic and other means of reproduction ;
- (*c*) Drawings, charts and blackboards for demonstration ;
- (*d*) Scientific means for detecting forgeries recognized by experts and professionals, such as—

(i) General appearance, (ii) Unconscious habits, (iii) Finger flexure, (iv) Gripping capacity of writer, (v) Habitual tendencies, (vi) Individual peculiarities, (vii) Pen scope, (viii) Movement used, (ix) Parallelisms, (x) Proportioning, (xi) Position of lines relative to edge of paper, (xii) That there is always dissimilarity in genuine signature and writing by the same person, (xiii) Probable change of genuine signature and handwriting of a person by reason of lapse of time, (xiv) Pen pressure, and where ink is deposited, openings between letters, (xv) Mis-spelled words, (xvi) Ragged features, (xvii) Similarities, (xviii) Spread of letters and tremors, (xix) Constant pivot and radius, (xx) Aligment, uniform or uneven, (xxi) Kind of ink used, (xxii) Age and quality of paper and effect of chemicals thereon, (xxiii) Effect of erasures, (xxiv) Actual and relative slant of letters, (xxv) Angles between their stems and base, (xxvi) Connection of letters, (xxvii) Eccentricities of letters, (xxviii) Extension of extremities, (xxix) Inclination of letters relative to vertical lines, (xxx) Resemblances or differences, (xxxi) Sharpness of curves, size, slant, shade, space, shape, (xxxii) Serrations or edges of lines, (xxxiii) Inflection, marking, crossing or dotting of letters, and use of punctuation, (xxxiv) Capitalization and manner thereof.

(4) Moore on Facts pp. 666—669; Taylor Will case 10 Abb. Pr. N.S. (N. Y.) 309 etc.

(*e*) What forged signatures show on examination :
General sameness, pictorial resemblance only, omission of shades, pauses in lines, absence of pen-pressure, copying effect, hesitancy and breaks, studied appearance, greater length than original.

(*f*) Features of tracing process :
Absence of evidence of pen-pressure or effect of split points, evidence of hesitancy in movement, resemblance in outline of signature but peculiar sameness throughout all lines, giving lifeless appearance, absence of free, flowing, life-like style [4a]."

**Relative value of expert and non-expert testimony as to handwriting.**

Referring to the relative value of expert and non-expert testimony as to handwriting, Judge Patteson said in a leading English case "to my mind I confess the knowledge of the general character of any person's writing which a witness has acquired incidently and unintentionally, under no circumstances of bias or suspicion, is far more satisfactory than the most elaborate comparison of even an experienced person called by one side or the other with a particular object." [5]

"The testimony of all witness to handwriting who did not actually see the writing made is from comparison," said Mr. Justice Shepard of the District of Columbia Court of Appeals. "The witness who has been in correspondence with the party, or who has become familiar with his writing in the public offces, or who has even seen him write his name once only, is generally held to be competent, and yet he compares the writing shown him with one borne in his mind. The expert compares the same writing with others of undoubted authenticity and fairness of selection, [6] and, with time to study them carefully, expresses his opinion. With these signatures in juxtaposition he can be cross examined and made to demonstrate his conclusions in the presence of the jury, who also make the comparison and test the soundness of his opinions, and the reasons therefor, by their own perceptions. We are unable to see why the testimony of each witness is not of the same nature, nor why the exempler in the mind of a witness should be regarded as more reliable than one presented to the expert's eye and at the same time to the eye of the jury. In the absence of an express decision to the contrary by the court of last resort, we must hold that the evidence was admissible." [7]

"Abstractedly reasoning upon this kind of proof," said Judge Badgley of the Lower Canada Queen's Bench, "it seems plain that a more correct judgment as to the identity of handwriting would be formed by a witness by a critical and minute comparison with a fair and genuine specimen of the party's handwriting than by a comparison of seen signatures with the faint impressions produced by having seen the party write, and even then perhaps under circumstances which did not awaken his attention." [8]

"In the case of the non-expert, the characteristics of the standard are necessarily indistinct, shadowy, and uncertain, while they show out to the expert in all the distinctness of visible characters. In the latter tangible realities are compared ; in the former a visible reality is compared with an invisible, intangible impression in the mind." [9]

And it is the prevailing opinion of judges that "the non-expert's recollection from a former comparison or from a former notice of writings,

(4*a*) See the case cited from an American Law Journal in 9 Cr. L. J. 113—120.
(5) Doe. v. Suckermore. 5 Ad. & El. 703, 31 E. C. L. 421.
(6) Moore on Facts. Vol. I. S. 650.
(7) Keyser v. Pickrell, 4 App Cas (D. C.) 198, 208.
(8) Reid v. Warner, 17 L. C. Rep. 485, 491.
(9) Woodman v. Dana, 52, Me. 9 at p. 14.

where there may have been no special reason for making a critical examination, is inferiror in weight to the testmony of a qualified expert after recent and careful scrutiny." [10]

The expert testimony is especially preferred to that of a witness who has seen the party write only once or twice [11].

If the expert has only one or two standards for comparison the Court may place more reliance on the testimony of a non-expert who has extraordinary opportunities for acquiring a knowledge of the handwriting [12].

Judge Johnson of South Carolina said "that the best and most useful evidence of handwriting is that of a person long accustomed to see the party write. It is by this means the character of the writing is fixed in the mind and forms the best standards by which to determine the identity but it will not be denied that the judgment would be powerfully assisted by the actual presence of the characters on which the standard was formed, and it follows that in the absence of better proof some opinion may be formed by comparing that which is acknowledged to be genuine with that which is disputed; and feeble as it may be, it is nevertheless a circumstance calculated in some measure to assist the judgment in deducing a conclusion from other parts which are doubtful [13]."

**Use of expert evidence in respect of handwriting in India.**

"As to the use of the evidence of handwriting experts in India, Mr. Hardless says:—"Expert evidence on handwriting came into use in India in 1904, on the appointment of Mr. Hardless, Senior, as the Government Expert in handwriting, concerning whom, it was officially asserted, in a recommendation made to the Secretary of State for India, two years subsequently, after obtaining reports as to his skill and the value of his work from courts and officers who had occasion to employ his services, and after mention of testimony to his great care and fairness and freedom from bias, that there were no handwriting experts of the same skill or standing in India. Since the appointment of an official expert some hundreds of cases have been tried all over India, including Burma and Ceylon, in which expert testimony on handwriting has formed a more or less important part of the evidence, and it can be truly claimed from the judgments of courts of all and in all parts of the Indian Empire, that expert evidence on handwriting has made an impression, secured value and respect, afforded aid, and is increasing in confidence as it is being more and more understood. According to the judgments of courts themselves, expert skill and testimony has aided in successful identification of handwritings both in English and the vernaculars.

The advantage in India has been that the scientific methods of identifying handwriting were introduced into it from the beginning, unlike England and America which underwent the experience of the faulty formation tests which continued in vogue for years, and is responsible for a great deal of adverse comment in the matter of the identification of handwriting. Of course old rulings on the old system of comparison have now and again been cited against evidence on handwriting, those concerned taking for granted that the comparison of handwriting is still conducted on the same lines as when it was first attempted [14]."

---

(10) Chance v. Indianapolis, etc., Gravel Road Co., 32 Ind. 472, 474; Withee v. Rowe, 45 Me. 571; Vinton v. Peck, 14 Mich, 287, 295;

(11) Hyde v. Woolfolk, 1 Iowa 159, 165; State v. Shinborn, 46 N. H. 497; Bowman v. Sanborn, 25 N. H. 87, 111;

(12) U. S. National Bank v. National Park Bank 59 Hun. (N.) 495, 500 13 (N. Y.) Supp. 411.

(13) Boman v. Plunkett. 2 McCord. L. (S. car). 519 see the same cited in Moore on Facts pp. 667—670.

(14) Hardless on Forgery.

**Judicial dicta against basing verdict solely on the opinion of experts as to handwriting.**

Again and again have judges declared the danger of attaching too much weight to the testimony of experts. They are generally men of high social standing and renowned in their own profession, and this fact is liable to induce juries to overlook the fact that after all they are deposing to a mere opinion and not to a fact. The following dicta of of eminent English and American judges on the point may also be noticed :—

"In many cases, especially with regard to handwriting, nothing can be more unreliable than the opinion of so-called experts," said Chief Justice Cameron of Ontario [15].

"The testimony of experts in regard to the genuineness of writings has not been considered, as a rule, to be of a satisfactory character [16]."

"Every one knows how very unsafe it is to rely upon one's opinions concerning the niceties of penmanship. The introduction of professional experts has only added to the mischief, instead of palliating it, and the results of litigation have shown that these are often the merest pretenders to knowledge, whose notions are pure speculation. Opinions are necessarily received and may be valuable, but at best this kind of testimony is a necessary evil. Every degree of removal beyond personal knowledge, into the domain of what is sometimes called with great liberality scientific opinion, is a step towards greater uncertainty and the science which is so generally diffused is of very moderate velue [17]."

"I myself believe in the almost worthlessness of expert testimony ; and that relating to disputed writings is, in my opinion, the most worthless of all," said Judge Palmer of the New Brunswick Supreme Court [18].

"Generally I am of opinion that the comparison even of an admitted fair specimen with a disputed writing is far from satisfactory. Nothing can be more fanciful than the opinions persons are apt to form from such comparison." [19]

"Comparison of handwritings is a mode of proof by which if it be not carefully guarded, judicial tribunals are liable to great imposition,—a class of evidence which at best and even when most carefully guarded is not very reliable." [20]

"Evidence of experts based upon comparison is, at best, not very reliable." [21]

"My observation and experience with respect to the testimony of experts in handwriting have given me a very poor opinion of its value. I have seen many such cases tried, and have never failed to see about an equal number of skilled witnesses on each side, the one affirming and the other denying the genuineness of the disputed signature. It is so usual an experience, in trials of this kind, to hear the opinion of ten or twenty experts on the one side met by the counter opinion of an equal number on the other. I do not deny that some weight is due to the species of testimony—but it is generally very unsatisfactory. This case forms no exception ; the experts differed as usual. Taking the testimony of the experts alone, no court could see its way

(15) Scott. v. Crerar. 11 Ont. 541, 554. See these dicta collected in Moore on Facts, pp. 656-672.
(16) Hammond v. Wolf. 78 Iowa, 227, 42 N. W. Rep. 778.
(17) Matter of Foster, 34 Mich. 21, 26.
(18) McGibbon. v. Burpee, 25 N. Bruns. 81, 84.
(19) Doe v. Suckermore. 5 Ad. and El. 703. 31. E. C. L. 406, 421.
(20) Sharb v. Kinzie, 100 Ind. 429.
(21) Winch v. Norman. 65 Iowa. 186, 21 N. W. Rep. 511. (Per Adams J.)

clear to any satisfactory conclusion, and no court would on the strength of it, disturb the title of bona fide purchasers for value." [22]

"This mode of evidence is in most cases very unsafe, even when there are several pieces for comparison." [23].

"Under the common law the proof of handwriting by comparison with other writings submitted to the witness receives but little favour and is very much restricted in its use. We are sensibly struck with the uncertainty of all evidence of handwriting, except where the witnesses saw the document written, and the very great care and caution with which it should be received." [24]

"The evidence resulting frem a comparison of a disputed signature with other proved signatures is not regarded as evidence of the most satisfactory character, and by some most respectable judicial tribunals is entirely rejected." [25]

"The opinions of experts upon handwriting, who testify from comparison only, are regarded by the courts as of uncertain value because in so many cases where such evidence is received witnesses of equal honesty, intelligence, and experience reach conclusions not only diametrically opposite, but always in favour of the party who called them." [26]

"There is no doubt but that comparison of handwriting is one mode of authenticating a signature, but it is an uncertain, dangerous and questionable mode, and only to be used or relied upon in aid and as ancillary to more direct evidence." [27]

"As a circumstance in aid of doubtful proof, comparison of handwriting is admissible, but *per se* is so feeble as to be unsafe to act upon [28]."

A Conviction cannot be based on the mere evidence of experts unless it is supported by other corroborative evidence [29].

The following dicta are somewhat more in favour of such testimony:—

"I think in all the cases where little weight is recommended to be given to the opinion of experts in handwriting a clear distinction is to be drawn between the mere opinion of the witness and the assistance he may afford by pointing to the marks, indications and characters in the writings themselves, upon which the opinion is based; and that the caution applies to cases where opinions conflict and the alleged forgery is admittedly executed with great skill and the detection is unquestionably difficult [30]."

"The practiced eye of the expert will enable him to perceive the distinguishing characteristics or features in different specimens of handwriting, and at once to indicate the points of similarity or dissimilarity though entirely unacquainted with the specimens presented. By long practice and observation he has become skilled in such matters [31]."

"Expert testimony is admissible and often necessary" said Judge Hawly "in order to bring out the essential traits and characteristics of a person's handwriting, which might not otherwise be noticed by the untrained eye of the ordinary judge or juror. By constant practice in examining signatures

(22) Morries v. Sargent, 18 Iowa. 90, 106. (Per Dillon J.)
(23) Barfield. v. Hewlett, 6 Mart. N. S. (La). 78, 80.
(24) McDonough's Succession, 18 La. Ann. 445, 448.
(25) Com v. Eastman. 1 Cush. (Mass.) 189, 217.
(26) Hoag. v. Wright. 174 N. Y. 36. 66 N. E. Rep, 579. *See also* 59 Ind. Cas. 220.
(27) Depue v. Place. 7 Pa. St. 428, 430.
(28) Boman v. Plunkett, 2 Mc Cord L. (S Car.). 518, 520. *See also* 56 Ind. Cas. 879.
(29) 36 Mad. 152: 22 M. L J 270: 14 Ind Cas 418: 13 Cr. L J 226.
(30) Moore on Facts. Vol. I, S. 630, p. 661.
(31) Woodman, v. Dana. 52 Me. 9, 15.

and handwritings, it is but natural that an expert will readily discover many peculiarities—many distinctive features—of the handwriting, by the aid of tests that are often made and applied, that would not at first blush be discernible to persons unaccustomed to such methods of investigation [32]."

"Where the discrepancies are glaring, a jury might observe them without aid from others. But such as are more minute and less striking would, not unless pointed out, be noticed by ordinary persons or witnesses, while they might easily be discernible by persons experienced in the examination of writings, whether acquainted with the handwriting of the indivdual or not. The pointing out such discrepancies in the shape, size, inclination, or shading of particular letters or words in an instrument, or in several instruments actually before the witness and the jury does not necessarily imply any opinion as to wandwriting and certainly does not require a previous acquaintance with the handwriting in question. It is rather a statement by the witness of facts or impressions derived from actual inspection of a document or documents immediately before him and before the jury." [33]

"We know ordinarily the testimony of experts in the matter of handwriting uncorroborated, is frequently taken as being of little value, but here the testimony of these experts is direct and clear. Their conclusions are sustained by highly intelligent analysis of every word and letter of each word, after painstaking comparison, with instruments of writing known, or admitted to be known, to be in the handwriting of the testatrix. These experts are, as we take it, skilled in the examination of handwritings, and have been a number of times called upon to decide the genuineness and the meaning of written words." [34]

"The most that can be obtained by such evidence is strong probability that the fact is so. These remarks, however, will be understood as applying more properly to those ingeniously executed counterfeits of writings which carry upon their face at least a reasonable degree of the probability of their genuineness. If the writing itself be suspicious, it may require but very slight evidence to turn the scale; and a jury, though supposed to be versed in the affairs and business transactions of life, and though possessed of even more than ordinary intelligence, might not at the same time possess that peculiar skill which would enable them to decide upon the face of the paper. It is the nature of man to acquire a certain degree of skill in that which he has set out to learn, and which he has long pursued as a vocation. An eye practiced in judging writings may, at a glance detect irregularities or counterfeits about it, which would entirely escape notice or detection from an unpractised eye. The rules of evidence should be so moulded as to make it at least possible to detect every description of forgery or counterfeits; otherwise, only the clumsily executed ones would ever meet with detection or condemnation. Adroitness in their execution would in many cases ensure success to those who might forge or alter written instruments. Both Government and law presuppose human weekness and, at least, the possibility of human depravity; and those connected with the administration of the law know, perhaps from actual observation, that what is but a theory in Government is in many cases true as a fact. It is indeed part of the very law of evidence itself, that it will adapt its rules to every variety of case or question which may arise for investigation in a court of justice. A clumsily executed counterfeit generally carries upon its face the evidence of its own condemnation. Not so, however, with respect to one ingeniously executed. An unpractised eye or unskilled person in writing can derive

(32) Green v. Terwilliger 56 Fed. Rep. 384, 394.
(33) Hawkins v. Crimes. 13 B. Mon. Ky. 257, 262.
(34) Moore on Facts. Vol. 1. s. 630. p. 662.

but little if any, aid from the writing, in forming an opinion in such a case. To shut out the evidence which might be afforded by skilful persons in the art of writing would be almost equivalent to saying that the law had provided no means by which well executed forgeries or imitations could be detected and they must therefore be respected as genuine instruments." [35]

"From my own experience," said Judge Walworth "I am satisfied that the comparison of handwriting is frequently more to be relied on, than the ordinary evidence which is given as to handwriting.[36]" In a case in New York Superior Court, the Judge, referring to the testimony of an expert, said "it is impossible to carefully examine the testimony without being impressed by the extent, the minuteness and the relevency of his illustrations and the force of his opinions and conclusions. They seem to indicate that skill, and the resources of science are destined to descover forgery, with a certainty but little short of a mathematical demostration [37].

In another case the Court remarked that "the testimony of an expert describing the appearance of a signature to a will was undoubtedly very beneficial to the jury in drawing their attention in detail to the appearance of the signature so as to enable them to judge whether as a question of fact it was different from the testator's genuine signature [38]."

"It seems that there is abundant justification for the holding of the courts that there is a science of handwriting and that experts who have qualified themselves by study and experience should be received to testify to the genuineness and identity of handwriting [39]."

"The theory upon which these expert witnesses are permitted to testify", said Chancellor McGill of New Jersey "is that handwriting is always in some degree the reflex of the nervous organization of the writer, which independently of the will and unconsciously, causes him to stamp his individuality in his writing. I am convinced that this theory is sound, but at the same time I realise that in many cases it is unreliable when put to practical test. It must contend not only with disguise but also with the influence of possible abnormal mental and physical conditions existing when the writing was made—such, for instance, as the position of the body, whether reclining, sitting or standing, the height and stability of that upon which the writing rests and the character of its surface, the character of the paper written, upon the ink, the pen, and holder of the pen, the health of the writer's body, not only generally but also with reference to the accidents and influences of the moment. It follows that unreliability is greater when the disputed writing is short or the standards for comparison are meagre or are all written at one time, and also that uncertainty lessens when the disputed writing is long and the standards are numerous and the products of different dates. Handwriting is an art concerning which correctness of opinion is susceptible of demonstration, and I am fully convinced that the value of the opinion of every handwriting expert as evidence must depend upon the clearness with which the expert demonstrates its correctness. That demonstration will naturally consist in the indication of similar characteristics or lack of similar characteristics between the disputed writing and the standards, and the value of the expert's conclusion will largely depend upon the number of those characterstics which appear or are wanting. The appearance or lack of one characteristic may be accounted to coincidence or accident, but as the number increases the probability of coincidence or accident will disappear, until conviction becomes irresistible. Thus, comparison is rated after the fashion of circumstantial evidence, depending for

(35) Moye v. Herndon. 30 Miss. 110, 119.
(36) People v. Hewit. (Oyer and T Ct.) 2 Park. Crim. N. Y. 21.
(37) Frank v. Chemical Nat. Bank. 37. N. Y. Super Ct. 26 per Curtis, J.
(38) Johnson v. Hicks, 1 Lans. (N. Y.) 150. (39) Hanriot v. Sherwood, 82 Va. 1, 9.

strength upon the number and prominence of the links in the chain. Without such demonstration the opinion of an expert in handwriting is a lower order of testimony, for, as the correctness of his opinion is susceptible of occular demonstration—and it is a matter of common observation that an expert's conclusion is apt to be influenced by this employer's interest,—the absence of demonstration must be attributed either to deficiency in the expert or lack of merit in his conclusion. It follows that the expert who can most clearly point out will be most highly regarded and most succesful [40]."

**Positiveness of Expert Witness.**

It is not demanded of an expert witness that he shall be so confident as to affirm that he cannot make any mistake in his conclusions from comparison of handwritings [41]. But where experts concede that the disputed writing has presented serious difficulties and that a satisfactory explanation of them has been reached only by a long and laborious process, their opinions will hardly create a strong impression [42].

"A reading of the cases upon the subject of expert testimony must reveal the fact that the criticisms of the courts upon it are justified, not on account of any inherent danger in such testimony, or because of its necessarily unsatisfactory character, but rather because of the frequent failure of counsel to conduct the examination of experts in accordance with the rules governing the admission of opinion evidence and a lack of appreciation, or at all events, a forgetfulness, in many cases, by both counsel and expert that the function of the latter is quasi judicial. In his enthusiasm for his client, the trial lawyer steps beyond the bounds, and he finds a ready second in his expert who has become imbued with the spirit of the advocate. The result is error which prompts caustic comments by the reviewing court, not always upon the course of counsel or the attitude of the witness, but frequently upon the general worthlessness and danger of expert testimony. That, within his proper field, the expert is a necessary factor in the adminittration of justice, cannot admit of doubt. In many cases, without his aid, courts and juries would be helpless. That expert testimony, if the case demands it, and it is properly and logically developed, is safe and helpful is the verdict of reason and experience. In the absence of a reform that would make the expert the appointed officer of the Court, instead of the paid employee of a party, he can escape disparagement only through the care of counsel in the conducting of the examination and his own care in preserving the judicial attitude." [43]

**Weighing expert evidence.**

The amount of reliance which a Judge may place on the testimony of any specified witness is also governed by the susceptibility to demonsrable proof of the evidence which the witness tenders, and the more the proof of such testimony is self evident, or lies within the knowledge or competency of the court to determine, the greater will, of course, be the value to be placed on it, and the greater will be the degree of confidence reposed in the deponent in any rare instance in which it is impossible or impracticable to afford ready proof of any particular statement. This is especially so in the case of what is generally termed "opinion evidence," because the reasons on which the persons giving such evidence base their conclusions, or the steps by which they arrive at their opinions, are not, as a general rule, known to the Judge, who has, consequently, to take a great deal on trust, or at any rate has to weigh the evidence put before him on the unsatisfactory basis already referred to [44].

(40) Matter of Gordon. 50 N. J. Eq. 397, 26 Atl. Rep. 268.
(41) Forgey v. Cambridge First Nat. Bank. 66. Ind 123, 125.
(42) *See* Matter of Burtis (Surrogate Ct.) 43. Misc (N. Y.) 437, 89. N. Y. Supp. 450.
(43) Michigan Law Rev. Vol V, p 579; Green Bag Vol. XVII. p. 493.
(44) 16 Green Bag pp. 8—9. (article by Frank Brewster.)

# CHAPTER XXI.

## Bias of Experts.

CONTENTS.—Bias of Experts.

In a case frequently cited by courts,[1] Sir Frederick Madden, testifying as an expert, undertook to say that a disputed document was written in the chirography of about the middle of the last century. "I do not mean to throw any reflection on Sir Frederick Madden," said Lord Broughman, delivering the judgment of the House of Lords; "I dare say he is a very respectable gentleman, and did not mean to give any evidence that was untrue;[2] but really this confirms the opinion I have entertained that hardly any weight is to be given to the evidence of what are called scientific witnesses; thay come with a bias on their minds to support to cause in which they are embarked; and it appears to me that Sir Frederick Madden, if he had been a witness in a cause and had been asked on a different occasion what he thought of this handwriting, would have given a totally different account of it[3]."

The minds of expert witnesses are "affected by that pride of mental fascination with which men are affected when engaged in the pursuit of what they call scientific inquiries[4]."

> "Of all the causes which conspire to blind
> Man's erring judgment, and misguide the mind,
> What the weak head with strongest bias rules,
> Is Pride, the never failing vice of fools[5]."

It is a trait of human nature to adhere with more or less obstinacy to opinions deliberately expressed[6].

Lord Campbell has said that "skilled witnesses come with such a bias on their minds to support the cause in which they are embarked, that hardly any weight should be given to their evidence."

Taylor even more emphatically puts it in his treatise on the "Law of Evidence". "Expert witnesses become so warped in their judgment by regarding the subject in one point of view, that, even when conscientiously disposed, *they are incapable* of expressing a candid opinion."

The experts frequently expound in nomenclature of their own invention pet theories for which they display a degree of attachment emulating the fervency of Ignatius Donnelly's faith in the Great Cryptogram.

Thus, in the New York Surrogate's Court, an expert propounded what he termed a serration theory, a method of assuming to identify a person's handwritting by the number of abrasions, called "serrations," which appear on the edges of the lines[7]. We have the authority of Pope that,

> "To observations which ourselves we make,
> We grow more partial for th' observer's sake[8]."

In many cases the expert witness becomes an active partisan in favour of the party by whom he is employed, upon lines most favourable to his

---

(1) Tracy Peerage case 10 Cl. & F. 154.
(2) High Character of a witness does not exempt him from the imputation of bias.
(3) Tracy Peerage, 10 Cl. & F. 154, 190. Moore on Facts, Vol 1, p 690.
(4) People v. Patrick 182 N.Y. 131, 74 N.E. Rep. 840. Per O'Brien J.
(5) Pope's Essay on Criticism.
(6) See 17 Am. and Eng Ency. of Law (2nd Ed.) 1149.
(7) Matter of Purtid, (Surrogate Ct. 43 Misc. N. Y. 437, 89 N. Y. Supp. 441 "This Theory is of such doubtful utility," said the court, "that even its author has not full confidence in it and it needs no extended discussion."
(8) Pope's Moral Eassy, Epistle I.

side of the case, and when this position is taken the testimony is sometimes given in such a manner as is calculated to deceive, mislead, rather than to enlighten or aid, the court or jury; and this occurs so frequently that courts have often condemned this character of testimony and declared it to be entitled to but little weight, and that it should be received with caution [9].

Unquestionably, the integrity of such testimony to handwriting is often subject to grave doubt, and will be as long as the expert is not called by the court, or by the public authority, as an unbiased and impartial adviser in the case, but is left to the selection of the interested parties who pay his fees, wherefore he too frequently takes on the character of a perfessional adviser and advocate of the party in whose interest he appears [10].

"Extreme care and caution should be exercised by an expert, that any conclusion he may reach is well founded. This he should be ready to show, by clear, strong and convincing reasons. But should it at any time, or in any stage of an investigation, appear that he has been misled in his own investigation, or by others, and has made an important mistake, he should not hesitate to correct the same, even though it involves an entire change of opinion, and necessarily of position from one side of the case to the other, and subject him, as it usually does, to all the base, mean, and false insinuations of treachery or mercinary motives which a knavish attorney can imagine or invent. An expert should never lose sight of the fact that his duty is that of an honest, impartial investigator, a judge rather than an advocate; and that he is to simply state facts as they appear to him, regardless of their bearing upon any side of the case; he should know no client or antagonist [11]."

The late Judge Pratt, of the Supreme Court of New York, while charging the jury in a case where forgery was involved, said:—

"When an expert is sought to be employed who has no previous knowlege of the case, it will inspire him with confidence and give his evidence great weight if he will act in accordance with this rule, to wit: peremptorily refuse to be informed upon which side of the case his services are required until a full statement of the facts has been made and he has given his opinion thereon. He will then himself know that his opinion is unbiased by any consideration whatever. If this rule should be adopted as the settled practice it would go far to dispel the prejudice that is oftentimes produced by a zealous and partisan manner upon the witness stand [12]."

There cannot be an opinion worthy of consideration, for which a reason cannot be given. When asked for his reasen, one witness, a bank cashier, replied, "Oh, I cannot tell why [13]."

"It is scarcely creditable to any witness to express an opinion for which he can give no reasons, or to a court to permit such to be given as expert testimony. For how can court and jury place the proper value upon opinions unsupported by *reasons*? Indeed, the value of expert testimony consists mainly in the ability of the witness, by reason of his special training and experience, to point out to the court and jury such important facts as they might otherwise fail to observe: and in so doing the court and jurors are enabled to exercise their own vision and judgment respecting the cogency of the reasons, and the consequent value of the opinion founded thereon. A skilful use of the blackboard and pencil as well as photographs, may greatly aid in elucidating testimony which courts now almost invariably

(9) Green v. Terwilliger, 56 Fed. Rep. 384, 824, per Hawley D. J; 12. P. L. R. 1921=59 I. C. 220=10 P. W. R. 1921. (However impartial an expert may wish to be, he is likely to be unconsciously prejudiced in favour of the side with calls him).

(10) Keyser v. Pickrell, 4 App. Cas. (D. C.) 198, at p. 208, per Mr. Justice Shepard.

(11) Ames 89. (12) Ames. 90. (13) Ibid 91.

permit. In the absence of a blackboard, large sheets of paper may be used for illustrations with a coloured pencil.

Objection has sometimes been made to the use of the blackboard, on the allegation that thereby evidence was introduced which could not appear upon the court record, or be available in case of an appeal. The substitution of paper for blackboard overcomes this objection, since the paper with the illustrations may be preserved for future use [14]."

Speaking generically of experts, the New York Court of Appeals said that the expert "comes on the stand to swear in favour of the party calling him and it may be said he always justifies by his work the faith that has been placed in him,[15]" and that "the opinions of experts upon handwriting who testify from comparison only are regarded by the courts as of uncertain value because in so many cases where such evidence is received, witnesses of equal honesty, intelligence and experience reach conclusions not only diametrically opposite, but always in favour of the party who called them [16]."

"The witness does not compare the writing before him with any exemplar formed in his mind naturally, incidentally, and without design or bias; but his attention is first called to different, instruments, or to different parts of the same instrument, for the pupose, of proving or disproving the identity of the handwriting, by saying, in effect, that if one instrument or one part of the same instrument is in the handwriting of the person in question, the other in his opinion and belief is not. If it is not certain that persons thus called to the comparison will always form their opinions under a bias of which they may be unconscious, in favour of the conclusion which they are expected to support; there is ground for apprehending that such, to a greater or less extent, will often and indeed generally be the case; while the fact that the witnesses are men of character and skill may give undue weight to their opinions, and thus add to the danger of such testimony [17]."

In a case where a famous expert testified that in his opinion certain signatures exhibited to him were forged, the court remarked that his evidence had been of great assistance, but proceeded as follows: "I sat by his side while he gave it, attended carefully to every word he said, and to every gesture he made, and followed each item of his evidence as he went along. I have since gone all over his evidence with the same care, spending a great deal of time upon it, and examining with the utmost care the disputed signatures, and the standards used by him, and many other standards not used by him; and, without going into details, I will say that he has not satisfied me that the signatures are forged. I place little or no value upon his judgment, expressed under oath, for the simple reason that it was not formed under such circumstances as to be impartial. He knew which signatures were suspected, when they were submitted to him for examination, and he also knew what judgement would be agreeable to his employers, and experience has shown that in such cases the mere sworn judgment of an expert is of little value [18]."

Sir Herbert Jenner noted the circumstance as unfavourable to the testimony of experts adverse to the genuineness of a writing in a case before him, "that the persons came to give evidence having been impressed with a notion that they have come to detect a fraud [19]".

(14) Ibid. (15) Roberts v. New York. R. Co, 128 N. Y. 455, 474, 28 N. E. Rep.
(16) Hoag v Wright 486, per Pecktam, J. 174 N. Y. 36, 42, 66 N. E. Rep. 579.
(17) Hawkins v. Grimes, 13 B Mon. Hy. 257, per Marshall J.
(18) Greenwood v. Henry, (N. J. 1894) 28 Atl. Rep. 1053, 1057, per Vice-Chancellor Pitney who concluded that the signatures were genuine.
(19) Panton v. Williams, 2 Curt. Ecc. 530, 595

CHAPTER XXII.

# Blunders of Experts.

CONTENTS:—Mistakes of experts.—Errors in identification of handwriting and causes thereof.—Sources of error.—Illustrative cases.—Even expert Mr. Ames is not infalliable.—The Morey letter.—The Cisco case.—State v. Tatcher Graves.—In the matter of Humphrey estate.—A case of the old Bailey.—Dreyfus case.—A case cited by Sir Henry Hawkins.—A case cited by Justice Donovan.

**Mistakes of experts.**

In Phonic F. Ins. Co. v. Philip, [1] Savage, C. J., said: "The danger of relying on witnesses of skill in handwriting was very strongly presented to this court in the case of Poucher v. Livingston, 2 Wend. (N. Y.) 296, decided three or four years ago. In that case gentlemen of the first respectability, and as well qualified as any in the community, made great mistakes. The question before the jury was the genuineness of a signature to a promisory note. A number of signatures were presented—some true and some false; some of the false were selected as genuine, and some of the true signatures were considered spurious. In that case a great effort was made with this kind of testimony, and the result proved that, in that instance, it was utterly worthless."

**Errors in identification of handwriting and causes thereof**

"One of the final fruits of knowledge of any subject is the ability to estimate correctly the difficulty of its problems, and the supreme test of ability in any field is the thoroughness and extent of one's knowledge of all the possible sources of error. The uninformed novice and the presumptuous FAKIR stand ready to give prompt and definite answers, and apparently with equal alacrity, to the most difficult as well as to the simplest problems. Obviously the subject of possible sources of error is of vital importance and should receive adequate consideration in every document investigation. Those who are best qualified in any field are the ones who most promptly admit their own limitations and the limitations of their own subject[2]. "Fool rush in where Angels fear to tread."

**Sources of error.**

"The principal causes of error in determining genuineness or forgery of handwriting or in deciding whether a particular handwriting was or was not written by a certain writer, may be arranged in three general classes. The FIRST class of errors grows out of the incompetence in the observer through lack of ability or experience. The SECOND class is that in which the conditions of the problem presented or internal matters may lead to error, and the THIRD class is that in which external matters, entirely outside the document or writing itself, may lead to error.

Errors of the first class, or those which may result from *Incompetence in the Observer*, are as follows:

(*a*) Basing conclusion entirely upon general appearance or upon "general character" of handwriting as a whole, (*b*) basing conclusion on forms of letters alone, (*c*) mistaking general characteristics and basing conclusion thereon, (*d*) mistaking certain features of writing for individual characteristics and basing conclusion thereon, (*e*) mistaking elements or features indicating nationality of writer for individual characteristics, (*f*) basing conclusion on accidental or insignificant variation, (*g*) failure to observe and consider significant divergence in inconspicous but fundamental characteristics.

(1) 3 Wend. (N. Y). 81,83.
(2) See Chicago Legal News: 16 Cr. L. J. 95-95. (Article by Mr. Osborne).

Errors of the second class that may arise from the nature of the inquiry, or *Internal Matters in the Document*, as as follows:

(*h*) Basing conclusion on too limited amount of disputed writing or too limited amount of standard writing, (*i*) basing conclusion on too few characteristics of unknown value, (*j*) reaching conclusion without knowing the date of writing under examination or date of standard writing, (*k*) giving definite opinion on mere marks or illegible scrawls which contain insufficient or no writing individuality, (*l*) basing conclusion on poor or inaccurate photographs

Errors that may arise under the third head, or from *External Matters*, ars as follows:—

(*m*) Basing conclusion on facts and circumstances apart from and outside of the handwriting or document itself, (*n*) reaching conclusion in haste or under unfavourable circumstances, (*o*) forming conclusion from influence of opinions of others or reported opinions of others, (*p*) reaching conclusion in the absence of necessary observing, measuring, or testing instruments, (*q*) reaching conclusion in certain cases before helpful enlarged or special photographs are made, (*r*) basing conclusion in whole or in part upon antipathy, friendship, prejudice, or an advocate's advance argument based upon alleged facts outside of the writing itself, (*s*) reaching conclusion against the weight of evidence because of strong prejudice on the general subject of expert testimony [2a].

"There are two main questions that confront the examiner of an alleged forgery. The first of these is how much and to what extent may a genuine writing diverge from a certain type, and the second is how and to what extent will a more or less skilful forgery be likely to succeed and be likely to fail in embodying the characteristics of a genuine writing. Here we have the very heart of the problem, for a forgery will be like the genuine at least in some measure, and there is bound to be some variation in the genuine writing itself.

"In examining a disguised writing or a natural writing for the purpose of determining whether or not it was written by a particular writer, two main questions also arise. We must know, if we are to avoid error, what is natural and habitual, and what is disguised. With these two questions correctly answered all the rest is easy.

"The recognition of personality in handwriting, generally assumed to be a simple and easy task, is sometimes easy, sometimes difficult, and sometimes impossible. Tee capable and conscientious investigator approaches every task as if it was the most difficult and when the question cannot be answered, he does not attempt to answer it.

"From even a brief examination of the circumstances surrounding the usual handwriting inquiry, it is easy to understand how mistakes are possible. Naturally the most common cause of error, as already suggested, is that the difficulties of the various problems are not appreciated, and as a result many testify on the subject who are not, and never would become, qualified to do so. Others testify who have not studied the particular question submitted in any way whatever, while still others testify not only without technical preparation, influenced by personal interest or strong prejudice. Testimony by witnesses of these classes usually consists of

(2a) See Article by Albert Osborne in the Ame Law Rev. cited in Chicago Legal News and also reproduced in 16 Cr. L. J. 95-97

The result of every handwriting investigation should be carefully tested by considering these possible sources of error. Incompetent, pretentious, or corrupt witnesses who testify on the subject can be most effectively cross-examined along these lines. Some of the above topics require no elaboration as their bearing is obvious, but a few of the principal topics are here more fully considered. Ibid.

mere statements of opinions and therefore is of but little value to a referee, judge, or juryman who is seeking assistance that will aid in discovering the truth regarding the controversy. It would be equally as helpful in many cases to let the janitor testify or to take witnesses at random from the audience in the Court-room. It is particularly unfortunate if those who are to finally decide a case of this kind are both prejudiced and incompetent. There have been those who have first denied that any one can by any amount of study and experience become qualified to assist in discovering and showing the facts in such a matter, and then have themselves, with but little study and without thorough investigation, deliberately proceeded to express the most positive, arbitrary, and often erroneous opinions on the technical questions presented. Prejudice is always the enemy of truth and of progress [3]."

**Illustrative cases.**

The following is from an article entitled "Experts in handwriting and Their Blunders," which was published in Law Notes of February 1900.

While testifying in the Molineux trial Daniel T. Ames, sometimes called "the Deen of handwriting experts," made this statement:—

"The science of mathematics is absolutely correct. I don't regard the science of deciphering handwriting as being absolute, but I regard it as certain."

**Even Expert Mr. Ames Is not infallible.**

Almost immediately after making this answer Mr. Ames was compelled to acknowledge, under cross examination, that he had made mistakes in deductions according to the science which he says is certain. It is because of such admissions, and because the history of the cases in which handwriting experts have been important witnesses contains many instances of serious blunders committed by these experts, that many persons have been led to conclude that the alleged science of handwriting is not a science at all, and that, whatever it may be called, it is quite as interesting for the mistakes made in its name as for the many correct deductions which its students have been able to make. The sceptics hold, therefore, if a handwritihg expert can make a mistake in one case he may make a mistake in another, and if grave errors may be made by applying to a problem rules of a science asserted to be exact, then the so-called science is not exact, and therefore in cases where much is at stake, a serious mistake may be made in placing too much reliance on statements made by students of handwriting commonly known as experts.

An interesting fact about the majority of the so-called handwriting experts is that they are loath to admit that they themselves ever made a mistake. They all give, or some of them will, much details regarding the mistakes of other experts. Of their own errors, however, they prefer that others should speak. And plenty of others may be found who will tell about these errors. A "Sun" reporter found, however, that, at present, few of the experts hereabouts are willing to discredit their calling by so much as an admission that any handwriting expert can make a mistake. These mistakes are to be found, however, all through the history of the so-called science and one who looks may find them.

**The Morey letter.**

One of the most celebrated instances of the mistakes made by this kind of experts was in the testimony given as to the authorship of the famous "Morey letter." The letter will be remembered, was one purporting to have been written to a man named Morey by the late James A. Garfield. In the letter Mr. Garfield was supposed to have expressed seme views on Chinese labour

(3) Article by Mr. Osborne, in the Chicago Legal News cited in 16 Cr. L. J. 95-96.

and to have written himself down as believing that a dollar a day was a sufficient wage for a labourer.

The letter was printed in a New York paper called 'Truth' near the close of the Garfield Hancock compaign, and caused a great sensation from one end of the country to the other. The managers of the Republican compaign were beside themselves. The Democratic managers were jubilant, and their joy was increased when a well-known expert in handwriting came forward with a positive statement that Garfield had written the letter. This statement was made after Garfield's signature had been compared with the signature to the letter and much publicity was given to the statement.

It was a big advertisement for the expert. Another well-known expert appreciated the value of the advertisement and had no intention of being outdone by a rival expert. This man happened to have Garfield's signature. He made a comparison of it with the signature of the letter, and then went to the Republican headquarters and solemnly declared that Garfield did not write the letter. This statement was also published broadcast and the expert had got his advertisement and the two experts were quits. Later, however, the second expert drew additional attention to himself by declaring that a newspaper man of the name of Kenward Philip had written it. The first expert had issued his declaration and he could not go back on it. The only thing he could do was to regret that there was no more advertisement for him. Thus the matter rested. Nobody of the name of Morey was found to acknowledge that he had received the letter. It was never proved that Philip wrote it. The electors decided that all the experts had done was to create a doubt as to the authorship of the letter, and gave Garfield the benefit of that doubt by electing him to the presidency.

Another case, historical because of the mistakes of the expert witnesses in handwriting, is that mentioned in the law books as the John J. Cisco case.

**The Cisco case.**

In this case the signature of John J. Cisco, a banker of New York, was in dispute. It was alleged that Cisco's signature to certain documents had been forged. Cisco himself said the signatures were forgeries and a crowd of experts swore to the same thing. Finally, after a lot of expert testimony to this effect had been taken, a clerk in Cisco's employ swore that he had seen the banker affix his signature to the document. When the witness recalled certain circumstances, Mr. Cisco remembered that he had signed them.

Perhaps the most noted instance of a person convicted of murder, in part through the testimony of handwriting experts, was the case of The People of the State of Colorado against Dr. T. Tatcher Graves, a well-known physician and man of wealth. He was indicted, tried, convicted, and sentenced to death for the murder of Mrs. Josephine A. Barnaby caused by whisky poisioned with arsenic. It was alleged that Graves on March 31, 1891, sent from Boston whisky to Mrs. Barnaby, that she drank of the whisky on the evening of April 13, following, and died from the effects of the poison in the liquor six days later. Mrs. Barnaby was possessed of considerable property. Dr. Graves was not only her physician but her confidential adviser. The alleged motive for the crime was Dr. Graves' desire to get possession of Mrs. Barnaby's property, it being shown that he had succeeded in getting her to make a will by which he was to receive a large bequest, besides being named as the executor. The bottle of whisky was packed in a box and sent to Denver through the mail. When Mrs. Barnaby undid the package containing the bottle, it was found that a piece of white paper had been pasted on the bottle on which was written the

**State *v.* Tatcher Graves.**

following inscription: "Wish you a happy New Year. Please accept this fine old whisky from your friend in the woods." Several experts, including three or four bank officials of Denver, swore that the writing on the label was the same as that of the papers admitted to be in Dr. Graves' handwriting. Subsequent to the conviction, Graves secured new trial and under the laws of Colorado, although under sentence of death, was admitted to bail. While under bail he travelled extensively and returned to Denver in time for the second trial. Before it began, however, he committed suicide. After his death a man came forward who told the true story of the inscription on the bottle and said he had written it at Dr. Graves' request in a post-office, and he further said that he did not know Dr. Graves at the time, having simply done a favour for a man, as he thought, who had difficulty in writing. This story did not tend to shake the general belief in Graves' guilt but it did show that handwriting experts may make mistakes even when a man's life is at stake.

Still another example of the mistakes which handwriting experts may make was furnished in what is known as the "Biff" Ellison case. Disputed handwriting cut some figure in that case, where Ellison, then one of the best known men about town, was charged with and convicted of an assault on a man named Henriques. One of the experts was called to establish the authorship of three letters. The expert swore that all the three letters were written by Mrs. Noeme, Mr. Henriques' daughter. It was proved later that only one of the letters was written by Mrs. Noeme. One of the others was written by Ellison and the other by Mr. Henriques.

The cross examination of the expert Mr. Ames by Mr. Weeks, Mr. Molineux's senior counsel, brought up several cases in which Mr. Ames is alleged to have sworn to one thing with regard to certain handwritings and it turned out that he was all wrong. Mr. Ames could not remember whether or not he had made the mistakes attributed to him by Mr. Weeks in most of the cases recalled.

**In the Matter of Humphrey Estate.**

A man named Humphrey died several years ago, leaving a considerable sum of money in a savings bank. Heirs were sought and finally a man of the same name came forward and asserted he was a descendant of the man who left the bank accounts. In proof of what he said, he produced a family Bible on a leaf of which, in lead-pencil was what purported to be the signature of the man whose estate was claimed. Mr. Ames was called to testify regarding the signature in the Bible and the signature in the dead Humphrey's bank-book. He declared that the two signatures compared in all respects. It was subsequently proved that the Bible produced belonged to another branch of the Humphrey family altogether.

Many other examples of serious mistakes made by this kind of experts might be given. Those mentioned would seem to show that the study of handwriting has not been reduced to an exact science.

**A case at the Old Bailey**

"I never was much of a believer in experts in handwriting," says the English barrister, Mr. Williams. "I have examined, and more frequently cross examined, Chabot, Nethercliffe, and all the experts of the day, and have nearly always caught them tripping. In fact, in my opinion they are utterly unreliable.

I was counsel in a case that took place at the Old Bailey on the 17th and 18th September, 1879, which thoroughly confirmed me in the opinion I have just expressed. Sir Francis Wyatt Truscott, who had been Sheriff of Middlesex, and had served his year of office as Lord Mayor, was charged will publishing a libel concerning John Kearns. Messrs. Poland and Grain

conducted the prosecution, while Sir John Holkar, I and Horace Avory represented the accused. The alleged libel was contained on a post-card. The prosecutor was accused of committing a criminal offence and the post-card concluded with these words: "Excuse an old friend mentioning this to you, to put you on your guard, but you are being watched by the police."

The prosecutor stated that he lived at Edmonton, and that he had formerly been wharfinger in upper Thames street. He added that he had been a member of the common council, and that the defendant had sat in the same court with him for years. A most intimate friendship, had, he said, existed between them. He was thoroughly well acquainted with the defendant's handwriting, and was most positive that Sir Francis had written the post-card in question. He applied for summons against the defendant at the Guildhall, and Mr. Alderman Cotton, who presided, had refused to give it. He had subsequently applied at the same place when Sir Robert Carden was presiding, but with a similar result. The prosecutor further informed the court that there had been litigation between himself, the defendant, and a lady of the name of Smith, who was the proprietress of the house where he lived at Edmonton.

The lady in question (who was stated to have filed two suits against Sir Francis in chancery) was called as a witness, and also positively swore that the handwriting upon the post-card was that of the defendant. She said that she had recognised it as his the instant it was shown to her—that she had frequently seen him write, and that she had received numerous letters from him.

Charles Chabot was then called. He stated that for many years he had been engaged in examining handwriting and that he carried on business at 27 Red Lion Square. He said he had made handwriting a careful study, and that, in consequence, he had frequently been a witness in important trials, and had been employed by the Government and other large bodies. He had compared a number of letters, undoubtedly written by the defendant, with the post-card, and he said he was prepared to swear that in each case the writer was one and the same person. A flourish that appeared on the post-card and a flourish that was attached to the signature in all the letters, were, he declared, unmistakably identical. There were other similarities to which he drew attention and he sought and obtained permission to quit the witness-box and pointed out those similarities, one by one, to the jury. This witness was severely cross examined by Sir John Holker, but, apparently was in no way shaken.

Frederick George Nethercliffe was then called. He stated that he had made handwriting a study during more than thirty years, that he had frequently appeared professionally in the witness-box, and that, after minutely comparing the letters with the post-card, he had independently come to the conclusion that the writer in both cases was the same. He produced a most elaborately written report, calling attention to the various similarities existing between the handwriting on the different documents and on being cross-examined he adhered absolutely to the position he had taken up.

We knew that they were all entirely wrong, and that we had a complete answer in store. Sir John asked permission of the presiding judge Mr. Justice Manisty, to call his witness first, and if necessary, address the jury afterwards. I then called Mr. Thomas Flight Smith, who stated that he was a member of the firm of Smith, Son & Co., wholesale stationers, of Queen Street, city. He said that he was acquainted with both the prosecutor and the defendant. He knew when they had been on terms of friendship, and that that friendship had now ceased. I asked him to take the

post-card in his hand and read it. He did so, and, upon being questioned as to whose handwriting appeared thereon, he said: "I wrote the post-card. It is my own handwriting. I was not actuated by any malicious motives towards Mr. Kearns in writing it. I was abroad when I heard that this charge had been made against Sir Francis. I read of the matter in the newspapers, and my first idea was to write to Sir Thomas Truscott and acknowledge that I did it; but I wrote to my father, instead, and I subsequently, at the request of Mr. Crawford, Sir Francis' solicitor, made an affidavit before Mr. Justice Stephen at chambers, in which I swore that the writing was mine. Sir Francis had nothing whatever to do with it. He was not aware in any way that I had written it."

The father, Thomas John Smith, was then put in the box. He stated that the post-card was in the handwriting, not of the defendant, but of his own son. To prove what he said, he produced for comparison three other post-cards in his son's handwriting.

Mr. Alderman George Swam Nottage was examined as a witness, and he stated that he knew Sir Francis and Mr. Thomas Flight Smith intimately; that, having received many letters from both, he was acquainted with their respective handwriting, and that the post-card was undoubtedly written, not by Sir Francis, but by Mr. Smith.

The jury stated that they did not wish to hear any further evidence, and proceeded at once to pronounce a verdict of "not guilty [4]."

**Dreyfus case.**

Few cases, if any, that have involved the genuineness of handwriting, have elicited wider attention and a greater interest than the great French trial for treason, popularly known as the Captain Dreyfus case.

"At the time of the arrest and trial of Dreyfus it was given out that the incriminating evidence had come from a waste-paper-basket of the German Embassy, and had been secured by one of the secret military agents of the Government. This individual, who was disguised as a rag-picker, made a practice of buying and carefully going over all the refuse paper that came from the office of the German Embassy, in an effort to find some clue to the source of leakage of important military secrets which were known to be in the possession of the German Ministry of War. One day, according to the story given out by the officers of the French Government this detective rag-picker secured, among the papers that had been thrown out, the 'bordereau,' or 'list of documents.' This was a single sheet of buff-coloured note paper of ordinary size, and from its contents seemed to be a memorandum of certain documents which had presumably been conveyed to the Germans.

"It was written in French, and ran as follows:—

"Although I have had no news from you to the effect that you wish to see me, I nevertheless send you, sir, some information of interest:—

1. A note on the hydraulic brake, 120; how it worked when experiments were made.

2. A note concerning the covering forces. Several modifications will be made by the new plan.

3. A note relative to alterations in the formations of artillery corps.

4. A note relating to Madagascar.

5. The draft of a manual of artillery field-practice, March 14, 1894.

6. This last document is exceedingly difficult to procure and I can have it at my disposal only for a very few days.

(4) See the same Cited in Moore on Facts, Vol. 1, pp. 670-673. 25. Amc. L. R. p. 966.

The Minister has sent a certain number of copies to the different regiments, and the regiments are responsible for them. Every officer who has a copy has to return it after the manouvers. So, if you wish to make such extracts from it as may interest you, I will procure a copy, subject to your promising to return it to me as soon as you have done with it. Perhaps, however, you would prefer that I should copy it out word for word and send you the copy.

I am just going to the manouver."

"That was all. There was no address, no date, no signature. The documents referred to in the memorandum were scarcely of vital importance; but, naturally, the French Government was interested to find out whether its secret orders were being systematically conveyed to the Germans.

"Armed with the clue provided by the 'bordereau,' the secret agents of the Ministry set about the task of finding its author. The writing of all the persons from whom it could possibly have emanated was examined and compared with it. It was finally announced by Major Du Party de Clam that the writing in the 'bordereau' coincided with that of Captain Alfred Dreyfus, stagiary in the second bureau at the general staff corps.

"Though Dreyfus was under survillance from this time, he was not at once placed under formal arrest. The 'bordereau,' together with the authenticated specimens of the handwriting of the accused man, was first submitted to two French Handwriting experts for their opinion.

"These authorities—M. Gobert and M. Bertillon—after a thorough examination of the papers submitted to them, delivered opinions exactly opposite. Gobert decided that the two could not have been written by one man, while Bertillon announced himself convinced that both were the work of the same hand: and later, three other graphologists were consulted, two of whom agreed with Bertillon, while the other sided with M. Gobert. The preponderance of opinion was against the prisoner. In spite of his protestations of innocence, the authorship of the 'bordereau' was fastened upon him, and he was sentenced to perpetual exile, and the infamy of being degraded as a traitor.

"In order to arrive at some estimate of the value of these different opinions, it may be well to consider for a moment the men who uttered them. M. Gobert is the expert examiner of the Bank of France, and at the most distinguished private graphologist in France, a man with presumably no prejudice in favour of either party in the case. M. Bertillon is widely known as a commissary of police and Chief de la Service de l'Identite Judiciare—an official of the French Government, and probably acquainted with its overwhelming desire to fasten the crime upon the accused man. The other experts were men of less note, and may have been influenced by the earlier decisions.

"After the conviction and transportation of Dreyfus, his family and friends began an active campaign to prove his innocence.

"As one step in this they prepared exact reproductions of the 'bordereau,' and of two authentic specimens of the condemned man's handwriting, one written before and one after the discovery of that document. These were submitted to the most famous graphologists of the world, eleven in number. Mr. Ames was among those whose opinions were solicited, and thus was brought officially into the case. It is an interesting and significant fact that these eleven experts, in half a dozen different countries, working independantly of each other, and along original lines, were unanimously of the opinion that the two papers were not and could not have been written by the same man. Thus the congress of experts stood three for and thirteen against the

decision of the court-martial, while the civilized world, outside of France, united in favour of Dreyfus [5]."

Writing of Handwriting Experts, Sir Henry Hawkins narrates the following incident in which he was engaged as counsel for one side :—

A case cited by Sir Henry Hawkins.

"I always took great interest in the class of experts who professed to identify handwriting. Experts of all classes give evidence only as to opinion ; nevertheless, those who decide upon handwriting believe in their infallibility. Cross examinations can never shake their confidence. Some will pin their faith even to the crossing of a T, "the perpendicularity, my lord," of a down-stroke or "the obliquity" of an upstroke.

Mr. Nethercliffe, one of the greatest in his profession, and a thorough believer in all he said, had been often cross examined by me, and we understand each other very well.

He had a son of whom he was proud, and he and his son were often employed on opposite sides to support or deny the genuineness of a disputed handwriting.

On one occasion, in the Queen's Bench, a libel was charged against a a defendant which he positively denied ever to have written.

I appeared for the defendant, and Mr. Nethercliffe was called as a witness for the plaintiff.

When I rose to cross examine I handed to the expert six slips of paper, each of which was written in a different kind of handwriting. Nethercliffe took his large pair of spectacles—magnifiers—which he always carried, and began to polish them with a great deal of care, saying,—

"I see, Mr. Hawkins, what you are going to try to do—you want to put me in a hole."

"I do, Mr. Nethercliffe; and if you are ready for the hole, tell me—were those six pieces of paper written by one hand at about the same time?"

He examined them carefully, and after a considerable time answered: "No; they were written at different times and by different hands!"

"By different persons, do you say?"

"Yes, certainly."

"Now, Mr. Nethercliffe, you are in the hole! I wrote them myself this morning at this desk."

He was a good deal disconcerted, not to say very angry, and I then began to ask him about his son.

"You educated your son to your own profession, I believe, Mr. Nethercliffe?"

"I did, sir; I hope there was no harm in that, Mr. Hawkins."

"Not in the least; it is a lucrative profession. Was he a deligent student?"

"He was."

"And became as good an expert as his father, I hope?"

"Even better, I should say, if possible?"

"I think you profess to be infallible, do you not?"

"That is true, Mr. Hawkins, though I say it."

"And your son, who, as you say, if even better than yourself, is he as infallible as you?"

"Certainly, he ought to be, why not?"

(5) See the same cited in Ames, p.p. 237-239.

Then I put this question: "Have you and your son been sometimes employed on opposite sides in a case?"

"That is hardly a fair question, Mr. Hawkins."

"Let me give you an instance! In Lady D—'s case, which has recently been tried, dit not your son swear one way and you another?"

He did not deny it, whereupon I added: "It seems strange that two infallibles should contradict one another!"

The case was at an end [6]."

**A case cited by Justice Donovan.**

In a trial in the United States Court at Omaha, where a young man had been indicted for passing a counterfeit £10 bill, the counsel of the latter, C. A. Baldwin, objected to General Strickland's course in endeavouring to prove by business men the fact that the bill in question was a counterfeit, but to no purpose. Finally, improving a favourable chance, Mr. Baldwin substituted a good bill for the counterfeit, which genuine money General Strickland then proved by three business men to be the rankest kind of counterfeit. Thereupon Mr. Baldwin vehemently demanded that attention be given to his objections, and Judge Dundy insisted that the District Attorney send out for a bank cashier and and expert.

With great confidence General Strickland handed to the expert the bill: after establishing his business and his experience in handling money, he said;

"State to the jury whether in your opinion that bill is good or bad."

"This is a good bill, sir," returned the witness.

"What?" shouted the Attorney, "do you mean to say that bill is not a counterfeit?"

"Yes, sir! If you will bring it down to the Omaha National Bank we will give you the gold for it."

Then there was a scene, in the midst of which Mr. Baldwin managed to explain to the court that he had changed the bills without the knowledge of the District Attorney, and in view of the fact that three good business men had testified that a genuine bill was a counterfeit he thought considerable allowance should be made for his client—an ignorant country boy—in mistaking a counterfeit for a good bill. The jury was evidently impressed with the idea, for it returned a verdict of acquittal [7].

(6) Hawkins' Reminiscences, 232—233. (7) Donovan's Skill in Trial, p.p. 152-154.

## CHAPTER XXIII.

# Cross Examination of witnesses as to handwriting.

CONTENTS:—1. **Non-expert witness.**—Cross examination of alleged writer.—Single signature apart from the body of the writing.—Admissions of alleged writer.—Showing the witness extraneous writings and signatures.—Testing the strength of the witnesses' moral conviction.—Illustrative cases.—Examination in chief.—Cross examination.—2. **Experts.**—Examination of experts.—Expert testifying from memory of lost instrument.—Value of expert and non-expert evidence compared.—Illustrative cases,

## (1) NON-EXPERT WITNESS.

**Cross examination of alleged writer.**

A court should be liberal in allowing cross examination of a witness who is himself a party to the suit, and if such a witness denies his signature to a document produced in court, he may, on cross examination, be required to write his name in open court so that it may be compared with the controverted signature [1].

The benefit of this kind of cross examination was well illustrated in a case where a check for the sum of twenty-four dollars was alleged to be forged, the word, "four" having been written "foure," and in the writing executed by the defendant upon the witness stand the same orthography was used [2].

It has been held that admittedly genuine documents, not otherwise relevant to the case, may go to the jury for the purpose of comparison. The chief value of cross examination would be destroyed unless the jury should be allowed to compare what the witness admitted he signed with what he denied. If they were satisfied his genuine signature was the same as the disputed one, the issue would be very much narrowed and reduced to a question of imitation, which would probably be determined by circumstances or by their estimate of the testimony as reliable or not.[3]

**Single signature apart from the body of the writing**

Single signatures, apart form some known surroundings, are not always recognized by the man who made them [4].

Few men care to assume, from seeing only what purports to be their signature, absolute knowledge that it is or is not genuine [5].

In a case in Michigan, the plaintiff suing upon an insurance policy and testifying as witness denied his signature to the application produced by the defendant as the one upon which the policy issued. On cross examination with a view to test the truthfulness of this denial, and the genuineness of the alleged signature, the counsel for the defendant presented to the witness a paper folded so as to show only the name of the plaintiff in writing, and asked him if the signature there pointed out was his. The counsel for the plaintiff insisted that the witness had a right to look over the whole paper before answering. To this the counsel for the defendant objected, but the court directed that the witness should be allowed, before answering, to examine the whole paper. This ruling of the court was held to be correct. Judge Cooley reasoned as follows: "Where an expert is undertaking to testify concerning handwriting, it is difficult to set any bounds to an examination which may reasonably tend to test the accuracy of his knowledge,

(1) Moore on Facts 27, 41. (2) Bradford v. People, 22 Colo. 157, 43 Pac. Rep. 1013.
(3) Dietz v. Grands Rapids Fourth Nat. Bank, 69 Mich 287, 37 N. W. Rep. 220.
(4) Matter of Roster, 34 Mich. 21, 26, per Campbell, J.
(5) Groff v. Groff 209 Pa. St. 603, 59 Atl. Rep. 65 per Dean, J.

skill, and judgment. Obviously, it would be proper to subject him to tests which would be entirely improper and tend unjustly to embarrass and confuse one who did not assume to be an expert, but who might nevertheless have some personal knowledge of a particular specimen of handwriting submitted to his inspection. A person who cannot even read handwriting may nevertheless be able to testify to a particular signature which he has seen made; for particular marks upon the paper may identify beyond question the instrument whose execution he witnessed. But if such a witness were required to look at the signature separated from the instrument and to say, without any of the aids which the marks upon the instrument would give him, whether that was or was not the signature he saw written, it is perceived at once that the requirement would be unfair and a categorical answer impossible. Now, it may be said that every man is an expert as regards his own handwriting, and may rightfully be subjected to the tests, when he is called to testify concerning it, that other experts might be tried by; but in fact a large proportion of the people do not possess or assume to possess any such knowledge of the peculiarities of their own handwriting, if any such there are, distinguishing it from any other, as would justify their expressing the opinion whether isolated signatures, which might be theirs, were in truth so or not; The handwriting of a man who writes but little may never acquire any very definite characteristics, or any great uniformity; and a very accurate penman may possibly copy the correct standard of penmanship so nearly as to render it difficult for him to determine whether a particular word shown him was written by himself or by some other writer, who with equal facility has copied the same standard. All writing in the same language follows in greater or less degree the same models, and some uniformity is always to be expected. If all houses were constructed in a like degree after one plan, it might nevertheless be possible for any house builder to recognize the several houses he had built, if he could see each with its surroundings but to require him to take a view of one with the surroundings excluded, and to say whether he constructed it or not, could hardly be fair to the witness, or a method likely to bring out the knowledge, if any, which he actually possessed. A man may recognise even a casual acquaintance if his whole person, size, height, carriage, and peculiarities of deportment may be observed, when if he were compelled to judge by a single feature, or even by a view of the whole face, he might easily be deceived in consequence of missing something upon which his recognition in part depended. Any examination based upon such partial view might be useful in entrapping the witness, if it were the purpose to be accomplished; but it could not be a reasonable mode of arriving at the truth. The witness in any such case is fairly entitled to all the aids to recognition which the circumstances and surroundings afford; and we think the court very justly and properly required that he should have them in this case. This by no means precludes a careful and critical examination of the witness after the general question has been answered, with a view to testing the accuracy of the opinion expressed, and the grounds upon which it is based. A thorough sifting of the testimony of the witness is always admissible; but justice to him requires that, before he is subjected to that process, he should be allowed to give his testimony in view of all the facts bearing upon the point under examination, so far as they may be within his knowledge, instead of being restricted to a partial and imperfect view, by means of which the likelihood of error, mistake, and embarrassment may be greatly increased [6]."

In a Pennsylvania case a non-expert witness testified to the genuineness of the disputed signature and on cross examination counsel exhibited to him

(6) North American F. Ins. Co. v. Throop, 22 Mich. 146, 161. Moore on Facts, Vol. I, p. 721.

a paper on which was written the same name, which was placed inside an envelope but so that through an aperture cut in the envelope the entire name could be plainly seen and nothing more, and asked, "In your judgment is that the defendant's signature?" Sometimes the witness answered that it was not, and at times that it was a forgery; and quite often that he was mistaken. It was strenuously objected that the witness was entitled to have placed before him the whole paper containing the signature. The court held that although the objection would have been good if the witness's knowledge had been limited to a sight of the signature on a check, bill, note, bond or other such writing, in which case the jury would have known that his familiarity with the signature was not thorough, but limited, and would have given it weight accordingly, nevertheless the objection was not tenable in the case in hand, because the witness had stated positively and unqualifiedly on direct examination that his acquaintance with the defendant's signature was such that he was able immediately to recognize it on sight. The real purpose was to show, according to a common term, that the witness thought himself "smarter" than he really was; and his mistaken answers made it clear that in most cases he had no such extensive and thorough knowledge of the signature as he professed [7].

The court was much impressed by the testimony of a non-expert witness that a signature was not genuine, who on cross examination was required to pass upon test signatures without seeing the writings to which they were attached, and made very few mistakes in verifying more than sixty signatures. [8]

In New Jersy it was held that there was no error in requiring that a paper thus exhibited to a witness on cross examination should be so shown that he could see the whole of the writing. "The better opinion seems to be," said the court, "that the party was entitled to lay the paper before the jury, to form their opinion as to the testimony of the witness, and therefore the whole paper should be shown; for the jury would not judge, from the inspection of the entire instrument, of the value of the opinion of a witness who has only seen a part of it. But admitting that the witness is not, as a general rule, entitled to see the entire instrument, it is clearly the duty of the court to see that the paper is so exhibited as to enable the witness to judge of its general character, and that the cross examination is so conducted as fairly to test the value of his opinion." [9]

**Admissions of alleged writer.**

Voluntary, deliberate, and repeated admissions by a party, that what purports to be his signature to a document exhibited to him is genuine, constitute strong evidence of the fact [10].

Testimony to a party's admission of the genuineness of his signature is a very weak species of evidence if the party denies that he made the admission [11].

**Showing the witness extraneous writings and signatures.**

It is not competent on cross examination to show the witness writings not connected with the action nor properly admitted for the purpose of comparison, with a view to testing his knowledge; and if such examination is permitted, the party will not be allowed to contradict the witness or preve him mistaken as to those writings [12].

(7) Groff v Groff, 209 Pa. St. 603, 59 Atl. Rep. 65.

(8) Gaine's Succession, 38 La. Ann. 123, 134.

(9) West v. State, 22 N.L.J. 212, 240, per Green C.J. Little confidence can be reposed in the judgment of a witness who is convicted of these mistakes on cross examination. Peebles v. Case, 2 Bradf. (N.Y.) 226, 235.

(10) Wigmore on Evidence 1170, 1171. (11) Plicque v. Labranche, 9 La. 559, 562.

(12) In Van Wyck v. McIntosh, the court said: "His knowledge may un questionably be experimented upon, but a fact irrelevent to the issue cannot be introduced into the cause and tried for the sake of so experimenting in regard to it."

In cross examination of a non-expert who has stated that he believes a disputed writing to be that of a specified person, it is improper to ask him "Would you take it against his denial?" Such an enquiry is purely hypothetical, predicated on no known or authenticated fact. It calls for mere speculation and vague belief. The answer might create some doubt with a weak juror, or be the foundation of an *ad captandum* argument, although wholly immaterial as evidence [13].

**Testing the strength of the witness's moral conviction.**

Where a witness testifies with positiveness and certainty to his knowledge of a party's handwriting, and his subsequent testimony discloses that his knowledge of it is insignificant, it tends to show a carelessness and indifference as to the accuracy of his testimony which clearly indicate that but little, if any, reliance should be placed upon it [14].

A method of cross examination which tends to confirm the evidence in examination in chief should be avoided. The following are instances of the same. On the trial of O'Coigly for high treason in 1798, a witness, Dutton, in his examination in chief, proved that a paper found in O'Coigly's pocket-book was in his handwriting. This evidence was in a singular manner strongly confirmed by the witness's answers to questions put to him in cross examination [15]:—

**Illustrative cases.**

**EXAMINATION IN CHIEF:—**

Q. Are you acquainted with Mr. O'Coigly, the prisoner at the bar?

A. I know Priest O'Coigly, very well; I knew him at Dundalk, in North of Ireland.

Q. Are you acquainted with his handwriting?

A. I have seen him write a number of times.

Q. So as to have acquired a knowledge of his manner of writing?

A. Yes.

Q. Look at that paper, and say whether, from your knowledge of his manner of writing, you believe that to be his handwriting?

A. I do believe it to be his writing.

Q. Do you include in that, the signature as well as the whole body of the paper?

A. I believe it to be all the same handwriting, and Mr. O'Coigly's handwriting.

**CROSS EXAMINATION:—**

Q. You have sworn you saw Mr O'Coigly write. Upon what occasion did you ever see him write?

A. On various occasions. I have seen him write letters and notes. I can relate a singular circumstance to you and the Court. There was a poor man of the name of Coleman in the gaol of Dundalk. This man had a wife, and was in great distress. The man's wife used to come to my little shop for tea and bread, and what they wanted; she had no money, and left her husband's watch in my possession for the goods she wanted. Priest O'Coigly, I believe through an act of charity to the poor man, he took a piece of paper and put his own name, and after that about a dozen more, and desired me to call upon these people, and they would give me a shilling apiece; he gave me his shilling, and said he would collect more about the town.

(13) Commonwealth Bank *v.* Mudge, 44 N. Y. 514, 522 But see *contra* Foster *v.* Jenkins, 30 Ga. 576. Moore on Facts, Vol. I ss. 640, 666—669.

(14) People v. Corey, 148 N. Y. 476, 42 N. E. Rep. 1066. Much latitude should be allowed in cross examination. Beavan *v.* Atlantic Nat. Bank, 142 Ill. 302, 31 N. E. Rep. 679.

(15) Trial of O'Coigly (taken by Gurney) cited in Ram on Facts.

Q. Upon that occasion you saw him write?
A. Yes [16]."

Similarly, on Horne Tooke's trial for high treason in 1794, Mr. Woodfall's evidence of the prisoner's handwriting was in a remarkable manner confirmed on the prisoner's own cross examination of him [17] :—

EXAMINATION IN CHIEF:—

Q. Is this the handwriting of Mr. Tooke's? (Showing a book to the witness).

A. I believe this part (pointing it out) is; but I cannot swear it.
Q. You are not asked to do that.

A. I never saw this entry—I mean merely to say, for my own sake, and that of the jury, that I only swear, that, as far as resemblance of hands strikes me, this is Mr. Tooke's writing. I have seen him write, but not so often as his writing has passed through my hands.

Q. But, however, from writing that you have seen, you are able to form a judgment?

A. I cannot say I am able to form a decisive judgment; but I believe, from the resemblance of hands, it is his handwriting.

CROSS EXAMINATION:—

Q. Are you sure you have seen me write?
A. Yes.
Q. How long ago?

A. Some years ago; I believe, full 17; the period is a memorable one. I allude to the circumstance of an advertisement for a subscription for the widows, orphans and aged parents of the Americans, who lost their lives at the battle of Lexington.

Q. That was in 1775, 19 years ago?

A. You are perfectly right; it was 19 years ago.....The reason why I instanced this case was, because it was a memorable one. You delivered to me, in my brother's counting house, a copy of the advertisement, upon which I think you wrote the words, 'For the London Packet and Morning Chronicle.'..... I don't know that I have ever seen you write but once.

Q. The last time you saw me write was 19 years ago?
A. Yes.

## (2) EXPERTS

Examination of experts.

"In these days when it is impossible to know everything, but becomes necessary for success in any avocation to know something of everything and everything of something, the expert is more and more called upon as a witness both in civil and criminal cases. In these times of specialists, their services are often needed to aid the jury in their investigations of questions of fact relating to subjects with which the ordinary man is not acquainted [18]."

In spite of judicial dicta against the weight to be given to expert testimony, the fact still remains that the testimony of expert witnesses must be reckoned with, in about sixty per cent of our more important litigated business, and the only possible way to enlighten our jurors and enable them to arrive at a just estimate of such testimony is by a thorough understanding of the art of cross examination of such witnesses.

(16) Cited in Ram on Facts 143—144.
(17) Trial of Horne Tooke, (taken by Gurney); Ram on Facts pp. 143—144
(18) Wellman's Art of Cross Examination pp. 72—74.

"As a general rule, it is unwise for the cross examiner to attempt to cope with a specialist in his own field of inquiry [19]."

"Lengthy cross examinations along the lines of the expert's theory are usually disastrous and should rarely be attempted [20]".

**Illustrative cases**

As distinguished from the lengthy, though doubtless scientific cross examination of experts in handwriting, the following incident cannot fail to serve as a forcible illustration of the suggestions laid down as to the cross examination of specialists. Mr. Wellman, the famous author of the work on cross examination assures his readers that although it would almost be thought improbable in romance, yet every word of it is true.

In the trial of Ellison for felonous assault upon William Henriques, who had brought Mr. Ellison's attentions to his daughter, Mrs. Lila Noeme, to a sudden close by forbidding him his house, the authenticity of some letters, alleged to have been written by Mrs. Noeme to Mr. Ellison, was brought in question. The lady herself had strenuously denied that the alleged compromising documents had ever been written by her. Counsel for Ellison, Mr. Charles Brooks Esq., had evidently framed his whole cross examination of Mrs. Noeme upon these letters, and made a final effort to introduce them in evidence by calling Professor Ames, the well-known American expert in handwriting [21].

He was called in to depose about the identity of the handwriting. He deposed to having closely studied the letter in question, in conjunction with an admittedly genuine specimen of the lady's handwriting, and gave it as his opinion that they were all written by the same hand. Mr. Brooks then offered the letters in evidence, and was about to read them to the jury when the Assistant District Attorney asked permission to put a few questions.

We give an extract from the examination of the witness by the District Attorney, counsel for the prosecution :—

Attorney :—"Mr. Ames, as I understood you, you were given only one sample of the lady's genuine handwriting, and you base your opinion upon that single exhibit, is that correct?"

Witness :—"Oh, yes, the more samples I had of genuine handwriting, the more valuable my conclusion would become."

Attorney :—(taking from among a bundle of papers a letter, folding down the signature and handing it to the witness) "Would you mind taking this one and comparing it with the others, and then tell us if that is in the same handwriting?"

Witness :—(examining paper closely for a few minutes) "Yes, sir, I should say that was the same handwriting."

Attorney :—"Is it not a fact, sir, that the same individual may write a variety of hands upon different occasions and with different pens?"

Witness :—"Oh yes, sir; they might vary somewhat."

Attorney :—(taking a second letter from his files, also folding over the signature and handing to the witness) "Won't you kindly take this letter, also, and compare it with the other you have?"

Witness :—(examining the letter) "Yes, sir, that is a variety of the same penmanship."

Attorney :—"Would you be willing to give it as your opinion that it was written by the same person?"

(19) Wellman p. 74. (20) Ibid. (21) Wellman 72.

Witness :—"I certainly would, sir."

Attorney :—(taking a third letter from his files, again folding over the signature, and handing to the witness) "Be good enough to take just one more sample—I don't want to weary you—and say if this last one is also in the lady's handwriting."

Witness :—(appearing to examine it closely, leaving the witness-chair and going to the window to complete his inspection) "Yes, you understand I am not swearing to a fact, only an opinion."

Attorney :—(good-naturedly) "Of course I understand; but is it your honest opinion as an expert, that these three letters are all in the same handwriting?"

Witness :—"I say, yes. It is my opinion."

Attorney :—"Now, sir, won't you please turn down the edge where I folded over the signature to the first letter I handed you, and read aloud to the jury the signature?"

Witness:—(unfolding the letter and reading triumphantly) "*Lila Naome.*"

Attorney:—"Please unfold the second letter and read the signature."

Witness : (reading) "*William Henriques.*"

Attorney :—"Now the third, please."

Witness :—(hesitating and reading with much embarassment "*Frank Ellison.*"

Thus the fact was clear that the three letters were written by three different persons, and not by the same person as testified to by the expert.

The alleged compromising letters were never read to the jury. As a matter of fact, father and daughter wrote very much alike, and with surprising similarity to Mr. Ellison. It was this circumstance that led to the use of the three letters in the cross examination[22].

It will not be uninteresting, by way of contrast, to record here another instance where the cross examination of an expert in handwriting did more to convict a prisoner, probably, than any other one piece of evidence during the entire trial.

The examination referred to occurred in the famous trial of Munroe Edwards, who was indicted for forging two drafts upon Messrs. Brown Brothers & Company, who had offered a reward of $. 20,000 for his arrest.

Munroe had engaged Mr. Robert Emmet to defend him. At that time the District Attorney was Mr. James R. Whiting, who had four prominent lawyers, including Mr. Ogden Hoffman, associated with him upon the side of the government.

Recorder Vaux, Philadelphia, was called to the witness stand as an expert in handwriting, and in his direct testimony had very clearly identified the prisoner with the commission of the particular forgery for which he was on trial. He was then turned over to Mr. Emmet, counsel for the defense, for cross examination.

Mr. Emmet :—(taking a letter from among his papers and handing it to the witness, after turning down the signature) "Would you be good enough to tell me, Mr. Vaux, who was the author of the letter which I now hand you?"

Mr. Vaux:—(answering promptly) "This letter is in the handwriting of Munroe Edwards (the accused)."

Mr Emmet:—"Do you feel certain of that, Mr. Vaux?"

Mr. Vaux:—"I do."

(22) Wellman pp. 72—74.

Mr. Emmet:—" As certain as you are in relation to the handwriting of the letters which you have previously identified as having been written by the prisoner ? "

Mr. Vaux:—" Exactly the same."

Mr. Emmet:—" You have no hesitation then in swearing positively that the letter you hold in your hand, in your opinion, was written by Munroe Edwards ? "

Mr. Vaux:—" Not the slightest."

Mr. Emmet:— (with a sneer) " That will do, sir."

District Attorney:—(counsel for prosecution, rising quickly) " Let me see the letter."

Mr. Emmet:—(contemptuously) " That is your privilege, sir, but I doubt if it will be to your profit. The letter is directed to myself, and is written by the cashier of the Orleans Bank, informing me of a sum of money deposited in that institution to the credit of the prisoner. Mr. Vaux's evidence in relation to it will test the value of his testimony in relation to other equally important points."

Ma. Vaux here left the witness chair and walked to the table of the prosecution, re-examined the letter carefully, then reached to a tin box which was in the keeping of the prosecution and which contained New Orleans post-office stamps. He then resumed his seat in the witness chair.

Mr. Vaux:—(smiling) " I may be willing, Mr. Emmet, to submit my testimony to your test."

Mr. Emmet made no reply, but the prosecuting attorney continued the examination as follows :—

Counsel for prosecution in re-examination asked as follows :—" You have just testified, Mr. Vaux, that you believe the letter which you now hold in your hand was written by the same hand that wrote the Caldwell forgeries, and that such hand was Munroe Edwards's. Do you still retain that opinion ? "

Mr. Vaux:—" I do."

District Attorney:—" Upon what grounds ?"

Mr. Vaux :—" Because it is a fellow of the same character as well in appearance as in device. It is a forgery, probably only intended to impose upon his counsel, but now by its unadvised introduction in evidence, made to impose upon himself and brand him as a forger."

The true New Oreleans stamps were here shown to be at variance with the counterfeit post-mark upon the forged letter, and the character of the writing was also proved by comparison with many letters which were in the forger's undoubted hand.

It turned out subsequently that the prisoner had informed his counsel, Mr. Emmet, that he was possessed of large amounts of property in Texas, some of which he had ordered to be sold to meet the contingent cost of his defense. He had drawn up a letter purporting to come from a cashier in a bank at New Orleans, directed to Mr. Emmet, informing him of the deposit on that day of $.1,500 to the credit of his client, which notification he, the cashier, thought proper to send the counsel, as he had observed in the newspapers that Mr. Edwards was confined to the jail. Mr. Emmet was so entirely deceived by this letter that he had taken it to his client in prison, and had shown it to him as a sign of pleasant tidings[23].

(23) " Pleasantries about Courts and Lawyers," by Edwards cided in Wellman 90—92

CHAPTER XXIV.

# Charge to jury as to evidence of handwriting.

CONTENTS :—Charge to jury as to the value of expert evidence.—Instructions to jury as to handwriting.

**Charge to jury as to the value of expert evidence.**

The following extract from a recent case that was tried in one of the American courts, not only shows the value to be attached to expert opinion on matters of handwriting, but also the method by which the jury is to appreciate the evidence of such experts :

The Court said in summing up the case to the jury :—" The prosecution rely upon the evidence of three experts who have testified in your hearing. These experts united in the opinion that the letter which is charged in the indictment was written by the same person who wrote the letter to Judge Fitzgerald and the letter to Mrs. Bridgham, which have been put in evidence and which the defendant's counsel has stated were written by the defendant. They give their reasons—two of them at considerable length—for arriving at the conclusion. Now, it is your duty to weigh the evidence of these experts, to see whether they are right, because the prosecution must satisfy you that he wrote it. Who are these men? They have been examined before you. They have given, to some extent, information concerning their studies and qualifications. They testify, two of them at least, that they have devoted comparatively long lives to the study of disputed handwriting ; that they have examined disputed handwriting that has afterwards become the subject of litigation in a large number of cases. The other one is a teacher of handwriting and has devoted less years, as indeed he has seemed to have lived less years, to this very interesting study. Are their opinions reliable? Do they satisfy you that the man who wrote these two letters, the rne to Judge Fitzgerald and the other to Mrs. Bridgham, is the same man, who wrote Exhibit No. 1? They concur in the opinion that Exhibit No. 1 is written in a disguised hand, and it is apparent from the other two letters, the one to Judge Fitzgerald and the other to Mrs. Bridgham, that they were written with a lead-pencil and with a free, off-hand, accustomed movement, but they declare that they are able, by certain tests which they say they have found to be correct during their long study of this science, to identify characters in this letter with the characters in the two letters to which I have referred, and that such an identification occurs in a large number of instances. Bringing down to a conclusion the result of their long experiences, and their examinations of these letters, they uniformly declare that they have no doubt that the same person wrote all three.

" Now, we know that the science of detecting handwriting is the subject of study by men who engage for pay in that pursuit. They expect, when they are called upon in courts of justice or elsewhere to make examinations and testify concerning them, to be paid for it. That is the business of their lives, as it is the business of the life of a lawyer to get pay from his client for services, of a doctor from his patient, of a pastor from his congregation. Their pay, it may be justly said, I think, must depend largely upon the extent and character of their studies and the extent and character of their qualifications to speak ; precisely as one lawyer may receive, and will receive, a large compensation for a case, while a lawyer of less reputation, of less study, of lower qualifiications, doing the same work perhaps equally as well, can command only a much smaller sum.

"Now, these men testify before you that these letters were written by the same person. They say that they have no doubt of it They declare that they have examined them critically. They have brought to bear upon it the experience of years, and the principles of their science, and all that study could qualify them to perform with relation to it, and they have attempted to give to you, and have given to you, what they claim to be their reasons for the result at which they have arrived. Are they right? Are you satisfied that they are right, beyond a reasonable doubt?"

"Mr. Atchison (counsel for defendant):—If your Honor please, I except to that portion of your Honor's charge in so far as it concerns expert testimony given in this case. I respectfully request the court to charge that direct evidence is stronger and is entitled to greater consideration than expert testimony.

"The Court:—That, I decline to so charge.

"Mr. Atchison:—I except to the refusal, and I except to all refusals.

"The Court:—That is, I decline to charge the last request under the circumstances of this case.

"The jury retired at 3-49 p.m., taking with them the exhibits, and returned into court at 4-18 p.m.

"The Court:—I have received, gentlemen of the jury, from you this question. Of course, I cannot answer any questions by written communication. I have to bring you into court and have the prisoner and his counsel represented and the District Attorney:—"Did the experts positively swear that the three letters, Nos. 1, 2 and 3, were written by the same person?" They swore that they had no doubt that they were written by the same person. Expert Ames swears that they were—'In my opinion all three letters were written by the same person.' He says there is no doubt in his mind. Expert Kinsley testifies to the same, and that there is not a shadow of a doubt, I think, as he expressed it, that the same person wrote them all. That answers your question. I have not undertaken to give the exact language, but that is what they said in substance.

"Mr. Atchison:—I except to the further charge that your Honor has just made.

"The Court:—I am not making any charge. I am answering a question that the jurors asked me as to what evidence the experts gave.

"Mr. Atchison:—I except to the remarks of the Court in response to the request.

"The jury retired at 4-21, and returned into court at 5-08, and stated, through their foreman, that they found the defendant guilty as charged in the indictment."[1]

**Instructions to Jury as to handwriting.**

The following instructions by the judge in a charge to the jury as to expert evidence have been held to be good:—Expert opinion evidence as to handwriting "is of the lowest order of evidence, or evidence of the most unsatisfactory character. It cannot be claimed that it ought to overthrow positive and direct evidence of credible witnesses who testify from their personal knowledge, but it is most useful in cases of conflict between witnesses as corroborating testimony."[2]

Such instruction may be applied to non-expert as well as to expert opinion evidence.[3]

(1) Extract from the Report of the court stenographer, cited in Ames 81—82.
(2) Whitaker v. Parker, 42 Iowa 585 See also Borland v. Walrath, 33 Iowa 130.
(3) Jackson v. Adams, 100 Iowa 163, 167, 69 N.W. Rep. 427.

Cases have occurred, for instance, where an expert was able to demonstrate that a disputed writing was traced from a genuine original, and the discovery of that fact had not previously been made. His opinion in such a case ought not to be disparaged in language which would authorize a jury to regard as weak and unsatisfactory the circumstance that the writings were facsimiles. [4]

An instruction that " while the opinion of an expert is competent to go to the jury on an issue involving the genuineness of a written instrument, yet such evidence is intrinsically weak, and ought to be received and weighed by the jury with great caution, and they should give it such weight only as they may think it justly entitled to receive in view of all the evidence in the case," was held to be an error, and the decision based thereon was reversed on appeal. " The evidence of experts is neither intrinsically weak nor intrinsically strong," said the court of appeal. " Its strength, or its weakness, depends upon the character, the capacity, the skill, the opportunities for observation, the state of mind, of the expert himself, and on the nature of the case and all its developed facts. Like any other evidence, it may be entitled to great weight with the jury, or it may be entitled to little; but of its weight and worth the jury must judge, without any influencing instruction, either weakening or strengthening, from the court." [5] In the same case the court condemned an instruction which seemingly authorized the jury to disregard all the expert evidence if the jury thought from their own comparisons that the disputed signature was similar to the admittedly genuine ones, though all the experts thought it not genuine and gave their reasons for so thinking. " It was well calculated to induce in the mind of the jury the belief thet they might wholly disregard the expert evidence if it did not coincide with their own opinion, formed by comparison of the different signatures, though not one of the jury was presumably capable of giving an opinion as expert as to handwriting [6]."

In another American case it was held to be an error to instruct a jury that " evidence as to the genuineness of handwriting is generally regarded as of a weak and unsatisfactory character," even though they are told at the same time that they " should give the evidence of each witness such credit as you may deem it entitled to, taking into consideration the sources of his knowledge and the fact as to how well acquainted he is with the handwriting of the defendant, and the frequency of the times at which he has seen (the party) write, and the different circumstances under which he has observed his writing or his signature [7]."

In the federal courts of America juries have been instructed that expert opinion evidence to handwriting should be received and acted upon with caution [8] and it is customary, to instruct that expert or non-expert opinion evidence is to be considered and weighed by the same tests as other testimony, to explain something of the nature of expert testimony, and to define the difference between the witness who testifies to facts and one who testifies to his opinion [9].

---

(4) Moore on Facts, Vol. I p. 605.

(5) Coleman V. Adair, 75 Miss. 660, 23 So. Rep. 369, per Woods C. J. On this point see also Pratt v. Rawson, 40 Vt. 183, 188. Suresh Chandra v. Emp. 39 Cal. 606: 13 Cr. L. J. 289: 14 I. C. 753: 16 C. W. N. 812; Batahusha v. Parmaswar. 64 I. C. 234 (P); Sreemathi Sarojini v. Hari Das. 49 Cal. 235; In the matter of Baichandra Singh 18 P. R. 1915: 28 I. C. 722: 16 Cr. L. J. 338: 12 P. W. R. (Cr.) 1915; Jalal—ud—din v. Emp. 147 P. L. R. 1912: 13 Cr. L. J. 563: 15 I. C. 979. 18 P. W. R. (Cr.) 1912; In. re. Basrur. Venkata Rao. 36 Mad. 159; 11 M. L. T. 93: 22 M. L. J. 270: 13 Cr. L. J. 226: 14 I. C. 418 1912 M W N 125.

(6) Ibid.

(7) Moore on Facts, Vol I p. 605-606.

(8) U. S. v. Pendergast, 32 Fed. Rep. 198, 200, per Thayer. J.

(9) U. S. v. Pendergast, 32 Fed. Rep. 198; U. S. v. Gleason. 37 Fed. Rep. 331.

CHAPTER XXV.

# Relation of Light to Proof of Documents.

CONTENTS :—Necessity for light for examination of documents.—During trials of cases in court-rooms.—To aid the human vision.—For judge and jury to follow the reasons and grounds of the expert's conclusions.—To discover indistinct stains and delicate tints and colours.—To determine the quality of paper in cases of alleged interpolation of sheets in disputed documents.—As aid to photography.—For examination of erasures.—For helping ink tests.—For determining ink colours.—Use of spectrum rays out beyond the violet.

**Necessity for light for examination of documents.**

Light is an important factor in the proof of documents [1].

**During trials of cases in court rooms.**

Justice has been defeated many times because court-rooms, like cathedrals, have been lighted with a dim light somewhat in harmony with some of the hampering old legal precedents.

There is in fact a form blindness akin to colour blindness. When the necessity arises for proving a somewhat obscure physical fact by visible evidence this whole question of human vision with its defects and limitations becomes a question of vital interest. In the first place, it is important to realize that seeing ability is not by any means the same with all observers. It is an encouragement to improve our sense of sight to realize that only part of our skill comes by nature and that much comes from study and experience.

In regard to this matter of proper illustrations, Mr. A. S. Osborne of New York,[2] has made some very apposite observations in an article recently published by him, entitled "Form Blindness, or Psychology of Sight in Relation to Legal Procedure," from which the following is excerpted :—

"All of us are blind to microscopic differences and identities in things, as all are deaf to certain sounds below or above the hearing range.....This range of blindness is to a large extent unconscious and varies greatly in different individuals. With some persons it reaches a degree of deficiency which makes dependence upon their visual judgment a source of real danger. Like colour blindness, and tone deafness, this inability to distinguish form may be found in those who in other fields possess the highest intellectual attainments ..... It readily occurs to those having experience in the matter, that in a case involving a disputed typewriting, where the whole case may depend upon the recognition of minute similarities or difference and their correct interpretation, it may be very unfortunate for those who seek to prove the facts, if the one who is finally to decide the case is even partially form blind. It certainly would promote justice if it were more widely understood in the legal world that variation in seeing ability is a proved scientific fact. Such knowledge would weaken prejudice, repress off-hand judgments, and lead to greater care in finally deciding the question at issue. The mere reading of various legal opinions, some by members of highest courts, show clearly that this question of seeing ability or visual discrimination and perception has had an important bearing upon the rendering of judgments. It is true that there are 'things which to the ordinary mortal

(1) On the subject matter of this chapter see a very interesting article in the Chicago Legal News reproduced in 16 Cr. L. J. p. 1 to which article the authors are greatly indebted in the preparation of this chapter, and extracts from which make the main portion of this chapter.

(2) The famous author of the work on Questioned Documents.

are not discernible,' but exact accuracy in some cases would require that this statement should be not 'the ordinary mortal,' but 'some ordinary mortals.' A blind man's judgment on a sunset is not worth much ..... Even a brief consideration of the subject of proof of visible evidence shows clearly the vital importance of enlarged photographs as an ideal in litigated cases involving these questions. Even slight enlargements may make evident to some observers what before could not be seen at all, and a sufficient enlargement usually makes differences and identities so plain that they can be seen even by those of foggy vision, who in examining the same objects in natural size would literally be form blind. If good photographs are excluded it may be impossible to prove the fact."

**To aid the human vision.**

This whole question of human vision and the aids that perfect and intensify it, is naturally closely related to the question of discovering forgery and the numerous other physical conditions that may point to fraud of various kinds in connection with disputed documents, and is of special importance in connection with the showing and proving of these facts in a Court of Law, often against prejudice and usually with untrained men, who must be made to see and understand. It is, therefore, essential that sense impression of all kinds be clarified and intensified in every way possible, and the arrangement, distribution, and management of light has a most important bearing on the subject.

Under the old legal practice, now happily but all too slowly passing away, expert testimony regarding forgery and documents, involving as it does many technical interpretations of visible evidence, was mainly the giving of bare oral opinions on a contested question in Courts of Law.

**For judge and jury to follow the reasons and grounds of the expert's conclusions.**

A new practice, however, has developed in most courts in connection with proof of physical facts relating to documents, by which, referee, judge and jury are actually shown the basis for whatever opinion is given, so that with the assistance of reason-giving testimony, now admitted in almost all courts, and with the aid of instruments, and enlarged, properly grouped photographic illustrations, they can finally reach their own conclusions regarding the disputed fact. Testimony is not simply oral, as in the past, but visible as well.

It will readily appear that this change of practice regarding visible evidence makes necessary such an illumination of court-rooms or trial chambers, as makes it possible to see with the utmost distinctness.

Another reason why court-rooms should be properly arranged and lighted is to enable judge and jury to see witnesses with the utmost distinctness as testimony is being given, as well as to hear them. That this result may be attained, it is necessary that witness-box, and Judge's bench be arranged in proper relations to each other and near together. Fortunately, there is in all of us a kind of instinct, enforced by conscious and unconscious training, by which we judge whether or not those who speak to us are telling the truth. This important faculty is dependent upon both the senses of sight and hearing. We recognize at once an insincere tone. Even dogs and children judge us in an occult and unknown manner. By the use of the eye as well as the ear, we unconsciously interpret all messages that come to us as exaggerated, true or false. That ancient requirement of the law that "the accused must be confronted by the witness against him," was no doubt in some measure based upon this important faculty by which truth is separated from falsehood. A witness should be placed close to and nearly, if not quite, facing the jury or the Judge who is to decide upon the truth or falsity of his testimony and the room should be

so lighted that his attitude, appearance, and every changing expression is distinctly seen. Few of us have ever analyzed the evidence of sincerity and of untruthfulness as shown by hearing and sight, but we can understand how, at least to some extent, it can be done.

A visit to many a court-room is sufficient to show how such a room should not be arranged and should not be lighted. Artistic and architectural considerations, in many cases, would seem to be the only ones that had been consulted in the arrangement. In many a city of our land, of all places, the court-room is the one place where it is most difficult to hear and most difficult to see.

Trials should be held where every word spoken can be heard distinctly and where every piece of visible evidence can be clearly seen for exactly what it is.

There are many court-rooms so dimly lighted and so improperly arranged that it is almost impossible in them to prove forgery, when such proof must be based upon the correct interpretation of delicate but highly significant visible evidence. In some few cases court and jury leave their accustomed places and in an informal and sensible manner, gather around some low-placed, clean window where all can see and all can hear [3].

**To discover indistinct stains and delicate tints and colours.**

In connection with the proof of many different questions relating to disputed documents correct and adequate illumination is absolutely essential, if the facts are to be proved. Vital evidence is sometimes based entirely upon the interpretation of indistinct stains, or delicate tints or colours, which, under the dim light provided, all become a dull and indistinct gray. In cases involving chemical erasures, in which certain indistinct yellow stains are of the utmost significance, such evidence is practically invisible under the yellow, flickering artificial light or the dim daylight of the average court-room. In many court-rooms the effective use of a microscope is simply impossible.

**To determine the quality of paper in cases of alleged interpolation of sheets in disputed documents**

In many cases involving the identification of paper, where sheets have been interpolated in disputed documents, the case could be positively proven out in the court-yard, but under the conditions provided, intensified by the bad acoustic properties, injustice may triumph or the guilty may escape. Many a city has spent millions on a court-house without one properly lighted and well arranged court-room where clear seeing and distinct hearing are possible. Darkness and evil have always been associated and still are associated in many a court-room

**As aid to photography.**

Light is also a great aid to justice in connection with the subject of photography as now applied to the investigation and proof of disputed handwriting and documents. The photographic camera bears a relation to the business, similar to that of the compass to the mariner. The relation of light to this question of photography is as close as the etymology of the word itself suggests. It writes out in a universal language its unmistakable interpretation of many things. Many disputed document cases are hastily settled as soon as they are properly illuminated by the photographic camera.

(3) As to the power of courts to provide themselves with propor Court Rooms having sufficient light and accommodation, we find the following in the Albany Law Journal :—"The courts have sufficient power to compel the authorities to furnish proper accommodations, if they choose to exercise the power. The court, it was held, could not be impeded in its functions by any other department of the government. The New York Tribune says that the Supreme Court in that country has more than once exercised its power by directing the sheriff to dispossess city officers from rooms in the court-house needed for court purposes." (American Law Review Vol XXVIII p. 887)

The camera assists us to see certain things which without its aid are too small things for us to recognize in their true significance and force. It is one of the natural but erroneous human assumptions that we see all that exists before us, but we know that this is not true, and thus arises the necessity, in connection with many questions, of properly enlarging the thing to be observed. Many forgeries are perfectly apparent when enlarged a few diameters. The photograph also makes it possible to cut apart, group, and arrange the parts of a disputed document for effective study and comparison.

**For examination of erasures.**

Another condition under which special illumination is of great value is in the interpretation of certain kinds of erasures, especially erasures of pencil lines. The disposition of a thousand dollars may depend upon the interpretation of a few words or even a few figures and the determination as to whether or not they have been changed. Unlike an ink line, an ordinary pencil mark is made by sufficient pressure on the writing instrument so that a certain amount of graphite is worn off against the surface of the paper. If a mark of this nature is carefully erased so that the colouring matter is removed, it may become entirely illegible although the depressions still remain, but is so shallow that it is invisible even under the microscope. If, however, such an erasure is photographed in enlarged form with a strong illumination, through a narrow slit on one side, with the rays of light almost parallel with the surface of the paper, the shallowest depression, where a word or figure has been so effectually erased that it is totally invisible under any other examination, then produces a shadow which, in a photograph of this kind, some times show with absolute distinctness what was originally written.

**For helping ink tests.**

Another class of cases under which the question of perfect illumination is of vital importance is in all ink investigations, either to determine age or to discover whether two or more ink writings are identical or different. Some of these questions can no more be answered under the illumination of certain court-rooms than they could be answered in the light of the average cellar, while the same investigation, if conducted under properly diffused white light, shows a result that can be seen and appreciated by any intelligent man. It is easy to understand how desirable it may be under certain circumstances to show that writing is not as old as it purports to be, or to show that an addition or interlineation in ink is the same or different from other parts of the same document. The interpretation must be based mainly upon the recognition of certain colours. Under suitable conditions and proper lighting this recognition is possible with the average observer. In many court-rooms such facts cannot be proved.

**For determining ink colours.**

All ordinary commercial ink of the present day is a chemical solution to which a temporary blue colour is added so that the writing may be legible when first written. Fresh writing of this kind, as we are all aware, is of a distinct blue or bluish green colour which colour gradually disappears as it is submerged or masked by the development of a stronger colour from the chemical constituents of the ink, until it finally reaches a black or neutral gray. When used during the winter months, modern ink, under the usual conditions under which writings are kept, requires many months to lose all its initial blue colour, so that examinations like those described, to show that the ink is not as old as it purports to be, may be made a long time after the actual date of the writing. Wills and documents, representing hundreds of thousands of dollars are brought into Courts of Law, purporting to be many years of age on which the ink colour has not yet reached its ultimate degree of blackness or intensity.

By the use of a special colour microscope with two objectives and the Lovibond tintometer glasses it is possible to match and record this changing ink colour with great accuracy. For example, it is easily possible to match more than a thousand variations in the colour blue alone. If an ink of this class is accurately matched and recorded as it first appears on a document purporting to be several years of age and then the same portion of ink is observed under the same conditions a few days or weeks afterwards and the ink has distinctly changed from a blue or distinct purple to a black or a much darker colour, this is positive proof that such document is not as old as it purports to be. That most persons can recognize colours under favourable conditions ordinarily provided, is simply impossible. If evidence of this class is to be made use of, it is necessary that the ink should be observed under diffused white light of the proper intensity.

**Use of spectrum rays out beyond the violet.**

Another most interesting special application of light, that promises to assist in disputed document cases, makes use of those strange new rays of the spectrum out beyond the violet. By the use of a suitable screen and appropriate illumination it is possible to photograph totally invisible strains resulting from a chemical erasure, so that the original writing becomes entirely legible [4]."

(4) See the article by Mr. Osborne in the Chicago Legal News cited in 16 Cr. L. J. p. 1.

CHAPTER XXVI.

# Detection of Forgery in Typewritten document.

CONTENTS:—Forgery of typewritten matter.—Principles applied to Indian circumstances.—Methods of examination of typewritten matter.—Points to which attention may be directed in examination of type.—Use of photography.

**Forgery of typewritten matter.**

It has often been said that forgery is easy now that important documents are usually typewritten. Most people have supposed that the work of typewriters is so uniform that the substitution of one sheet for another could be made almost as a matter of course, with impunity. Comparatively few lawyers are yet aware that, far from this being true, the detection of forgery in a typewritten instruments is in most cases a matter of well-nigh mathematical demonstration. Doubtless, many forgeries of this kind have been successful, though suspected, because of the erroneous belief that proof of the forgery was impossible. There is a fascinating interest in studying the evidence of forgery in such cases because of the peculiar satisfaction in reaching in most cases a conclusion that is unmistakably true. It is true that detection of typewritten forgery may be difficult, even impossible, if both the genuine and the spurious pages were written on the same machine and at very nearly the same date. Possibly this will be so if they are written on two machines of the same make, both of which are new. But different machines even of the same make, will almost certainly have some minute distinguishing differences, and these will be rapidly exaggerated by use. The least slant of a letter, the slightest defect or peculiarity of any kind in it, may distinguish even a new machine from others, and, when used, some characteristics of this kind are certain to appear and increase with time. In case any of these peculiarities of a machine exist, its identification becomes a matter of certainty if a reasonable quantity of its work can be obtained for examination. A broken, bruised, or scarred letter, or one out of line, may positively identify the work of that machine during the period when such defect existed. And if in a letter book or otherwise continuous samples of the work of the machine are available for inspection, it can be positively determined at what date this peculiarity of the machine first developed. Various defects of this sort appearing successively during a course of years make it possible to fix positively the time when any particular specimen of work done on that machine was made. In these and similar ways a competent expert can often prove to a demonstration that a forged document or portion of a document, could not possibly have been made when it appears to have been made and by the machine that made the genuine document [1].

Yet, it is unfortunately still true that many attorneys are unaware of the extent to which this line of evidence has been developed, and as a result, in some cases they permit typewritten forgeries to go unchallenged when they ought to be detected and proved spurious [2].

(1) Perhaps no one has done so much to discover the possibilities of these proofs of forgery in typewriting as Albert S. Osborne, of Rochester, New York, who has written articles during several years past in various journals showing by explanation and illustrations the certainty of proof in this class of cases. But the field is a large one, and there are already many experts able to detect and prove the existence of such forgeries.

(2) Case and Comment, cited in 8 Cr. L.J. 15.

On an issue as to whether certain typewritten letters were written by a party, testimony by an expert on typewriting, who was familiar with the mechanism of typewriting machines, that a comparison of the letters with the work done by a certain typewriting machine, in the town where the party lived, indicated, because of defects in the type and in the alignment thereof, that the letters were written on that machine, was held to be admissible. State. v. Freshwater. 30 Utah, 442, 85 Pac. Rep. 447. On the subject matter of this chapter see also a very interesting note in 28 Harward Law Review 693.

"As a matter of fact, the characteristics of typewriting are more difficult to copy than those of ordinary writing resulting from involuntary action such as difference in speed, pressure, etc., which can always be discovered by photography, but can never be successfully copied," said Judge Mathieu of the Superior Court of Quebec.

A competent writer referring to this subject in the course of an article in the Law Notes for November 1904 says :—

"It would hardly occur to any one who had not especially considered the matter, that among the advantages of the typewritten document over one in manuscript might be numbered the difficulty with which a successful forgery of the former could be accomplished. As a matter of fact, the contrary view would probably be entertained by most people. It would seem the most easy task imaginable to simulate characters which are machine made. The ever-changing peculiarities of handwriting would not have to be avoided. A machine would not appear to be possessed of the slightest individuality. And yet, it is probable that typewriting is, of all kinds of writing or printing, the least susceptible of imitation. Let us suppose that we are attempting to forge a typewritten paper of any kind. We desire this paper to purport to have issued from the Law Office of Mr. Smith. The thing we must do is to get hold of a machine of the same make as Mr. Smith's. The types of the Remington, the Caligraph, the Wellington, the Smith Premier, etc., bear little resemblance to each other. So, if Mr. Smith has a Remington we must get a Remington. Then we must be sure to get a Remington of the same number as Mr. Smith's. The different numbers have different length of lines, and besides have different letters or characters, of which there are more than eighty. Mr. Smith's machine might have a dollar mark or a fraction, or some other unusual character which nevertheless we might have to use. Then we must also get a machine of precisely the same kind of type. There is large Roman type, small Roman type, large script type, small script type, correspondence type, etc., and any particular number of any kind of machine might have any one of these kinds of types. If, however, we succeed in getting a machine of the same make, of the same number and of the same kind of type, our difficulties are by no means surmounted. There are at least two other requirements which it would be well-nigh impossible to satisfy. In the first place our machine must be practically of the same age, as Mr. Smith's ; that it is to say, it must have been used for about the same length of time. The type flattens with use, and often breaks, so that there may be certain letters exhibiting marked peculiarities. The roller becomes dented in places with continual pounding, and as a consequence the writing is apt to be less clear in some lines than in others. Besides, new type is more apt to puncture the paper than old, particularly in the case of marks of punctuation. In the second place, if Mr. Smith's machine be out of alignment, our machine must also be out of alignment and in just the same manner. The letters often get slightly out of place, the imprint being made on the paper either a little above or a little below the base line, or to the right or left of the proper position. It is easy that if a *g* or an *s* has this fault it will be manifest all through the writing, whereever those letters occur, and such writing could be easily distinguished from one made with type perfectly aligned. Now add to all this the necessity of securing paper of the same make, weight, and ruling as is used by Mr. Smith, and it is manifest that our attempt to forge Mr. Smith's typewriting is going to be next to impossible.

Lest our readers, however, should declare that all the foregoing is fanciful and purely theoretical, we may say that at least one case of an attempt to forge typewriting has come before the Courts. That case [3]

(3) Levy v. Rust, 49 Atl. Rep. 1017.

came up before the Vice Chancellor of New Jersey some ten years ago, and is a remarkable illustration of the point we are trying to make. The question arose as to whether certain receipts, apparently signed by the defendant, Rust, were genuine. Mr. Rust, who was an attorney, was in the habit of having receipts made out in typewriting, on ordinary typewriter paper, and then personally affixing his signature thereto. Several of these receipts were produced on the trial, and Mr. Rust promptly repudiated them as forgeries. The signatures were carefully examined and compared with others concededly genuine, by the Chancellor, by several other men accustomed to scrutinize writing, and by at least one expert witness. Not one of them could find a single conclusive indication of forgery. Then it was necessary to turn to the typewritten part of the receipt. Here is what the Chancellor says on this point: "An expert in typewriting is brought here, and that expert sat down by my side at the table here and explained his criticisms on this typewriting and I went over it with him carefully with the glass, and while glancing hastily at his evidence it appeared very clearly. It appeared very much more clearly to me when I followed his testimony, as he gave it with the papers before us. He says these receipts running from Feb. 2, 1891 to Sep. 31, 1891 all contain certain defects in the mechanical work, which are very clear to the eye of an expert. Now this gentleman is not a professional expert witness, but a gentleman who is employed by the vendors of typewriting machines to go about the country and examine typewriting machines and see whether they are out of order, and in that way his eye becomes very acute and quick to discover things that will escape the vision of a casual observer; and I was very much struck by his evidence. He points out, in the main, three matters. There are other things, but three I recollect very distinctly. He says that in every one of these the period mark is too low, below what it should be, without exception, and an examination of them bears him out. I examined them carefully at the time. I have examined them several times since. The period mark instead of having the underside of it on a line with the under side of the body of the letters, has half its width below the line, and good typewriting does not have that. The next is the letter *s*. The letter *s* is off its feet, and every one of them makes a bad mark, and every one of them marks exactly the same. There is not a period mark in one of these receipts that has not the same characteristics. Then he says the letter is a little too far to the left. That is not so manifest unless you go into detail and look at it in all surroundings, because its being out of place will appear either more or less according to what kind of a letter is beside it. For instance if there is a wide letter beside it, it will not appear so clearly. But it is there I saw it clearly, in every case when he pointed it out. There were some other things that he spoke of, but I will rely on those three. Now a large amount of typewriter work done in Mr. Rust's office was produced here. It had been produced in Court already, in agreements written at the same time almost, with the dates on these receipts, and not one of them has any such characteristic. I have looked at them with great care and did at the time. Now these things to my mind, are a great deal better evidence than anything that has been produced here in the expert way, of the fact that those receipts were not made out by Mr. Rust's typewriter machines Now let us see about Mr. Rust's Typewriter machine. He had but one except for a week in the month of March, 1891, when it was taken to New York to be repaired, and another machine was brought to the office to take its place, which was returned when the machine that Mr. Rust had was repaired. There was some other work done on another typewriter downstairs occasionally, but that was only a long job that was taken downstairs to be written out on another machine, and it would be incredible to believe that seven receipts written at various times between

Feb. 2,1891, and Sep. 11, 1891, were all taken out of the office and done on another machine, which continued during all that time to have those peculiarities in it. Now, I have looked at that in every aspect, and I can't believe that those receipts were made in Mr. Rust's office. The mechanical work, to my mind, forbids it. Now, that almost decides this case. But it does not stop there. The paper on which the bills and receipts are written, with one exception, is a rough, cheap paper, and has vertical marginal rulings only on one side. Mr. Rust proves to my satisfaction by a very strong weight of evidence that he had no such paper, in his office; that all his paper was ruled on both sides, and that the character of the paper is different. He brings his typewriter, and they all say that these seven bills and receipts were not their work and that it was not done on the kind of paper they had in the office. It was suggested that they occasionally bought other paper temporarily than that which Mr. Rust was in the habit of keeping for use, and that these might have been slips from that. But then again you are supposing almost an impossibility. How came seven receipts, with the exception of one, and that is Sep. 11, ranging in date between Feb. 2 and Aug. 3, 1891 to be all made on that same kind of paper which Mr. Rust was not in the habit of keeping in his office at all? That is almost impossible to believe [4]."

We see then from this case that a paper, evidently a forgery, but which could not be proved to be such from the handwriting or signature it contained, nevertheless, was easily revealed in its true character by a study of the typewriting. What a handwriting expert could not discover, a mere repairer of typewriting machines could and did discover. As compared with handwriting, then, our conclusion must be that typewriting is not easily forged. And it may be added that in the case of wills, deeds, or legal papers of any kind, the possibility of safety from imitation and forgery is a matter of no small importance.

Referring to this subject Mr. Frank Brewster, in the course of a learned article says :—

"The use of the typewriter—the term is really a misnomer, as the machine does not really write— has made very rapid strides in India within the past decade, and it may be said that now-a-days it is as necessary a part of the equipment of the modern office as the old-time pen and ink. The appearance within the last two or three years of the folding typewriter will probably go still further to popularise the writing machine, as the folding variety is cheaper, lighter, more compact, and serves the purpose of the touring official, journalist, author and missionary equally, as well as the more costly and cumbrous ordinary machines.

**Principles applied to Indian circumstances.**

Concurrently with the increasing distribution of typewriters all over the country, and what may be termed the legitimate manner in which they should be used, it will not surprise many persons to learn that they are being used to a rapidly increasing extent either in furtherance of some criminal object, or in the preparation of non-criminal documents to which, for various reasons, the designer does not wish to append his name. It is not unreasonable to assume that these outward and visible signs of disordered or criminal minds will increase, *pari passu*, with the continued increase of the use of typewriting machines, and the subject is, therefore, one to which Police Officers would do well to pay some attention.

"In no country in the world perhaps is the practice of writing anonymous letters so prevalent as in India, and although such communications as a rule

(4) Cited in Moore on Facts p. p. 726—730

may be safely treated with the contempt they deserve by promptly consigning them to the waste paper basket, still occasions may arise when it may be necessary for the investigating officer to avail himself of any clue or assistance which an anonymous communication seems likely to afford. Most officers have had practical experience of, and are able to determine the correct line of action to follow in regard to discovering the writer of a handwritten anonymous communication but in the case of a typewritten document of a similar nature, investigating officers have hitherto, it is feared, made little or no attempt to trace out and identify the particular typewriter on which the document was written, having perhaps considered that the task is one which is impossible of accomplishment. This attitude is not without some foundation, for even amongst typewriter men in England, the fact that typewritten document can be positively identified as the work of a particular machine is generally unknown; in some instances they even seem to be unaware of any differences in the styles of type used in their own models!

"The march of science is responsible for the exploding of many myths, and to the accumulation must certainly now be added the familiar idea that the preparation of a spurious typewritten document securely shields the doer from the consequences of his act. This idea is not only erroneous, but the typewritten document may sometimes be the very medium whereby the machine can be tracked to its owner, and the culprit discovered and this result can often be obtained more rapidly and with greater facility than if the document had been produced by means of pen and ink. It may be urged that the identification of the typewriter on which a document was written is not of much value to the enquiring officer, since it by no means follows that the tracing out of the machine necessarily leads to the discovery of the person who wrote the document. This is of course, true, and the contention is entitled to some respect and consideration but the identification of the machine at once narrows down the scope of the inquiry enormously, and in most cases this will be sufficient for the astute officer, who can then regulate his inquiry accordingly.

"The identification process does not lay claim to fantastic or weird pretensions, but it does claim to prove by incontestable evidence of physical fact the existence of minute characteristics in the type not apparent to the unskilled observer, but which are made perfectly clear by means of correctly prepared enlarged photographs, etc., so that the ordinary individual will be as competent to pronounce an opinion on the evidence put before him as the cleverest expert, provided that he is gifted with, or can employ, normal sight and possesses the usual degree of average intelligence [5]."

Referring to this subject Mr. Mitchell in his work on "The Expert Witness" says:—

"With regard to typewriting, it may be mentioned briefly that each machine has its own idiosyncracies by which it may be recognised, and observations made by the writer have proved that letters written upon the same typewriter at intervals of a year will exhibit corresponding peculiarities.

An interesting proof of the conclusive character of the evidence to be derived from an examination of typewriting was afforded by the Risly case, which was tried in 1911, in the Supreme Court of New York.

In that case the defendant, Risly, had attempted to procure another machine which would show defective impressions matching those observed upon his own machine. He had instructed the mechanic of the manufacturing company to alter a machine left with him so that it had exactly the

(5) Article by Frank Brewster in 15 Cr. L. J, 29—37.

same faults of spacing, alignment and defective letters, the object being to show that there might be two machines which would agree in characteristics.

The mechanic was forced to admit, however, that notwithstanding all his efforts with chisel and file, he had not been able to make a machine showing exactly the same faults.

The mathematical probabilities of there being two machines of the same manufacture and having type of the same size and design, which should give impressions with identical defects was estimated by Professor Snyder in his evidence at the trial, as one chance in 3,000,000,000,000 [5]."

**Methods of examination of typewritten matter.**

"In order to detect and compare defects in typewriter type impressions successfully, the investigating officer needs no appliances other than a simple microscope, or magnifying glass of the kind used for the examination of finger prints. If a sufficient quantity of material with clear impressions is available, and the breaks or gaps, in the typewriting are at all pronounced, the investigator will find that the kind of glass referred to will be sufficient for his purpose, and that in a fair percentage of cases it will give him all the assistance that is necessary to enable him to realise that he is on the right track. The greatest caution, must, however, be observed to avoid a hasty or ill-considered judgment and a definite decision should not be arrived at, unless the defect is persistently repeated in every impression in exactly the same spot on every occasion. Where "carbon" or "press" copies form the standard for the inquiry, it would be advisable for the investigating officer to obtain expert aid, if it can be procured, as the presence of what may seem to be gaps or flaws in the type impressions is not always indicative of defects in the type.

In an inquiry concerning a typewritten document, the question may arise as to whether or not the same ribbon was used throughout the document or if two different ribbons were employed in typing two separate communications. As in other matters relating to typewriters, the ribbons of no two manufacturers are exactly alike in regard to the colouring matter employed, or in the nature and texture of the material utilised to retain the ink. In the weaving of the ribbon some manufacturers put in the same number of threads to the inch both in the weft and the warp, while others use more in one than in the other. This phase of the subject is somewhat abstruse, but is mentioned merely to show the extent to which an inquiry may proceed [6].

**Points to which attention may be directed in examination of type written documents.**

"The examination of typewritten documents resolves itself into two main branches, namely, the determination of the make of the writing machine used (e.g., Remington, Underwood, Empire, etc), and the identification of the typewriter on which the document was actually written. The first is usually the most difficult problem to solve, as not only must the examiner be familiar with the characteristics of the type used on all the leading machines, but he should, if possible, be in possession of specimens of writing taken from each make. Moreover, unless he has some practical knowledge of the mechanical structure of typewriters in general, and of the leading models in use in this country in particular, points may arise in the course of his enquiry which will baffle him entirely or render him liable to specify as permanent a fault or defect which is really temporary, either on account of bad operating or a momentary irregularity in the mechanism of the machine [7]".

(5) Mitchell's Expert Witness pp. 130-131. (6) 15 Cr. L. J. 29. (7) Ibid.

It is in the matter of design and proportion that greatest divergence can be observed, as no two type engravers seem to agree as regards the exact manner in which the features of the several letters of the alphabet should be delineated, and it is the knowledge of this fact which enables an examiner to determine with accuracy the make of machine on which a document was typewritten. The most inexperienced or casual observer will have no difficulty whatever in deciding between the work of a "Yost" typewriter and that of certain other machines such as the "Empire," owing to the great difference in the design of the type, and, moreover, the appearance of the impression of the type of these two typewriters conveys so different a picture to the eye that there can be no confusing of one with the other, because in the "Yost" a pad device is used for inking the type, whereas in the "Empire" the usual ribbon arrangement is adhered to. The difference in the result is unmistakable. These two machines have been referred to merely as example of the wide divergence which is at once appreciable to the naked eye, but no matter what two machines are selected for comparison similar differences will be found to exist. These differences are sometimes so very small that they cannot be appreciated unless the aid of suitable photography is requisitioned [7a].

The manufacturers frequently make changes in the design of the type with a view to produce a neat and attractive style which will appeal to the artistic taste of the purchaser, or for some other reason. For instance, the Smith Premier Typewriter Company have lately put on the market a new model type for their No. 10 machine, which, it is said, has been brought out in response to a demand for a new type made at stated periods, but were introduced in the natural course of the evolution of the typewriter as it is known to-day, and they afford the investigator an excellent and reliable means of determining the approximate age of a typewritten document, or of ascertaining the number of the model on which a communication was executed, just as certainly as if they had been introduced for that express purpose.

The dates on which these changes were brought into force being known, they act as milestone on the road of time for the investigator, and it does not require much ingenuity to perceive that a document must necessarily be fraudulent if the claim is made that it was executed on a certain date on a particular machine, and it can be shown that the machine did not exist at the time. If, for example, the statement is made that a document was written at Calcutta in 1906, it can be at once proved to be untrue if the characteristics of the type impressions show that the machine used was, say, a No. 10 Remington or a No. 20 Yost, because both these models were not on the market in India at the time [8].

The second main branch of typewritten document investigation is the identification of the machine on which the communication was actually typed. This means that the investigator must be able to single out the suspected machine from among hundreds, or even thousands, of exactly the same model, which at first sight may seem an extraordinarily difficult or impossible thing to do, but an understanding of the general construction of typewriters and a knowledge of the features developed by daily use will considerably simplify a solution of the problem [9].

---

(7a) Ibid.
Photography plays an important part in questioned typewritten document investigation, as without its help many points might pass unobserved, or could not be shown. Where only black impressions on a white background require to be dealt with, any photographer, whether amateur or professional, who has the means of enlarging on bromide paper, may be able to give the investigating officer considerable assistance, but with certain colours, knowledge of the principles of colour photography and the possession of special accessories is essential, if satisfactory results are to be obtained. (8) Ibid. (9) Ibid.

The next direction in which typewriting can be identified is in regard to the manner in which the type impressions are recorded on the paper. Practically all typewriter types are made slightly concave so as to fit the platen (the cylinder round which the paper is rolled), and consequently if the types do not strike the paper evenly the impressions will not be uniform. An examination of almost any piece of typewriting will reveal instances in which some letters print heavy on the right side of the letter and light on the left, while others will print heavy on the left and light on the right. Others again will be found to be heavy at the top and light at the bottom, or *vice versa* [10].

Another important means of identification of a particular machine is afforded by the degree of divergence of letters from a line drawn at a right angle to the horizontal. Even in new machines some letters incline to the right or left, and in machines which have been in use for any length of time it is nearly always possible to find letters inclining several degrees to the right or left of the vertical position. Half a degree or even a degree of divergence from the correct position may seem to the ordinary typewriter use a matter of small moment, and not worth consideration, but it may make all the difference in the world in the matter of satisfactorily establishing the identity of a machine.

A further aid to particularising a typewriter is by means of defects in the type, owing to letters being broken, battered or worn, with the result that letters so affected do not produce correct impressions on paper. Sometimes, but not often, machines are issued from the factory with defects in the type which the eagle eyes of the expert, "Assemblers" and "Inspectors," have failed to detect, but in the vast majority of instances the imperfections alluded to are caused by operators striking one type on top of another, or on parts of the machine other than the platen. Even the skilful and experienced typist is liable to "mash" the type in this manner.

Scars, bruises, or other evidence of disfiguration of the type faces are of great importance in establishing the individuality of a typewriter, but they have special significance for the investigating Police officer, who cannot immediately obtain expert aid and who is, perhaps, devoid of the appliances essential to success under some of the heads previously mentioned. Once a defacement of type faces occurs, the disfiguration is permanent throughout the life of the typewriter, although of course, it is liable to alteration as the result of a second collision contiguous to the scene of the first accident, but it is highly improbable that such an event will take place or that the defect will be entirely removed, unless a new type is inserted. If, for purposes of analogy, it is assumed that a person has a scar two inches long, and half an inch broad running vertically midway between the left eye and the left ear, the top of the scar commencing on a level with the left eye, most people would be perfectly safe in hazarding that such a mark would be a permanent means of identification to be found on that person and no other. How many persons would dream of thinking, and what is the probability, that the entire blemish would, or could, be wholly eliminated during the life of the individual? The chances of such a contingency occurring are very remote [11].

"In conclusion, it may be stated that these points cannot be said to be exhaustive—several volumes would be required to treat the matter adequately but it may be hoped that it will be the means of indicating what is very useful and at the same time a most intensely interesting and fascinating study[12]".

(10) 15 Ibid. (11) Ibid. (12) Ibid.

CHAPTER XXVII.

# Finger Prints.

[N. B.—*This chapter is to be read along with references to the plates given at the end of the chapter.*

CONTENTS:—Importance of identification by finger prints.—Origin and history of finger print identification.—Individuality of finger prints.—Facial identification compared with finger prints.—Permanency of finger prints.—Effect of heredity and family likeness.—Effect of injuries to the fingers.—Use of finger prints in India.—And other countries.—In business transactions.—In identification of criminal cases.—Classification of finger prints.—Plain and rolled impression.—Method of study of finger prints.—Method of developing accidental finger prints.—Number of points of coincidence of finger prints.—Sole prints.—Illustrative cases.

**Importance of identification by finger prints.**

"It used to be said that nothing is certain but death and the tax collector. To this may be added finger print identification. Of all the physical characteristics by which we are guided in distinguishing between human individuals, there are none more certain or invariable than the tiny ridges and furrows which cover the skin of the hands, and which are most conspicuous on the tips of the fingers and thumbs. The structure of the papillary lines of the finger tips is permanent, lasting from the seventh month of womb life till the decomposition of the texture after death, and is absolutely distinct in every individual." [1]

"Finger-prints are self-signatures, subject to no fault of observation or clerical error, and persistent throughout life [2]."

Although it is but in recent years that the value of this system as a means of detection or identification has been generally recognized, it is by no means new. Centuries ago it was used in China and Egypt, and the British Museum contains an Assyrian brick upon which the seller of a field imprinted one of his fingers as a witness to his signature [3].

**Origin and history of finger print identification.**

"In 1823 Purkenje, the eminent physiologist of Breslau, drew attention to the subject of finger impressions. He distinguished nine types, and suggested a system of classification, but it was not followed up. The first practical application of the method was made by Sir William Herschel, of the Indian Civil Service, who introduced it into the district of Hooghly, in Bengal, as a means of identification, to meet the practice of personation prevalent in all the courts. He wrote a report recommending its general adoption in India, but his advice was not followed, and the practice lapsed in the Hooghly district after his departure. The subject was afterwards taken up as an anthropological study by Mr. Francis Galton, and very fully worked out. It is thus explained in brief by Mr. G. R. Henry, inspector-general of police, Lower Provinces:—

The palmar surface of the hand and the sole of the foot are traversed by innumerable ridges, forming many varieties of pattern, and by creases.

---

(1) See article by Joseph Bush in Case and Comment cited in 16 Cr. L. J. 78.
Referring to this subject Dr. Rabagliat of Bradford says:—"These differences exist because each person being an incarnation of vital energy and being a slightly different incarnation from every other, the vital energy which procreates him translates itself into every anatomical organ and expresses itself in every physiological function, and therefore every particular form must be appropriate to the particular procreator and slightly different from every other. For the same reason, the human finger prints are for ever separate and distinct from Pithecoid or ape finger prints."

(2) See Bose on Finger Prints 1-2. (3) 16 Cr. L. J. 78.

The ridge patterns and the ridge *characteristics* persist throughout the whole period of human life, and are so distinctive as to differentiate each individual from all others. An accurate reproduction of these ridges is obtained by inking the finger bulb and pressing it on paper, the impression thus recorded being a reversal of the pattern on the finger. All impressions may be arranged under one of four types, namely, arches, loops, whorls, composites. Arches subdivide into arches and tented arches: clear definitions demarcate arches from tented arches, and both from loops. Loops may be *ulnar* or—*radial*, and are further differentiated from each other by ridge *counting* and by their ridge *characteristics*. Whorls are single or double-cored; impressions of this type differs conspicuously from each other, owing to the innumerable varieties of pattern they present, but further demarcation is provided by ridge *tracing*. Composites include central pockets, lateral pockets, twinned loops, accidentals [4].

In 1892 Anthropometry was introduced into Bengal, and then into other provinces; but after some years' experience certain defects in working became apparent and attention was turned to the alternative use of finger prints, on which the Home Office had reported favourably in 1894. Experiments in identification by finger prints only were made in Bengal, and were so successful that in 1897 the Government of India appointed a committee to examine both systems. It recommended the adoption of finger prints on the Bengal plan "as being superior to the anthropometric method—(1) in simplicity of working; (2) in the cost of apparatus; (3) in the fact that all skilled work is transferred to a central or classification office; (4) in the rapidity with which the process can be worked; and (5) in the certainty of the results." Various theoretical objections to finger prints have been raised, but they have no particular value. Obliteration of the ridges by injury is possible, but it would in itself be suspicious, and would constitute a most distinctive personal mark; obscuration by manual labour is not found to be a serious drawback. In June 1897, a resolution of the Governor-General in Council directed the adoption of the finger print system throughout India, and its gradual substitution for the previously existing anthropometric system has since been carried out. Its use is not confined to the police department, but extends to all branches of public business.

It is probable that different systems may suit different conditions. Foreign governments now use for police purposes combination of Anthropometry and finger prints similar to that adopted in England. There are minor differences, but the systems are sufficiently alike to be available for dealing with international crime. The full advantage of scientific identification, however, will not be reaped until judical procedure recognizes more clearly the distinction between professional and accidental criminals. On this point the committee of 1894 remarked:—"As there are some criminals who ought never to be sent to prison, there are others who ought never to be released; and when this distinction is established and provided for by legislation, it will be of even greater importance than at present, to have an exact record of each criminal's offences [5]."

(4) See Ency. Britanica. Title "Anthropometry."
From this it will be seen that the classification is somewhat complicated and technical. For further explanation and for the practical application of the method the reader is referred to Mr. Henry's book on Finger Prints (1900).)

(5) On this subject see also *Instructions Signaletiques*. *Henry*—Classification and Uses of Finger Prints. *Spearman*:—Fortnightly Review, March 1890; New Review, July 1893. *Blue Book*—"Report on best Means available for identifying Habitual Criminals," 1894. *Mitchel*:—Expert Witness, chap. III, pp. 37—52; Ency. Brit. Title "Anthropometry" 10th Ed. Vol. 25 p. 469.

**Individuality of finger prints.**

Sir Francis Galton, in calculating the chances that the print of a single finger should agree in all particulars with the print of another finger, concluded that it is as one is to about 64 millions, and that if the comparison is extended to two fingers the improbability would be squared, reaching a figure altogether beyond the range of imagination [6].

"It is something like the chance of two cities being constructed by accident on exactly the same plan[7]".

"The finger tips of a mummy in the natural museum of Vienna show after thousands of years clear papillary lines, and these lines can be seen in corpses which have lain in water for some time, the lines only disappearing with mortification[8]".

**Facial identification compared with finger prints.**

It is safer to identify a person from the imprints of his finger than from the face or other bodily characteristics.

In an American county there were two negroes each having the name of Will West. In 1903 one of these men was committed to the United States Penitentiary at Leavenworth, Kansas, and a few days later was photographed and his measurements taken according to the Bertilon system. The record clerk, thinking that he remembered the face, remarked: "You have been here before." "No, sir," was the reply; but the clerk, still unconvinced, compared the measurements which he had just made with his record file, and produced a card with an accompanying photograph marked "William West."

The prisoner stared in amazement at what he believed to be his portrait, and then exclaimed: "That's my picture right enough, but I don't know how you got it, for I know I have never been here before." The clerk then read the details on the back of the card, from which it appeared that the original of the photograph was at that very moment a prisoner in this penitentiary, serving a life sentence for a murder committed in 1901.

It was then found that there were two Will Wests under the roof of the same prison, each of whom showed practically the same Bertillon measurements, and had faces so closely similar that it was almost impossible to distinguish the two men apart. The only difference between the two persons consisted in their finger prints.

This unique series of coincidences affords convincing evidence that the scientific measurements of the human frame cannot be accepted as absolute proof of identity, even when they corroborated the evidence of an eye-witness or of the camera. Even in such cases a reference to the finger prints of the two persons would enable us to avoid falling into an error as to identity [9].

**Permanency of finger prints.**

The ridge patterns on the skins are not only unchangeable, but also cannot be permanently removed by any means short of complete mutilation of the finger or hand. This was clearly proved by a series of experiments made by Dr. Faulds in Japan. He rubbed the finger with pumic stone until the patterns were no longer to be seen, but in each case the ridges recurred in exactly the same form with the growth of the skin. Similarly, after the destruction of the skin by burning or its peeling after fever, the new skin will show the same patterns as the old.

(6) Article by Joseph Bush on Finger Print Identification in Case and Comment; 16 Cr. L. J. 78.
(7) See Bose p. 4.
(8) 16 Cr. L. J. 78 (Journal).
(9) See Mitchel 26—27.

Criminals, unaware of this power of the skin to renew its original characteristics, have sometimes attempted to prevent their finger prints being taken by lacerating the surface of their fingers, their object being to obtain a lighter sentence by concealing the fact that they were old offenders[10].

Sir Melville McNaghten, in his '*Days of my Years*,' mentions an instance of the kind, where a man, while being taken to prison, in the prison van completely excoriated his finger tips by means of the metal tag of a boot-lace. For the time being this prevented his finger prints being taken, but in the long run it availed him nothing, for his sentence was postponed until after the skin had healed, when his finger prints were taken, and he was recognised as an old offender. [11]

No more striking example of the superiority of the finger print method over all other systems of identification can be found than that afforded by the case of two negroes named Will West, mentioned above. Although neither photograph nor scientific body measurements were capable of distinguishing between these two men apart, their finger prints were quite different and afforded an absolute proof of their respective identities [12].

**Effect of heredity and family likeness.**

It has also been proved by Sir Francis Galton that though the finger print patterns are transmissible by descent, or are found to characterise members of the same family, or show a strong tendency to resemblance in twins, there cannot be any chance of mistaken identity. "The patterns may fall into the same class, but their general forms may be conspicuously different, while their smaller details, namely, the number of ridges and the *minutiae* are practically independent of the patterns." [13]

**Effect of injuries to the fingers.**

"Superficial injuries to the fingers, such as slight cuts or scratches across the bulb of a finger, will show a white mark upon the impression taken. Cigarette smoking also affects the ridges by burning the surface, and causes a dappled effect to be seen on the impression. *A slight burn will also cause a white patch.*" [14]

**Use of finger prints in India.**

"Once the value of this system became recognized the extension of its use was rapid, and nowhere so much so as in this country." In India all military and all civil pensioners are now required to give their finger impression as a precaution against fraud.

In the registration offices of all the provinces parties presenting documents for registration are required to authenticate their signature by affixing the impression of their left thumb on the document and in a register kept for that purpose. Employers of labour protect themselves against fraud and against troublesome labourers by taking finger prints on receipts and contracts; and the system has been adopted by the post office and Government medical departments, and is required of all who take the Government Civil Service examinations.

**And other countries.**

The system has been extensively adopted throughout Australasia, in Ceylon, South Africa,—and it is used by many of the police departments in the United States, among which are Rochester, Chicago, Cleveland, St. Louis, Baltimore, San Francisco, Indianapolis, Louisville, Kansas City, and it has been adopted in England and her colonies in the navy, army and marine corps [15].

The value of this system is fast being recognised by banks as a means of identifying a depositor, especially since the great influx of foreigners, and

(10) Mitchel 43—44. (11) Mitchel 44. (12) Mitchel 44.
(13) Galton on Finger Prints. (14) Cromwell, cited in Bose p. 3. (15) 16 Cr. L.J. 78.

**In business transactions.**

undoubtedly, will in time to come be recognized by insurance companies as of incalculable value in identifying as an assured a dead body, where all other means of identification have been obliterated [16].

And as a means of preventing forgery it has been suggested that one making a Will will be required to authenticate by his finger print, a print also to be registered in the surrogate's office. As a means of preventing fraud, the system, it can be seen, recommends itself [17].

**In identification of Criminals.**

As a means of identifying or detecting criminals it is far ahead of the Bertillon system; for excellent as that system is, it yields in certainty and simplicity to the finger print system. A man may change in height and breadth, in complexion and the colour of his hair. He may be an adept in facial disguise. He may even succeed in modifying or obliterating his skin marks, but he can never alter the tell-tale writing of his finger tips, which appears again practically unchanged even after the skin has been destroyed by fire or acids. The great advantage of the finger print system over the Bertillon is that a finger print is an actual human document, the exact negative of an original, incapable of error so far as the record is concerned. Though a mistake be made in counting the number of ridges, such mistake can be corrected, even after the owner of the finger is gone, by recounting. But under the Bertillon system once a mistake is made it cannot afterwards be discovered or remedied without re-measurement of the individual who has vanished. Then the finger print system is simpler. The only instruments needed being some ink, a piece of tin, and a roller, and anyone can take prints, whereas anthropometry requires training and a knowledge of the decimal scale. [18]

One fact which should recommend the finger print is that so far as is known where that system has been used in the Courts of Law, there has been no conflict of opinion between experts, which is often the disgusting feature of testimony of other experts.

**Classification of finger prints.**

All the impressions obtained from the fingers and thumbs are divisible into four types. These four types are: Arches, loops, whorls, and composites. In studying these types the reader is referred to the plates given at the end of this chapter.

In arches the ridges run from one side to the other of the pattern, making no backward turn.

In loops some of the ridges make a backward turn, but without twist.

A loop is *ulnar* when the downward slope of the ridges about the core is from the direction of the thumb towards that of the little finger. A loop is *radial* when the downward slope is from the direction of the little finger towards the thumb.

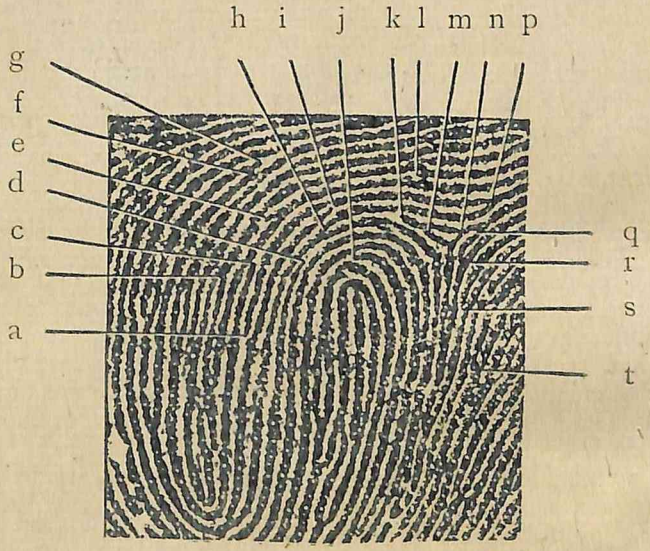
The *ulnar* loop derives its name from the large bone of the forearm. The *radial* loop derives its name from the small bone of the forearm.

A "Whorl" is a pattern in which some of the ridges make a turn through at least one complete circuit; there are two deltas. In classification the ridges are traced from the left to the right delta to ascertain whether the whorl is inner meeting or outer.

"Composites" are patterns in which combinations of the arch, loop, and whorl are found in the same print, also impressions, which might be deemed to present features requiring their definition as being loops in respect of the

(16) Ibid. (17) Ibid.
(18) Article by Joseph Bush in Case and Comment 16 Cr. L. J. 378.

ARCH. WHORLS. LOOP.




**Enlarged view of Thumb Impression for facility of comparison.**

The following method of study may be found useful: Commence at the central line, count the number of lines on each side, and note the peculiarities in the several lines, as breaking off of the lines, [*vide* (a), (d), (e), (j), (k),] junction of two adjacent lines, [*vide* (b), (c), (f), (g), (h), (i), (l), (m), (n), (p), (q), (r), (s), (t),] or the formation of a delta, or an enclosed space within three lines, as at (m n), and such other particulars. Then the disputed thumb impression may be compared, in each of these particulars with the standard thumb impression and the results noted.

---

N.B.—The authors are indebted for these specimens to Sir Edward Henry's book on Finger Prints and the portion relating to this subject in Mr. Wills' Circumstantial Evidence.

majority of their ridges and whorls in respect of a few ridges at the centre or side. Composites are traced and classified in the same way as if they were whorls.

**Plain and rolled impressions.**

Impressions are taken in two ways, as "plain" and as "rolled" impressions[19].

The "rolled" impressions are obtained by first inking the bulb-surface of the fingers between the nail boundaries and then lightly rolling the inked fingers on the paper once over, the plane of the nail being at right angles to the paper.

A "plain" impression is obtained by lightly placing the inked finger flat upon the paper.

In a "plain" print the whole contour of the pattern does not appear, whereas in a "rolled" impression the whole pattern is reproduced. It is, therefore, easier to determine the type of pattern from a "rolled" print, and its greater surface gives a large number of points for comparison[20].

**Method of study of finger prints.**

"In studying the variety in the finger prints of different individuals, account has to be taken not only of the general form of the pattern and of the number of ridges between fixed points but of all the *Minutiae* appearing in each finger print–breaks, junctions bifurcations, islands, etc., which are equally persistent with the general form of the pattern. If two finger prints are compared and are found to coincide exactly, it is practically certain that they are prints of the same finger of the person; if they differ the inference is equally certain that they are made by different fingers. The prints of one finger, if clearly taken, are therefore, enough to decide the question of identity or non-identity.

"The first attempt at comparing two finger prints would be directed to a rough general examination of their respective patterns. If they do not agree in being arches, loops, or whorls, there can be no doubt that the prints are those of different fingers; neither can there be doubt when they are distinct forms of the same general class. But to agree thus far goes only a short way towards establishing identity, for the number of patterns that are promptly distinguishable from one another is not large[21]."

"It is sometimes found that dirt on the slab causes a hiatus in a ridge, which leads to the commencement of a new ridge being found in a print where bifurcations occur in the corresponding part of the comparison print. Similarly, too much ink or pressure may cause a continuity where there should be a hiatus[22]."

Any article with a smooth surface is likely to retain imprints of value if touched. Finger prints on rough surfaces are of little use[23].

In cases of murder immediate search should be made for blood-stained finger impressions.

The usual methods of developing accidental finger prints upon polished surfaces such as furniture or glass windows is by the application of a fine

(19) Bose p. 6.

(20) The accessories needed for taking finger prints comprise a tin slab, a rubber roller, and a pot of printer's ink. The slab must be perfectly smooth and a small quantity of ink should be put on the slab and the roller used to bring the ink down to the finest possible film. If too much ink has been put on the slab, a sheet of paper laid on it and rolled over with the roller will generally reduce it sufficiently. If the ink is dry and thick it can with a little perseverance be worked up smooth on the slab. It is advised as a word of caution that the slab, roller, and the ink should be kept clean and free from dust, grit, and hairs. Bose pp. 5-7.

(21) Galton on Finger Prints, Bose 26—27.

(22) Bose 27—28. (23) Bose 34.

**Method of developing accidental finger prints.**

powder, such as magnesium carbonate, graphite or an aniline dye, the excess of which is afterwards blown or dusted off, leaving the pattern of the ridges outlined in the powder. This method of development is practically certain at any time after the imprint was made, if the surface was highly polished, but upon a fabric such as paper which is not highly sized, is only applicable for a short time.

Another method of developing latent prints upon paper is by the use of a suitable ink, as first suggested by Dr. Forgeot. Imprints are usually more or less greasy from the natural oil of the skin, and so when lightly brushed with ink, repel the liquid at those points where the skin has been in contact with the paper, and leave a visible print in which the furrows between the press on the ridges will be stained while the ridges themselves will be colourless [24].

The use of reagents in the form of vapour is often much more satisfactory than that of either powder or liquids, and some of these reagents have the advantage of being applicable without destroying the paper. Iodine vapour, for instance, will develop a finger print very sharply for many months after it was left on paper, but has the drawback of being fugitive, so that the developed print will soon fade again. On the other hand, the vapour of osmic acid, at first suggested by the writer for this purpose, leaves a permanent stain, but is much less sensitive than iodine vapour, which will detect finger prints upon paper for long after they have ceased to give any reaction with osmic acid [25].

"Finger marks on glass, polished wood, and metal may be intensified by sprinkling the surface with a small quantity of a powder, known to chemists as "Grey powder," which should then be gently shaken or brushed off with a camel hair brush. Should the substance be white in colour, such as paper, wood, etc., "Graphite" may be used instead of "Grey powder." This treatment has the effect of making visible impressions which cannot be seen with the naked eye [26]."

In June, 1912, a burglary occurred at a house in Lyons, a sum of money and a good deal of jewellery being stolen. There was no witness and none of the ordinary indications of the identity of the burglers, but it was noticed that the rosewood box in which the jewellery had been kept was covered with finger prints. These were coloured by the powder method and photographed and it was then found that they coincided with those of a man named Boudet, who had previously been convicted for theft, and it was also recorded that he was in the habit of working with an associate named Simonin. The latter was therefore also arrested, and it was then discovered that all the imprints on the box which were not those of Boudet had been made by Simonin. At the trial it was demonstrated to the jury that the middle finger of Boudet's left hand showed 901 pores, which coincided exactly with one of the imprints on the box whilst a print taken from the palm of Simonin's left hand contained no fewer than 2000 points of agreement with another print upon the box. Both men were sentenced to five years hard labour.

**Number of points of coincidence of finger prints.**

In another case, in January, 1915, a house in Lyons was broken into through a window. On the broken glass finger prints were discovered which coincided with those of a man named Dorey, who had already been convicted for a similar offence. One of the imprints showed 21 points and another 16 points of agreement, but the others were only fragmentary; these however, contained numerous pores by which their identity could be established.

(24) Mitchel 45—46. (25) Ibid 46. (26) Galton cited in Bose 34—85.

In a case of similar burglary in November, 1912, it was shown that in one imprint alone of those left on a window pane, there were more than 400 pores agreeing in all respects with those in the imprint of a Spaniard named Matieu, who had been accused of the crime, and a second print showed 200 points of agreement. Confronted with this evidence, Matieu pleaded guilty, and was sentenced to a term of imprisonment[27].

A still more remarkable triumph for the new method is recorded by Dr. Locard. Now that the spread of scientific knowledge has extended even to the professional burglar, it is not unusual to hear of house-breakers covering their hands to prevent any tell-tale prints being left behind. This precaution was taken by a man who, in January, 1912, broke into a tavern in Lyons, stole several bottles of wine, and drank from others on the spot. Notwithstanding the fact that he had protected his fingers with a "honeycomb" towel, which he had found on the premises, he left an imprint in which there were 22 distinctive ridge markings and many characteristic pores[28].

**Sole Prints.**

The friction skin upon the soles of the feet, like that upon the palms of the hands, shows ridges which form distinctive patterns and are, therefore, capable of being used as proofs of the identity of the individual.

In European countries boots are too extensively worn for this characteristic to be of much general use for this purpose but in Eastern countries, where a large proportion of the population goes bare-foot, record of the prints made by the soles might frequently prove as valuable as the now generally adopted systems of finger prints have done. [29]

The patterns upon the feet, unlike those upon the hand, extend beyond the actual soles, so that the whole of the characteristic markings are not shown within the area covered by the tread. The latter portion of the markings, however, is that which would be shown in an accidental footprint, and hence any system of classifying the patterns should include the tread area.

The most complete study of the sole patterns is that made by Wilder and Wentworth (Personal Identification, p. 159), who have shown that various portions of the footprint might be used for the purpose of differentiation and classification. [30]

The method of sole print identification has now been adopted in the Chicago Lying-In Hospital for recording the identity of babies, for it has been found that it is much easier to take a print from the soles of a baby than from its finger tips. [31]

**Illustrative Cases.**

When Jezebel was thrown to the dogs, and they went to bury her, they found no more of her than the skull and the feet and the palms of her hands, so that no man could say: "This is Jezebel." But, as Sir Francis Galton remarked, it was by the soles of the feet and palms of the hands, and by them alone, that it would have been possible to identify the body of Jezebel with absolute certainty. [32]

In 1908, a man named Chadwick was charged with burglary at Birmingham. The burglar had left several imprints upon a champagne bottle, and evidence was given that these coincided in no less than twelve of the ridges with the finger prints of the prisoner. The judge, however, did not regard the evidence as satisfactory, and advised the jury not to accept it. But, notwithstanding these doubts of the judge, the jury found the prisoner guilty. [33]

(27) Mitchel 47—49. (28) Mitchel 47—48. (29) Mitchel 49.
(30) Mitchel 50. (31) Ibid 51. (32) Mitchel 31. (33) Mitchel 41.

Instances of the value of the method in proving the innocence of an accused person are cited by Messrs. Wilder and Wentworth. In one of these cases a man was arrested in 1911 on the charge of murdering several people with an axe. Blood prints of the murderer's fingers had been left upon the handle of the axe, but these were so different from the finger prints of the accused that he was immediately released[34].

The value of finger prints as a means of identification or detection is evidenced by the following instances.

One of a notorious gang of thieves had escaped from the Paris police when three of his companions had been captured; all attempts to discover the missing man proved fruitless until later a man was arrested for theft at another place. He gave another name but the Police, suspecting that the description he gave of himself was false, took the impression of his finger prints, and, forwarded these together with the man's description and photograph to the Anthropometrical Department of the Prefecture of Police at Paris. The finger prints were immediately recognised, and he was identified as the man who had been wanted [35].

In the Assize of Court of Christiana, Norway, one was convicted of larceny on the sole evidence of the comparison of finger prints of accused with finger prints found at the scene of the crime on a pane of glass and a bottle.

In Lyons, France, conviction of two persons of robbery was had solely on evidence of identification of finger prints found on a pole used in effecting entrance to a house, on a flower vase, and on two bottles and two jars.

And an equally convincing proof was offered of the value of the finger print system when it proved the identity of a dead man. The scattered remains of this man were found upon a railway line, and there was no clue whatever as to his identity. Upon the off chance of the victim's finger prints being known at the Scotland Yard, the impressions from his fingers were taken by the Local Superintendent of the Police and forwarded to headquarters, where on reference to the index of finger prints, they were immediately recognised and the identification of the man made certain[36].

It is said that there is no room for mistake or fraud in respect of the identification of prisoners by means of finger prints. That, even here, as in other instances human ingenuity keeps pace with or is even in advance of the safe guards provided for by nature, is illustrated in the following case.

Edward Meldon was charged with the murder of one Mr. Crostic and the important evidence against him was that of an expert to the effect that there were the finger prints of the accused found in blood by the side of the murdered man.

The case looked very black when Mr. Sheldon, counsel for the accused, rose to address the court. "He admitted that there was no evidence with which to controvert the theory that it must have been the finger prints of Edward Meldon that had been found beside the murdered man."

He called Thomas Lane (the expert, engaged by the prosecution) as his first witness, and the court attendants began to pass around the room drawing down the heavy shades that served to darken the room when the lantern was used. Sheldon waved them aside.

"At present I do not desire to use the lantern", he said, quickly, "I wish to interrogate Dr. Lane on other matters."

(34) Mitchel 42.
(35) Case and Comment cited in 16 Cr. L. J. 78.
(36) Ibid.

Lane had figured so prominently as an expert witness that it had been suggested that of course Sheldon had called him to the stand to controvert his own testimony. The first question fell upon the ears of the spectators as a shock.

Q. "I wish to ask you, if your relations with the deceased Mr. Crostic were pleasant?"

A. "Entirely so," said Lane. "I do not know why they should be otherwise."

Q. "Is it not a fact that you proposed marriage to Miss Crostic some time ago?"

A. "I did."

Q. "And were told that she was already engaged to marry the defendant?"

A. "I believe the answer was something of that sort," was the reply, in a tone so low that those at the rear of the room could not catch the answer.

Q. "And was it not you who told Mr. Crostic that the accused had been a frequenter of a certain disreputable resort in the city?"

Lane shifted uneasily in his seat. The prosecution objected to the question, but the Judge sustained Sheldon, and finally, in a halting manner, Lane spoke.

A. "I might have said that I did not think that Meldon had done sowing his wild oats. I think I did not mention any particular resort."

Q. "Yet the prisoner has said that Mr. Crostic said you were his accuser?"

A. "I know nothing of that, Mr. Crostic cannot speak but for himself."

Q. "Where were you on the night of the murder?"

A. "At my office all the evening. I had occasion to call up several persons on the telephone. They can substantiate my statements if that is what you are driving at."

"That will be all," said Sheldon. Then he asked that all the room might be darkened, and called to the stand one of the police experts who had already testified for the prosecution.

Q. "You have told the Court," began Sheldon, "that there can be no possible error in the identification of the thumb-marks found upon the sheets of Mr. Crostic's bed with those of the defendant. That is so, is it not."

A. "Entirely so. No two thumb-marks are ever exactly alike. The prints on the sheet are remarkably clear. There is no room for error?"

Q. "I wish you would make a print of my thumb," said Sheldon.

The expert handed down a glass slide, and presently threw upon the screen the result.

Q. "That is not in the least like that of the accused?" said Sheldon, questioningly.

A. "Not in the least," was the prompt reply. "Even a layman can see the difference."

"And yet," said Sheldon, "if you will let me have another slide———." He pressed his thumb upon the glass and presently it was flashed upon the screen.

A gasp ran through the room as it was realized that the two prints were entirely unlike.

Q. "Is that like the other?" demanded Sheldon, smilingly. The expert shook his head.

A. "Not a bit like it," he admitted.

Q. "Is it like the print you made of the hand of Herman Battle?" asked Sheldon.

The expert fumbled in his case, and presently threw a second print on the screen. They were identical.

"Let's have a third trial," suggested Sheldon. "Be particular to see that the glass does not pass from your possession."

Everyone in the court-room pressed forward in his seat to see the test. Presently this, too, was thrown upon the screen.

Q. "Is it not the print of the accused's thumb?" he asked.

The crowd exclaimed with excitement. Even to the scar, the print was the same.

A. "That is the print of the prisoner's hand," agreed the expert. "I would know it among a thousand."

Q. "And yet the prisoner has not left the dock," reminded Sheldon.

A. "I cannot understand it," was the puzzled response. "It is not reasonable that you should be able to change the prints at will."

"If we may have a little light I will enlighten the court," was the response. "It is all perfectly simple."

In the stillness the green shades were sprung up with a snap that sounded like a roar. For a moment, every one blinked as the strong light blinded their eyes. Sheldon turned towards the Jury-box.

"You will recall" he began eventually, "that some few weeks ago an estimable citizen of this town was accused of burglary. A safe had been drilled open, and on the window sash were found prints of a finger stained with oil and the dust from the boring.

"These prints were found to be those of Herman Battle, who is now waiting trial for that offence.

"Mr. Battle was not near the scene of the alleged burglary that night. He was an old friend of the accused's father, and consented to aid us in an experiment. Because no finger print is ever duplicated by Nature there has existed no doubt but that Mr. Battle was the offender, and yet the real offenders, if they are such, are Mr. Twining, junior counsel in this case, Miss Crostic, Miss Meldon and myself.

"It was desired to show that while the peculiar markings of the cuticle of the hands is never exactly duplicated, it is entirely possible to take advantage of this fact to fasten upon an entirely innocent person the blame for a crime.

"It is well known that for several years Dr. Lane has had a fad for studying finger print identifications. He has been called as an expert witness in numerous cases in this and other cases and it was to him that I first returned for information when I retured home and found that the accused had been put in jeopardy of his life on account of a few finger prints on a bit of cloth.

"But I also found that Dr. Lane carries his studies further than most. He not only makes collections of prints, but of the fingers making these prints.

"He did not call my attention to them, but I perceived that he had a large collection of casts of hands. From the accused I learned that he had given Dr. Lane permission a few months ago to make a cast of his hand, but that only the thumb had come out clearly.

"From the experiments I made I found that it would be entirely feasible to reproduce these casts in other materials than plaster—in the composition used by printers to ink their forms for instance.

"The prints made by me before the court were made from these casts, just as were the prints on the linen placed in evidence. Dr. Lane has admitted upon the stand that he was refused by Miss Helen Crostic when he made a proposal of marriage to her. With her father dead and her lover hanged for his murder, there might have been a possibility of her re-considering her determination.

"At the same time Lane supposed that the death of Mr. Crostic would free him from the payment of certain obligations he contracted and which he supposed were in the possession of the deceased, though in point of fact they are in my safety deposit box in the city.

"He prepared a composition stamp and carefully left behind the evidence that would incriminate his rival, while he established a telephone *alibi*. I demand the arrest of Thomas Lane for the murder of John Crostic."

All eyes were turned on Lane, who sat at the rear of the room, one of the court attendants went over to him and laid a hand on his shoulder. As he hid so the body lurched forward and fell to the floor. Another physician sprang forward and bent over the body for an instant.

"Hydrocyanic acid," he said tersely. "Pure Prussic acid. The man died instantly."

The Judge glanced at the prosecuting attorney. The latter nodded, the Judge's gravel fell.

"The prisoner is discharged," he said shortly. "The case has been taken to a higher Court."

While the spectators rushed out to be the first to tell the news, Sheldon went towards Ned. Their hands clasped in silence as they stood there for a moment.

"I feel almost like a murderer," said Sheldon wearily. "Let us go to Elizabeth. I need her[57]."

(57) Law Students' Helper, cited in 16 M. L. J. (Jour) 435—439.

# INDEX.


ACCOUNT BOOKS — PAGES.
alteration of figures in— 82
ADMISSIBILITY
nature and,—of evidence of experts 160
ADMISSIONS
—of the alleged writer, effect of 186
AGE
—and infirmity as affecting handwriting 33
ALTERATIONS
expert evidence as to erasures, —, and interpolations 83
ANCIENT DOCUMENTS
forgery of— 125
ANONYMOUS LETTERS
examples of—
disguised handwriting 70
APPELLATE COURT
comparison of writings by— 107
ATTESTING WITNESS
evidence of,—not always conclusive 164
BANKERS
study of the forger's methods by,—and their agents 52
BIAS
—of experts 171
BINDING OF BOOKS 111
BLACK BOARD
writing with chalk on— 99
BLANK SPACES
filling up of,—in documents 35
BLUNDERS
—of experts 174
BOOKS
binding of— 111
BUSINESS SURROUNDINGS
—affecting handwriting 23
CAMERA
wonders of the,— 127
CHARACTER
correspondence between,—and handwriting 42
writing as an index to— 42
experiments of study of,—from handwriting 43
moral,—of witnesses testifying to opinion 158
CHARGE TO JURY
—as to evidence of handwriting 192
—as to value of expert evidence 192
CHEMICAL TEST
—of ink, in detection of forgery 109 118
CIRCUMSTANTIAL EVIDENCE
*See* EVIDENCE
Nature and variety of— 134
detection of forgery by surrounding circumstances 134
cumulative force of,—
illustrated from Daniel O'Connell's theory of Burke's authorship of Junius' Letters 134
COINCIDENCE
—of two signatures on super-imposition, is conclusive proof of forgery by tracing 55
COLOUR MICROSCOPE
use of — 117
COLOUR PHOTOGRAPHY
use of, — in detection of forgery 130
COMPARISON
psychology of identification of things by, — 94
Appreciation of evidence as to, 104
detection of forgery by,—by Judge and Jury 105
—of writings by appellate court 107
CONDUCT
— of the alleged forger 140
COURAGE OF CONVICTION
— of non-expert 157
COUNTENANCE
*See* HUMAN COUNTENANCE
characteristics of handwriting compared with features of human,— 3
comparison between the character of handwriting and— 4
CROSS EXAMINATION
—of experts 102
—of experts, certain rules of caution 163

—of alleged writer 184
DECEASED PERSONS
Forged wills and claims against the estates of— 84
DETECTION OF CRIME
—a matter of fascinating interest both in fact and fiction 127
DETECTION OF FORGERY
*See* FORGERY
—by comparison by Judge and Jury 105
—by examination of ink, paper etc. 113
—by reference to time and place 124
—by the use of photography and microscope 127
—by reference to surrounding circumstances 134
—in typewritten documents 200
DISGUISE
Natures' impress of individuality not obliterated by— 69
DISGUISED HANDWRITING
*See* FORGERY
writing a disguised hand 37
points to be attended to in the examination of— 70
examples of,—anonymous letters 70
detection of,—attention to peculiarity of spelling 71
opinion evidence of experts as to whether signature is natural or simulated 72
Junius' Letters as an illustration of— 73
DOCUMENTS
filling up of blank spaces in— 35
detection of forgery by examination of— 108
necessity for close scrutiny of,—illustrative cases 108
age of— 108
ink test, examination of ink used in writing a questioned— 113
use of photography in the administration of Justice, applied to cases of reproduction of the original of— 128
relation of light to proof of— 195
DREYFUS CASE 180
DUAL PERSONALITY
what is— 38
—in handwriting 38
mistaking same person for different individuals, case of—38
illustrative cases of,—in handwriting among men and women 39
characteristics of,— in handwriting 40
ECCENTRIC WRITING
—and whimsical writing 26
EFFACED WRITING
causing re-appearance of,— 79
ERASURE
forgery by,—methods of,— 78
—of words or figures and substitution of new ones in their stead 79
—by scratching 80
resizing of paper over— 81
expert evidence as to— 83
sizing of paper and— 109
EVIDENCE
forger himself sometimes produces,—of his guilt 55
internal,—sometimes conflicts with the result of comparison by experts 140
internal,—of forgery 141
—of the writer 150
—as to handwriting 150
—of persons who saw the party write and of persons acquainted with the party's handwriting 156
—of experts 154
—of attesting witnesses not always conclusive 154
—of unwilling witness 154
presumption from non-production of— 155
non-expert— 156
—of person who has gained knowledge of a person's handwriting by corresponding with him 156
nature and admissibility of,—of handwriting experts 166
—of handwriting, charge to Jury 192
EXAMINATION OF WRITING
—by Judge and Jury 154
EXPERTS
a case where—solved the riddle 67
effect of disagreement among-102
failure to cross-examine,—presumption to be drawn 102

comparison by Judge *versus* comparison by— 105
internal evidence sometimes conflicts with the result of comparison by— 140
evidence of— 154
who are— 160
nature and admissibility of evidence of handwriting— 160
handwriting—compared with other classes of,— 161
cross-examination of,— certain rules of caution 163
—and non-expert testimony, relative value of 164
positiveness of,— 170
bias of— 171
mistakes of— 174
examination of— 188
EXPERT EVIDENCE
basis of,—as to handwriting 8
use of,—in some early English cases 9
as to erasures, alterations and interpolations 83
value of,—based on comparison 99
—use in India 165
judicial dicta against basing verdict solely on— 166
weighing of— 170
charge to jury as to value of— 192
EXTRANEOUS WRITING
showing the witness,— 186
FALSIFICATION
detection of,—of handwriting and figures by means of photography 129
—of wills, postal orders, permits etc. 131
FAMILY INFLUENCES
—on handwriting 22
FIGURES
alteration of,—detection of forgery 130
FINGER MOVEMENT 24
simple— 24
limited penscope in— 25
cases where,—is most commonly employed 25
advanced— 25
FINGER AND FOREARM MOVEMENT 26
FINGER AND WRIST MOVEMENT COMBINED 26
FINGER PRINTS
importance of identification by 208
origin and history of,— identification 208
facial identification compared with,— 210
permanency of— 210
effect of heredity and family likeness on— 211
effect of injuries to the fingers 211
use of,—in India and other countries 211
use of,—in business transactions 212
use of,—in identification of criminals 212
classification of— 212
method of study of— 213
method of developing accidental— 214
number of points of coincidence of— 214
FOREARM MOVEMENT 26
FORGED WILLS
*See* WILLS
—present a special difficulty 84
—and claims against the estates of deceased persons 84
FORGER
study of methods of,—by bankers and their detective agents 52
—himself sometimes produces evidence of guilt 54
conduct of the alleged— 140
FROGERY
*See* DETECTION OF FORGERY
*See* DISGUISED HANDWRITING
*See* FREEHAND FORGERY
*See* TRACED FORGERY
methods of— 52, 78
coincidence of two signatures one superimposed on the other is conclusive proof of— 55
characteristics of freehand— 64
—by imitation 65
—by erasure, methods of erasure 78
insertion of sheets in bound books 83
detection of,—by comparison with genuine writing 94
detection of,—by comparison by Judge and Jury 105
detection of,—by examination of document 108

detection of,—by examination of ink, paper etc. 113
importance of ink test in detection of— 114
stamp, examination of, in cases of— 120
detection of—by reference to time and place 124
date of manufacture of paper, clue to— 124
date of stamp, clue to— 124
special peculiarities of the writing of the times, clue to—124
—of ancient documents 125
importance of post-office marks in detection of— 126
detection of—by the use of photography and microscope 127
use of photography in,—cases 129
use of colour photography in detection of,— 130
falsification of wills, postal orders, permits etc, detection of— 131
use of photography in saving the innocent 131
use of enlarged photographs in detection of— 132
use of microscope in detection of— 132
use of spectroscope in detection of— 133
detection of—by reference to surrounding circumstances 134
internal evidence of— 140
detection of,—in typewritten documents 200

FRAUD
Nature sets no bounds on the ingenuity of man for accomplishment of— 78

FREEHAND FORGERY
*See* FORGERY
methods of forgery, forgery by tracing and— 52
illustrative case of— 63
methods of examination of— 63
characteristics of— 64

GRAPHOLOGY
science of— 42

GUIDED HAND
writing by — 36

HANDWRITING
*See* MARK
*See* SIGNATURE
nature of,—its speciality and individuality 2
characteristics of,—compared with features of human countenance 3
general similarity in— is always combined with differences in detail 3
similarity of human countenance may be more deceptive than similiarity in— 3
comparison between the character of,—and countenance 3
variations in identity 6
causes of variation in— 6
—and signature 6
basis of expert evidence as to— 8
formation of— 21
nature of, — in general 21
factors in the formation of — 21
influence of the school room on— 21
family influence on— 22
common business surroundings affecting— 23
sex influences as affecting— 24
physical causes in the formation of figures caused by different kinds of movements in— 24
four kinds of movements in— 24
limited penscope in finger movement 25
mark of illiterate persons generally made by finger movement 25
other cases where finger movement is most commonly employed 25
advanced finger movement 25
characteristics of these different kinds of movements 26
raised arm or whole arm movement 26
variations in— 28
necessity for a knowledge of the similarity and variation and causes thereof in— 29
variations in — judicial dicta 30
causes of variation in— 31
available space for writing as affecting— 33
condition of health as affecting— 33
mental condition as affecting— 33
age and infirmity as affecting— 33
impairment of sight as affecting— 33

nervous diseases as affecting — 33
tremor affecting— 34
writing by guided hand 36
dual personality in— 38
illustrative cases of dual personality in,—among men and women 39
correspondence between character and— 42
experiments in study of character from— 43
similarity in— 65
disguised— 69
nature's impress of individuality not obliterated by disguise 69
rationale of comparison of— 96
practice of receiving other genuine instruments for purpose of comparison, certain dangers to be avoided, effect of lapse of time 97
detection of falsification of,— by means of photography 129
evidence as to— 150
evidence of persons who saw the party write and of the persons acquainted with the party's— 152
evidence of person who has gained knowledge of a person's, — by correspondence with him 156
various circumstances affecting the weight to be attached to non-expert testimony as to— 157
nature and admissibility of evidence of,—experts 160
errors in identification of,— and causes there of 174
instruction to Jury as to evidence of— 193

HOLOGRAPH
signature can be more easily imitated than a,— 65

HUMAN COUNTENANCE
*See* COUNTENANCE
Characteristics of hand-writing compared with features of,— 3
similarity of, — may often be more deceptive than similarity in handwriting 3

HYPNOTISM
writing under,— or hysteria 36

IDENTIFICATION
psychology of,— of things by comparison 94

IDENTIFICATION OF HANDWRITING
errors in,—and causes thereof 174

IDENTITY
variations in,—handwriting 6

ILLITERATE PERSONS
Marks of,—generally made by finger movement 25

ILLUSTRATIVE CASES
Innocent father convicted for guilty son 22
—of dual personality in handwriting, among men and women 39
— of traced forgery 58
— of freehand forgery 63
—a note that misled a banker's clerk 65
Abel swearing the forged deed was genuine and vice versa 65
a deed which Lord Eldon was alleged to have attested 66
a case that put a whole office in a dilemma 66
expert helps to bring back to rememberance what was forgotten by lapse of time 67
a case where the expert solved the riddle 67
of anonymous and disguised handwriting 71
of insertions, interlineations 82
of forged wills 84
claim against the Erwin Estate 91
Miser Russell case 92
a clever schene 92
of handwriting changing with increasing years etc. 98
of miscarriage of justice resulting from neglect to make a proper examination of testtimony before it was offered 108
Warren's case 111
of chemical examination of ink etc. 120
of special peculiarities in the writing of different times 125
Matlock will case 142
In re-Theophilus Youngs 146
Case related by Hawkins in his reminiscences 147
Molineaux's trial 176
Morey letter, the 176

Cisco case, the 177
Tatcher Grave's case 177
In re: Humphry Estate 178
Case at the Old Bailey 178
Dreyfus case 180
a case cited by Hawkins 182
a case cited by Donovan 183
INFIRMITY
Age and—as affecting handwriting 33
INK
—as affecting handwriting 32
writing with pencil, pen, & 37, 81
—and pencil erasures 81
examination of— 109, 113
of artificial aging of,— 113
colour changes of— 114, 116
chemical test,— 118
INK LINES
the crossing of— 118
INSERTION & INTERLINEATIONS 81
INTOXICATION 34
JUDGE AND JURY
detection of forgery by comparison by— 105, 154
JUNIUS' LETTERS
—as an illustration of disguised handwriting 73, 134
LABOURED SIGNATURE
—generally suspicious 68
LEFT HAND, writing with 35
LETTER-PRESS COPIES 99
LIGHT
relation of,—to proof of documents. 195
necessity for,—to aid the human vision 196
—for judge and jury to follow the expert's conclusions 196
—to discover indistinct stains and tints 197
—to determine the quality of paper in cases of interpolation of sheets 197
—as aid to photography 197
examination of erasures 198
—for helping ink-tests and detection of ink colors 198
LITERACY
—or otherwise of the writer 34
MARK
*See* HANDWRITING
*See* SIGNATURE
Signature by— 7, 25
MEMORY
non-expert witness refreshing 157
MENTAL CONDITION
—as affecting handwriting 33
MICROSCOPE
detection of forgery by— 127
MIND
influences of the,—on writing 24
MISTAKES OF EXPERTS 174
MOLINEAUX'S TRIAL 176
MOREY LETTER, the 176
NATIONALITY
—as affecting handwriting 23
NERVOUS DISEASES
—as affecting handwriting 33
NON-EXPERT
*See* EXPERT
evidence of,— 156, 157
—and expert testimony, 164
PALSIED HAND
writing by a,— 36
PAPER
nature of,—pen, ink, etc. 32
resizing,—over erasures 81
time of manufacture of,— 108, 124
examination of folds of,— 109
sizing of,— 109
detection of forgery by examination of,—etc. 113-119
PARNEL
Russell's defence of,— 10
PEN
nature of,—ink, paper etc. 32
direction of the,— 54
PENCIL ERASURES
ink and,— 81
PENCIL WRITINGS 119
PENSCOPE
limited,—in finger movements 25
PERSONALITY
persistence of,—under varying circumstances 31
dual,—in handwriting 31-38
PHOTOGRAPHS
taking,—for evidence 131
use of enlarged,— 132
PHOTOGRAPHY
detection of forgery by— 127-133
use of,—in the administration of justice applied to cases of reproduction of the original of documents 128
detection of falsification of handwriting and figures by means of,— 129
use of,—in forgery cases 129
use of,—in saving the innocent from charge of forgery 131

PHYSICAL SIGNATURE
—of wills 32
PIGGOTT FORGERY CASE 10
PLACE
detection of forgery by reference to,—time etc. 124
POST OFFICE MARKS
importance of,— 126
PRESUMPTION
—from non-production of evidence 155
RACE
—affecting writing 32
RETOUCHING 58
SCHOOL ROOM
influence of,—on writing 21
SEX INFLUENCES
—as affecting handwriting 24
SIGHT
—as affecting handwriting 33
SIGNATURES
*See* HANDWRITING
—by mark 7
variance between,— 31
coincidence of two,— 55
genuine and forged,— 65
—can be more easily imitated than a holograph 65
laboured—suspicious 68
identification of single,— 184
SOLE PRINTS 215
SPECTROSCOPE
use of,—in forgery cases 133
SPECTRUM RAYS
use of,— 199
SPELLING
attention to peculiarity of—71, 111
STAMP
examination of,— 120, 124
TESTIMONY
of expert and non-expert,— 164
TIME
detection of forgery by reference to,— 124
TRACED SIGNATURES
*See* FORGERY 53-58
detection of— 54
—and freehand forgery 52
psychology of,— 53
coincidence of two signatures 55
—need not be a perfect duplicate of the original 57
TREMOR
—affecting handwriting 34
TUTORED WITNESS 158
TYPEWRITTEN DOCUMENT
detection of forgery in— 200-207
VARIATIONS
—in handwriting 6, 28-31
—between signature and other writings 31
WARREN'S CASE 111
WATER-MARK
—, clue to forgery 119
WHIMSICAL WRITING 26
WHOLE ARM MOVEMENT 26
WILLS
*See* FORGED WILLS
forged, — and claims against estates of deceased persons 84
falsification of, — etc. detection of forgery 131
WITNESSES
evidence of unwilling, — 154
non-expert, — refreshing memory 157
tutored— 158
moral character of,— 158
moral conviction of— 187
WRIST MOVEMENT 26
WRITER
literacy or otherwise of the— 34
cross examination of— 184
admission of,—effect of 186
WRITING
four kinds of movements in,— 24
variance between signature and other, — 31
— with hand benumbed with cold 34
—with left hand 35
—at beginning and at end 35
—resumed after long vacation 35
— by guided hand 36
—with pen held by teeth or toes 36
— as an index to character 42
causing re-appearance of effaced — 79
detection of forgery by comparison with genuine, — 94
comparison of disputed,—with genuine ones. Judicial dicta 105

*Printed by Jegam & Co., Dodson Press, Teppakulam Trichinopoly.*