



# MASSOTHERAPEUTICS

OR

## MASSAGE

AS A

### MODE OF TREATMENT

BY

WILLIAM MURRELL, M.D., F.R.C.P.

LECTURER ON PHARMACOLOGY AND THERAPEUTICS AT THE WESTMINSTER HOSPITAL  
FORMERLY EXAMINER IN MATERIA MEDICA TO THE UNIVERSITY OF EDINBURGH  
AND THE ROYAL COLLEGE OF PHYSICIANS OF LONDON

*FIFTH EDITION*

LONDON

H. K. LEWIS, 136, GOWER STREET, W.C.

1890

E06098

PRINTED BY  
H. K. LEWIS, 136, GOWER STREET,  
LONDON, W.C.

## PREFACE TO THE FIFTH EDITION.

A large edition of this work having been exhausted in a little over a year I have no option but to prepare another.

As the title of this, the Fifth Edition of **MASSAGE AS A MODE OF TREATMENT**, I have again employed the term **MASSOTHERAPEUTICS**. It may be said that there is not much difference between the two, but there is a difference which as time goes on becomes more pronounced. By **Massotherapeutics** I mean the scientific aspect of the subject; **Massage**, that is simply as a therapeutic agent, and not **Massage** as a means of earning a living or as a modified form of hotel keeping.

It must be admitted that many people regard **Massage** and all that appertains to it with a good deal of suspicion, and not without reason. The difficulty is, not that **Massage** fails to receive the credit to which it is entitled, but that it is employed in a number of cases for which it is essentially unsuited. No discrimination is exercised, but its use is advocated for all sorts of chronic ailments. This is a grave mistake and is greatly to be deplored. The work, too, is often carried on by people who know little or nothing about it, and who have not even mastered its most elementary details. They regard



it as a special system of treatment, whereas in reality it is only one of a number of therapeutic agents at the disposal of every physician. They practice without knowledge and often do incalculable harm. It is not pleasant to hear of an aneurysm or an ulcer of the stomach being ruptured by the efforts of a too zealous rubber, but such mishaps are not infrequent. The so-called *Masseur* or *Masseuse* who goes about the country armed with a "certificate" which is simply a receipt for money paid is an abomination, and has been the means of bringing a legitimate mode of treatment into disrepute. The confusion which still exists between Massage and Weir-Mitchellism is also unfortunate.

Since the publication of the First Edition I have visited Holland, Sweden, Russia, Finland, and the United States, with a view of ascertaining the progress of Massage in those countries. In the present edition several new illustrations have been added. The old headings of the chapters have been retained although they are no longer very appropriate.

I must express my indebtedness to Dr. Fletcher, of the Charterhouse, for pointing out many mistakes and misprints which from time to time demon printers have surreptitiously introduced.

WILLIAM MURRELL.

# CONTENTS.

CHAPTER	PAGE
I. Introduction . . . . .	I
II. The History of Massage . . . . .	5
III. The Method of Performing Massage . . . . .	34
IV. The Masseur and the Masseuse . . . . .	63
V. The Physiological Action of Massage . . . . .	74
VI. Massage in Paralysis . . . . .	91
VII. Massage for Constipation . . . . .	113
VIII. Massage a Remedy for Rheumatism . . . . .	140
IX. Massage and Neurasthenia . . . . .	159
X. Spinal Irritation and Massage . . . . .	177
XI. Massage in Organic Diseases . . . . .	188
XII. Massage in Surgical Affections . . . . .	215
XIII. Massage in Poisoning . . . . .	232
XIV. Massage in Uterine Complaints . . . . .	244



# MASSAGE AS A MODE OF TREATMENT.

## CHAPTER I.

### INTRODUCTION.

SOME years ago at the Westminster Hospital I delivered a lecture, subsequently published in the *Lancet*, on the TREATMENT OF INFANTILE PARALYSIS, in the course of which I referred to the value of Massage as a therapeutic agent. The subject attracted a good deal of attention, and I received a number of letters from medical men in various parts of the country asking for further information, many of my correspondents urging me to publish fuller details of the "New Mode of Treatment." I have much pleasure in acceding to their request, and I do so the more willingly because in Germany and elsewhere I have had the opportunity of witnessing the progress of a number of cases of different diseases treated by this method.

I am afraid that a good deal of misconception

exists in this country on the subject of Massage. Many people think that it is only a kind of "rubbing" or "shampooing," whilst others associate it in their minds with the idea of a Turkish bath. Patients often suppose that if they are to undergo a course of treatment they will have to abandon their ordinary occupations, cut themselves adrift from their friends and submit to be isolated or live in seclusion. It is amusing to watch their astonishment when they are undeceived on these points. Another common mistake is to suppose that anyone can "do Massage," and that the whole art can be acquired in one or two easy lessons. Applicants for employment are anything but pleased when they are told that it takes nearly two years to learn, and that many people from lack of aptitude or defective general education never succeed in acquiring it. I constantly see nurses and others who think they are thoroughly competent to undertake Massage, but who have not the dimmest idea even of the meaning of the word. Another very prevalent mistake is to suppose that each séance should last an hour. How this absurd idea originated it is difficult to say.

In the following pages I have endeavoured to give a concise account of the Mezgerian or Von Mosengeilian system as practised in Holland and Germany, together with certain indications as to the class of cases in which it is most likely to do good. The ignorant rubber of course thinks that it will cure everything, but as a matter of fact its sphere of action is limited. If carried out under the direction of a scientific physician, who has had experience in this mode of treatment, it yields excellent results, but if allowed to drift into the hands of an ignorant empiric it soon degenerates into the most arrant quackery.

The first question which naturally arises is "What is Massage?" It is always difficult to give a definition, but I should be inclined to say that by Massage we mean a scientific mode of treating certain forms of disease by systematic manipulation. The word is, I think, derived from the Arabic *mass* or *mass'h*, to press softly, the Sanskrit root being *makch*. Possibly, however, it may have its origin in the Greek *μάσσω*, which means strictly to handle or touch, but is more commonly employed in the sense of squeezing

or working with the hands as in the manipulation of dough. It is equivalent to the Latin *pinso* to beat, or pound, or bray, or crash. The Greek *μασσεῖν* is met with in the Latin *massa*, a substance which adheres like putty, and we have also the Spanish *mása* meaning dough. Massage is not by any means a new mode of treatment, and it is probable, as Billroth says, that the art of performing the various manipulations now embraced under this term is as old as the art of surgery itself.

The term Massotherapy which has recently been adopted by Professor Dujardin-Beaumetz is, I think, convenient as indicating the application of Massage to therapeutics. A Massotherapist, I take it, is one who studies the art and science of Massotherapy. He must know in what cases Massage is likely to do good, and should be able to give precise directions for carrying out the requisite manipulations. He need not of necessity be a practical *Masseur*, and the *Masseur* on the other hand may have no real knowledge of Massotherapeutics. There is the same difference between them as there is between a composer and an instrumentalist.

## CHAPTER II.

### THE HISTORY OF MASSAGE.

IN a primitive form Massage was known both to the Greeks and Romans, who resorted to it especially after the bath, a custom which under the name of "shampooing" still prevails amongst Oriental nations. After the struggles of the circus it was employed to dissipate the resulting contusions and extravasations, and to restore pliability to the bruised and stiffened joints. Homer tells us that beautiful women rubbed and anointed war-worn heroes to rest and refresh them after the toil and heat of the battle. We all know the story of the Emperor Hadrian, who one day seeing an old soldier rubbing himself against the marble at the public baths, stopped him and inquired why he did so. The veteran answered :—" Because I have no slave to rub me," whereupon the Emperor, pitying his condition, gave him two slaves and enough to keep them. On the following day when the Emperor



made his appearance a number of old men commenced rubbing themselves against the wall hoping to have similar good fortune, but the Emperor divining their intention directed them "to rub one another." Hippocrates says :—"A physician must be experienced in many things, but assuredly also in rubbing, for things that have the same name have not always the same effect. For rubbing can bind a joint that is too loose, and loosen a joint which is too tight." And he adds, "rubbing can bind and loosen, can make flesh, and cause parts to waste. Hard rubbing binds, soft rubbing loosens, much rubbing causes parts to waste, moderate rubbing makes them grow." Celsus, too, suggests the use of friction for the removal of deposits in the tissues, and especially for the relief of pain. Amongst the Chinese, written allusions will be found dating back to a period three thousand years before the Christian era, and their oral traditions are of still greater antiquity. The Chinese manuscript Kong Fau, the date of which is 3,000 B.C., seems to have contained detailed accounts of these operations. Closely allied in their nature and mode of action

are the *sarchuna* of the Persians, the *ἀνατριψις* of the Greeks, and the *friction* of the Romans. Much useful information respecting its early history will be found in the works of Hippocrates, Celsus, Galen, Oribase, Cælius Aurelianus, and other writers both ancient and modern. The Duchess of Rutland contributed an admirable and scholarly historical sketch of the subject to the *Nineteenth Century* of December, 1886, and to the *Queen* of February 2nd, 1887.

Baudin, in his *Travels in New Holland*, relates that the individuals who have the greatest influence amongst the savages are the *mulgaradocks*, or medical charlatans. A mulgaradock is regarded as possessing power over the elements either to avert wind and rain, or to call down tempests on the heads of those who come under his displeasure. In order to calm a storm, he stands in the open air, spreads out his arms, shakes his mantle made of skins, and gesticulates violently for a considerable time. In order to effect a cure, he proceeds much in the same way, but with rather less noise: he practises a mode of rubbing, and

sometimes hits the patient with green rods which have first been heated at a fire, stopping at intervals to let the pain pass away. The Africans follow the same fashion; and with the Russians, flagellation by means of a bundle of birch twigs is often practised. After the victim has been well-nigh parboiled in a vapour bath, a pailful of cold water is dashed over him, the effect of which is described as electrifying. He is then plunged into the snow, and prepared to endure the rigour of the climate with impunity. The Siberians and Laplanders also are said to indulge in these luxuries.

My attention has been called to a curious work entitled "A Brief account of Mr. Valentine Greatrack's (*sic*) and Divers of the Strange Cures by him lately performed as written by himself in a letter addressed to the Honourable Robert Boyle, Esq.," and published at the Mitre in Fleet Street in the year 1666. I have perused it with care, but cannot admit, as has been suggested, that it is an early work on Massage.

In the *Gazette des Hôpitaux*, for 1839, "*La Lancette Française*" as it was called, I find a

## TOOGI-TOOGI.

paragraph headed " Massage employé dans l'île de Tonga," in which it is stated that it is the custom when a traveller is fatigued from walking or other exercise, to make him lie down, and then to perform certain operations on him, known as *toogi-toogi*, *mili*, or *fota*. The first of these consists of striking quickly and softly with the fist, the second is a process of rubbing with the palm of the hand, whilst *fota* means pressing and squeezing the tissues between the fingers and thumb. These operations are usually performed by females trained for the purpose, and they relieve pain and fatigue, and in addition produce an agreeable effect, which predisposes to sleep. When they practise them with the view of relieving fatigue only, the arms and legs are subjected to treatment, but when the pain is localized it is to the part affected or to the surrounding parts that the procedure is applied. For headache the skin over the frontal region and the cranium generally is submitted to *fota*, and often with speedy relief. Sometimes when the fatigue is very great, they employ young children to tread under their feet the whole body of the patient. Dr.

N. B. Emerson gives a similar account of the *lomi-lomi* of the Sandwich Islanders, and describes it as a luxurious and healthful form of passive motion, bestowed by the Hawaiians as a crowning act of gracious hospitality on the honoured guest or distinguished stranger. Nordhoff, in his interesting work on "Northern California, Oregon, and the Sandwich Islands," says that to be lomi-lomied you must undress and lie down on a mat. The less clothing you have on the more perfectly can the operation be performed. "To you thereupon comes a stout native with soft fleshy hands, but a strong grip, and beginning with your head and working down slowly over the whole body, seizes and squeezes with a quite peculiar art every tired muscle, working and kneading with indefatigable patience, until in half an hour, whereas you were weary and worn out, you find yourself fresh, all soreness and weariness absolutely gone, and mind and body soothed to a healthful and refreshing sleep." These are clearly but primitive methods, and have little in common with Massage as we now understand the term.

During the early part of this century there is reason

to believe that the true Massage was practised in France, but it was carried on secretly, and the professors of the art were but little inclined to impart their knowledge to casual inquirers. It is to Dr. Mezger, of Amsterdam, that we are indebted for much of our knowledge of the modern phase of Massage. His thesis was published in 1868, and is entitled "De Behandeling van Distorsio pedis mit Fricties." In the preface he states that he commenced studying the subject in 1853, and that he has modified it and practised it constantly since 1861. I may mention incidentally that Mezger has published no large work on the subject, and that his reputation rests chiefly on the undoubted success which he has attained in treating his private patients. He is not now connected with any hospital, and some time ago declined a Professorship in the University.

I was at Amsterdam a short time ago, but I have no intention of describing the method of cure practised there, although I may perhaps venture to transcribe a portion of Mr. G. A. Sala's account of a recent visit to that interesting old city:—"The

other day," he says, "being in the picturesque old town on the Amstel, I strolled into the hotel of that name—a Brobdingnagian establishment in the modern style—and, after traversing a long corridor, found myself in what I took to be the reading-room, but which was in reality the *salle d'attente*, engaged by Dr. Mezger for the use of his patients. A number of ladies were reading the papers—the popular *Nieuwe Rotterdamische* and half-a-dozen other sheets bearing titles so portentous that I hesitate to print them—when, as if by preconcerted action, all sprang to their feet as an elderly, white-haired, florid-complexioned gentleman, clad in a white blouse ('holland,' *bien entendu*), bustled into the room, nodded pleasantly to this lathy gentleman, 'chaffed' that stout lady, and then retired to the consultation-bureau, ready and eager to give all and sundry that kneading and commelling which I understand forms the basis of the massage treatment. I had half a mind to have interviewed the Doctor then and there; but remembering the severe punching I endured at the hands of a sturdy Tartar in a bathing establishment

situated, if I recollect aright, in the Nevski Prospekt, in the city on the Neva, I seized my hat and fled precipitately to the actual *salon de lecture*, on the other side of the long corridor, fearful lest I, too, who am not a rheumatic subject, should be seized and incontinently 'massaged' by the potent physician in whose charge the suffering Empress Eugénie has once more wisely placed herself. 'A prophet has no honour in his own country.' Indeed! You have but to go to Amsterdam and talk to a native about Dr. Mezger to be convinced of the utter and complete falsity of the *dictum*, so far as the Dutch are concerned. Not long ago the High Priest, nay, the veritable Pontiff of Massage, gave out his intention of relinquishing the practice of his profession and retiring into private life—say at Arnhem or Scheveningen. The Amsterdamers were instantly up in arms, vowed and declared that he should not leave them, pleaded that their city would not be the same place without this modern Æsculapius, and in the end the cheery doctor was obliged to relinquish his cherished idea of retiring on his laurels, the victim of circumstances



other day," he says, "being in the picturesque old town on the Amstel, I strolled into the hotel of that name—a Brobdingnagian establishment in the modern style—and, after traversing a long corridor, found myself in what I took to be the reading-room, but which was in reality the *salle d'attente*, engaged by Dr. Mezger for the use of his patients. A number of ladies were reading the papers—the popular *Nieuwe Rotterdamische* and half-a-dozen other sheets bearing titles so portentous that I hesitate to print them—when, as if by preconcerted action, all sprang to their feet as an elderly, white-haired, florid-complexioned gentleman, clad in a white blouse ('holland,' *bien entendu*), bustled into the room, nodded pleasantly to this lathy gentleman, 'chaffed' that stout lady, and then retired to the consultation-bureau, ready and eager to give all and sundry that kneading and pommelling which I understand forms the basis of the massage treatment. I had half a mind to have interviewed the Doctor then and there; but remembering the severe punching I endured at the hands of a sturdy Tartar in a bathing establishment

situated, if I recollect aright, in the Nevski Prospekt, in the city on the Neva, I seized my hat and fled precipitately to the actual *salon de lecture*, on the other side of the long corridor, fearful lest I, too, who am not a rheumatic subject, should be seized and incontinently 'massaged' by the potent physician in whose charge the suffering Empress Eugénie has once more wisely placed herself. 'A prophet has no honour in his own country.' Indeed! You have but to go to Amsterdam and talk to a native about Dr. Mezger to be convinced of the utter and complete falsity of the *dictum*, so far as the Dutch are concerned. Not long ago the High Priest, nay, the veritable Pontiff of Massage, gave out his intention of relinquishing the practice of his profession and retiring into private life—say at Arnhem or Scheveningen. The Amsterdammers were instantly up in arms, vowed and declared that he should not leave them, pleaded that their city would not be the same place without this modern Æsculapius, and in the end the cheery doctor was obliged to relinquish his cherished idea of retiring on his laurels, the victim of circumstances

which were beyond even his power to control. A determined people, the Dutch! Those who are at all acquainted with Amsterdam will smile at the idea of rheumatic patients resorting thither, even though it be the headquarters of the eminent 'massager;' for assuredly if there is one place in the wide world, after Venice, calculated to bring on an attack of 'rheumatics,' that place is the business capital of the Netherlands, intersected as it is with canals which would be charming indeed, if the water would condescend to run even once in a way, instead of remaining turgid, slimy, stagnant, and indescribably filthy. O, the smell of those canals! I can scent it even now, though happily the wide North Sea divides it and me." Mezger has recently left Amsterdam, and has taken up his residence at Wiesbaden.

It is, however, not to Mezger, but to the careful and painstaking observations of Prof. Von Mosengeil, that we are indebted for an accurate and scientific knowledge of the subject. His experiments on rabbits have served to place the whole question on a firm basis, which will not be

readily shaken. The literature of Massotherapy is now so extensive that it is not possible in the space at my disposal to refer to even a tithe of the able works and articles which have from time to time appeared on various branches of the subject. I can only mention in the most casual way even such well-known authorities as Mezger, Von Mosengeil, Reibmayr, Estradère, Norström, Ilia Gopadze, Zabudovski, Benjamin Lee, and Douglas Graham. Of late the Russians have been extremely active in this direction; I have to thank Dr. Theodore Maxwell for calling my attention to several valuable papers written in their language.

In this country unfortunately very little is known about Massage. As an example of the ignorance which prevails on the subject, it may be noted that in a well-known Dictionary of Medicine, it is stated that Massage, "shampooing," "kneading," and "medical rubbing," are synonyms, and it is defined as a "process of treatment by rubbing, which consists in deep manipulations." The so-called Massage practised by "medical rubbers" and

nurses is not Massage at all, as the term is understood on the Continent, and has little or nothing in common with it. In the words of the *Lancet* :—“It is as absurd to suppose that ‘rubbing’ and ‘shampooing’ is Massage as it is to say that a daub of paint is a work of art.” There was at one time a deep-rooted objection to Massage as a method of treatment, but this has gradually disappeared, and it is now admitted that it is really a useful and scientific mode of cure, not unworthy of the notice of even the most orthodox physician or surgeon. More than ten years ago it received in Germany the adhesion and support of such distinguished authorities as Billroth, Esmarch, and Langenbeck. It is not free from the taint of quackery, but as a recent writer says :—“Quackery does not consist in the thing that is done, so much as the spirit in which it is done. The most time-honoured and orthodox remedies may be employed in such a manner, and by men boasting of the highest qualifications, as to be fairly chargeable with this taint. That we should be debarred from the use of such potent therapeutic agents as Massage, or systematic

muscular exercise, or electricity, or hydrotherapeutics and the like, because in unworthy hands they have been abused, seems to be almost worse than absurdity."

As much misconception still exists on the subject, it may be as well to point out the differences between Massage and the so-called medical rubbing. Massage, as already stated, is a scientific method of treating disease by means of systematic manipulation. The individual muscles or groups of muscles are picked out or isolated, and stimulated to contraction mechanically. The movements must be made in the direction of the muscle fibres, and the tips of the fingers must be carried along in the interstitia, so as to promote the flow of lymph and increase tissue metamorphosis. In addition an attempt should be made to stimulate mechanically the various motor points, in order that the muscles may be made to contract by a stimulus conveyed along their nerves. The manipulations are carried out systematically in definite order and with a definite object. In medical rubbing these condi-

tions which are essential to Massage are considered to be of no importance, and the operator simply rubs or pummels the patient, without any regard to the anatomical arrangement of the parts, and usually without any very definite object. To perform Massage a knowledge of anatomy is essential, whilst for rubbing and shampooing, physical strength and endurance with a certain knack are all that is necessary. Shampooing is very useful in its way, but it is not Massage, and can never take the place of Massage. There is as much difference between Massage and shampooing as there is between playing a difficult piece of music and striking the keys of the pianoforte at random.

The Weir Mitchell treatment of neurasthenia and hysteria is a combination of isolation or seclusion, rest, electricity, overfeeding, and "Massage," the term Massage being employed, not in its original sense, but simply as a synonym for rubbing. Dr. Playfair's system is I believe identical with Weir Mitchell's, and is applicable to the same class of cases. Dr. Playfair tells us that Massage in the

sense in which he uses the term is "nothing more than a vicarious way of giving exercise to patients who cannot take it themselves." In a recent communication to the *Lancet* he states that practically he has never himself seen Massage employed, and does not care how it is done.

The Swedish System of Medical Gymnastics taught at the Royal Central Institute at Stockholm, under the direction of my friend Professor Torngren, differs essentially from Massage and is much more comprehensive. The instruction is carried out very thoroughly and systematically, and medical men wishing to obtain a certificate of competency are required to devote three years to the work. No one is allowed to practice unless duly qualified, and no patient is admitted for treatment unless furnished with a prescription or recommendation from his physician. Students can enter only between the ages of twenty and thirty, and are required to produce a certificate of sound bodily health and freedom from deformity. Foreigners must have mastered the language to enable them to follow the course of instruc-



tion readily and accurately. The curriculum includes anatomy, physiology, hygiene, pathology, mechanics, and theoretical gymnastics. The practical work begins at eight o'clock in the morning and is carried on in classes, with short intervals of rest, until three o'clock in the afternoon, when the day's work is done. In connection with the Institute, there is a school where the pupils learn under strict supervision to drill the children. The gymnasium is elaborately fitted up, and advanced students are taught various trapeze performances, their safety from accident being ensured by the employment of a net. The boy's drill in the senior class prepares the way for military drill, into which it imperceptibly merges. The art of swimming is also included in the system, and is taught on dry land with great success, more than eighty per cent. of the scholars swimming beautifully, especially if they refrain from going into the water. Many diseases are treated successfully by exercises and manipulations alone, no medicine of any kind being taken. Compression of the jugular vein is employed for headaches, and pressure on the pneumogastric nerve for palpitation

and cardiac disease. Phthisis in the early stage is benefited to a marked degree, and rheumatism, sprains, and stiff joints are treated by Massage in conjunction with active and passive movements. Many sufferers from chronic bronchitis and winter cough visit Stockholm year after year for systematic treatment. It is cold in winter and the ground is covered with snow, but the air is dry and bracing and the patients as a rule do well. Stockholm is a beautiful city, and for gaiety and amusement compares favourably with Paris. The people are charming, and English is very generally spoken. In summer the best plan is to take the boat from London or Hull to Gothenburg, and then to go through the Göta Canal, calling at Trollhätta on the way. In winter the canal is frozen, but there is a capital train service. The hotels at Stockholm are good, rooms can be obtained in private houses without difficulty, and the cost of living is small. I am greatly indebted to Professor Torngren for admission to his excellent Institution, which is under Government control, and for many other acts of kindness and courtesy.

The term Massage is often employed in a manner

which clearly indicates that no definite idea has been formed of its meaning. Here, for example, is an extract from an article entitled "Massage by Machinery," which appeared in a well-known American Journal —

"From a big room on the second floor at No. 45 Randolph Street, above a wholesale grocery store, and next to the apartments occupied by the Ethical Society, a noise comes forth all through the day which reminds the listener of the click of the looms in a cotton factory. If the person who hears the noise enters the room to investigate, a strange sight meets his gaze. A dozen machines, run by a steam engine in one corner of the apartment, rattle and click in a monotonous way, and in the embrace of each is a human being, who is being shaken, kneaded or rolled for the improvement of his health. There are several machines which have what can only be described as two rubber pads on the end of an iron stem extending out from them. These pads may be said to represent a human hand in motion, shaking horizontally, with about one hundred and fifty movements to the minute. The patient sits on a chair and

places any portion of his body to the rubber pads. They take hold and shake with a vigorous, even motion, clutching the clothing, skin, and muscles like the hand of a living person." It is hardly necessary to say that this is not Massage, and is not a bit like it.

I am afraid that the true Massage will never come into general use in this country. There are of course hundreds of people who pretend that they practise it, but as a matter of fact nine-tenths of them have never been properly trained, and know nothing about it. There is as much difference between Mezger's Massage and the so-called English Massage, as there is between champagne and gooseberry. It is oysters and marcobrunner *versus* ginger-beer and whelks. The difficulty is that the majority of people do not know one from the other, and most patients are perfectly satisfied as long as the rubber gives them a full hour, works hard, and gets hot and a little "dewy." Fine work and the isolation of individual muscles, or groups of muscles, is at a discount, whilst motor points are unknown quantities. Of course the after effects, the results of the treatment,

are not the same, but people do not find that out until the mischief is done, and then they are disappointed and disgusted.

I was recently informed that Mezger's Massage was practised at a well-known health resort in this country, a skilled *masseuse* having been obtained straight from Aix-les-Bains. As the system pursued at Aix is not Mezger's, and has little or nothing in common with it, I fail to see the force of the recommendation.

Apropos of this statement, I may refer to a charmingly printed little book on "Health Resorts at Home and Abroad," by Dr. M. Charteris, Professor of Therapeutics and Materia Medica, of Glasgow University, and I will venture to quote his description, from personal observation as we are told, of the process as carried on at one of our inland watering places:—"Undressed, a patient enters a large room with a tiled floor, on which about ten inches of water at 104° F. rests. The temperature of the room is the same as the water. The patient sits on a wooden chair, and two men, lightly attired, with arms and legs nearly bare, commence opera-

tions on him. One stands behind and presses and kneads the muscles of the back, proceeding from the nape of the neck, while the other stands in front and operates from the toes upwards, first on one side then on the other. Each prominent muscle has a firm stroking with the palm of the hand at its origin, its course and its insertion. This in the massage nomenclature is termed 'effleurage.' Special attention when the body is reached is directed to the liver; the stroking is here more firm and persistent, and sundry pokes are made at its lower margin to awaken dormant energy. The rolling, kneading, and persistent pressure may, I presume, be called 'pétrissage.'" After some quasi-humorous remarks respecting the garrulousness of those who practise these proceedings, the author continues:—"Massage is followed by strong jets of tepid water directed rapidly and methodically by the masseurs for five minutes, while the patient stands in a corner of the room grasping firmly a wooden rail. Afterwards placing himself in the centre of the room, and leaning over the back of a chair, a showerbath of tepid water, gradually replaced by cold, descends

over the person. The whole process lasts about twenty minutes, and at the expiry of that time the patient enters a retiring room heated by a gas stove and reclines on a couch, warm sheets and towels being carefully tucked about him. In ten minutes the masseur enters and states that it is necessary now to dress." Dr. Charteris in conclusion says :—"The practice of Massage being thus described and its principle being simple in the extreme, I fail to apprehend why even professional men should try to surround it with any mystery and affirm that an attendant requires lectures and two years' instruction to become a masseur or a masseuse. Surely such statements are misleading and smack of quackery or charlatanism. An intelligent man or woman could easily understand how to mass expertly in say five weeks." If by Massage is understood the process here described, I most heartily concur with the writer as to the uselessness of attending lectures or devoting two years to the attainment of so simple an art. I certainly think that five weeks is ample for the purpose, and am not sure that five minutes would not suffice. Any unemployed charwoman or disengaged

bath-attendant would be found an efficient operator, and probably a shilling an hour would be considered adequate remuneration. The account of Massage as given by the learned Professor is of considerable interest, as it serves admirably to illustrate the mental confusion which still exists in spite of all that has been written on the subject.

As the correctness of my statement, that Massage is not employed at Aix-les-Bains, has been questioned, I think it right to say that it was made on no less authority than that of Dr. L. Blanc, Médecin Inspecteur des Eaux d'Aix, and of Dr. L. Brachet, Physician to the Bathing Establishment of Aix-les-Bains and Marlioz. When I make a statement I like to make it on good authority. Dr. Brachet, in a letter now before me, says:—"We have no regular Massage at Aix, but strong rubbing and shampooing during the douche. Aix owes its success to the mineral water and the douche. Our place being much frequented, some masseurs and masseuses are advertising themselves as having practised there. To be a thoroughly good masseur it is necessary to have some notion of Anatomy, and I am sorry to say



## MASSAGE.

that most of our doucheurs and doucheuses are so uneducated that they cannot either read or write." This I think settles the matter once and for all. If you want Aix you must go to Aix, you cannot have it bottled and sent to you. It is of no use getting a masseuse from a place where Massage is not practised. The climate and waters of Aix are unrivalled, and patients suffering from rheumatism, gout, or any affection of the respiratory organs cannot do better than get Dr. Brachet's excellent work on Aix-les-Bains and read it. Others perhaps may be more interested in a little work by Dr. Blanc, entitled *De l'Action des Eaux d'Aix-les-Bains, Marlioz et Challes dans le Traitement de la Syphilis*.

It is a curious fact, but in this country we seem quite incapable of running a health resort with anything like success. Perhaps we are too respectable, or perhaps we have not the business capacity. I remember last year my attention was attracted by various advertisements and editorial announcements of a new resort for invalids, the exact locality of which need not be indicated, and one Saturday afternoon I thought I would run down and have a

look at it. The first part of the journey on the Great Central was jolly enough, but after that we were shunted about, and kept fooling round at various wayside stations in a manner which was tantalizing to a healthy person, and would certainly have proved prejudicial to an invalid. On arriving at my destination I found there was not a conveyance of any kind to be had, and it was only by dint of bribery and corruption that I finally induced a man to carry my bag and show me the way to the establishment or hotel, or whatever it was called. I was graciously received by a lady, who apparently combined the offices of manageress, lady-superintendent, and matron. She seemed astonished at the advent of a casual visitor, but courteously gave me the choice of fourteen bedrooms, from which I concluded that it was not the "season." They were all equally dismal, close, cold, and uncomfortable, so that there was not much difficulty in making a choice. I ordered a fire and was given a code of rules and regulations, with which I found I was expected to conform during my stay in that hospitable place of entertainment. They were voluminous,

and embraced so many different subjects that I determined to study them attentively. I felt uneasy that I had forgotten to bring a certificate of moral character signed by a clergyman, but fortunately they did not ask for it. I went down to dinner, and it was certainly a very solemn function. There were not many people there—not more than six I think—but they spoke in whispers, and I felt that I did not desire more company. They were respectable undoubtedly, and looked like undertakers. I ventured to remark to one of them that it had been a fine day, but he gave me such a stony stare that I saw that I had gone too far and must be more circumspect in future. After dinner I thought I would like to go into the billiard-room, but I was informed that the waiter was having a hundred-up with the groom and that it was not available. I wanted to smoke, but the risk of violating one of the bye-laws was too great, and I felt that it should not be incurred without a legal opinion. There was nothing more to do, so I retired to my solitary chamber to study the rules and regulations. The next morning I awoke refreshed from my labours, and after breakfast interviewed the

manager and told him I wanted to see the spring and the baths. He was evidently taken by surprise and was for a time speechless, but by the judicious application of brandy and water internally, he recovered sufficiently to say how deeply I had wounded his feelings and to remind me that it was the Sabbath. I was informed that no one was ever allowed to take a bath on Sundays, and that the springs usually dried up on Saints' days and holidays. Under the exceptional circumstances I determined to go to the Church, but my good intentions were nipped in the bud, for I learnt, much to my regret, that only that very morning the clergyman had been inhibited by his Bishop, presumably for attempting to take a bath. There was evidently nothing more to be done, so I went to my room and had another dose of the rules and regulations, which lasted till dinner. This was a solemn mid-day meal, but it possessed elements of excitement, for under the influence of a couple of glasses of good old fruity port the wife of one of the undertakers thawed slightly and condescended to ask me what I thought of the Collect for the day. Not having read it, I had to do the

best I could with somewhat unpromising material. I fear I failed to answer her expectations, for she sighed deeply and ceased to address her remarks to me. The rest of the day was passed peacefully as it had begun, in the study of the rules and regulations. There were no Sunday trains, and even the most lavish promises failed to procure a conveyance of any kind, or possibly I might have been tempted to move my location. That night I interviewed the manager and told him quietly but firmly that I would depart by the 6.15 a.m. train. He was surprised, and told me he expected I would want to stay six weeks at the least. I explained that the place had made such an impression on my mind that it was not necessary. He said he was sorry, but I could not go by the 6.15 as it was against the regulations for the guests to rise or for the front door to be opened till eight o'clock. I told him I was certainly going, but did not wish to put him to any inconvenience, and offered to take the hotel with me. He was not satisfied, so I gave him, in a small compass, my opinion respecting the rules and regulations, and after that he was no longer anxious

to keep me. By means of a second edition of the bribery and corruption I was conveyed to the station in the morning, and after fruitless endeavours to awaken the booking clerk I succeeded in stopping the train by the simple expedient of standing between the rails and refusing to stir. I got back to town that afternoon, feeling that I had had as good as six weeks in the country. I shall never go there again, but I still have the rules and regulations, and take them, from time to time, in small doses, medicinally.

## CHAPTER III.

### THE METHOD OF PERFORMING MASSAGE.

NOW as to the method of performing Massage. In the first place it must be understood that there are several different kinds of Massage, or perhaps I ought rather to say, that Massage comprises several distinct modes of procedure. As a well-known writer says, "tous les Massages sont des manipulations tandis que toutes les manipulations ne sont pas des Massages." Massage is the generic term which includes the other specific forms. The terms used for the different varieties of Massage are, it will be seen, of French origin. They are in common use both in that country and in Germany. They are very old, and were employed ages ago, when Massage flourished in France.

I do not think that diagrams are of much use in illustrating the various forms of Massage, but in accordance with a very generally expressed desire

I append a few examples showing the different methods employed. They are as good as a good artist can make them, and they show something, though I fear not much. It is a treat to hear Schönberger playing a "Rhapsodie" of Liszt or an "Impromptu" by Schubert, but a photograph of that distinguished performer seated at his piano-forte can give but a faint idea of the delicacy of his touch or of his marvellous powers of execution. And so it is with Massage; an engraving may show the position of the hands at rest, but it can never indicate the various little niceties of touch and the delicacy of execution which, as the result of years of practice, are as a second nature to the thoughtful and intelligent *Masseuse*.

I. We begin then with what is called *effleurage*. This is a stroking movement made with the palm of the hand passing with various degrees of force over the surface centripetally. It may be practised with the fingers or with the thumb alone. It is of little value in itself, but produces good results when combined in various ways with the other procedures to be presently described. It is essential that the



movement should be as much as possible in the direction of the muscle fibres. It should never degenerate into mere rubbing. Every "movement" begins and ends with an effleurage performed quickly and perhaps forcibly. For deep-seated tissues the



*Fig. 1* is an illustration taken from life of the method of performing effleurage of the forearm. It will be seen that the wrist is steadied with one hand, whilst the other performs the necessary movement.

knuckles may be used instead of the palm of the hand. Noström says:—"The way is to begin at the extremity of the limb and slide the hand gently upwards towards the trunk. Before the right hand has quite accomplished its movement the left comes into play, starting from the same point. The exact

mode of procedure will depend on the region subjected to treatment; for example, the palm of the hand could not be employed for the joints of the little finger." Beuster, of Berlin, describes *effleurage* as

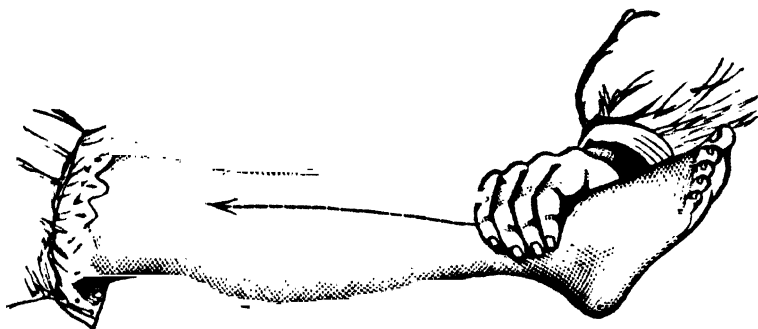
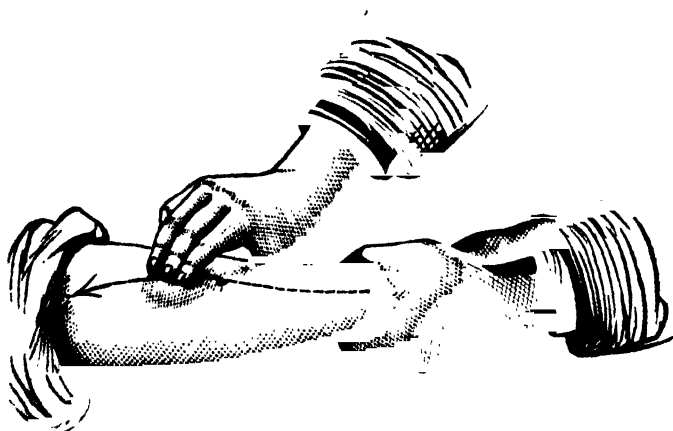


Fig. 2 is simply diagrammatic, and illustrates a method of performing effleurage often met with in this country. The leg is held tightly by the outstretched fingers and thumb just above the ankle, and the hand is carried rapidly and firmly upwards towards the knee. The grasp is then relaxed, the hand returns to its original position, and the manoeuvre is repeated. The fault is that the effleurage is represented as being performed on the ridge of the tibia.

consisting of "slow gentle strokes in a centripetal direction along the course of the veins and lymphatics made with the palm of the hand and with the pressure intermitting so as to cause passive peristaltic action." Jacoby says "the volar surface of the

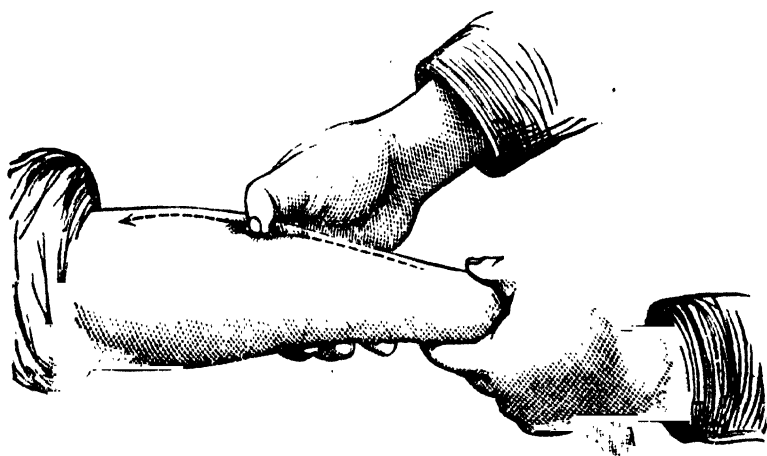
ends of the fingers or of the entire hand having been applied to the part at a point situated more peripherally than the affected portion, is then pushed centripetally forward and a short distance beyond



*Fig. 3* is also diagrammatic, and illustrates another method of performing effleurage, the fingers alone being employed for the purpose. The arm is shown held by the operator, by the left hand at the wrist, whilst the fingers of the right hand are carried steadily upwards towards the elbow, care being taken to keep as much as possible in the intermuscular spaces. The hands are awkwardly placed, and this method is not recommended.

the part. When this hand has reached its destination the other hand is placed at the starting point, and the same movement executed. Mean-

while the first hand has been brought back, so that by the time the second one has fulfilled its purpose it is ready to begin again. This is then repeated with regularity. The time to be devoted to each stroke



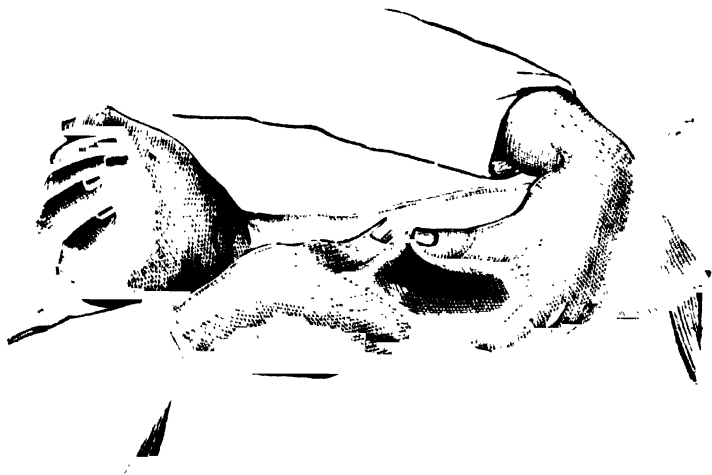
*Fig. 4* illustrates a method of performing effleurage with the thumb alone, which whilst moving upwards is held perpendicularly and pressed down deeply between the muscles, so as to stimulate circulation locally and remove effusions or exudations.

will vary much, the strokes also following with more or less rapidity." Douglas Graham is, I think, the only writer who has attempted to define the rapidity with which the various strokes should be made. He thinks that for the arm or forearm a rate of from

one hundred and fifty to three hundred and sixty a minute is not too much. Below the knees they may number from one hundred to one hundred and sixty with each hand, but on the back will not exceed from sixty to seventy-five. I must confess that this is a point on which I do not think it necessary as a rule to give directions. A certain amount of discretion must be left to the operator, and people vary much in their rate of work.

II. Next comes *pétrissage*, which is more important and is by no means easy to acquire. It is this procedure above all others, as Lee, of Philadelphia, has pointed out, by which we act upon the circulation of the deep-seated parts and modify the processes of tissue metamorphosis. "It is a powerful excitant to the capillary circulation, a stimulant to secretion, and an awakener of dormant nervous energy." It consists essentially in picking up a portion of muscle or other tissue with both hands, or the fingers of one hand, and subjecting it to firm pressure, rolling it at the same time between the fingers and the subjacent tissues. The hands must move simultaneously, and in opposite directions. It will

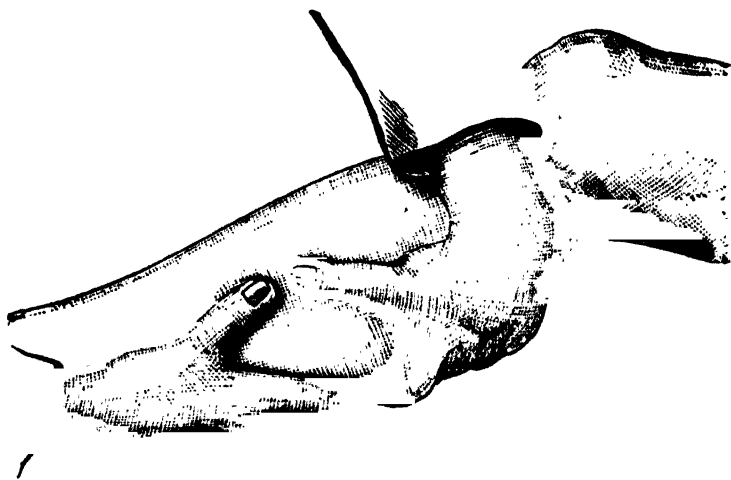
be observed that the thumb and fingers are wide apart, and that the whole muscle is taken up between the fingers and firmly pressed and rolled. The movement is made from below upwards, and the parts are squeezed in much the same way that one



*Fig. 5*, taken from life, is a good illustration of the mode of performing pétrissage of the forearm. The muscles are firmly grasped with both hands, and a rotatory movement is imparted to them.

would squeeze out the contents of a sausage. Professor Von Mosengeil always impresses on his pupils the necessity for "working upstairs," that is from the extremities towards the centre of the body. The skin must move with the hands or the operation is a

painful one for the patient. What one hand misses the other takes up, so that all the tissues are subjected to the influence. It is of importance to proceed uniformly and not to jump from spot to



*Fig. 6*, also taken from life, shows pétrissage of the leg. The mode of manipulation is the same as in the last figure, but the hands are somewhat differently placed.

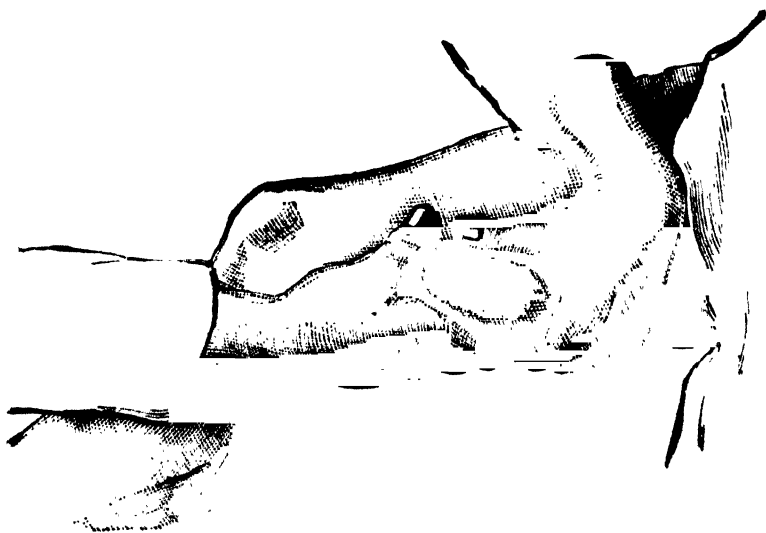
spot. To do this well it is essential to remember the arrangement of the groups of surface muscles, and to keep well in the interstitia. It is hardly necessary to say that it would be useless to attempt pétrissage of the hard tissues, such as the bones.

You will often see a nurse trying to squeeze up the ridge of the tibia under the impression that the bone is a muscle. •

Dr. Reibmayr, speaking of pétrissage, says "this manipulation consists of pressing, compressing, and squeezing the tissues to be subjected to treatment. Grasp the part and impart to it an oscillating movement stimulating sometimes a single point and sometimes the whole tissue." This is feasible only when the whole thickness of the part can be laid hold of so as completely to isolate it from the subjacent and surrounding tissues. Pétrissage is especially applicable to the muscles of the limbs, the neck, and the loins. The simplest mode of procedure consists of picking up between the fingers of one hand a muscle or group of muscles, isolating it and then allowing it to spring back by its own elasticity, the fingers at the same time kneading it as one would a piece of dough. When it is desirable to act on a large group of muscles both hands are employed so as to squeeze it as in squeezing water out of a sponge. At the same time that the muscles are being squeezed or pressed, a rotatory movement is imparted to them,



which must be transverse to the axis of the limb so as to combine with the compression a certain amount of torsion and stretching, which are essential to the complete performance of the procedure. Another form of pétrissage which, although less generally



*Fig. 7* illustrates pétrissage of the thigh, the muscles being firmly grasped with both hands.

efficacious, may be found useful in certain cases consists of rolling the parts between the palms of the hands. To perform this the hands may be

placed either parallel to the axis of the limb or perpendicularly to it, one on one side and one on the other, so as to impart a to and fro movement, as when the hands are rubbed together to warm them. Here the pressure acts only indirectly by producing torsion and extension of the muscles, nerves, and aponeurotic tissues. When pétrissage of a deep-seated point is required the thumbs alone should be used, care being taken that the nails are cut short.

III. The next process is *friction* or *massage à frictions*, which is performed with the tips of the fingers, and is employed chiefly in the treatment of affections of the joints. It is a complex movement, combining two distinct modes of procedure. The palm of one hand is placed on the limb and moves from below upwards, as in effleurage, whilst at the same time the other hand manipulates the joint, the fingers performing an energetic circular motion. There are two distinct movements, one vertical and the other rotatory. Each hand undertakes a distinct and special function, in which the tips of the fingers play the chief part. Mezger maintains that the co-ordination of movement must be made in

such a way that there is a general symmetry of action, the hands adapting themselves with difficulty to a different rhythm. To quote Beuster again :—  
“The finger-tips of one hand held at right angles



*Fig. 8, taken from life, illustrates friction of the knee-joint performed with the tips of the fingers of both hands.*

to the axis of the limb rub across and across in narrow ellipses, while the fingers of the other hand stroke parallel to the axis of the limb.” The term is a bad one, for it has nothing to do with what we

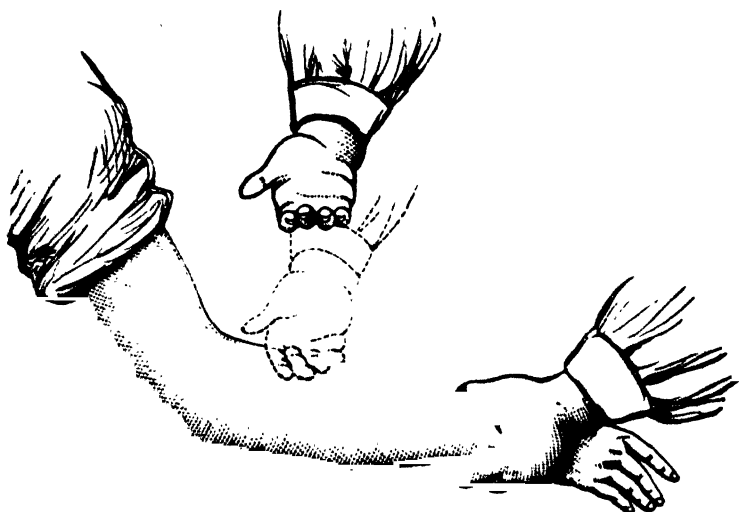
ordinarily understand by friction. It is always associated with effleurage, and it must be performed quickly and with considerable facility, or it is valueless. It is useful not only for treatment, but for the purpose of diagnosis.



Fig. 9 illustrates friction of the ankle-joint, a method frequently used in the treatment of sprains.

IV. *Tapotement* is a kind of percussion which may be made with the tips of the fingers, their palmar aspects (*les tapotements de Laisné*), the palm of the hand, the back of the half-closed hand, the

ulnar or radial border of the hand (*hachures*, *hackungen* of Neumann), or with the hand flexed so as to contain, when brought in contact with the



*Fig. 10* illustrates a method of performing tapotement, the muscles being struck lightly and rapidly with the dorsal aspect of the fingers of the half-closed hand, so as to stimulate them to contraction.

surface of the body, a cushion of air. Noström points out that this movement should be performed with the hand hollowed and the wrist flexed. When the part is deeply seated both hands must be

employed. It is not only a stimulant, but a sedative, and the effect produced depends entirely on the force and rapidity of the strokes. The arm should not come into play, but the movement should be made from the wrist alone. Dr. Léon Petit thinks that the name alone suffices to define it, and that no detailed description is required. In exceptional circumstances *tapotement* may be indirect, a bundle of swan's feathers lightly tied together being employed for this purpose, but this is now rarely resorted to by good operators.

V. *Direct Mechanical Stimulation*.—This is a mode of manipulation but little known or practised in this country. It has not received the attention to which it is justly entitled as a therapeutic measure. Dr. Arvid Kellgren has been at some pains to demonstrate its utility, and I am indebted to him for practical instruction in the methods he employs. He says:—"The manipulator causes the nerve to vibrate either by frictions made transversely over it, in a manner similar to that in which a player passes the fingers over the strings of his harp, or he makes quick vibrations on the

nerve. When the latter method is adopted, he either follows its course with the tips of the fingers, or he keeps them fixed and vibrates upon those parts of it as are most painful. The different modes of procedure depend on the position and surroundings of the nerve." The median nerve is well adapted for illustrating the first method. The arm is abducted until it assumes the horizontal position, when the nerve, as it leaves the axilla, can be felt as a thick cord lying to the outside of the branchial artery. When the tips of the fingers are rapidly drawn across it transversely, in the manner indicated, a feeling is produced similar to that which is experienced on electrical stimulation. The supra-orbital nerve, as it lies on the bone, may be utilized for demonstrating the second mode of manipulation. It is essential that the parts which cover the nerve should move with the fingers of the operator, or the friction will not reach its destination, and the application will prove of no avail. The physiological effects of these manœuvres are :—1. An increase of nerve energy. 2. Diminution of pain, as seen in the prompt relief of neuralgia

and other affections due to nerve disturbance. 3. Contraction of the smaller blood-vessels supplying the part. This is shown by the relief of weight and tension in the head, afforded by stimulating the sensory nerves of the skull and by the curious fact, of which I can vouch from personal experience, that friction over the cervical and brachial plexuses will produce a distinctly chilly feeling over the whole body, similar to that experienced from sitting in a draught. 4. Muscular contraction, illustrated by the flexion and extension of the fingers and of the wrist which follows mechanical stimulation of the median and musculo-spinal nerves.

It is always necessary to give the operator clear and explicit directions as to the methods to be employed, and it is never safe to trust to his unaided judgment. In some cases, for example, *effleurage* and *pétrissage* are indicated, whilst in others *massage à frictions* will alone be employed. Sometimes purely local treatment will be resorted to whilst in others general Massage will be prescribed. The time and duration of each visit should be distinctly specified, and the instructions may have to



be varied from week to week or even from day to day. The *masseur* carries out our directions with as much accuracy as the skilled pharmacist dispenses our prescriptions.

In many German works on Massage detailed directions are given for manipulating different regions of the body. They are, I think, hardly necessary, for the various movements are for the most part simple adaptations of the primary methods already described. Still, in accordance with a very generally expressed wish, I give a brief account of some of the best known methods.

Gerst's method of applying Massage to the neck is as follows :—The patient faces the *masseur* with the chest exposed and the head thrown well back so as to extend the parts. He must breathe naturally and easily or he will impede the venous circulation and defeat the aim of the operator. These preliminaries being arranged, the manipulations, which may be divided into three stages, are commenced. In the first place the hands of the operator, with the palms uppermost and the ulnar border alone touching the skin, are placed one on each side

of the neck in such a manner that the tip of the little finger and the ungual extremity of the ring finger are behind the ear upon the mastoid process, the ball of the little finger resting beneath the ramus of the lower jaw. With the hands in this position centripetal effleurage of the upper part of the neck is commenced. The ulnar border is then moved towards the median line, both hands turning on their axes until the radial border comes uppermost and assumes the position originally occupied by the ulnar. The palmar surface of the hand is now in contact with the neck, and is available for effleurage. During this manœuvre continuous pressure is kept up with the thumbs on the internal jugular veins, the rest of the hand sufficing for the external jugulars and the lymphatics. Having arrived at the supra-scapular fossa, the hand is still further turned on its axis until the radial borders are brought into play. The description seems a little complex, but the movement is in reality simple enough.

Hoeffinger's method is much simpler and presents some peculiarities. He seats his patient on a high

back chair, the head slightly thrown back and the neck and upper part of the chest uncovered. Standing upright behind him, he places both hands open



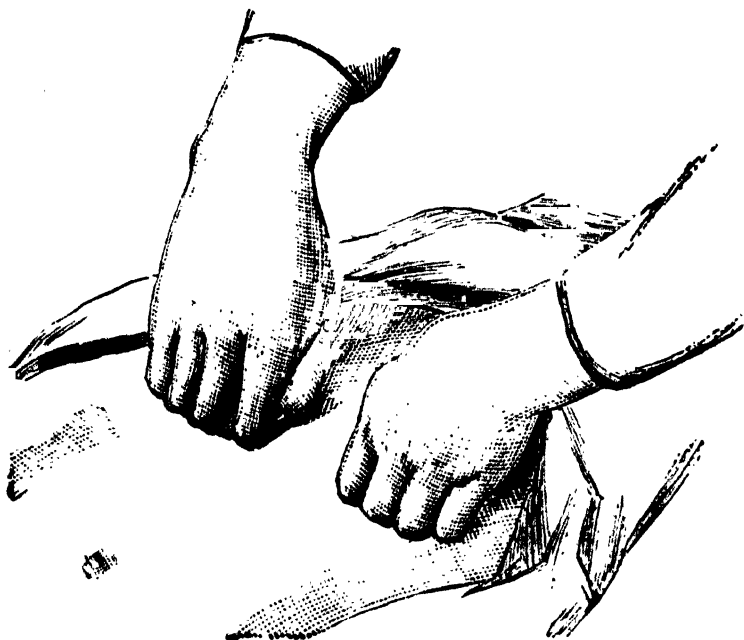
*Fig. 11* illustrates Massage of the Neck, according to Gerst's method. It will be seen that the head is well thrown back, and that effleurage is practised from above downwards, the hands being carried from the lobe of the ear to the shoulder.

beneath the jaw, the thumbs forming a fulcrum at the back of the neck. Gentle and regular movements are performed from above downwards and

inwards, little or no pressure being exerted. It is claimed for this method that in addition to avoiding compression of the larynx it fatigues neither the physician nor the patient, and allows the latter to breathe freely and easily.

There are many methods of practising Massage of the abdomen, Laisné's being one of the best. The hands are placed one on each side of the abdomen and move in opposite directions so as to exert a moderate amount of pressure. The course of the colon is followed, and the patient should be in such a position that the walls of the abdomen are relaxed. Another method is described by Léon Petit and other writers. In the first place circular friction is performed with the fingers of the right hand round the navel, the thumb being placed outside the circle and acting as an eccentric fulcrum. Next, the fingers are kept rigid whilst the same movement is performed with the palm of the hand. Lastly, the right hand is placed in the right inguinal region, with the left on the top of it so as to exert additional pressure, and it is moved with an undulatory motion along the course of the ascending,

transverse, and descending colons. These movements combined in various ways are practised a number of times in frequent succession.



*Fig. 12* illustrates a simple method of performing tapotement of the abdomen. The hands may strike either alternately or simultaneously, as may be found convenient.

Hirschberg thinks that Massage of the abdomen should be directed "on anatomical principles." He takes the tissues in a certain definite order, stimu-

lating first the different coverings of the abdomen, then the walls of the stomach, then the large and small intestines, and finally the deeper structures. He directs the patient to lie on a couch or an extended chair, which can be readily approached from either side. To relax the abdominal walls the chest should be slightly raised and the thighs should be flexed. The manipulations should not, as a rule, be attempted for at least a couple of hours after a meal, or disastrous results may ensue, but in cases where the patient suffers from discomfort immediately after taking food, it is permissible to commence at once, although *Massage fort* should never be attempted, and the manipulations should be confined strictly to *Massage doux*. Before resorting to masso-therapeutical measures for the relief of gastric disorders, it is desirable to map out, by percussion or otherwise, the limits of the organ with the view of ascertaining its condition as regards distention, the amount of resistance of the abdominal walls being at the same time noted. Massage of the abdomen may, as already indicated, be "light" or "heavy;" that is, it may be confined

to the superficial structures, or may implicate the deep-seated viscera. The Massage of the abdominal walls should be applied, in the first place, to the muscular tissue on the right side, extending from the epigastrium to the pubes, and should be followed by effleurage of the oblique fibres. After this should follow superficial stimulation of the muscles, care being taken not to interfere with the deeper structures. The fingers should next be inserted between the muscular bands, and an attempt made to stimulate the stomach itself, the action necessitated being that which would be employed to empty a non-resistant vessel filled with fluid. Another good mode of manipulation is to place one hand on the surface of the abdomen, with the fingers extended, and then to insert the fingers of the other hand in the interdigital spaces, keeping up meanwhile deep pressure so as to stimulate to action the walls of the stomach. This may be followed by "*les mouvements de tremblement de Georgi*," and the sitting, which never exceeds half-an-hour, should end up with Massage of the abdomen according to the method of Reibmayer-Petit.

Such is, in brief, an account of the mode of procedure advocated by Rubens Hirschberg, of Odessa.

There are still other varieties of Massage, such, for example, as different forms of vibration already referred to, but these it is hardly necessary to describe in detail; in fact, it is almost impossible to teach the art of Massage by written or verbal description. It is very much as if one were trying to make a pianoforte player by describing how it is done without recourse to the instrument. Massage is undoubtedly difficult to learn, but it can be acquired by dint of constant practice, and after a time becomes almost a second nature. There are several little points of detail to which attention must be paid. The massage should be "dry," that is, without the use of oil, or liniments, or ointments of any kind. This is contrary to the teaching of Busch and other writers, but a little experience soon serves to show which method yields the best results. The only exception, or almost the only exception, to this rule is when the patient suffers from some form of specific disease, when the operator should use an antiseptic preparation—carbolic acid or oil of cloves.



and lard, for example—for his own safety and protection. The less ointment one uses the better, and it must be remembered that vaseline is never admissible. Scrupulous attention must be paid to the condition of the hands and nails. The hands should be soft, and the nails short. A few months ago Prof. Liebreich, of Berlin, advised me to try Lanoline, the newly-discovered wool oil and basis for ointments. I have employed it in several cases, especially in the form of Lanoline ointment, and have found it useful for joints. As a rule, however, I prefer dry rubbing, and for the following reasons:—(1) You get better contraction of the muscles, and consequently a greater flow of lymph; (2) electrical currents are more readily developed in the tissues; (3) there is a greater elevation of temperature in the part; (4) you do not make your patient in a mess. There is not the slightest fear of causing abrasion of the skin in dry rubbing if the operator knows his work. The rubber who rubbed a hole in his patient because there was no vaseline had mistaken his vocation. I do not deny that inunctions are of value in suitable cases, but that

is entirely another matter, and has nothing to do with Massage.

Many special preparations, such as "Lanoline cream," are recommended for keeping the hands soft and white, but they are hardly necessary. A little ammonia or borax in the water in which the hands are washed may be useful. At night the best mixture for the hands is white of egg mixed with a grain or two of alum. The so-called Roman toilet paste is a mixture of white of egg, barley flour, and honey. Simple oatmeal would in all probability do just as well, but the best way of keeping the hands smooth and white and fit for massage is never to do anything which would make them rough or dirty.

In some parts of the Continent massage is employed alone, whilst in others it is associated with electrical treatment. Von Mosengeil, in addition to being an authority on Massage, is a thoroughly practical electro-therapist. In suitable cases he employs both the constant and the interrupted current, placing one electrode on some neutral spot, and the other on the various motor points in

succession. In some cases—headache, for example—static electricity is employed, sparks being taken from the painful spot. Static electricity, so long discarded as a therapeutic agent, is now employed by many physicians in the treatment of hysteria, hypochondriasis, and allied conditions.

## CHAPTER IV.

### THE MASSEUR AND THE MASSEUSE.

THE next point for consideration is, who should do the Massage? It would be absurd to suppose for one moment that so delicate a duty could be entrusted to an untrained or uneducated person. Both Mezger and Von Mosengeil are their own operators. For women and children it is essential to obtain the services of a thoroughly accomplished *Masseuse*. She must be an educated lady—I use the word advisedly—who has been thoroughly trained in the different methods, a process which will occupy at least two years. She must have such a knowledge of surface and visceral anatomy and of physiology as will enable her to carry out the instructions of the physician intelligently. It is not necessary that she should be physically strong, aptitude and intelligence being of far greater importance. She must be a woman of refinement, and the possession of a certain

sympathetic temperament will greatly enhance the value of her services. I quite agree with Dr. Benjamin Lee, who, in speaking of the choice of a manipulator, says:—"He or she, for both sexes may succeed admirably as *masseurs* or *masseuses*, must possess firstly, vigorous health; secondly, muscular strength; thirdly, a cheerful temperament, a pleasant face, and an acceptable manner; fourthly, a soft and pliant but strong hand; fifthly, a fair education and a certain amount of refinement; sixthly, a knowledge of the leading facts of anatomy, such as the position of the various organs, the position and course of the larger arteries, veins, and nerves, and of such facts in physiology as the functions of the various organs, the course of the circulation, and the general processes of nutrition; and, seventhly and lastly, an acquaintance with the effects produced by the different forms of manipulation, the order in which these different forms should be employed to produce certain general effects, the injury which may be inflicted by employing them improperly or out of their proper order, and a practical dexterity in their application,

to be attained only by training under an experienced instructor. Hence it will be understood that we cannot take John from the stable, or Biddy from the wash-tub, and in one easy lesson convert either into a safe, reliable, or efficient manipulator. Massage is an art, and, as such, must be acquired by study and patient practice under competent guidance." The necessity for obtaining educated people to perform Massage is as yet hardly recognized in this country. A short time ago on asking a medical friend if he used Massage much in his practice he replied :—" Oh, yes, a great deal, my butler does it." After that I should not have been at all surprised to hear the electrical treatment was conducted by his footman, and that the kitchen-maid undertook the obstetric cases.

Since the publication of the first edition of this book, I have received on an average a dozen letters a week from people expressing their readiness to undertake cases of Massage for me. I have been favoured with calls from nearly a hundred young ladies all more or less attractive—and incompetent. When I venture to point out to them that it is desir-

able that they should have at least an elementary knowledge of the subject, before undertaking the treatment of the sick, they uniformly resent the insinuation, and some of them, I am sorry to say, have expressed their feelings in language more forcible than polite. They generally end up by saying that they are "quite sure" that if I would only just show them how it is done, they would "pick it up" in no time. They are not as a rule wanting in confidence, and tell me that if I would just give them "one trial" they would afford my patients every satisfaction. They are willing enough to undertake any case, and it is a matter of indifference to them whether the victim is a man, woman, or child, provided only that there is a fee attached. A few of them have taken my advice, and have abandoned a task for which they are hopelessly unsuited, but the majority having nothing in the world to do, and finding home-life monotonous, are infatuated with the desire to treat other people and make a fortune. They usually come armed with a certificate or two, and with elaborate testimonials from partial friends, who would

willingly vouch for their fitness to undertake anything in the world. It is an unpleasant task to have to decline their offers of assistance, especially when the appeal, as is so often the case, is made in *formâ pauperis*; but one cannot forget that one has a duty to perform to one's patients as well as to the would-be *Masseuse*. It is just as difficult to learn Massage in a few easy lessons as it is to become a *prima donna* by this simple means. Skilled labour, as in all callings, commands its price, but for the untrained and incompetent there is no demand. I am always willing to try and help those who have had the requisite education, but I cannot undertake to find work for the enormous army of unemployed to be met with in a large city like London. Most of these people have not the dimmest idea of what is meant by punctuality, and are just as incapable of keeping an appointment as they are of writing a decent letter. I am sorry to say this, but it is true.

The so-called Massage practised in some of the hospitals, and under the auspices of some of the nursing institutions, is a painful exhibition of ignor-



ance and incompetence, being simply a degenerative form of rubbing or shampooing. Both are useful enough in their way, but they hardly rank as scientific therapeutic agents. The art of Massage, depending as it does on a knowledge of Anatomy and Physiology, takes many months to acquire, and the only plan at all feasible is to train one's own operators. It may not be necessary for a *Masseuse* to study Comparative Anatomy, or even Topographical Anatomy, but it is essential that she should attend lectures on Plastic Anatomy—the Anatomy of External Forms—and this cannot be done in a week or in a month. It is of no use for me to tell her to perform effleurage of, say, the trapezius in the direction of its fibres if she has no idea whether that muscle is situated in the back or in the sole of the foot. To work efficiently she must carry in her mind's eye the arrangement of the structures beneath the skin, and if she is not able to do this she is no better than a common shampooer. For some cases first-class work may not be essential, but those are not the cases which test the efficacy of this mode of treatment. A short

time since a gentleman stated in one of the medical papers that it might be learnt in a few easy lessons, "like fly-fishing, tennis, and cricket," but as it appeared that he had no practical knowledge of the subject, and that his views, to say the least, were somewhat hazy, the assertion may be allowed to pass without further criticism. The statement made by the *Lancet*, that "skill in the proper performance of Massage takes at least two years to acquire," is correct. Compare the analogous case of billiards. You see a man knocking about the balls in the billiard-room of a country inn. You ask him how long it takes to learn, and he will offer to teach you in half an hour for the smallest possible consideration. Go to a champion player and ask him how long he took to learn, and he will tell you that he has been at it all his life, and has to work hard to hold his own. It is all very well to talk about "natural aptitude," but in Massage, as in everything else, good results mean hard work, and plenty of it. Anyone can rub mechanically, but that is of no earthly use; a *Masseuse* must work with her brain as well as with her hands. If

Massage is worth doing at all it is worth doing well, and the requisite knowledge cannot be picked up without trouble, or acquired in a day. It must be admitted that, in this country, at all events, good Massage is *caviar* and *vodki* to the million.

The duration of the *séance* is another point of great importance. The whole operation should not occupy more than from ten to fifteen minutes, and many authorities think that four minutes are quite enough. In recent cases these short sittings should be frequently repeated, say three or four times a day, but in chronic cases such frequent meetings are not essential. There seems to be a general impression that Massage should be suspended during the menstrual periods, but this, I think, is hardly necessary. The morning and evening are by far the best times for Massage. It is never a good plan to employ a person who is uncongenial to the patient, or who has damp and clammy hands. It is necessary to exercise as much care in the selection of a *Masseuse* as a doctor usually bestows on the choice of a wet nurse for a child. No one suffering from any constitutional disease or ailment should be

considered eligible. Not long ago a medical man sent me an individual for whom he begged me to find employment as a *Masseur*. On asking how he knew the doctor, he said he was under his care for syphilis. It is hardly necessary to say that I did not avail myself of his services. The patient must have confidence in the treatment and in the operator. It is useless to attempt Massage in the face of persistent objection on the part of the patient, or the patient's friends. It is sometimes stated that patients should rest in bed for an hour after each *séance*, but this is not necessary ; on the contrary, I think the sooner they go about their business the better. It is difficult at first to make people understand that if ten minutes' Massage will do them good, twenty minutes will not prove twice as efficacious. Such, however, is not the case. An observation by Reibmayr may serve to impress this on the memory. He subjected a dog to Massage for a few minutes and found that the pulse rose from twenty-four to sixty-four. He then continued the manipulations for some time longer and the pulse quickly fell to thirty-six. Nörstrom

says :—" La durée des séances sera de cinq minutes ou à peu près ; dans les cas chroniques on en fera une ou moins par jour ; dans les cas aigus il en faut deux de dix minutes ou davantage ;" but an expert *masseuse*, from whom I have derived many practical hints, assures me that half an hour is not too much for a case of infantile paralysis. I always tell my patients that they must have one day's rest during the week, preferably on the Sunday. It must be remembered, however, that the same method of treatment with respect to details is not applicable to all cases. Each case must be taken on its own merits, and it is here that the special skill and knowledge of the physician come into play. Massage is a powerful therapeutic agent, but if improperly employed, or if used in unsuitable cases, it may do a great deal of harm.

The terms used to designate those who practise Massage and the words employed in describing the different methods and processes, are, as Dr. Charles K. Mills, of Philadelphia, points out, somewhat awkward for English speaking people. "The proper term for a male operator is *Masseur*, for a

---

female *Masseuse*, the plurals being *Masseurs* and *Masseuses*. The verb which expresses the performance of the procedure is *Masser*. It is, therefore, proper to speak of a patient as being *Masséed* or of *Masséeing* a patient. I certainly would not advise you to speak either of *Massageing* or *Mas-sacreing* a patient. The latter is certainly expressive in describing the violent performances of some of the untrained exponents of the art."

## CHAPTER V.

### THE PHYSIOLOGICAL ACTION OF MASSAGE.

RESPECTING the physiological action of Massage, it is necessary to speak with caution. Here, as is so often the case, practice has preceded theory. The art of Massage has been acquired, but we know little of its mode of action. We find that we cure our patients, but hardly know exactly how these results are obtained. It is easy to theorize, but we want carefully observed facts and accurately recorded experiments. Fortunately we have something to guide us, and we turn with pleasure to the painstaking observations of Gopadze, Zabłudovski, and Von Mosengeil. Dr. Gopadze's experiments were made on four medical students who were kept in the hospital, and subjected to systematic Massage for twenty minutes or more daily. The operation commenced with effleurage, beginning at the extremities and working upwards. This was followed by pétrissage, friction, and tapotement, ending up

with a second effleurage. In each case the appetite was decidedly improved, the patient—or victim—taking more food than usual, not only during the week that the operations were performed, but during the subsequent week as well. The amount of nitrogenous transformation during the continuance of the Massage was augmented in all four cases, and the quantity of nitrogen assimilated was increased independently of the food taken. In the Massage week two of the subjects gained slightly in weight, whilst the other two lost, but in the week following that in which Massage was resorted to, all four gained notably. It was found that the temperature in the axilla fell for above half an hour after each rubbing, but never more than half a degree. It then rose steadily, and an hour later resumed the normal or perhaps remained the fraction of a degree lower than at the commencement of the *séance*.

The respirations were always increased in frequency, and were deeper and fuller. The effect on the pulse varied with the kind of Massage employed. With surface effleurage carried on lightly, the pulse became more frequent, but under the in-



fluence of pétrissage it was rendered slower. In both cases, however, it was fuller, and the effect persisted for an hour or even longer.

Zabludovski's observations were made on himself, his housekeeper and his maid-servant, and lasted for eighteen days. He noticed that there was a general improvement in bodily vigour, and that mental activity was greatly increased. The appetite, too, improved, and they all slept well at night. The Massage of the abdomen proved most efficacious in promoting the action of the bowels.

Dr. Ivan Stabrovski's paper on the "Influence of Massage on the Exhalation from the Lungs and Skin," published in the form of a thesis at St. Petersburg, is a sound bit of work. The experiments were carried on in the wards of Professor Manasseïn, the distinguished editor of the *Vrasch*. Of the fourteen patients on whom observations were made, nine were in good health, whilst the remaining five were convalescent from various acute illnesses. Each series of experiments continued over a period of ten consecutive days, each *séance*

lasting an hour. Curiously enough, the results seem to have been somewhat discordant if not absolutely contradictory. In five cases there was an increase in the pulmono-cutaneous exhalation and a diminution in the quantity of urine. This increase occurred shortly after the Massage, so that when this was practised in the morning the perspiration was increased during the day, but became normal during the night. Similarly the quantity of urine fell during the day and rose again at night. In the remaining six cases both the urine and the exhalation from the skin and lungs were increased during the period of Massage.

Dr. Eccles, in a paper presented to the Royal Medical and Chirurgical Society of London, has shown that *effleurage* stimulates the skin muscles, produces dilation of the superficial vessels and insensible perspiration, excites the skin reflexes, and acting through the cutaneous nerves, increases the rapidity of the circulation and heart's beat. *Pétrissage* forces the lymph out of the muscles, increases the velocity of the blood current through the part, temporarily decreases the size of a limb and in-

creases its muscular power. The pulse-rate is reduced, especially in pétrissage of the abdomen. *Massage à friction* produces the same local effect as pétrissage, whilst *tapotement* excites muscular contractions. By a combination of all these procedures the texture of the skin is improved, the sense of locality is increased, and the general body temperature is raised. The free surface temperature of a part under Massage is higher than that of the rest of the body, whilst abdominal Massage decreases the surface temperature of the extremities. A course of Massage of a month's duration should increase the body weight, the appetite, muscular strength, and ability to sleep and work well. The observations are of value in confirming the conclusions of previous workers.

Professor Von Mosengeil's experiments are of the greatest interest. He took a number of rabbits and injected into the knee-joints a syringeful of Indian ink. Massage was performed at intervals on the right knee, but the left was left untouched. At the expiration of twenty-four hours or more the animals were killed, and the tissues on both sides

were carefully examined. The left knee-joints were distended with fluid, whilst on the right side, which had been manipulated, it had entirely disappeared. The lymphatic glands on the right were full of particles of Indian ink, whilst the corresponding glands on the untreated side remained unaltered. The difference was so marked as to be visible to the naked eye. The conclusion arrived at as the result of these, and a number of similar observations, was that Massage promoted absorption by the lymphatics. It is probably in this way that effusions and other morbid products are removed. Another fact observed by Von Mosengeil was that Massage raised the temperature of the limb or part operated on, a fact susceptible of easy demonstration. This was at first thought to be purely mechanical, the result of the friction with the hand. It was noticed, however, that it was quite as marked after pétrissage as after effleurage, and it was found, too, that this elevation of temperature was not merely temporary, but lasted for some hours. It was so marked as to be appreciable, not only by the thermometer, but to the touch.

It is obvious that Massage increases the circulation through the part, and this probably explains its efficacy in hastening the union of fractured bones, a fact now well established. The elevation of temperature in some recent experiments was found to be from three to four degrees, and in infantile paralysis, according to Professor Weir Mitchell, it is often from six to ten degrees. It is probable that effleurage of the surface, lightly performed, contracts the superficial blood vessels locally, whilst deep and persistent effleurage combined with pétrissage dilates them. The redness of the surface observed after a few minutes' pétrissage has long been recognized, and this may to some extent explain the beneficial effects of Massage in infantile paralysis. As already shown, the nutrition of the parts is maintained until new cells in the cord take on the function of those which have been destroyed.

It is well known that Massage increases the electrical contractility of muscular tissue. Zabludovski has shown that kneading restores the contractile power of muscles exhausted by the rhythmical application of maximal induction currents, whilst simple

rest without Massage has very little restorative effect. This point can easily be demonstrated on the human subject. Professor Von Mosengeil applied an electrode to one of my motor points—it was the external popliteal nerve if I remember rightly—and then gradually reduced the strength of the current, until it failed to produce any contraction in the muscles; he then masséed the limb for two or three minutes, after which the current, which had previously failed to elicit a response, produced vigorous contraction. Douglas Graham, of Boston, states as the result of his observations that muscles respond more readily, more vigorously, and more agreeably to the Faradic current after Massage than they do before, especially if they are somewhat deficient in contractility. It would seem that Massage exerts an action similar to very complete and perfect circulation through the part, in removing waste products, and restoring muscular power. It is probable that it is by stimulating the circulation, and increasing the supply of blood to the part that it promotes the union of bone after fracture. Reibmayr has shown that as the result

partly of the development of surface heat and partly of the friction, delicate electrical currents are developed in the tissues themselves. Zabludovski demonstrated this experimentally; he found, too, that a man who could lift a weight of one kilo at intervals of one second, by flexion of the elbow joint, from a table on which the fore-arm rested horizontally, was enabled after the arm had been masséed for five minutes to lift it in the same way over eleven hundred times. The work was performed with less difficulty, and gave rise to very little pain or sense of fatigue.

It has been shown by Hirschberg that Massage of the abdomen exerts a powerful influence on the duration of the retention of food in the stomach. In the investigation of the subject, advantage was taken of Professor Ewald's observations on the physiological action of salol. Salol, as is well known, is a derivative of salicylic acid, one atom of the hydrogen of the acid being replaced by a molecule of phenol. Ewald asserts, as the result of his experimental researches, that salol is not decomposed in the stomach, but immediately on

its entrance into the intestines, and that the products of decomposition appear almost at once in the urine in the form of salicyluric acid, which is detected by giving a red precipitate with perchloride of iron. Ewald proposed taking advantage of this fact to determine the rate at which food passed out of the stomach into the intestines. He found that the urine of seven persons in good health exhibited the salicyluric acid reaction in from half to three-quarters of an hour after the injection of the drug, but in seven cases of gastric dilatation, with atony of the muscular wall, from two to three hours were required.

Hirschberg, working on these lines, found that in healthy people, after the administration of a gramme of salol, it required from two to two-and-a-half hours before the salicyluric acid could be detected, his results being in conformity with those of Brunner and Huber. He found, too, that after the patient had been made to walk for fifteen minutes, or had exercised in a gymnasium for ten minutes, the reaction was afforded by the urine in an hour and five minutes. The same result was



obtained by Faradization of the abdomen for a quarter of an hour. Herschberg affirms that in the elimination of salol from the stomach, Massage is more potent than any of these agencies, although he omits to state definitely how soon the first trace of salicyluric acid appears in the urine. He maintains, however, that it is eliminated very quickly and very completely. The final conclusion at which he arrives is that Massage of the abdomen is a powerful action in promoting contraction of the stomach, and in facilitating the passage of food into the intestines.

There can be but little doubt that Massage exerts much of its beneficial effect by stimulating the flow of lymph in the lymphatics. This explains its use in hæmorrhagic effusions, and throws light on its mode of action in promoting absorption of tissue round chronic ulcers. The manipulations exert some influence mechanically, which is facilitated by the arrangement of the valves permitting the passage of lymph in one direction only, and in addition, the contraction of the muscular fibres has much to do with the production of the effect.

When the muscle fibre is stimulated mechanically to contract it shortens and thickens, and the lymph in the spaces immediately surrounding it is driven onwards. There seems to be a general consensus of opinion in Germany that this is by far the most important factor in the production of the good effects witnessed in many cases of disease treated by massotherapeutics.

Hirschberg discovered by chance the diuretic effect produced by Massage of the abdomen. One of his patients complained that after the first interview he had to rise frequently during the night to pass water. On investigation it was found that he was passing 500 c.c. in the 24 hours. The urine was clear, had a specific gravity of 1002, and contained neither sugar nor albumen. On discontinuing the Massage, the amount of urinary secretion diminished, and was on successive days 4300, 3000, 3000, 2500, and 1800 c.c. On resuming the Massage, the quantity was at once augmented. On the days on which the Massage was applied, the measurements were successively 2500, 2300, 2300, 3500, 4500, 4500, and 5000 c.c., the maximum

reached being 5000 c.c. in 24 hours. Hirschberg then instituted a series of systematic observations on his patients. For some days he carefully measured the quantity of urine passed, in order to obtain a reliable standard. He then resorted to Massage of the abdomen, and in every case the diuretic effect was apparent. This was sometimes observed at once, but sometimes not until the succeeding night. One patient, whose normal standard was from 1500 to 1800 c.c., passed 2000 c.c. after a single application. In another patient, in whom the Massage was continued for several days, the urinary secretion rose from 2000 to 2800 c.c. On omitting the Massage, the quantity of urine fell in one case from 2000 to 800 c.c. Hirschberg is not prepared to accept the view advanced by Pouloubinski, Zabloudovski, Reibmayr, and other writers, that the augmentation is due to increased absorption, but considers with Glovetki that it is a vaso-motor action, and is due to increased blood pressure. However that may be, it is now an accepted fact that Massage of the abdomen exerts a well-marked diuretic action.

Dr. Graham, in a recent article, says:—"I have so often observed an increase in the quantity of the catamenia, and an earlier appearance than usual in women, who are to all intents and purposes well, and who have had Massage of the back or general Massage for some slight ailment, that I have finally come to regard this as one of the physiological effects of Massage. Even Massage of a leg for a joint or muscular affection is frequently followed by an earlier appearance and a longer stay of the monthly visitor."

It has been suggested that possibly Massage may in some cases exert a beneficial effect by getting rid of or dispersing—to use a popular expression—certain deposits or thickenings in the muscular and other tissues. Dr. Walter Johnson says:—"If any surgeon or physician who has not hitherto had his attention directed to this point, will manipulate the flesh of his patients, he will be surprised to find in how many cases he will detect thickenings, hardenings, and swellings in various parts. He will find the necks of nearly all his patients who have suffered for any length of time

from head affections swollen and indurated, with most probably enlarged absorbent glands in the neighbourhood. The neck and shoulders will frequently be tender to the touch, and the muscular and other fibres will be dry and will crackle perhaps on pressure. He will notice a similar condition of the shoulders and upper part of the back in asthmatic patients particularly, and he finds the long muscles of the back very much disordered, in many chronic diseases affecting the stomach, liver, kidneys, etc. The arms and legs will on examination present swellings and hardenings and thickenings, accompanied by swollen glands in a multitude of patients." The credit of this observation is assigned to a certain Mr. Beveridge, who many years ago practised as a rubber in Edinburgh, and the existence of these indurations has been confirmed by Norström, Henschen, Vretlind, and other writers. Beveridge, we are told, found that they could be dispersed by friction, and that coincidently with the removal of these deposits, as they were called, the patient's health materially improved, and sometimes chronic diseases of long standing

## *FRANCIS BACON.*

were cured. A young gentleman, the son of a wealthy merchant, was for many years subject to epileptic fits, and was treated in vain by the most eminent physicians, both in Edinburgh and London. At last he was cured by Mr. Beveridge. Beveridge discovered a crop of deposits, rubbed them away, and the lad got well. Dr. Johnson says:—"I knew the young gentleman and I knew his parents, and there is no doubt of the truth of this statement." The theory about the deposits may not be worth much, but still empirical observations such as these deserve consideration.

The value of friction in maintaining the health is referred to by many writers of repute. Francis Bacon, for example, points out that "frictions make the parts more fleshy and full as we see, both in men and in the currying of horses. The cause is for that they draw greater quantity of spirits and blood to the parts, and again because they draw the ailment more forcibly from within ; and again, because they relax the pores and so make better passages for the spirits, blood, and ailment ; lastly, because they dissipate and digest any inutile or

## *MASSAGE.*

excrementitious moisture which lieth in the flesh ; all of which help assimilation." This may not be quite in accordance with modern views of pathology, but still it is extremely interesting. Sir William Temple, writing on "Health and Long Life," says :—"Friction is of great and excellent use and of very general practice in the Eastern countries, especially after their frequent bathings ; it opens the pores, and is the best way of all forced perspiration ; is very proper and effectual in all swellings and pains of the joints, or others in the flesh which are not to be drawn to a head and break."

## CHAPTER VI.

### MASSAGE IN PARALYSIS.

WE have now to consider the class of cases in which massotherapeutics is most likely to prove beneficial. It is by no means easy to say in what diseases it is most useful. Unfortunately its employment has been advocated in the treatment of many complaints for which it is essentially unsuited. Accurate diagnosis is of the utmost importance, so that the sphere of usefulness of this remedy may with increased experience become more accurately defined.

I will begin with INFANTILE PARALYSIS because it was in the treatment of this affection that my experience of this method of treatment was first obtained. The history of these cases is only too familiar to most of us.

A child—a bright, happy, intelligent child—is put to bed one night with little or no indication of illness, or, at the most, suffering from some slight



ailment, and in the morning wakes up paralyzed, and a cripple. The little girl who, only yesterday, could run and jump and dance with the best of them, is now a helpless invalid, tied to her couch and incapable of the slightest movement. If you examine the legs—for they are the limbs most frequently affected—what do you find? They are deadly cold, there seems to be but very little life or circulation in them, reflex action is abolished, and not unfrequently they are exquisitely tender to the touch. The child tries to move, but her best efforts are in vain; she has no more control over those palsied limbs than if they belonged to an inanimate object. The physician, after a few days, applies his electrical tests and points out that both nerves and muscles refuse to act. In poliomyelitis anterior acuta, as we technically call the disease, the excitability of the nerves to the Faradic current begins to diminish about the third day from the commencement of the illness, and by the end of the week is gone, perhaps never to return. On the application of galvanism to these nerves there is no response, but placed directly over the muscles themselves it

is found that there is increased excitability, a feebler current than in health sufficing to cause contraction. After a time this excessive irritability passes away, and it is impossible to obtain any response with either form of electricity. The outlook is indeed bad, and the ultimate chances of recovery are small, unless recourse be had to some special mode of treatment. It must be remembered that all this has come on suddenly, possibly without any warning or antecedent illness of any kind; or it may follow in the wake of measles, scarlet fever, whooping cough, or one of those apparently trivial febrile disturbances which are so common in children, and for which we ordinarily do so little. Sometimes there may be a fit or an attack of convulsions, but this is not usually the case. Even when the paralysis to some extent passes away, one or two muscles, or groups of muscles, fail to perform their accustomed functions; and the child, even if able to get about, walks with a limp and is a cripple for life. As Professor Erb points out, club-foot, loose joints with dangling limbs, and extreme degrees of spinal curvature nearly always owe their origin to infantile

paralysis. The shrunken, paralyzed, crippled members, hideously distorted, incapable of use, constitute a burdensome appendage to the body rather than an integral part, and present a striking contrast to the healthy, well-developed, and well-nourished limbs.

The general mode of treatment to be adopted has been sufficiently indicated in the lecture to which I have referred (*Lancet*, Dec. 26, 1885). In essential paralysis, as we have seen, the legs, or at all events the affected members, are always cold, and the muscles react but feebly to the electrical current. By systematic massage an improvement is speedily effected. We resort chiefly to pétrissage, associating it, of course, with effleurage. Both processes must be centripetal, working upwards from the extremities. The sittings should be, at first, of short duration and frequently repeated, say three or four times a day, but in chronic cases twice a day will suffice. The first effect noticed is that the limbs become much warmer, and this is not temporary, but lasts for some hours. Then it is seen that the susceptibility of the muscles to the electrical cur-

rent is greatly increased, so that they contract at once after a few minutes' massage to a stimulus which would otherwise exert not the slightest effect. During the last six years I have had a large number of cases of this description under observation, and in every instance in which the treatment was carried out actively and systematically the best possible results were obtained. Many of them were of many years' standing, and some remained under treatment for many months. Two patients have been under observation for over six years, and from being helpless invalids have grown into bright, active, happy children. I have now under treatment a case of spastic infantile paralysis, and good progress is being made. Electricity is most useful as an adjunct. One electrode—the cathode—is applied to the spine about the tenth dorsal vertebra, whilst the other is placed over the various motor points. The weakest currents are employed, and contraction may be obtained by opening and closing the current from time to time. Shocks of any kind are quite inadmissible, and the application should never be permitted to cause the child pain.

It is a good plan to search for tender spinal processes, and this applies equally to many other forms of paralysis. A big sponge to the head and the passage of a weak constant current is useful, especially if there be much contraction of the limbs. I see no objection to the employment of such accessory treatment as pine-extract baths, salt-water baths, rabbit-wool stockings, and the administration of cod-liver oil, extract of malt, and the beef and iron wine. When the acute symptoms have subsided, the Swedish Gymnastic Exercises, such as are practised at Stockholm, are undoubtedly useful. In comparatively recent cases the prognosis is good, but in old standing cases one has to be cautious in expressing an opinion.

A short time ago, a little girl was brought to me suffering from Infantile Paralysis, one leg being cold and motionless. I suggested Massage, but the friends lived in the country, and great difficulty was experienced in getting it properly carried out. At last it was determined to bring the patient up to town every day, so that she might be under the care of a good *masseuse*. This was done six days

a week, and at the expiration of three months the leg was practically well. No medicine was given, the only accessory treatment resorted to being a pine extract bath night and morning. Soon after seeing this case I received a communication from a doctor in the suburbs of London, stating that he had under his care a child suffering from this complaint, who had been treated by Massage from the very first without the slightest improvement, and asking somewhat aggressively what explanation I had to offer. I met him in consultation and was not surprised at the failure of his treatment, for the nurse who had charge of the patient, although a well-meaning woman, had been very imperfectly trained, and was quite unfitted for the task she had undertaken.

In other hands than mine Massage has been shown to be useful in the treatment of infantile paralysis. Von Mosengeil mentions a case in which at the expiration of four months electrical excitability was completely restored. In some of his cases there was little or no improvement at first, but after some months the muscles regained their

normal condition. Norström confirms these statements and urges that the treatment should be commenced at once, or, at all events, as soon as the febrile symptoms have subsided. It seems to me that the great difficulty is to determine how much of the improvement is due to treatment and how much to the retrogressive action of the disease.

In other forms of PARALYSIS Massage is equally efficacious, and benefit will be experienced from its employment in pseudo-hypertrophic paralysis, facial paralysis, wasting palsy, and allied conditions. It answers admirably in cases of paralysis of single nerves. One of the first of these cases treated by this method was paralysis of the muscles supplied by the musculo-cutaneous nerve, a somewhat uncommon condition. The patient had had a fall on his shoulder, resulting in the formation of an abscess in the axilla. This ran a chronic and somewhat indolent course, and little by little the patient lost the power of flexing his forearm, the other movements of the upper extremity remaining unaffected. On examination it was found that the biceps and coracobrachialis were completely paralyzed, although no

anæsthesia over the region supplied by the cutaneous branch of the nerve could be detected. At the beginning of the second month, when the patient was first seen, the muscles failed to act to the Faradic current, but they contracted well on the application of a slowly interrupted constant current. Massage was recommended, and six weeks later it was reported that the patient had greatly improved, and had almost regained the lost movement. In paralysis of the musculo-spinal nerve not due to chronic lead poisoning—a much more common complaint—equally good results are obtained. In writers' cramp, and especially dancers' cramp, it is an excellent mode of treatment. The spasm of the muscles of the legs from which *danseuses* so frequently suffer, is often cured by a single application. Zabludovski has recently published in the *Vrasch* a number of cases of violinists' cramp treated by this method. Dr. Vivian Poore, in a lecture, "On certain conditions of the Hand and Arm, which interfere with the performance of professional acts, especially Piano-Playing," speaks highly of the value of Massage in these cases, but



warns us against its employment as long as the nerve-trunks are tender, for under these circumstances it may do harm rather than good. He adds, that as the professional *masseur* is not infrequently over-zealous, and the mere passive action of being rubbed is very exhausting to the patient, we must be careful that the Massage is neither too long nor too vigorous. With this proviso, "if Massage be reasonably and sensibly carried out, it is undoubtedly of great value." The success obtained in some forms of writers' cramp by a modified process of Massage is well-known. I recently had under my care a gentleman, the manager of a bank, who came to me from Australia for treatment. He had been suffering from writers' cramp for over a year, and it was a typical case of the disease. In six months he had recovered sufficiently to return home with the view of resuming work. I do not give details of his symptoms, because he had a good deal of medicinal treatment in addition to the masso-therapeutics. Douglas Graham thinks that Massage is, in many cases, capable of "fulfilling therapeutical indications of the utmost importance, such as

the removal of increase and decrease of resistance in the paths of conduction, excitation, and motion; restoration of harmonious co-operation of individual movements of natural conductivity and excitability, as well as of muscular sense and muscular effort; in a word, correction of under-action and over-action of muscles, nerves, and their central reflex apparatus."

Some forms of Massage are useful in post-diphtheritic paralysis. Dr. Arvid Kellgren has recorded the case of a girl of fifteen, who was under the care of Dr. Moebius, of Leipzig. She had had diphtheria badly, and on admission to the hospital it was found that she had paralysis of the soft palate, and that there was loss of extension and flexion of both knee joints. She was treated by direct mechanical stimulation according to the method already described, and was kept under observation from June 23rd to August 16th, having during that time eighteen applications, each lasting from half to three-quarters of an hour. The report states that she was discharged cured, and that four months later there had been no relapse.

All writers are agreed as to the enormous benefit which may be effected by Massage in hysterical paralysis. In cases of hemiplegia due to cerebral hæmorrhage, Massage may be useful in maintaining the condition of the muscles, and arresting those unpleasant startings to which many paralyzed or partially paralyzed persons are liable, but it can hardly be expected to effect a cure. In all cases of chronic paralysis progress must of necessity be very slow, and Schreiber very properly lays much stress on the necessity for patience and perseverance. It is perhaps hardly necessary to say that by Massage I mean real Massage, or to point out that these good results are not likely to follow what is commonly called "medical rubbing." The late Mr. Maclean, in a short communication to the *Lancet*, 1877, says:—"Friction is the only form of manipulation ordinarily made use of by the profession in the treatment of paralysis, and when the medical attendant orders friction, the 'medical rubber' is usually called in, and without any instructions from the medical attendant is left to his own devices, which in most cases consists in rubbing the skin

with various degrees of force, using as a lubricating agent some oil to which some virtue is ascribed. If attention is directed to it, one immediately recognizes the fact that such manipulation as this can have little effect on anything but the skin itself."

A case of chronic myelitis, which was under my care, serves, however, to illustrate the benefit which may sometimes be derived from a course of Massage even if very imperfectly carried out. I may say at once that I saw the patient, usually in consultation, only at long intervals, so that I am unable to trace his progress towards recovery very accurately. He was a young clergyman, a curate in the country, and it was supposed that his illness originated from getting wet through whilst riding across country one bitterly cold winter's night to see a poor woman who was at death's door and longed for the consolation of the Church. When first I saw him, in consultation with Dr. Harrison, of Braintree, he was lying on his back in bed, and was completely paralyzed from his waist downwards. He had no control over his legs, which were drawn up towards the abdomen in a most painful position. He was

racked with pain, which was controlled only by large and frequent injections of morphine. The urine had to be drawn off by the catheter, and was strongly ammoniacal. Constipation was a prominent symptom, enemata having to be used every time an action of the bowels was desired. There was impairment of sensation in both hands, and the breathing was irregular and spasmodic. He had been carefully examined a few days previously by a distinguished authority on nervous diseases, who is reported to have said that no treatment would be of the slightest avail, and that in all probability the patient would not live ten days. I took a more hopeful view of the case, and after reducing the morphine, prescribed pills of physostigmine and phosphorus every three hours, with the constant current to the spine twice a day, and Massage to the legs. Considerable difficulty was experienced in finding anyone to carry out the necessary manipulations, but at last a man was sent down, who, if not a *masseur*, was at all events a very good rubber. In a few weeks difficulties arose chiefly in consequence of the expense attending the rubbing, and

the treatment was partially suspended, or at all events very imperfectly carried out. Some six months later I again saw the patient, who was still confined to his couch, and at my earnest solicitation Massage was resorted to for six weeks. A hitch, however, occurred once more, and I saw nothing of my patient for over a year, when one morning he walked into my room the picture of health and having almost perfect control over his legs. He told me that he had carried out my treatment during the whole time to the best of his ability, and that he attributed his recovery to the various remedial agents which had been suggested. He still walks with a stick, but has sufficiently recovered to undertake mild clerical work, and officiates, I am told, without difficulty. Mr. John Tweedy, who saw him with me, finds that he has white atrophy of one optic nerve, and the other shows signs of degeneration, but the mischief is not progressing, and there has even been some slight improvement in his sight of late. This I admit is a very incomplete account of an interesting case, but the main features are unmistakable. Had he been placed from the

first under the care of an accomplished *masseur*, I believe that the result would have been even more striking and satisfactory. I think it right to mention, although I do not know that it has any direct bearing on the case, that at one time an abscess developed in the lumbar region, which was opened antiseptically by my friend and colleague Mr. Boyce Barrow.

There are some cases of so-called paralysis in which Massage not only does no good, but may do harm. I would especially instance those cases in which there is no wasting of the limbs, but where more or less violent tremors are excited on the slightest attempt to perform any voluntary act, the rigidity coming on in paroxysms and being induced by any kind of irritation. There is no loss of sensation, and the muscles retain their electrical condition, the reflexes being unimpaired or even exaggerated. These are for the most part examples of lateral sclerosis, the lesion extending gradually downwards from the site of some pre-existing lesion. I remember a case in point. The patient, an architect about forty years of age, had fourteen

years previously spent a cold winter's morning fishing from a punt. A few days later he had to attend a funeral, and having no other black clothes at hand went to the ceremony in a thin summer frock-coat and without an overcoat. It was bitterly cold, and the next day he suffered from severe pains in his legs and experienced some difficulty in walking. His symptoms increased in severity for about a year, when he regained a certain amount of power in the affected limbs, but on the slightest exertion suffered from a peculiar spasmodic condition which forced him to walk on the toes. This gradually increased in severity, until the slightest movement or irritation induced a tetanic condition of the muscles. On attempting to walk, the legs were kept close together from spasmodic contraction of the adductor muscles of the thighs, the toes were forced down to the ground, and as soon as the heels began to descend there was spasmodic contraction of the muscles of the calf, forcing him back again on to his toes. He lost control of the sphincters of the bladder and rectum, and the sweat centres were evidently involved, for although he



often perspired freely in the upper part of the body, the lower extremities were persistently dry. He was placed under my care at the suggestion of Sir William Jenner, and at the express wish of the patient, Massage was resorted to daily for a period of two months. The treatment was carried out in the most approved fashion, but it failed to do any good, and I think even intensified the spastic condition. I have seen other cases of lateral sclerosis in which Massage seemed to me to be distinctly harmful.

There is reason to think that Massage is of much value in the treatment of LOCOMOTOR ATAXY. In Germany, however, they rarely rely on it alone for effecting a cure, but resort to active medicinal treatment as well. They are great believers in the efficacy of the green iodide of mercury, finding that it exerts a beneficial effect in arresting the progress of the disease. They give it even when there is no history of syphilis. Their "Resolvent Pills" are made by mixing one gramme of the green iodide with some inorganic substance as an excipient and dividing into 120 pills, two of which should be

taken three times a day, the patient meanwhile abstaining from the use of red wine. The Massage is most useful in allaying the acute pains which are so commonly an accompaniment of this complaint. I recently had under my care at the hospital a case of Locomotor Ataxy, in which a crude form of Massage apparently produced satisfactory results. I have the notes before me, but as they are somewhat voluminous and extend over a period of nearly two years, I content myself with reproducing the crucial facts. The patient was a man, thirty-nine years of age, a coffee stall keeper by occupation. In the course of his business he was of necessity up the greater part of the night, and was greatly exposed to the inclemency of the weather. He had been somewhat worried from the falling off of his trade, in consequence of the closing of a neighbouring dancing-rooms. He had never had syphilis, but he came of a consumptive stock and had himself been under treatment for that complaint. When first I saw him he was in bed, and was unable to walk without assistance. His gait was characteristically ataxic, and the patellar reflexes were

absent. His pupils were contracted and failed to respond to light, but on ophthalmoscopic examination no atrophy was detected. Gastric and other crises absent. The patient complained of acute pains of a lightning character in the limbs. He attributed his symptoms to getting thoroughly numbed in a long railway journey in the dead of winter some six months before. The prognosis on admission was considered so unfavourable that he was placed on the incurable list. He was taking antipyrin, which had a very beneficial effect in relieving the attacks of pain. I ordered him to be rubbed for twenty minutes twice a day, and this was done with certain intervals for eighteen months. At the expiration of that time he could walk two miles without difficulty. I am inclined to think that he might have improved still more, but having been placed on the incurable list, which entitled him to board and lodging for the rest of his natural life, it was obviously not to his interest to get too well. Dr. Weir Mitchell, of Philadelphia, says:—  
“It is many years since I first saw in this city general Massage used by a charlatan in a case of

progressive paralysis. The temporary results he obtained were so remarkable, that I began soon after to employ it in locomotor ataxy, in which it sometimes proved of signal value, as in other forms of spinal and local disease."

Massage is useful in Landry's paralysis—paralysis *ascendens acuta*. In these cases there is usually at first slight fever, pain in the back and limbs, and general weakness lasting one or two days, or it may be three or four weeks. This is followed by paralysis of the lower limbs, then of the body, and finally of the upper extremities, with perhaps some disturbance of respiration. The electric excitability of the paralyzed nerves and muscles remains perfectly normal—an important point in distinguishing it from central myelitis and poliomyelitis anterior acuta. In most cases the tendon reflex is present at the beginning of the disease, but is abolished later on. The paralysis in untreated cases usually progresses upwards until it involves the medulla oblongata and death ensues.

In many forms of paralysis Massage must be employed with the greatest caution. When prescribed

in unsuitable cases, it may lead to degeneration of the muscular tissue, wasting being rapid, and the muscles presenting irregular vibratile oscillations due to contraction of individual fibres.

In connection with this subject it should be mentioned that Blache has shown (*Bull. de l'Acad. de Méd.*, t. xix., p. 919) that Massage employed for ten minutes or a quarter of an hour three or four times a day is useful in the treatment of chorea, especially in the acute stage. The circulation is improved, the pulse falls and becomes more regular, the surface temperature increases, the patient sleeps better, and in a few days the movements are less violent or perhaps have entirely ceased. I have seen some four or five cases treated by this method in hospital practice, and although there has been some improvement, the results have not been very striking. I did not see the Massage performed and cannot answer for its quality.

## CHAPTER VII.

### MASSAGE FOR CONSTIPATION.

FOR constipation it is certainly one of the most powerful therapeutic agents at our command. Pétrissage of the abdomen is the best method, care being taken to make the requisite manipulations in the direction of the ascending, transverse, and descending colons. It should be associated with different varieties of tapotement, the flat open hand, the hand partially closed so as to form an air cushion, and the margins of the hands being employed according to circumstances. Vibratory movements are in addition resorted to in obstinate cases. Years ago, Piorry advocated a mode of treatment for constipation, which is not essentially different from that now described. Averbach says : " Disorders of the digestive apparatus, and especially constipation, constitute one of the most marked indications for the employment of Massage. When there are no complications, but the symptoms are

due to disordered secretion, one can always effect a cure in one or two months, or at the outside, three or four." Speaking from my own experience, I should say that the effects were remarkably prompt. Massage answers admirably for women who suffer from this condition, especially when there is a lax condition of the walls of the abdomen resulting from frequent pregnancies. It is of the greatest service, too, in constipation associated with obesity, and in that form of constipation which frequently results from taking too little exercise. It probably acts in three ways: (1) by increasing the intestinal and other secretions; (2) by stimulating the peristaltic action of the intestines; and (3) mechanically by pressing the accumulating fæces towards the rectum.

Dr. Georg Hünerfauth, of Bad Homburg, has published a capital little book on *Habitual Constipation and its Treatment with Electricity, Massage, and Water*, in which he says:—"The usefulness of abdomen Massage is especially manifest in cases of atony of the muscular coats of the bowels which is the primary and original cause of

chronic constipation. This must be the more insisted on, as the much more frequent application of Massage of the joints causes many physicians to overlook the advantages of abdomen Massage ; there are even a good many physicians wholly unacquainted with it."

Cases of chronic constipation are common enough, and I have recently met with several instances in which treatment by Massage has done much good. Most of these depended in all probability on chronic catarrh of the intestine, but one or two were complicated by the presence of fæcal tumours which could be detected with more or less distinctness through the walls of the abdomen. In one case, the patient, a lady, had been a constant sufferer for eight years. She also complained of "uterine disorder" and "spinal irritation." The fæces were passed at irregular intervals in the form of little hard dry pellets or lumps, varying in size from a bullet to a hen's egg, their passage being attended with great pain. It would seem that certain articles of food were delayed in the intestine for some considerable time. Thus the remains of



French beans, and especially of brown bread, were noticed by the patient in the motions six weeks after these articles had been discontinued, and the same occurred with strawberry pips and other things which could be readily recognized. In this case the services of an excellent *masseuse* were obtained, and pétrissage and effleurage of the abdomen were practised in the direction of the colon for twenty minutes twice a day. At the expiration of a week the lumps were passed with much less difficulty, and the patient was able to dispense with the morning enema to which she had long been accustomed. The treatment was continued for twenty-one days, and after the interval of a month was resumed for four weeks longer at the patient's desire. She had medicinal treatment during a portion of the time, but most of the benefit derived was, I think, attributable to the massage. A medical man suffering from persistent constipation associated with a movable kidney, for whom I recommended massage, and who wisely placed himself in competent hands, writes at the expiration of a fortnight:—"For ten consecutive days

my bowels acted promptly just after breakfast, a feat which they had not previously accomplished for five years!" In some of these cases a relapse is not uncommon, necessitating a second course of treatment.

Dr. Oscar Jennings, of Paris, recently had charge, with M. Fège, of a patient who had suffered for twenty years from constipation. He never went to the *garde robe* without using a lavement or some other form of peristaltic persuader, and even this of late years had lost its efficacy. Dr. Jennings immediately commenced a course of treatment by electricity (*méthode de Boudet*) with which in a few days he combined Massage of the abdomen. The sittings lasted from fifteen to twenty-five minutes each. From the very first the patient experienced much relief, there was less pain in the abdomen and the distension rapidly subsided—but there was no satisfactory action of the bowels. The patient seemed to be possessed with a monomania of constipation, his whole thoughts being centred on this one subject. He constantly discussed the terrible consequences which must ensue from want of

action of the bowels. To meet this phase of the complaint after three weeks' treatment, baths of static electricity were substituted for the constant current. In about a week the patient declared that he felt much better, and his mental anxiety entirely disappeared. On the thirty-fourth day the patient had a hard but natural motion, the first, as he pathetically remarked, which he had seen for over ten years. From this time, every morning regularly he had an evacuation without difficulty and without the aid of artificial means. The treatment was continued a fortnight longer, at the end of which time the cure was complete.

Dr. Bueler recently delivered a lecture at a meeting of the Medicinisch Pharmaceutischen Bezirksverein von Bern on the treatment of "Habitual Constipation" by abdominal Massage, in which he recorded his personal experience of twenty cases treated according to this method. Eighteen patients were permanently cured, in one a relapse occurred in two months, and in another, a case of chronic gastro-intestinal catarrh with dilatation of the stomach, the constipation still persists, though

all digestive disturbances have disappeared under the influence of a periodical evacuation of the stomach by means of manipulations in the epigastric region. A cure was usually effected in from four to six weeks, and after from twelve to twenty-five interviews. No untoward symptoms were observed even when the treatment was carried out on people advanced in years. Dr. Bueler lays great stress on the fact that Massage is not simply one therapeutic agent, but a combination of several factors powerful for good or fraught with danger according to circumstances. The physiological effects of Massage in the treatment of constipation may, he says, be classified as follows:—(1) The mechanical action, which is the most important of all, and is not limited to the gastro-intestinal contents, but extends also to the large abdominal secretory organs, removing obstruction of their ducts. This is shown by the success of Massage in cases of fæcal accumulation, jaundice due to obstruction of the common bile duct, ileus, invagination, volvulus, etc. These mechanical effects are best produced by *pétrissage*, which breaks up im-

pacted faecal matters, and by *effleurage*, which facilitates the excretion of materials loosened by the former manipulation. (2) The reflex effect of Massage is shown by contraction of the involuntary muscular tissue of the intestine which follows stimulation of the abdominal parietes. This effect is best produced by *tapotement*. Many cases of habitual constipation can be cured by manipulations of this kind alone. This is well illustrated by Dr. Bueler's case of a student who had suffered from constipation for five years, and who was permanently cured after a course of treatment of eight weeks' duration, the *tapotement* being resorted to three times a week. (3) The thermic action is shown by Von Mosengeil's experiments already related in detail. This action is allied to the treatment of constipation by the application of hot poultices to the abdomen, and to certain hydrotherapeutic measures. (4) The chemical action is more hypothetical. It is suggested that abdominal Massage, whilst causing marked hyperæmia of the local integuments, gives rise to an arterial anæmia, and venous hyperæmia of the peritoneum with an

accumulation of carbonic acid in the intestinal circulation, leading to increased peristalsis. "The problem of the practitioner in every individual case of constipation," says the author, "is to find out which of the therapeutic elements of Massage is most suitable and promising; whether the procedure must aim only at strengthening the tonicity of the abdominal muscles, or must act mechanically or in a reflex or thermic manner." This question being settled, the procedure can be considerably simplified by omitting all unnecessary manipulations. The author strongly condemns the routine practice of Massage in all cases without discrimination, and insists on the strictest adaptation of the treatment to each particular case. Manipulations which lead to a rapid cure in one group of cases may be followed by injurious consequences in another. Thus in the cases of chronic constipation due mainly, if not entirely, to weakness and flabbiness of the abdominal walls, as in women who have borne many children, or in men advanced in years with big pendulous obtrubrences, such manipulations as forcible separation of the abdominal

recti by the insertion of the tips of the fingers between the edges of the muscles along the linea alba are indicated. The muscles contract forcibly, and this action may be intensified and prolonged by transverse *effleurage* in an outward direction from the medial line. Concurrently with this the diaphragm should be strengthened by deep inspirations performed forcibly and regularly, as in the practice of artificial respiration. On the other hand, in cases of constipation due to atony of the intestine, such as occur in persons of sedentary habits, the treatment must consist of gentle, gradually intensified and more powerful *effleurage*, followed by moderately strong *tapotement* with the palm of the hand. In constipation due to dyspepsia, complicated perhaps with dilatation of the stomach, the manipulation should consist of *effleurage* limited to the gastric area. Two cases of this kind treated in this way twice a week were permanently cured in a month. The Massage must be similarly localized in cases of fæcal accumulation in the cæcum or sigmoid flexure. In habitual constipation dependent on cerebral or spinal neurasthenia, especially com-

mon in hypochondriacal or hysterical subjects, only such procedures as *tapotement* and *effleurage* are indicated. In three of Dr. Bueler's patients hæmorrhoids, in one case half the size of an egg, were present, and these were considerably reduced even after the first visit, and entirely disappeared before the expiration of the month's treatment. He says:—"I am so pleased with the result that in future I shall recommend to my hæmorrhoidal patients abdominal Massage as the first thing to be tried." The most unsatisfactory results were obtained in cases of constipation depending upon adhesions left by previous attacks of general or local peritonitis. Dr. Bueler advocates the immediate employment of gentle *effleurage* in all cases of peritonitis as soon as the acute symptoms have subsided. He refers to the case of a youth of seventeen, who suffered from perityphlitis, in which from the thirteenth day of the disease and the ninth after defervescence *effleurage* in the ileo-cæcal region was resorted to with much benefit, the exudation, which had been very considerable, passing away in about eight days without leaving a



trace. Dr. Bueler's paper is a good honest bit of work, and throws much light on the treatment of constipation by Massage.

Dr. Georges Berne, of Paris, points out, and I think very justly, that before undertaking the treatment of a case of constipation by Massage it is essential to make a careful examination with the view of determining the absence of any contra-indication, such as a tumour or chronic inflammation. The hepatic region should also be examined to see that there are no biliary calculi in the gall-bladder, for if they are there, care will have to be taken not to make pressure on the adjacent parts of the transverse colon. If gall-stones get roughly handled they are apt to cause injury to the gall-bladder or its duct, whilst if there is only bile, its expulsion into the duodenum will do good by stimulating the muscular contraction. Berne's conclusions may be briefly summed up as follows:—(1) Abdominal Massage is the best method of treating constipation which has resisted other remedial measures. (2) No sitting should exceed twenty minutes, and there should be at first at least one a

day. (3) A natural action usually takes place after about the sixth application, and the beneficial effect continues long after the cessation of the treatment.

(4) Pressure should be exerted over the fundus of the gall-bladder so as to induce it to contract and assist the progress of the bile towards the intestine.

(5) Massage induces a more abundant secretion of the gastric juice and stimulates the contraction of the muscular contraction of the large intestine. (6)

In addition to stimulating reflex action, Massage acts mechanically, and under its influence intestinal changes take place more actively.

Dr. Hermann Sahli, of Berne, advocates the employment of cannon balls in the treatment of constipation. They are not, as might be supposed, to be taken internally, but are rolled over the abdomen for five or ten minutes every morning. The patient lies on his back during the performance, and we are told that the whole of the abdominal surface should be treated systematically and conscientiously. On cold mornings there is no objection to warming the cannon ball, which should weigh three or four pounds, in front of the fire. In some

instances the relief is immediate, in others the treatment may have to be continued for some days before the desired result is obtained. In chronic cases the patient should end up by balancing the cannon ball on his navel, a procedure which requires much care and dexterity. Even should it not succeed, the patient will have the satisfaction of knowing that he has done his duty. Cannon balls are not an article of commerce, at all events retail, but they may be obtained in small quantities on making application on the prescribed form to the authorities at the Woolwich Arsenal, stating the purpose for which they are required. Solid shot are said to be better than shell.

Massage alone will usually effect a cure in chronic constipation, but I often prescribe in addition a compressed tabloid triturate (vide *Practitioner*, Dec. 1887), containing a fifth of a grain of aloin, one sixtieth of a grain of strychnine, an eighth of a grain of extract of belladonna, and a sixtieth of a grain of powdered ipecacuanha, instructing the patient to take three or four, one every ten minutes, before breakfast. A lady who had suffered from

this complaint for many years, and was a connoisseur in laxatives, assured me that they did her more good than any medicine she had ever tried.

It is a good plan to use an enema immediately after every Massage of the abdomen so as to clear out the rectum. This is often neglected, but I am sure it is a point of some importance in the treatment of obstinate cases of constipation.

In a communication to the Caucasian Medical Society, published in 1884, Dr. Ivan J. Kriviakin of Botlikh, Dagestan Region, advocates the employment of Massage of the abdomen, as a curative agent in cases of intestinal obstruction. The procedure, we are told, requires only one assistant, the name of which is Patience. The operator anoints his hands with oil, separates the thumbs as much as possible from the first fingers, puts the thumbs in juxtaposition, places the hands at the lower part of the abdomen, the patient meanwhile lying on his back, and while producing steady and strong pressure, passes his hands first from downwards, upwards, then in the reverse direction, then from the right to the left, and so on, repeating the manipula-

tions for twenty minutes, by the end of which time a regular peristaltic storm is set up in the intestines. Then the patient, who at the beginning of the sitting feels rather uncomfortable, but in about ten minutes experiences some relief, is allowed to rest for an hour and a half, when another sitting of fifteen minutes' duration is resorted to if necessary. As a rule, however, the first sitting is quite enough, the patient being relieved. It happens not infrequently that in the course of the manipulations a distinct elongated sausage-like tumour is detected, and when this is the case tapotement will be found essentially useful. Dr. Kriviakin finds this method of treatment invaluable in all cases of intestinal obstruction from whatever cause arising. He quotes the case of a strongly-built man, aged 24, who, in addition to constipation of ten days' standing, suffered from agonizing paroxysmal abdominal pain, foetid vomiting, obstinate hiccough, offensive eructation, and distension of the abdomen. A volvulus was suspected, but after a *séance* of twenty minutes' duration, profuse and extremely offensive defæcation followed, and the patient's bowels were

subsequently moved five times in rapid succession. These observations have been confirmed by Dr. J. A. Goralevitch, Dr. M. D. Nekrasoff, and Dr. M. K. Golbeck, all of whom have related cases which have been under their care. Massage of the abdomen is frequently resorted to at the Dorpart Hospital, where the patients are mainly Livonian peasantry.

Mr. Treves, speaking of Massage, says: "With regard to its effect in cases of fæcal accumulation, it must act largely as a mechanical agent, influencing the conformation of the stercoral mass and modifying its position. It would appear also to act as a direct stimulant to the intestine, for within a few minutes of the commencement of the manipulation, peristaltic movements are excited which may in time reach such a grade as to cause much colicky pain. It is possible that such effect may be brought about by the immediate stimulation of Auerbach's plexus, under the control of which the peristaltic rhythm is supposed to lie. The stimulation also of the skin of the abdominal parietes may not be without influence. It is supplied by branches from the last seven of the dorsal nerves, and it is signi-

ficant that it is from these very nerves that the splanchnics are in great part derived. The part played by the splanchnics in the abdominal nervous system need not be commented upon. Their precise influence upon the bowel has yet to be established, but so far as movement is concerned they appear to contain both excitator and inhibitory fibres. These explanations of the effects of Massage are not entirely satisfactory, nor are they such as would satisfy the captious doubter. The doubter, however, can wait, and in the meantime the practical man may be satisfied that he has in Massage a therapeutic measure of considerable value." Dr. Cheadle has recorded three cases of intussusception treated by inflation and Massage.

Dr. George Harley, in the *Illustrated Medical News* of Oct. 20, 1888, advocates the use of digital manipulation for the extrusion of calculi, biliary sand and gravel from the gall-bladder and bile ducts. When there is an obstruction to the flow of bile, due to the presence of a concretion, the gall bladder is always more or less distended with fluid, and is easily felt through the abdominal parietes

unless the patient is abnormally stout. It is not possible to grasp it, but by the application of judicious and steady pressure to the fundus it may be made to expel its contents and force out the offending body. Dr. Harley succeeded in safely extruding into the intestines of a lady, aged fifty-five, a gall-stone the size of a small hazel nut, which had been for many years impacted in her bile duct, and had brought her to the verge of dissolution. In another case, as the result of fifteen minutes' manipulation, he expelled two facettted sharp angular gall-stones, the size of field-beans, affording such immediate relief that the patient experienced no difficulty in searching for them himself in the motion which speedily followed. A detailed account is given of several cases treated by this method, one of the patients being a lady of "high rank" and "about sixty summers," who for twenty years had been treated for dyspepsia and flatulent colic, and had the advantage of being seen by no less than nine doctors, including "a former President of the Royal College of Physicians and two of our leading operating surgeons."



Dr. Harley says :—" When first called to her bedside I diagnosed a gall-stone firmly impacted in the common bile duct ; and as I proposed to subject her gall-bladder to digital manipulation, in order to force the impacted concretion out of the duct, it was arranged that as soon as possible she should proceed to London. The distance was only fifty miles, and yet such was the fatiguing effect the railway journey had upon her, that when she arrived in town she was in a state of collapse ; from which she did not sufficiently recover to admit of my beginning the treatment for three days, and it was not until a week more had passed away that the impacted stone was successfully dislodged from the duct, and only after four days more was it discovered in the stool. The stone, which was of the size of a small field-bean, proved on analysis to consist almost entirely of cholesterin ; and although it was not facettèd, there was no doubt in my mind that it was one of many, for I could feel the gall-bladder quite distinctly, as a hard ovoid body, the size of a man's fist, about three inches to the left of the umbilicus, and immediately below the enlarged

liver. A daily course of digital manipulation of the gall-bladder was accordingly recommended and had recourse to, with the result that over seventy gall-stones were found in the stools during the subsequent seven months. At the end of that time, the gall-bladder appearing to have been completely emptied of all its calculi, the patient left for the country, and it is no exaggeration to say that soon afterwards all the dyspeptic symptoms, which she had suffered from for years previously, disappeared. In this case rarely more than one gall-stone was voided at a time, though occasionally, after a big-gish one had for six or seven hours blocked up the duct, and caused jaundice before coming away, two or three smaller ones rapidly followed its extrusion without their producing any other symptoms than a trifling epigastric discomfort. It must be added that the calculi differed very much, both as regards their naked-eye appearances and chemical constitution, some being almost white, others brown, and not a few blackish-green, differences no doubt arising from the stones having been formed at various times and under different conditions during the

twenty or more years the patient had suffered from the biliary derangements, which had not only been originally diagnosed, but always previously treated, as severe indigestions." The same method of treatment is applicable to the treatment of renal calculi impacted in the ureters.

Gopadze speaks well of the influence of Massage in catarrh of the common bile duct. The symptoms observed in fourteen cases were jaundice, vomiting, loss of appetite and constipation alternating with diarrhœa. Massage in the region of the liver effected a cure on the average on the eighth day.

In DYSPEPSIA and other functional disorders of the digestive apparatus, Massage is most useful. Applied to the abdomen, it is a powerful stimulant to both the gastric and biliary secretions. Gopadze and Shpoliansky have shown that under the influence of Massage food is retained in the stomach a much shorter time than usual, and in cases of slow and difficult digestion, pétrissage, alternating with intermittent pressure with the warm hands, has been found by M. Dally to be most valuable. The

case was recorded not long ago in one of the daily papers of a retired Colonial Judge, "a man of intelligence and experience, accustomed all his life to carefully discern between truth and falsehood," who was cured of dyspepsia of many years' standing by a short course of Massage. The recovery was complete, and he soon found himself able to eat and drink everything that came along without suffering or discomfort. For flatulence it is an admirable remedy. A young lady recently told me that she became so distended after meals that she felt she ought to be married if only for the sake of appearances.

Hirschberg speaks well of the beneficial effects of Massage in many affections of the stomach. In cases of dilatation, for example, when the muscular tissue is weak, and the food is retained, it excites contraction, and by determining a flow of blood to the parts improves nutrition. In two well-marked cases it not only removed the digestive troubles and the nervous phenomena, but resulted in an entire disappearance of the physical signs. It increases the secretion of the gastric juice, and is

especially useful in atonic dyspepsia. It relieves the symptoms of pain, weight, and discomfort, from which dyspeptics frequently suffer, and is one of the best remedies for flatulence, quickly expelling the accumulated flatus. By stimulating the nerves of the stomach it is beneficial in many gastric affections of nervous origin. The best results are obtained in cases of chronic dyspepsia due to catarrh of the stomach associated with dilatation. In the dyspepsia of anæmic or chlorotic girls it yields equally good results. The increased supply of blood to the walls of the stomach is inimical to the formation of gastric ulcer, but when once an ulcer has formed the employment of Massage is distinctly contraindicated, as it might give rise to hæmorrhage or perforation. It should never be resorted to when the existence of malignant disease is suspected.

In the treatment of CORPULENCE Massage is of very great value. It answers admirably for ladies who, about thirty-five, as the result of a sedentary life and other complications into which it is unnecessary to enter, find that they are beginning to get stout and lose their figures. This is a condition

not uncommonly met with, and I do not know that it is ameliorated in any way by purely medical treatment. Pétrissage and effleurage of the limbs, with pétrissage and tapotement of the abdomen following the course of the colon, are the best forms. Massage in a modified form is often resorted to by ladies engaged professionally, who find they are getting too stout. It is especially useful for women who have passed much of their lives in hot climates, and have been precluded from taking much exercise. Dr. Lauder Brunton says:—"We all know how active exercise increases the appetite. Tissue-change goes on more rapidly in the organs, waste is more abundantly excreted, and more food is eagerly sought for. But there are many feeble, flabby persons who cannot take exercise, or if they can, will not. Moreover, there are others who are quite willing to exercise the voluntary muscles of the limbs, but cannot exercise the involuntary muscles of their internal organs. Now treatment by Massage helps both of these. It increases the nutrition, both of the voluntary muscles and of the internal organs, and under its use patients apparently hopelessly incurable completely recover." It

is a great stimulator of energy, and will "brace up" people as nothing else will. A physician who recently called on me from Sydney told me that it was of great service for women who had been long in Australia, and who were getting stout, and I have heard similar accounts from American physicians.

Some months ago I saw a lady, aged 38, who, as the result of much good living and little exercise, had become inordinately stout. She was very short of breath, and was disinclined for exertion of any kind. She had been fond of literary pursuits, but even those had lost their charm, and were irksome to her. She was extremely irritable, and a source of trouble and anxiety to her friends and relatives. Massage was prescribed, and in two months she lost a stone and a half in weight, and improved notably in other respects. Another lady, whose age was reputed to be thirty-five, had her waist reduced by Massage from twenty-five to twenty inches, and made an excellent marriage.

Dr. Benjamin Lee, of Philadelphia, in an admirable paper on "Blood, and how to make it; Fat, and how to reduce it," records the case of a young lady, aged seventeen, who was cured of excessive

obesity almost entirely by Massage. She is described as being "of large frame, decidedly above the average height, and enormously fat." Her arm was larger round than the thigh of an ordinary adult woman, and the accumulation of fat upon the abdomen was immense. She could only walk with great difficulty, partly from loss of power in her legs, but chiefly from her great weight. Once a day, supported by two persons, she was helped down stairs and then wheeled out to the piazza, where she sat in fine weather to get the fresh air. This was the only exercise she was capable of taking, and she suffered so severely from pain in her back, that it was thought she had spinal curvature. A few weeks' treatment worked a marvellous change, and in three months she could walk half a mile without the slightest fatigue. The following spring she walked into town, a distance of six miles, in order to show her doctor how complete had been her recovery. Her figure, we are told, is now as remarkable for its lightness and grace as it had before been for its shapeless and unwieldy immensity.



## CHAPTER VIII.

### MASSAGE A REMEDY FOR RHEUMATISM.

IN RHEUMATISM and rheumatic affections, Massage has long enjoyed a high reputation. It is efficacious in both the articular and muscular forms. In a curious work by William Balfour, M.D., published in Edinburgh in 1816, and entitled "Observations, with cases illustrative of a new and simple and expeditious mode of curing Rheumatism and Sprains without in the least debilitating the System," an account is given of the treatment of rheumatism by percussion, friction, and compression. His attention was called to the subject by a little personal experience. "Having been seized with a rheumatic affection of the left shoulder, chiefly in the course of the deltoid muscle, the pain at times, but especially towards morning when warm in bed, was so severe as to make me cry out. Desirous on one of these occasions of moving my arm, a task to which its own powers were unequal, I grasped it

firmly with my right hand about the middle of the pained muscle ; to my surprise and high gratification I was instantly relieved from pain, and while I thus held my arm I could do anything with it I pleased, without further aid from my right hand than mere compression." This led to an investigation of the subject, and the systematic employment, in a number of cases of rheumatism, of compression, percussion, and friction ; a rude and primitive form of Massage, in fact. By far the most startling case in Dr. Balfour's book is that of Madame Rey De La Ruaz, a French lady, long resident and well known in Edinburgh. She is said to have inherited gout, and to have suffered from it from the age of six. Dr. Balfour tells us that when first he saw her, "all her fingers were extremely weak, some of them swelled, others so exquisitely painful that she could not suffer them to be touched ; she could not lift a wine-glass with one hand, but she contrived to do it with both by turning their backs to each other. Both wrist joints were stiff and painful, but the left could not be moved without the greatest suffering. Both elbow-joints were greatly affected ; the left did

not possess half the natural range of flexion and extension. On each humerus, immediately above the inner condyle, a large tumour was situated, so painful that it could not be touched without making the patient cry out. 'All the muscles covering the humeri were from origin to insertion rigid, knotted, and thickened. The deltoid muscle felt like two boards; the connections of the clavicles with the shoulders and the joints at their flexures the patient could not suffer to be touched. She could not lift a hand to her head. . . . Her head and a small part of the anterior portion of the trunk of her body were indeed the only parts free from disease, and she had not walked a step for eight years." The account of her case extends over nearly twenty pages, and is too long to reproduce here. It may not be very clear what was the matter with this lady, but it is interesting to note that she was completely restored to health in five months by friction, percussion, and compression, without taking any medicine, "with the exception of a few laxative pills and a saline julep when she was feverish." The author seems to have been rather proud of his

success, for he says:—"I congratulate this excellent meritorious woman upon her restoration to independence; I congratulate those who are still martyrs to rheumatism; I congratulate all mankind that a cure is at last discovered for one of the most harassing and painful diseases to which human nature is liable, a disease in its nature so obstinate as to have hitherto set at defiance the utmost efforts of the healing art."

In Sir John Sinclair's "Code of Health and Longevity," an account is given of the means by which Admiral Henry, of Rolvenden, cured himself of Rheumatism, a tendency to Gout, the *Tic Douloureux*, the Cramp, and other diseases, including a cataract. It appears that it was in the year 1787 that he began his medical operations, "and those only in a very slight and trifling manner, not knowing but that they might prove injurious, and his friends being extremely apprehensive that he would do himself much mischief." The instruments first employed were made of wood, but bone was subsequently substituted. The bone instruments were made from the ribs of cattle, and it was found a

great advantage to have them bent, as they could thus be applied more successfully to different parts of the body. Any knobs which existed were preserved, and others were made artificially with a file. We are told that every part of the body was daily acted upon by some of these instruments for the purpose of preserving health and warding off the infirmities of old age. The tools were applied to the knees, ankles, and insteps, which were all much swollen and hard, owing to the rheumatism, and very painful when touched, and though the operation was very lightly done, yet he derived considerable benefit from it. After a time he began to use a common hammer, made of iron, with a bit of cork on the head, and covered with leather. He persevered in the use of this instrument for about three years, night and morning, together with small bone instruments with knobs for loosening the tendons. He completely succeeded in removing the swellings, and by keeping up the practice was restored to the use of his limbs. This was clearly an application in a primitive form of Massage, or at all events of percussion.

Many rubbers employ amber oil, a volatile oil made by distilling amber, in the treatment of rheumatism, rubbing it into the affected part with the palm of the hand. It is the *Oleum Succini* of the United States Pharmacopœia, and the *Huile Volatile de Succin* of French writers. When pure it is almost colourless. I think it is useful in slight cases, and when Massage cannot be obtained I often prescribe it. It is said to be the active ingredient in Roche's Embrocation, and in Haarlem oil, which is a mixture of balsam of sulphur, Barbadoes tar, oil of turpentine, linseed oil, and oil of amber. Rubbed into the spine night and morning it is an excellent remedy for whooping-cough.

These, of course, are not quoted as cases of rheumatism treated by Massage. I often find Massage of the greatest value in this condition, after the complete failure of ordinary rubbing. A lady who has for many years suffered from chronic articular rheumatism recently told me that she derived more benefit from three weeks' Massage, which was carried out under my direction, than from all the

drugs she had ever taken, and this is not an exceptional experience.

Dr. Dollinger, of Buda Pesth, records several



*Fig. 13* illustrates the method of treatment adopted in a case of rheumatism involving the muscles in the neighbourhood of the shoulder joint. The thumbs do the work, the other fingers serving to steady them.

cases in which Massage proved useful in his hands. A lady, aged forty, who had been a cripple for many

years, came to him complaining of pains in the joints. There was effusion in both knees, the left measuring 38 centimetres and the right 41. The first phalanges of the toes were bent up, the terminal phalanges bent down. The metatarso-phalangeal joints were swollen and very painful. The patient could walk only a few steps with the greatest difficulty. The joints were masséd daily, and after fifty-five visits the exudation in the left knee had gone, and it measured only 37 centimetres. There was only a little pain in the toes and metatarsal bones, and the patient could walk for an hour and get upstairs without difficulty. Another case was one of rheumatism of the intercostal muscles. The patient, a man, aged 26, was bent forward with pain, could hardly walk, and had great difficulty in breathing. Massage was performed with difficulty, as the patient cried out on being touched. Gentle effleurage was essayed, and the pain and tenderness were in half an hour less acute. In an hour the patient could breathe freely, and move his body backwards and forwards without pain. In four days he was cured. Other cases, notably one in which



the patient suffered from severe pain in the legs, from standing for some hours up to his hips in water whilst duck shooting, were treated successfully.

Massage is of value in that complaint which is commonly called rheumatic gout, but which has been more accurately named by Sir Alfred Garrod rheumatoid arthritis. The difficulty which has always been experienced in effecting even an improvement in this obstinate disease by medicinal means is only too well known. Graham has published in detail seven cases of rheumatic gout treated by Massage, and there was marked improvement in all except one. The results obtained by continental observers have been equally good. I give details of a severe case in which some benefit was derived.

The patient was a lady 55 years of age. Up to June, 1884, she enjoyed perfect health, and was able to walk, drive, and travel, without the slightest difficulty. She was essentially active in her habits, and was a good pianoforte player. About the time mentioned she noticed that there was a little stiff-

ness in her knees, but not enough to cause her much inconvenience. This stiffness in the knees—the other joints as yet being unaffected—increased little by little, but she was able to get about fairly well up to Christmas. In January, 1885, the wrists were noticed to be stiff, and in February of that year, at the suggestion of some friends, she went to Bath for treatment. She had fifteen baths, and rapidly grew worse. She discontinued the treatment, but was so ill that she could not get away until June. During her stay at Bath the hands were for the first time affected, and the finger joints became stiff. Since her return to London she has had sixteen doctors, and has, she says, taken gallons of colchicum, arsenic, and other drugs. She had a medical rubber for fifteen months without benefit. The pain and stiffness in the joints have at times been so bad that she has had to have morphia injected. The patient when seen was dressed and was sitting upright in her chair in a constrained and awkward position. She had a peculiar fixed and uncomfortable look, due perhaps to the fact that she was unable to turn her head.

Her hands were terribly distorted, the joints being enormously enlarged and the fingers fixed and rigid. The soft parts were thin and wasted, so that the hands looked like claws. She could do little or nothing with them, and although she had been a fine performer, her pianoforte was closed, and had not been opened for many months. Both knees were much swollen and very stiff. At my request she tried to stand, and succeeded after many failures. She walked across the room feebly and unsteadily, her joints creaking like a rusty hinge. She attempted to walk upstairs, but could only manage four steps even with assistance. There was great pain at the lower part of the spine, and the cervical vertebræ seemed fixed. Her face was curiously worn and wasted, the skin being thin and shiny. She had taken morphia hypodermically for some months with some benefit. There was no evidence of the existence of gout, and the case was clearly one of rheumatoid arthritis. At her request I consented to try Massage, and placed her under the care of a competent *masseuse*, who visited her once a day, paying especial attention to the spine.

At the expiration of three weeks she had improved, but not to a very marked extent. From circumstances beyond her control she then ceased treatment and passed out of my hands, but I saw enough to satisfy me that had the Massage been continued for a longer time her symptoms might have been materially ameliorated.

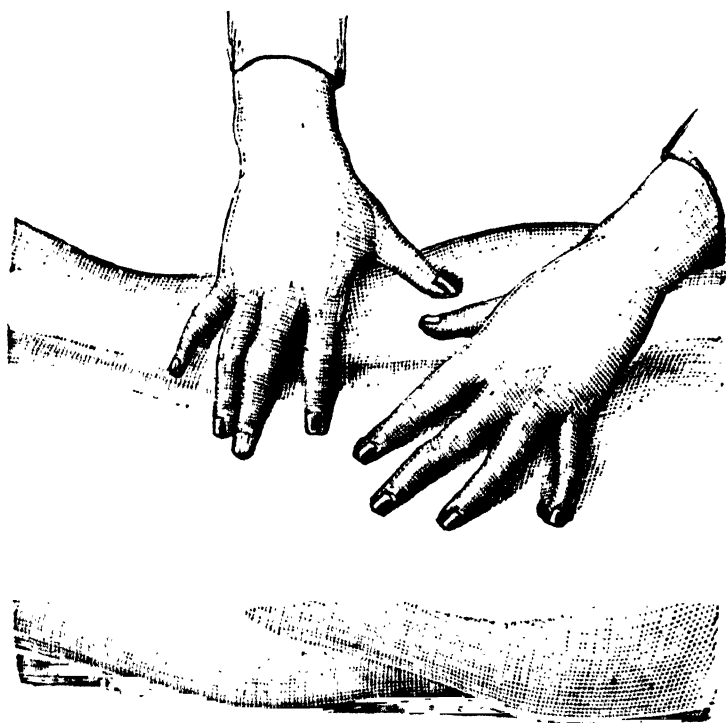
It is difficult to say how Massage does good in cases of rheumatic gout. Dr. Archibald E. Garrod has shown that there is reason for believing that it is a disease of nervous origin, and it has even been suggested that it owes its origin to some chronic affection of the medulla oblongata. Massage undoubtedly prevents the wasting of the muscles and other soft parts, and this in itself is a considerable gain and adds much to the comfort of the patient.

Some years ago I recommended Chaulmugra oil in rheumatic gout. It is an Indian remedy obtained from the seeds of *gynocardia odorata*, a native of Pegu. At ordinary temperatures the oil is solid, is of a light brown colour, and has a decidedly disagreeable smell and taste. It may be melted by placing the bottle in hot water or allowing it to

stand for a few minutes in front of the fire. It should be well rubbed into the affected joints, and may also be taken internally in *perles*. It is equally efficacious in rheumatism and other joint affections. A patient recording his experience says:—"A month since, I was suddenly seized with a severe attack of rheumatism, and so acute was the pain that for two days and nights I could not sleep, and the swelling of my hands made me quite helpless. I could neither dress nor feed myself. Having had a sharp attack of rheumatic fever about twenty years ago, I was very much afraid that I was again to be laid aside from business; and you, I fear, will hardly believe that within three hours of the application of the oil, the use of my hands was restored to me, and that from that day to this I have had no return of the pain."

M. Martin, of Lyons, has recorded a number of cases of *lumbago* treated by Massage, and Laisné has published other cases treated by what he calls *massage par ondulations*. The last named procedure is carried out somewhat in this way: the patient is made to lie on his face, a pillow being

placed under the abdomen so that the muscles of the back are relaxed. The operator then



*Fig. 14.* This figure, drawn from a photograph, illustrates the method of treatment adopted in lumbago. The operator has found a tender spot, and is working at it. Notice the position of the thumbs and fingers.

places the tips of the fingers, slightly separated, a little below the seat of pain, and to the right

of the spine; the fingers are then moved slowly upwards, pressing gently, and at the same time describing a series of small circles. When the seat of pain is passed, this is repeated in a similar way on the other side of the spinous processes. Should the pain be limited to one side, or be more severe on the one side than on the other, that should have the preference, but in most cases it will be found better to make the movements first on one side, and then on the other. The pressure should be gradually increased as the pain decreases. After from twenty to twenty-five minutes' working in this way, similar movements should be made with the ball of the thumb and little finger, the whole ending up with the application of a moderately tight bandage. In lumbago, tender spots may often be detected on careful examination, due in all probability to some morbid condition of the ligaments. Massage and friction over the seat of pain will usually effect a cure in these cases.

There are few conditions more amenable to treatment by massotherapeutics than what is commonly called *backache*. This is a composite condition

and may be due to a variety of causes. The patients are usually women, and the suffering is undoubtedly often very acute. In the majority of cases it has its seat in the muscles, and is the result of strain or over-fatigue. The strain may be equally severe on both sides, but in patients who are in the habit of throwing the weight of the body on one leg when standing, it may be confined to one side. I have met with many examples of this in young women who have to stand for many hours a day behind the counter. Sometimes the pain is the result of pregnancy, the accumulation of dropsical fluid in the abdomen or even the development of fat. A still more common cause is uterine disturbance, this being simply one of a group of symptoms indicative of the existence of some displacement. More rarely it arises from a defect in the process of digestion and assimilation, the muscles, as Dr. George Johnson has pointed out, being irritated rather than nourished by the imperfectly digested food. The pain is often so acute as to temporarily incapacitate the patient for exertion of any kind. Sometimes it persists all day, and, for



the matter of that, all night, whilst in other cases it comes on at a particular hour—usually late in the afternoon—and lasts till bed-time. The suffering is undoubtedly very severe, and a lady not long ago told me she often felt as if she would like to take a knife and stick it in her back to relieve the horrible, dull, aching pain. I have known a sufferer from this condition stop a friendly postman or policeman in the street, and beg him, with tears in her eyes, to give her a good punch between the shoulders to take away the pain. In many instances I have known Massage give prompt if not immediate relief. As accessory measures, I usually recommend Burgundy, cod-liver oil, and hypophosphites. Menthol plasters are useful, and so is the application of a cone of menthol and capsicum.

Many people suffer from vague uneasy pains in the legs, usually said to be rheumatic or neuralgic. In young people they are sometimes called “growing pains;” they are intensely painful, and the patient not uncommonly suffers at the same time from a feeling of depression and wretchedness. They may be associated with disordered digestion

and constipation, but this is not always the case. Very little is known about these pains, but it is found practically that they are relieved by Massage. Some time ago I saw a gentleman who suffered from periodical attacks of pain in the legs ; he was unable to describe the pain beyond saying that it was not an acute pain, and curiously enough he was unable to localize it ; he did not think it was in the joints, and yet he could not say where it was. There was no tenderness, but the legs seemed to him to be heavy, and to be perpetually aching ; sometimes it would attack the arms, and was then most marked in the shoulders and wrists ; it rarely troubled him at night, and never incapacitated him in any way ; he had never had rheumatic fever or any acute illness, and lived a very regular life, eating well, working hard, and taking a fair amount of exercise ; there was no hereditary tendency to gout as far as he knew, and he usually drank hock or claret, and took but little beer ; he was in fairly comfortable circumstances, but had had a hard struggle to get on in the world ; the attacks of pain usually lasted some three or four hours, sometimes

all day, and were accompanied by a good deal of mental depression; they were intensified and commonly excited by worry or anxiety of any kind. I was unable to give any definite opinion as to their origin and nature, but suggested Massage as a mode of treatment, and this afforded prompt relief. In a subsequent attack guiacum did a great deal of good. It was given in the form of Wyeth's Compressed Lozenges, made up with black currant paste. Taken frequently it acted as a diaphoretic and purgative. I have employed this combination in several cases of hepatic derangement with much benefit. Another good method of giving guiacum resin is with extract of malt—twenty grains to the ounce three times a day. In exceptional cases this dose excites a rash, resembling that produced by *copaiba*.

## CHAPTER IX.

### MASSAGE AND NEURASTHENIA.

DR. DOUGLAS GRAHAM, of Boston, speaks highly of Massage in the treatment of NEURASTHENIA. He uses it for those "who, in spite of rest, change, and medication, have become chronic neurasthenics, the result of business reverses, overwork, worry, loss of relatives, disappointed hopes, or as a sequel of some affection that has existed in some part of the system, but which has recovered or has become of secondary importance." These symptoms may be somewhat ill-defined; but I have certainly found Massage of the greatest use in what, for want of a better name, has been called "SPINAL NERVOUS WEAKNESS," or "NEURASTHENIA SPINALIS." Erb, speaking of this condition, says :—"Abundant experience has shown me that these cases are not rare, and that they are of great practical importance; they give rise to much anxiety, not only to the patient,

but to the physician, owing to the striking resemblance they often exhibit to severe disease of the cord." These cases of spinal weakness are usually met with amongst the rich and educated. Some months ago I saw a young man, who had had a distinguished college career, and was working hard for a profession. He was a great big strong fellow, capable of any amount of physical exertion, but instead of devoting himself to athletics, he preferred reading medical works and analyzing his feelings and sensations. He complained of "restlessness at night," of "inability to apply his mind," of "coldness in the hands and feet," of "burning pain in the spine and across the back," of "dimness of sight," of "numbness of the hands and fingers," and "disturbed dreams." His appetite was good, he was well nourished, and I failed to detect any organic disease. He had taken a good deal of medicine, and had tried rest and change of air, without much benefit. I recommended effleurage and pétrissage of the back and legs, with the application of a constant current to the lower dorsal vertebræ by means of a large sponge electrode, and in six weeks

almost all the symptoms had disappeared. Another patient complained of feeling "dull and gloomy in company," of "bad memory," "loss of energy," of "tremblings in the back of the neck and down the spine," of being "very nervous," and of a sensation as if he were "sinking through the bed at night." Neurasthenia, or at all events a closely allied condition, is common amongst Americans who have been engaged in large business transactions. I recently had under my care a gentleman who offered an excellent example of this condition. He was certainly one of the "brightest" and most original thinkers it has ever been my pleasure to meet, a brilliant conversationalist, a genial companion, and a smart writer. He had built up a gigantic enterprise, and his operations were conducted on an enormous scale. He told me that he wrote or dictated as many as 90,000 letters a year. He had travelled all over the world, and had made an enormous success. But everything had been on his shoulders, and after twelve years of hard work, both night and day, he felt that he could do no more, and that he was temporarily "played out."

He tried rest, but to a man of his temperament rest was an impossibility, and he had little or no faith in medicines. He had been through all kinds of "cures," but without much benefit. He had such a superabundance of energy that he always got through a three weeks' course in about two days and a half. I tried electricity at his own request, sometimes the constant, and sometimes the interrupted current, and it certainly did him more good than anything. I cannot say that I treated him, but I carried out certain treatment at his suggestion, and I was glad to be of use to him. I never had a pleasanter patient, nor one I liked better. His sufferings were very real, and I heartily sympathized with him, and was delighted when he got better.

Some of the symptoms described by patients suffering from neurasthenia are by no means easy to classify. Here, for example, is an extract from a letter of 48 closely written pages which I received from a lady not long ago :—

"I suffer from indigestion, flatulence, fermentation, acidity. Have sick headaches that last three days with intense nausea—not vomiting. I suffer

dreadfully from dry mouth and throat—no saliva with which to masticate food—am obliged to have fluid with all I eat, and to put a piece of dry biscuit or bread into my mouth is torture—as if it would give me a fit; horrid sensation round the jaw and running down the spine. I generally keep a small stone in my mouth and draw some moisture to it. When I awake in the night, my tongue adheres to the palate, and feels as if it would tear it raw to move it. Drinks do not relieve it—have no thirst—rather an aversion to drinks—cannot touch an acid of any kind, and the ripest fruit puts my teeth on edge like alum. Then there is coagulation in the throat of tenacious saliva which will neither go down nor come up—very suffocating sometimes, and often keeps me out of bed, when I have to get up at night, so choking. Tongue is large and often sore. I was obliged to have four front lower teeth extracted this summer, the tongue was becoming so inflamed and ulcerated. I have difficulty in swallowing sometimes at meals, I have to return the food to the mouth and swallow it again before it will go down—the whole alimentary canal is



irritable, food scrapes all the way as it goes down, and at times lodges in the centre of the chest. Throat outside contracting—the sinews from the chin to the collar-bone gradually contracting—very hard under the chin, cannot keep the mouth closed with head back. Have attacks of cramp in throat and root of the tongue. Sometimes cannot put a glass of cold water to my mouth—causes an acute spasm—catches my breath. Kidneys all wrong—have suffered agonies with stones coming away. This time last year a stone took four months to come away, and the last night got so wedged the urine trickled all the time for hours. I could not go to bed—it was an awful night for me. I would not disturb anyone, but longed for morning to send for a surgeon to come and give me relief, but at last the relief came—the constant action of the burning water seemed to polish and break up the enemy—little bits came first, and then—thank God!—I have curious prickings all through the internal regions, sometimes one part, sometimes another—sometimes even as high up as the right breast and right shoulder blade. Then there are disagreeable

screwings—how can I describe them? Well if a bed or piece of furniture could feel when the carpenter with the key gave another turn, and another, and so on as tight as ever he could screw them, that is as near as I can describe the sensation. It is very trying—I have it in the left side below the waist as if my back would be broken in just there. I have it in front near the pylorus, sometimes lower down. It is a moving sensation—and so are the showers of prickings—as if a soda-water bottle had been suddenly let loose in my inside,” and so on for the rest of the forty-eight pages. This lady had been under a great many doctors. I do not think they did her much good, and I am sure I did not.

In conditions similar to those here described, baths of static electricity are undoubtedly useful. Dr. Oscar Jennings says:—“*C'est un moyen calmant de premier ordre que, d'accord avec mon maître le Dr. Dujardin-Beaumetz, je préfère aux traitements médicamenteux pour les malades surmenés et éternés.*”

The Weir Mitchell system is now largely used in the treatment of many of these cases. It is not

Massage in the sense in which we employ the term, but a combination of isolation, rest, over-feeding, electricity, and rubbing. I know of very many cases in which it has undoubtedly answered admirably, the patient benefitting greatly by the treatment. In other cases, however, it has been a dismal failure, and much harm has resulted both to body and mind. Seclusion is a serious matter, and the expense has also to be taken into consideration. Dr. Benjamin Lee, one of the best authorities on Massage in America, evidently regards "over-feeding" as anything but an unalloyed blessing, for he says:—"The Italian ortolan, seduced by supposititious sunrises into taking five meals a day, is not as happy or lively a bird as his American cousin, the bobolink, which feeds but twice. A Strasbourg goose is certainly not the synonym of health and vigour; and however tempting a *paté de foie gras* may be to the palate of the epicure, the livers which compose it were anything but a source of comfort to their original owners. Life, which depended on such livers, was certainly not worth living." Zab-ludovski, commenting on this special method of

treatment, says that it is a mistake to place patients suffering from neurasthenia in a hospital or "home," where a number of invalids are congregated together, for they never do well, and it is much better that the patient should be surrounded by those who are well and strong, rather than by those who are weak and emotional. He thinks, too, that by subjecting the patient to several hours' "Massage" daily, harm is often done instead of good. The exposure is no light matter, and cold and chilliness frequently result. Massage may be compared to sea bathing in its effects. A dip acts as a tonic, bracing up the system, whilst a long immersion is depressing and lowers the vital powers. The patient should be mistress of her own servants, and it should not be left to them to order her about and make her do as they think fit. We should encourage her to exercise her authority, and not endeavour to destroy her self-esteem.

Dr. Weir Mitchell's "Fat and Blood," an Essay on the Treatment of certain forms of Neurasthenia and Hysteria, may be regarded as the classical work on the subject, and is so familiar to readers on both

sides of the Atlantic, that it is hardly necessary to do more than mention it. In an able article on "Rest in Nervous Disease," published in Seguin's American Clinical Lectures in 1875, Weir Mitchell points out that it is easy for a physician to say to a woman, who has been in bed for a month, and is able enough to get up: "Now the time has come for you to leave your bed," but he may find perhaps that she has gained a set belief that she cannot get up, and that to give her back the assurance of her ableness to walk is no light or easy matter. There are other grave objections to the isolation treatment. In the first place it brands the patient with the name of hysteria. Then, again, people are not very particular to distinguish accurately between "isolation" and "seclusion," and to say of a young lady that she was for a time in seclusion is not to improve her matrimonial prospects. It seems, too, an unwise thing to trust an uneducated nurse with a galvanic battery, and let her use it on a patient without knowing or perhaps caring what pain she may give or what harm she may do. The expense, as I have said, is a serious consideration, and if

uneducated labour is employed, as is undoubtedly often the case, I cannot see why such heavy fees should be charged. It is a perfectly legitimate mode of treatment, I have no doubt, but it is very apt in unscrupulous hands to degenerate into charlatanism and quackery.

In connection with this subject I should like to point out that a good many cases are diagnosed as Hysteria which are nothing of the kind. For example, not long ago a young lady was sent up to me from the country, who was supposed to be a fit and proper subject for the Weir Mitchell treatment, or at all events for Massage. She was eighteen years of age, and her history was somewhat peculiar. Until a few months ago she was a healthy, muscular, and well-nourished young woman, and could walk, ride, drive, and dance with anyone of her weight and size. She was of a remarkably lively disposition, and was fond of games of all kinds. She was the life of a country house, and her friends—even her female friends—said she was as good as a tonic. She had had a bad fall from her horse, but seemed none the worse for it. One day, however, she got

wet through coming home from a meet, and was laid up with a sharp attack of tonsillitis for about ten days. Whether that had anything to do with subsequent events I cannot say, but soon after—how soon I was unable to ascertain—her appetite failed, and instead of making a hearty breakfast, luncheon, and dinner, the greatest difficulty was experienced in getting her to take food of any kind. She lost flesh, and a few months after, when I saw her, she was dull, listless, apathetic, and worn almost to a skeleton. She looked quite old; her extremities were cold, and although she was very restless and most anxious to exert herself, she frequently fainted and was unable to follow her former occupations and amusements. Her menstrual functions were irregular and scanty, and for some months had been absent. Her friends in London had been prepared for an alteration in her appearance, but when they saw her they were startled and shocked, and declared they hardly knew her. Her family history was peculiar. Her father suffered from neuralgia, and her mother from megrim, one cousin abstained entirely from meat, whilst another subsisted chiefly on sweets. Her doctor, writing to

me, said :—" Until the last four months, or at all events six months, she was a well-nourished and particularly healthy looking girl. She had the best of spirits and seemed to enjoy a very robust state of health. I have observed no hysterical symptoms or tendency whatever about her." At first I had a suspicion that she had formed some unfortunate attachment, but her mother declared that there was nothing of the kind. She had been religiously brought up, but there was nothing morbid in her devotional exercises. I examined her spine and found that there was some tenderness over the lower dorsal vertebræ. I thought it might be a case of spinal irritation, but was inclined to adopt the theory that it corresponded more nearly to those cases described by the late Sir William Gull, under the title of *Anorexia Nervosa* ("Transactions of the Clinical Society," vol. vii., p. 22, *Lancet*, March 17th, 1888). Tentatively I tried Massage. The treatment was carried out systematically for six weeks, and she grew worse. Her condition was now a very critical one; she weighed only 5 stone 11 pounds, and she was threatened with gangrene of the nose and lower extremities from defective



circulation. I saw her with Dr. Ringer, who confirmed my diagnosis of anorexia nervosa and recommended forced feeding. This was tried at home for a time, but she was difficult to manage, and it did not answer. Finally I decided not to isolate her, but to put her in a home where she would be made to take food. Her dietary for the first week was as follows :—

- I. 7.30 a.m.—Peptonized milk half a pint, brandy half an ounce.
- II. 9.0 a.m.—Hot milk half a pint with a raw egg, the yolk being first beaten up, the milk poured upon it, and the white, beaten to a froth, added last.
- III. 11.0 a.m.—Half an ounce of cod-liver oil in coffee.
- IV. 1.30 p.m.—An ounce of dry peptonoids with half a pint of Revelenta made thin.
- V. 4.0 p.m.—Half a pint of milk, warm.
- VI. 7.0 p.m.—A cupful of Benger's Farinaceous food.
- VII. 9.0 p.m.—Half a pint of thick gruel, with half an ounce of brandy.

The patient was kept in bed, being allowed to

get up for only about an hour in the evening, and she was given a pilule of arsenious acid—one-hundredth of a grain—every four hours. During the week she lost over three pounds.

The second week her dietary was as follows:—

- I. 7.0 a.m.—Peptonized milk eight ounces, with half an ounce of cream and half an ounce of brandy.
- II. 9.0 a.m.—Half a pint of Benger's Farinaceous food, brandy half an ounce, cod-liver oil half an ounce.
- III. 11.0 a.m.—Half a pint of strong beef-tea or soup, with about four ounces of raw meat.
- IV. 1.30 p.m.—Liquid peptonoids (prepared fresh daily) one ounce, with eight ounces of Revelenta made thin.
- V. 4.0 p.m.—Half a pint of milk, with soda water and a rusk.
- VI. 7.0 p.m.—Five ounces of cooked meat free from bone, one ounce of vegetables, followed by half an ounce of cod-liver oil in lemon juice.
- VII. 10.30 p.m.—Half a pint of thick gruel, with half an ounce of brandy.

On this treatment she gained two pounds in the week.

The following week we substituted for the mid-day meal four ounces of fish, two ounces of whole meal bread, and two ounces of liquid peptonoids, and for the last meal half a pint of strong beef-tea, with half an ounce of brandy. On this she gained four pounds. The next week she took in addition to the other articles of diet eight ounces of peptonized meat daily. At the expiration of six weeks of this treatment she was sent home practically cured, and two months later I learnt that there had been no relapse. Six months after she was perfectly well, could take any amount of exercise, and weighed over ten stone. She sometimes objected to the dietary, but it was never necessary to resort to artificial feeding. She did not have Massage during this time. Her urine was examined from time to time, and was found to be free from sugar and albumen. The liquid peptonoids employed in this case were made for me by Mr. Martindale, according to Gerrard's formula, which is as follows :—"Lean beef, finely minced, eight ounces. Pepsine, sixty grains. Mix and add diluted hydrochloric

acid, two drachms. Water, one pint. Digest for three hours at 130° F.; neutralize with bicarbonate of sodium and strain."

One of the most striking features in these cases of Anorexia Nervosa is the extreme restlessness from which the patient invariably suffers. There is a curious propensity to wander about, and the victim may walk hour after hour in the crowded streets, apparently without any purpose and without the slightest sense of enjoyment. In addition to the anorexia, there is extreme emaciation, with slow pulse, subnormal temperature, and shallow, infrequent breathing. These patients may become consumptive; but to begin with there is usually no signs of tubercle. This restlessness is not confined to people suffering from Anorexia Nervosa, but is often met with in women who have sustained some great domestic loss, or who suffer from prolonged anxiety and inability to sleep. I know a lady, a frail, delicate little woman, who often gets up in the middle of the night, goes out, and walks and walks for hours together, until she is thoroughly worn out.

It is often supposed that Dr. Weir Mitchell was

the inventor or originator of Massage, but I cannot find that he himself has ever preferred a claim to be so considered. In his first edition, and again in the fourth edition of his admirable work, he says:—  
“I do not wish to be thought of as putting forth anything very remarkable or original in my treatment by rest, systematic feeding, and passive exercise. All these have been used by physicians, but as a rule one or more are used without the others, and the plan which I have found so valuable, of combining these means, does not seem to be generally understood. As it involves some novelty, and as I do not find it described elsewhere, I shall, I think, be doing a service to my profession by relating my experience.” This statement is most explicit, and there is abundant evidence to show that although Weir Mitchell did not introduce Massage in any shape or form, to him belongs the honour of initiating the combined method of treatment with which his name will always be associated, and which may be conveniently termed “Weir Mitchellism.”

## CHAPTER X.

### SPINAL IRRITATION AND MASSAGE.

MASSAGE is of the greatest use in the various forms of that peculiar and interesting condition described many years ago by the late Mr. Thomas Pridgin Teale, of Leeds, and the brothers Dr. and Mr. Griffin, of Limerick, and now commonly known as SPINAL IRRITATION. Mr. Pridgin Teale, in his classical work, says :—"The symptoms of this affection consist in an infinite variety of morbid functions of the nerves of sensation and volition, which have their origin in the spinal marrow, and the parts in which these morbid functions are exhibited of course bear reference to the distribution of the spinal nerves. The morbid states of sensation include every variety, from the slightest deviation from healthy sensibility of any part, to the most painful neuralgic affections on the one hand, and to complete numbness or loss of feeling on the other, including pains which may be fixed or fugitive, or

darting in the direction of the nerves, pricking and tingling sensations, a sense of creeping in the skin, of cold water trickling over it, and numerous other states of perverted sensation, of which words are inadequate to convey a description. In the muscular system we find weakness or loss of power, and sometimes a tendency to rigidity. These symptoms sometimes exist in so light a degree that the patient considers them unworthy of notice, and only admits their existence when particular inquiry is made respecting them; the only complaint which he makes being an unaccountable sense of weakness and inability of exertion. In other cases the tremors have excited alarm; sometimes the neuralgic pain in the scalp, or the fixed pain in the muscles, particularly when it occurs in the intercostal muscles, have suggested the idea of serious disease in the brain or in the lungs, and when the pain is seated in the muscles of the abdomen, a fear that some organic disease of the abdominal organ has taken place harasses the mind of the patient."

In these cases tenderness over the spine corresponding to the origin of the affected nerves is

always a prominent symptom. Sometimes, however, it is not complained of until specially inquired for, and now and then its existence is not even suspected by the patient, until she is made to wince when pressure is exerted by the hand of the physician. Nervous pains and neuralgias of different kinds, shifting suddenly from place to place, are amongst the common symptoms of this peculiar affection. They are brought on by the slightest exertion, by lifting a weight, by twisting or straining the back, or by any effort, mental or physical, and usually they are relieved to some extent at all events by lying down. Teale says :—" Irritation of the lower cervical portions of the spinal marrow gives rise to a morbid state of the nerves of the upper extremities, shoulders, and integuments at the upper part of the thorax. Pains are felt in various parts of the arm, shoulder, and breast ; sometimes the pain takes the course of the anterior thoracic branches of the brachial plexus, occasionally the pain is fixed at some point near the clavicle, scapula, or shoulder joint, at the insertion of the deltoid or near the elbow, or shoots along the



course of some of the cutaneous nerves. Frequently one or both of the mammæ become exquisitely sensitive and painful on pressure, and some degree of swelling occasionally takes place in the breast, attended with a knotty and irregular feeling when the neuralgic pains have existed a considerable time in the part." Nausea, retching, and vomiting are not unusual concomitants, and the same may be said of spasmodic cough and difficulty of breathing. Palpitation is often met with, frequently associated with a feeling of pulsation at the pit of the stomach, throbbings in the temples, heats and flushes, and a tendency to faint. Ross says the symptoms begin with headache, sleeplessness, increased nervous irritability, ill-defined pains in the face or extremities, and general feebleness. "The patient now complains of pain in the back, which is aggravated by exertion, and is situated most frequently between the shoulder-blades, or in the back of the neck, and less frequently in the loins. The spinous processes of some of the vertebræ are excessively tender to pressure, and over these processes the surface is found to be very

sensitive when a hot sponge or the cathode of a galvanic current is applied. Tenderness of the vertebræ to pressure is indeed the most constant and important symptom of spinal irritation, and this sign is rendered all the more valuable from the fact that spinal tenderness is never a prominent symptom of myelitis and other organic diseases of the cord. The patient complains of various paræsthesia and neuralgiform pains in the upper or lower extremities, occiput, face, pelvic region, bladder, genitals or viscera; the slightest exertion occasions great fatigue and exhaustion, and walking soon becomes impossible, owing to the excessive pain caused by it. The motor symptoms consist of fibrillary twitchings, spasms of some muscles, choreic movements, hiccough, and even permanent contractures in some cases." Prolonged and spasmodic muscular contraction, as in the case described by Dr. Radcliffe in Reynolds' "System of Medicine," is sometimes the most prominent symptom. In a case described by Dr. and Mr. Griffin, sudden insensibility was always induced by even slight pressure on the seventh or eighth dorsal

vertebra. In another case a sense of faintness was engendered in the same way :—" On examining the spinal cord, although there did not appear to be any tenderness, the sensation of pain was excessively disagreeable to him through its whole course. When the finger rested on one of the dorsal vertebræ he grew pale and terrified, and would have fainted had the pressure been continued. He felt no pain, but a sudden indescribable sensation or thrill through every nerve in his frame, which was inconceivably horrid ; he shuddered at the idea of permitting a repetition of the pressure, and had an unpleasant feeling about the part for the remainder of the day. When a few weeks had elapsed, however, he allowed another examination, with precisely the same results." Dr. Sinclair Coghill, in an able paper on "*Irritable Spine as an Idiopathic Affection*," maintains that a very common exciting cause is exhaustion of nerve force, especially through the brain, and he adduces many lucid arguments in support of this view. This condition, he points out, often results from excessive mental work, as, for example, in preparing for an examination, com-

bined, perhaps, with under feeding and an absence of a fair share of recreation.

I know of no class of cases in which general Massage does so much good as in spinal irritation. Very often the patients have long been in the habit of taking morphia, and this mode of treatment will enable the physician to discontinue its use, or at all events materially diminish the dose. I recently had under my care a lady sent me by Dr. Sinclair Coghill, who was to the best of my belief suffering from this condition. She was probably about forty-two years of age, but might well have passed for thirty-four, or at the outside thirty-six. She was not in the least degree hysterical, and was one of the best read and most accomplished women I have ever met. She was a good linguist, a painter in oils, a musician, and could beat most men in riding, driving, swimming, or even billiards. She worked hard, and when people were in trouble they consulted her in preference to the clergyman of the parish, or even the doctor, knowing that they would command her sympathy and active co-operation, and receive good sound practical advice into the

bargain. It is needless to remark that possessing all these good qualities she was married. She had been ill for some time, but how long she could not say, for she made light of her own ailments, and refused even to discuss her symptoms until she was temporarily incapacitated for active work. She suffered severely from pain in the back between the shoulder-blades, brought on by the slightest exertion, or even by mental worry or anxiety. It was a hot burning pain, and on examination there was found to be marked tenderness over the spinal processes, extending from the first to the sixth dorsal vertebræ, and increased by the application of a hot sponge. The weight of her clothes was a source of discomfort, so that even in winter she went about lightly clad. I suggested a course of Massotherapeutics, and she came to London and took rooms in order to be near me. She was never isolated, but during the first month went out little and had few visitors. She improved under the treatment, but not so rapidly as I had anticipated, and accordingly during the second month we changed our tactics. She no longer remained in

the house, but went out every day, in the morning to visit her *masseuse*, and in the afternoon to pay visits and transact business. The change was beneficial, and she was practically cured, and was well enough to return home and resume her life of hard work. The pain in the back had not completely ceased, but it came on only at long intervals, and after an unusually heavy day. I think my diagnosis was right, but at all events the result of the treatment was satisfactory. The brothers Griffin, although in all probability they knew nothing of Massage, as we understand the term, clearly recognized the value of friction to the spine; they say:—"Friction of the spine along its whole length for a considerable time daily has been employed by most practitioners, who have directed their attention to the complaint. It will sometimes be found a good substitute, where blistering disagrees, and occasionally gives more relief than any other remedy. It seems particularly useful in abating the morbid sensibility of the vertebral column, which is so striking on pressing certain portions of it."

I have had a good many cases of spinal irritation under my care during the last twelve months, and some of them, especially those of long duration, have proved very obstinate. When slow progress is made under Massage, I usually apply menthol and capsicum freely to the spine in the form of a cone. Another equally efficacious preparation is strong capsicum liniment. In a recent case which had resisted all ordinary treatment a plentiful application of capsicum to the back, followed immediately by the hypodermic injection of seven minims of a one in twenty solution of nitrate of pilocarpine, worked wonders. The perspiration greatly intensified the local action of the capsicum without producing any discoloration or destroying the cuticle. Some of these cases, as I have said, are extremely difficult to cure. A few months ago a lady was sent up to me from Derbyshire for treatment. I do not know exactly how old she was, but she was about thirty-one or thirty-two. She suffered from persistent neuralgia from the age of twenty to twenty-three, and since then had been practically a confirmed invalid. She was not actu-

ally confined to bed, but she passed the greater part of the day in her bedroom, and was only comfortable when lying on her back. Her symptoms were very indefinite, but she complained chiefly of a burning pain in the spine, extending from the first to the fifth dorsal vertebræ. I could detect no organic disease, and yet she seemed incapable of any exertion. Her appetite was good, she was not anæmic, her bowels and menstrual functions were regular, and she was apparently anxious to get well. She was not unintellectual, but she had spent the greater part of her life in a small country town and was listless and apathetic and extremely difficult to rouse. I tried first Massage and electricity for six weeks, then painted her back with capsicum, and gave her hypodermic injections of pilocarpine from time to time, but without, I am bound to say, very much benefit. She was an utter disbeliever in medicine, and had tried almost everything except matrimony. Whether that would have cured her I am not prepared to say.



## CHAPTER XI.

### MASSAGE IN ORGANIC DISEASES.

THERE are undoubtedly many cases of organic disease in which Massotherapy proves directly useful. Some time ago I mentioned in the *British Medical Journal* that I had treated with success a gentleman, aged 68, who came to me complaining of shortness of breath, and increasing disinclination to take exercise. He had been in business, and had led a most active and energetic life. Three or four years ago he retired, and from that time experienced a gradual falling off in health. His appetite was poor, his bowels were obstinately confined, and he was nervous and anxious about himself. He was found to have a loud apex systolic murmur, and the heart's action was weak and irregular. I suggested Massage, which was carried out systematically four days a week, for a period of six weeks. He improved from the very first, and before the conclusion of the course, was better than he had

been for many months. His appetite returned; his hands and feet were warmer; the bowels became regular; he slept well at night; and his spirits improved in a most satisfactory manner. A still more striking case has recently been under my care. A young lady, aged 22, was brought to me suffering from palpitation, shortness of breath on the slightest exertion, and extreme œdema of the legs. She was unable to take exercise, and the legs were so swollen that they pitted deeply on pressure. On examination of the chest, she was found to have a loud apex systolic murmur. She had never suffered from rheumatic fever, and her parents had not the slightest idea that her heart was affected. I gave her first digitalis and then strophanthus, but without much benefit. Systematic massage was then resorted to, and almost immediately a diuretic action was induced, and the patient was relieved of her most urgent symptoms. In three weeks her legs had returned to their normal condition, and she was able to walk farther and better than she had done for two years previously. In all cases of œdema of the legs where the tissues are so puffed up that

they pit on pressure, either as the result of cardiac disease or chronic kidney affection, massage is of great value in promoting absorption and improving the circulation.

Dujardin-Beaumetz records the case of a lady, the wife of one of his colleagues, who suffered from albuminous nephritis with considerable anasarca of the lower limbs, which doomed her to absolute rest. Massage removed the œdema, which did not return, although the quantity of albumen in the urine remained unchanged. "Here," says the distinguished Professor, "the effects of Massage are twofold. It acts first of all locally and favours the resorption of effused liquids; then it has a general action, promoting nutrition, augmenting the excretion of urea, and thus combating one of the effects of chronic alterations of the kidneys."

Dr. Carl J. Rossander, the Professor of Surgery at Stockholm, states that nearly a third of the people who come there for treatment by Massage are suffering from some form of heart disease. The results, he adds, are very good, and there is every reason to be satisfied with the benefit experi-

enced. He has seen every symptom of fatty degeneration entirely removed, and valvular diseases so much alleviated, that the patients have ceased to suffer even when the anatomical signs have remained unaltered.

I rarely prescribe Massage for angina pectoris, but the existence of this disease is no bar to its employment. In 1882, a gentleman, aged 71, was sent up to me from the country for severe anginal attacks, which occurred several times a day and were increasing in frequency. I prescribed nitro-glycerine tabloids and heard no more of him till December, 1887, when he came to see me, and told me that he had taken the nitro-glycerine, without a single day's intermission, ever since his last visit. He could not tell me exactly how much he took, it varied from day to day, and with the amount of exercise or exertion; but he thought on the average that he got through, in the course of the week, six bottles of tabloids, containing twenty-five in each bottle. These were gr.  $\frac{1}{6}$ , so that he took about three grains of pure nitro-glycerine in the week. This was quite enough to ward off the attacks, and

he found that with care he could keep free from them entirely. What he wanted to see me about was not the angina pectoris, but an attack of paralysis, which he had four years ago, leaving the right arm and leg almost powerless. He wished to try Massage for this, although there seemed but a slender chance of any material benefit accruing from the treatment. A skilled operator was accordingly sent down to Dorking, where he lived, every day for six weeks, and although, as had been anticipated, there was no very marked improvement in the condition of the paralyzed parts, it was satisfactory to learn that the manipulations could be performed in a patient subject to angina pectoris, without producing the slightest inconvenience, or bringing on the attacks. It may be said that this evidence from the angina pectoris point of view is purely negative, but negative evidence is sometimes of value.

In another case of angina pectoris Massage seemed to me to be distinctly beneficial as an accessory agent. The patient, who was fifty-three years of age, was sent up to me from Llanelly. He

was a large mill-owner, and had always attended personally to his business, besides taking an active share in political life. In the previous August he had had a great deal of worry and anxiety, in consequence of a fire, which had consumed his premises and the greater part of the stock. He was perfectly well until the fourth of January of the following year, when he experienced a sense of pain and constriction in his chest, whilst walking briskly up hill. These attacks occurred on the slightest exertion, and on January 18th, feeling that he could go on no longer, and acting on the advice of his doctor, he came up to town, and placed himself under my care. He bore the journey badly, and, when I saw him, was suffering from a prolonged attack of anginal pain. I gave him a dose of nitroglycerine, and after getting him to bed examined him carefully. He was fairly well nourished, but had evidently lost flesh. His pulse was intermittent, and his blood-vessels had undergone marked degeneration, but the heart sounds were normal. There was a trace of albumen in the urine, but no casts were detected. I ordered him a mixture,

containing a drachm of the one per cent. solution of nitro-glycerine, four drachms of spirits of chloroform, half a drachm of tincture of capsicum, with four ounces of peppermint water, the directions being that he should take two drachms every three hours, with an extra dose immediately at the onset of each attack. He was also ordered a bottle of nitrite of amyl, to use in cases of emergency. Three days later he reported that he had had no difficulty in taking the nitro-glycerine, that he had had no occasion to use the nitrite of amyl, and that the attacks were less frequent, even on exertion, and of shorter duration. I doubled the dose of nitro-glycerine, and ordered gentle effleurage for the arms and muscles of the chest night and morning. On the 25th he found that he could walk 400 yards without difficulty, provided he took a dose of the nitro-glycerine mixture before starting. He had a little bronchial attack, for which I ordered pure terebene and pinol to be taken frequently. He complained greatly of coldness of the feet, and it was suggested that he should wear pure woollen socks, changing them frequently, and keeping one pair in

readiness before the fire. At times he had a good deal of pain in the left shoulder, running down the inner side of the arm to the little finger. For this, his daughter, who had some knowledge of electricity, undertook to use first the constant and then the intermittent current. On this treatment he steadily improved, and on January 26th was able to walk slowly for half an hour. The confinement and want of exercise gave rise to an inactive condition of the liver, for which he took two grains of Euonymin at bed-time, with a dose of Carlsbad salt in the morning. It was found necessary to keep the bowels acting freely. This treatment was continued with but little intermission until June, when he went to Yorkshire and took a farmhouse on the moors. I saw nothing more of him until the end of the following September, when he returned looking the picture of health. He had gained a stone in weight and had entirely lost his anginal attacks. He had not the slightest difficulty in walking even up hill, and told me as an example of what he could do, that a few days before he had driven a dogcart 28 miles, and had walked over six miles without the



containing a drachm of the one per cent. solution of nitro-glycerine, four drachms of spirits of chloroform, half a drachm of tincture of capsicum, with four ounces of peppermint water, the directions being that he should take two drachms every three hours, with an extra dose immediately at the onset of each attack. He was also ordered a bottle of nitrite of amyl, to use in cases of emergency. Three days later he reported that he had had no difficulty in taking the nitro-glycerine, that he had had no occasion to use the nitrite of amyl, and that the attacks were less frequent, even on exertion, and of shorter duration. I doubled the dose of nitro-glycerine, and ordered gentle effleurage for the arms and muscles of the chest night and morning. On the 25th he found that he could walk 400 yards without difficulty, provided he took a dose of the nitro-glycerine mixture before starting. He had a little bronchial attack, for which I ordered pure terebene and pinol to be taken frequently. He complained greatly of coldness of the feet, and it was suggested that he should wear pure woollen socks, changing them frequently, and keeping one pair in

readiness before the fire. At times he had a good deal of pain in the left shoulder, running down the inner side of the arm to the little finger. For this, his daughter, who had some knowledge of electricity, undertook to use first the constant and then the intermittent current. On this treatment he steadily improved, and on January 26th was able to walk slowly for half an hour. The confinement and want of exercise gave rise to an inactive condition of the liver, for which he took two grains of Euonymin at bed-time, with a dose of Carlsbad salt in the morning. It was found necessary to keep the bowels acting freely. This treatment was continued with but little intermission until June, when he went to Yorkshire and took a farmhouse on the moors. I saw nothing more of him until the end of the following September, when he returned looking the picture of health. He had gained a stone in weight and had entirely lost his anginal attacks. He had not the slightest difficulty in walking even up hill, and told me as an example of what he could do, that a few days before he had driven a dogcart 28 miles, and had walked over six miles without the

slightest inconvenience. Six months later he reported that he was quite well.

I should not like to assert positively that Massage does good in goitre, but in one case it certainly seemed to reduce the swelling. A young lady, who had been for some years at school in Switzerland, was sent to me from Constantinople for treatment. Her friends had been assured most positively that she was suffering from aneurism of the carotid artery, but Sir Joseph Lister was unable to confirm the diagnosis and agreed with me that it was a bronchocele. Massage was practised assiduously for nearly six months, and the swelling was reduced to such an extent as to be hardly noticeable. It cannot be regarded, however, as a test case, for I was anxious to get my patient well as quickly as possible, and gave her iron and large doses of belladonna the greater part of the time. I applied iodine liniment twice, but it produced a permanent pigmentation of the skin, and I fear did more harm than good. The result I admit is inconclusive, but still if an opportunity offered again, I should not hesitate to employ Massage, as it seemed to me that its effects were beneficial.

Massage is most useful as a nervous sedative. Graham says, that "upon the nervous system as a whole, Massage most generally exerts a peculiarly delightful, and at the same time profoundly sedative and tonic effect. While it is being done, and often for hours afterwards, the subjects are in a blissful state of repose, they feel as if they were enjoying a long rest, or as if they had just returned from a refreshing vacation ; quite frequently it makes optimists of them for the time being. An aptitude for work usually follows, though generally those who submit to this treatment feel gloriously indifferent, and needless apprehensions are dispelled." In INSOMNIA general Massage at bed-time undoubtedly promotes sleep. Several cases have come under my observation in which it has been resorted to with marked success. The result is not only certain but prompt, the patient usually enjoying a good night's rest after the first *séance*. It has the great advantage over all narcotics that there are no disagreeable after-effects.

A short time ago, a gentleman, aged 35, came under my care for treatment, having been sent by his brother, a well-known physician in Ireland. He

had been engaged in business since he was nineteen, and the senior partners having gradually died off he had the responsibility of a large store on his shoulders. He was of a nervous temperament, and he told me that when he went home he was always thinking about the work of the day, and was restless and disturbed at night. He slept badly and his sleep seemed to do him no good. He was pale, worn, and anxious looking, but was not suffering from any organic disease. He had a great dislike for sedatives and narcotics, and refused to take any medicine except a tonic. At first I was puzzled what to do for him, but at his brother's request I prescribed Massage. He was obliged to return home in ten days, and could give me no more time. The Massage was applied every night at bed-time for half an hour, and at the expiration of the time mentioned he was very much better. He was so satisfied with the result that he promised that as soon as business matters would admit of a longer absence from home he would come to London for a more extended course of treatment.

I know several stockbrokers who resort systema-

tically to Massage. They say it "calms the nervous system," and allays the excessive irritability and sense of tension from which they so frequently suffer. There are other people who without being either Brokers or Jobbers are always worrying about "Berthas," or "Saras," or "Doras," and they too are benefited by the same treatment. At the same time it must be admitted that Massage does not suit everybody, and it certainly should not be resorted to without adequate advice.

Ordinary medical rubbing often does a great deal of harm in these cases. Dr. Walter Johnson, of Great Malvern, in his work on the "Anatriptic Art," says, "rubbing has a very peculiar effect upon the nervous system. I have produced sleep by delicate soothing strokings of the upper part of the back in a sleepless patient, and everyone who is rubbed appropriately has a tendency to sleep. But there is a way of rubbing which irritates and excites the nerves, and an unskilled rubber, rubbing in this manner, will do frightful mischief. A lady suffering from spinal weakness came to Malvern for change of air. Here she was introduced to a

female rubber who professed to be able to do great things for her spine. The lady wrote to her medical attendant, who resided in a distant town, and received his permission to be rubbed. So the rubbing took place and was persevered in, in spite of a continued increase of unfavourable symptoms, until at last the lady grew so ill that I was sent for. I found her suffering from acute congestion of the brain, produced entirely by the injudicious rubbing."

There are many general or constitutional diseases in which Massage is useful. It would at first sight perhaps hardly be supposed that Massage would do much good in ANÆMIA, and yet in obstinate cases it is a most valuable accessory. Persistent anæmia is often met with in women who take little exercise, and remain indoors the greater part of the winter. Iron up to a certain point does good, but after a time it is not assimilated, and fails to do any good, and the patient no longer improves. A short course of Massage then proves most useful, and on resuming the iron there is immediate improvement.

Massage is useful in PHTHISIS. Several cases have been brought under my notice in which it has

done good. Dr. Charles Theodore Williams, in that excellent work on "Pulmonary Consumption," published by him in conjunction with the late Dr. C. J. B. Williams, says: "Under its influence appetite and digestion improve, and the circulation becomes more vigorous, colour returns, and the quantity of food consumed is sometimes astonishing."

In the *British Medical Journal* of April 20th, 1889, the Rev. D. T. Masson, M.D., gives an interesting account of an old Highland form of chest Massage, practised for many years in the counties of Ross, Sutherland and Caithness, for the cure and prevention of consumption. The general mode of procedure will be gathered from the following extract:—"The patient, stripped to the loins, was seated on a high stool, while the operator, usually a strong, healthy, muscular woman, stood behind. The patient was first made to raise his arms and join hands over the top of his head, or behind the neck. The operator now advanced a hand on each side of the patient, from behind forwards, till both her hands met over the third and



fourth segments of the sternum, whence with firm & equable pressure, her palms, lubricated with sweet fresh butter, were swept downward and backward, following the line of the lower border of the chest. After two or three similar passes of the operator's palms over the same region, and with increasing pressure, her fingers were pushed well under the lower border of the chest and the false ribs, pulling them steadily outwards. After this the backward sweep of her palms was carried step by step up the chest, sweep after sweep coming nearer the clavicle, where again the tips of the fingers, though in a modified way, and to a greatly lessened extent, played the same part as they had been made to play at the lower border of the chest." The manipulator ends up by an attempt to "open out the chest," to evert that is the margin of the lower ribs, and to direct forward the xiphoid cartilage. This treatment practised systematically in the good bracing antiseptic air of the North, would, doubtless, exert a very favourable influence in arresting the progress of the disease.

I have found Massage of much value in certain

stages of SYPHILIS, especially in women. The patient has perhaps been well treated, and has taken mercury in small doses at intervals for a year or more, and all the active symptoms have subsided. A general condition of debility, however, still persists, which is intensified rather than relieved by medicinal treatment. Massage may then be resorted to with great benefit, the patient rapidly improving in general health. Massage was of service in relieving pain in the case of a lady whose left breast had been removed for cancer. There had been a recurrence of the disease and the axillary glands were extensively involved. She suffered greatly from a sensation of "contraction" in the corresponding arm. Massage of the arms, legs and body, always afforded temporary relief, the patient remaining for some time in what she described as a "mesmeric" condition, in which pain was completely abolished. It must not be supposed from the fact of my referring to this case that I advocate the employment of Massage in cancer. Nothing can be further from my intention. Dr. Arthur Jackson, of Sheffield, contends that Mas-

sage is wholly bad where there is malignant cachexia, and I am inclined to agree with him, although the evidence on this point is as yet not very conclusive.

Some months ago I saw a lady who passed with each motion, and with considerable pain and difficulty, large lumps of undigested fat. I was in some doubt as to the exact nature of the complaint, but regarded it as an affection of the pancreas. Massage of the abdomen did good, but the patient was more speedily relieved by hypodermic injections of pilocarpine.

It would hardly seem likely that Massage would prove of much value in any of the acute specific diseases, but Professor Maclean, of Netley, speaks highly of its utility in the treatment of intermittent fever. He says that if steadily and skilfully performed by an expert, it diminishes congestion of the abdominal organs, distributes the blood more equally throughout the system—a powerful aid to its depuration—regulates the action of the bowels without the necessity for resorting to aperients, removes the oppressive feeling of languor and lassitude, and

promotes cheerfulness and a healthy action of the skin.

In the CONVALESCENCE from many diseases, acute and chronic, Massage is most useful. It improves nutrition, and the patient often gains strength very rapidly indeed. In other cases of general weakness and debility it often proves beneficial.

A few months ago a tall, slim, intellectual looking woman called on me to consult me respecting her general health. She was reticent and evidently wished me to prescribe for her without entering into details respecting her symptoms and history. This was impossible, but little by little, as I came to know her better and appreciate her good qualities, I learnt that she was a singer, that she was passionately fond of music, and had studied under some of the best masters both in Germany and Italy. She was blessed with a fine contralto voice, and had taken to the stage as a profession. She had been a success, but although her salary was a large one she was not happy, for her friends did not approve of her choice and threw cold water on her

efforts. She was determined to show them that their objections were unfounded and unjust, and with the view of convincing them led the life of a recluse, studying hard and persistently, and declining invitations to dinners and pleasant little supper parties. The strain of an unnatural life told on her, and soon her appetite failed and her strength gave way. One night, to her dismay, something went wrong with her voice, and from that moment her spare time was devoted to the throat specialists. They were all kindness and attention, but beyond a little doubtful congestion could find nothing wrong with the vocal cords. She speedily lost confidence in herself, and threw up all her public engagements. I attributed her symptoms to worry and anxiety intensified by insufficient feeding, and suggested Massage. The treatment was carried out systematically for some weeks with marked benefit to her general health and improvement to her digestive powers, but her voice was gone for ever, and I fear she will never sing again, except as a recreation and for the gratification of her friends. Her career was blighted

---

by over-consciousness. I give this as an isolated case simply for what it is worth, and do not pretend that Massage is a specific for hypersensitivity.

My friend, Dr. Dujardin-Beaumetz, of Paris, speaks well of Massage in NEURALGIA, and I can to some extent confirm his experience. In these cases and in cases of frontal headache and megrim I usually advise "mechanical nerve vibration," according to the method already described. The thumb or finger is pressed firmly on the tender spot if one can be found, or if not, on the course of the nerve, and the vibration is continued for several minutes or until the pain is ameliorated. In neuralgia of the limbs the same mode of treatment may be resorted to with advantage.

Some two years ago, Dr. G. Norström, of Paris, published an admirable work on the treatment of Megrim by Massage. He finds as the result of numerous observations, that this affection is not uncommonly associated with inflammatory deposits in the muscles of the neck and head. He gives a table showing the relative frequency with which they

occur in different situations, from which it appears that they are most commonly met with in the posterior cervical region. In addition there is



*Fig. 15.* This figure, taken from a photograph, speaks for itself. The operator is performing effleurage for the relief of frontal headache.

sometimes a thickening of the nerve sheath, and there may be induration of the subcutaneous cellular tissue. These deposits are not easy to detect, but

they may be recognized by the practised observer, and will be found to be much more tender than the surrounding parts. They are common in the tissues of the forehead and temples, and the pain often radiates from them to the vertex. Not uncommonly, too, the skin itself is indurated and extremely sensitive. Vretlind has satisfied himself of the existence of these deposits, and thinks that no physician should attempt to treat a case of neuralgia or megrim without searching for them. They can be removed by Massage, and the symptoms then entirely disappear. Norström gives a detailed account of thirty-six cases, some of them of many years' duration, in which this mode of treatment was successfully pursued. The deposits are sometimes difficult to disperse, and the sufferer has to exercise a good deal of patience. Henschen, speaking of these deposits, says they are often met with in the subcutaneous cellular tissue rendering the skin less movable than usual. On the forehead they frequently assume a cartilaginous hardness and are arranged in lines varying in length from a few millimetres to two centimetres, and following the



course of the supra-orbital nerve. It is only by comparison of the two sides that it is possible to detect their existence. It is easy to distinguish them from normal structures by their hardness and sensibility to pressure, and by the fact that the pain radiates from them towards the vertex. They may be due to chronic hyperæmia or to inflammation of the neurilemma. On the temples they are rarely observed, except in cases of megrim when they follow the course of the temporal artery. On the scalp they are not readily detected, but sometimes a cartilaginous growth is found on the facial nerve. It is difficult to say whether these swellings are due to abnormal development of the muscular, nervous, or subcutaneous tissue, or of the periosteum.

As an accessory measure I recommend the administration of tabloids of antipyrine each containing five grains, six or eight being taken in the course of the twenty-four hours. This is a valuable method of treatment, and in fifteen cases in which I have employed it the results have been most satisfactory, immediate relief being obtained usually after the failure of many other remedies. It is stated that

antipyrine very often gives rise to erythema, urticaria, and other inconveniences. I do not think this is often the case, for I have prescribed it largely, and have met with but few instances in which it produced a rash on the skin.

In congestive headache effleurage should be performed gently over both the external and internal jugular veins, so as to facilitate the passage of venous blood. The effect is almost immediate, relief being obtained in a few minutes.

In an article by Dr. George W. Jacoby, of New York, which recently appeared in the *Journal of Nervous and Mental Diseases*, a good account is given of Massage of the neck. The method advocated was originally introduced by Gerst, of Wurzburg, who found that by practising effleurage over the jugular veins he could abstract blood from the brain and meninges. He noticed that patients who before the *séance* complained of a feeling of pressure and congestion in the head with flushed face and dilated pupils, were at once relieved by this simple procedure.

Professor Max Schüller, of Berlin, has recorded

fifteen cases of sciatica successfully treated by Massage, and is convinced of its superiority over all remedial agents commonly employed. The pain quickly abates, and the power of walking improves daily. The duration of treatment is, on an average, two weeks and a half, but in one case a cure was effected in nine days, and several others in from ten to fourteen days. One patient abandoned the treatment after five days in favour of electricity and vapour baths, but deriving no benefit, returned to the Massage, and was cured in nineteen days.

I have treated many cases of sciatica by Massage with marked success. I remember one case in particular—a very obstinate one. The patient was a railway engineer, and for some time had been actively engaged in constructing a submarine tunnel. The water came in almost as fast as they could pump it out, and he was pretty constantly exposed to wet and damp. After some three or four years of this work he went out to Simla to build a railway, and had a good deal of riding and driving. Whether it was the damp, or the heat, or the change, I do not know, but at all events he got an

attack of sciatica in the right leg, which proved so obstinate that he was invalided home. I treated him with large doses of iodide of potassium, Massage, and the constant current. When first he came to me he could walk only with a stick, but in a month he could get about quite freely and without effort. He then went into the country for change of air, and returned a month later practically cured.

Massage has occasionally failed in my hands, and I then usually resort to hypodermic injections of antipyrine, giving half a gramme dissolved in twenty minims of water once or twice a day. In a very obstinate case under my care at the Westminster Hospital, this treatment worked wonders, the patient sleeping so soundly after the first dose, as the result of freedom from pain, that we thought for the moment that a mistake had been made, and that he had had morphine. This was my first experience of this method of treatment, but now I am not surprised at the prompt relief which it affords. In another very obstinate case the antipyrine after a time lost its effect, and I then gave tabloids of anti-febrin, which answered admirably.

A very good method of treating sciatica is to moisten the skin with oil of sandal wood, or oil of Eucalyptus, and then to move up and down the thigh a cupping glass, exhausted by means of an india-rubber ball. The skin is reddened, and the oil is rapidly absorbed.

## CHAPTER XII.

### MASSAGE IN SURGICAL AFFECTIONS

THERE seems to be a general consensus of opinion that Massage is well adapted for the treatment of certain chronic JOINT AFFECTIONS, and most of those I saw treated by Von Mosengeil were such as would in this country be considered incurable, or would drift into the hands of "bone-setters." Reibmayr has demonstrated its value in chronic synovitis, whilst Norström's article on *Massages dans les Maladies des Articulations et leur annexes* is well-known. Friction with effleurage is the method employed. Massage is of the greatest possible value in the treatment of sprains, both acute and chronic. The old-fashioned plan was rest in bed and evaporating lotions; the modern treatment is Massage and nothing else. As a rule Massage is not well adapted for cases in which there is acute inflammation, but an exception has to be made for sprains, a host of observers having re-

corded their opinion in favour of the innovation. The pain, the discoloration and the swelling disappear as if by magic. It is important to begin the treatment at once, there being nothing to be gained by delay. Norström records the case of a lady, aged 46, who slipped and sprained her ankle. The pain was very acute and she was unable to walk. She was nervous and excited, and cried out when the part was touched. There was some swelling in front of the malleoli, but fortunately no bones were broken. Very gentle effleurage was resorted to for a quarter of an hour, and it was then found that the joint was much less painful, and could be moved more readily. The treatment was repeated, and the same evening she was able to proceed to Saint Germain where she lived. On the previous occasion she met with a similar accident, and was confined to her bed for six weeks.

Dr. Douglas Graham records the results of the Massage treatment in 308 cases of sprains, contusions of joints and distortions, the average time needed for recovery being nine days. The average of 55 cases treated by rest and compresses was 26

days. The Massage average would have been better had it not been for 39 cases which were not seen until from ten days to three weeks after the accident. These cases took on an average 21 days to get well. Berghmann and Helleday, who were pupils of Mezger, give a somewhat sensational account of a case of chronic circumscribed synovitis cured by Massage. They say :—"The first case of the kind we were fortunate enough to see made a great impression on us. The patient was an old gentleman who had suffered for three months from weakness of the right leg which had increased little by little until he was quite unable to get upstairs, and after walking a few steps was obliged to stop even on a level ground. There was no pain, only a constant feeling of weight and weakness in the affected member. There was no sore or abrasion and apparently no articular inflammation. He had been under the care of many physicians and surgeons, many of whom thought it was rheumatic, whilst others were equally certain that it was of nervous origin. One of them diagnosed paresis of the muscles of the leg due to old standing curvature.



When Mezger examined him he could find nothing wrong with the spinal column. The muscles of the affected leg were atrophied, and the temperature was distinctly lower than on the other side. The hip-joint and the ankle-joint presented no sign of disease. Active or passive movements of the knee gave rise to no pain, and there was no effusion and no swelling. Suddenly Mezger placed his finger on a spot limited to the patella and exclaimed 'it is there.' He diagnosed chronic circumscribed synovitis and explained that the wasting of the muscles was due to defective nutrition caused by long disuse. After four weeks' Massage the patient was cured with the exception of a little difficulty in getting upstairs."

Dr. Graham points out that the sooner the treatment is commenced the shorter is its duration. The advantages resulting from Massage are speedy relief of the pain and swelling, and earlier and more perfect use of the joint and limb. Bergham has treated successfully by Massage no less than 145 cases of recent traumatic joint affections, including contusions, distortions, and synovitis with

effusion. Seventy cases affecting the ankle-joint recovered on an average in six days, whilst 38 cases of old sprains required 22 days each. It was found that after a plaster of Paris dressing had been applied even for a very short time, the duration of the treatment was much prolonged. Nélaton, Sée, Demarquay, Labbé, Duplay, and others speak highly of the value of Massage in affections of the ankle-joint. For stiff joints of various kinds nothing could be better. In a case recently under my care, a cure was effected in six days. Dr. Roux, of Lausanne, says that it acts almost like magic in cases of synovitis, whether of rheumatic origin or resulting from an injury. In the Prussian army, where treatment by Massage is in certain cases obligatory, it is found that the average duration of the disability from sprains not treated by Massage is twenty-seven days, whilst when Massotherapy is resorted to it is only nine days. These results based on the observation of a large number of cases are very striking.

In the last edition, I stated that many English surgeons were employing Massage in the treatment

of sprains, and would in due course publish the results of their observations. I have much pleasure in calling attention to an interesting chapter on Massage in an excellent work on "Sprains," by Mr. Mansell Moullin.

The author, after describing the methods of procedure, points out that the best proof of the power possessed by Massage over absorption and circulation is shown by the ease with which swelling and tension can be made to disappear from sprained joints. "In recent cases" he says, "the greatest care is required, and nothing is so likely to increase the mischief as rough handling of the part; but when it is carried out quietly and gently by one who has had some experience, it is very difficult to find anything that acts in so perfect a manner. The whole limb perhaps is swollen, the joint distended with blood, the skin shining and tense, much too hot to the touch and exquisitely tender, but all this vanishes as if by magic. The tension disappears as the fluid is carried off, the pain is relieved, the temperature falls, the natural outline begins to appear once more, extravasated blood is

broken up, the *débris* dispersed and adhesions between the torn and bruised surfaces effectually prevented. Sometimes even tendons which have been turned almost out of their grooves by the accumulation of fluid in their sheaths can in this way be restored to their positions without further assistance. Such results as these cannot, of course, be obtained in every case of recent sprain, and even when the treatment is successful in relieving the pain and getting rid of the swelling it must always be remembered that time is needed for the repair of structures that have been torn. I am convinced, however, that especially when the stress of the injury has fallen on the muscles, and when the laceration is not too great, this plan may be adopted not only with the greatest safety, but with an infinitely better prospect of speedy recovery, than under the old established method of bandaging and rest." Speaking of more chronic causes, where the effusion is denser and firmer, and where, owing to the long-continued distension, the tissues have lost their tone and become sodden and œdematous, the author recommends that Massage should be applied with

greater freedom. "The solid part of the effusion is broken up and disintegrated by the pressure, so that it is driven into the absorbents and carried away by the increased force of the stream, the chronic congestion is dispersed, the blood circulates more freely, the tone of the part returns, and the lifeless, helpless look disappears day by day. The improvement is often surprising in its rapidity. A joint that has remained for weeks cold and inactive, the seat of a constant wearing pain, and quite incapable of performing its proper movements, in a very few sittings begins to recover its flexibility, loses the pain, and allows itself to be handled, and passive movements to be carried out with ease and readiness." Mr. Mansell Moullin finds that the most striking results are furnished by cases, which have been treated by bandaging in the conventional way, where the œdema still persists, and where there are no adhesions other than those resulting from rigidity of the capsule and the swelling of the soft tissues.

Dr. A. Landerer recommends Massage in the treatment of flat foot, and states that he has cured

eight cases by this method. He considers that it acts by strengthening the muscles concerned in maintaining the condition of the arch of the foot. In one well-marked case a cure was effected in eight weeks.

In that common domestic affliction, a black-eye, Massage, if properly performed, will remove all traces of the disagreement in three days. This is better than the plan usually recommended of painting the other eye in order to ensure uniformity.

There is a curious work which gives some very interesting information on the use of various forms of friction in the treatment of sprains and joint affections generally. It is entitled "A Full Account of the System of Friction as adopted and pursued with the greatest success in cases of Contracted Joints and Lameness from various causes, by the late eminent surgeon, John Grosvenor, Esq., of Oxford, with observations on those cases to which it is most applicable, by William Cloebury, Member of the Royal College of Surgeons of London, and one of the surgeons to the Radcliffe Infirmary, Oxford." Although published as recently as 1825, it

is a comparatively rare work, there not being a copy in any of the medical libraries of London. The third edition contains a reprint of the life of Mr. Grosvenor, and is illustrated with his portrait. His method of manipulation is described at considerable length, but is hardly worth reproducing, as it is simply an imperfect form of Massage.

His results, however, appear to have been wonderfully good, and people came from all parts of the world to be under his treatment. He selected his cases carefully, and declined to undertake those which, in his opinion, would not yield speedily to treatment. He recommended friction for "contractions of the joints, unattended with inflammatory symptoms proceeding from colds, damp beds, or rheumatism." He thinks, too, that it is useful "where there is too great a secretion of the synovial fluid of the joints, particularly in the knee-joints." Good results have, in his hands, followed this treatment "in incipient cases of white swelling." He by no means confines himself to surgical cases, but devotes much attention to children "who are weakly or rickety, or in whom the circulation is

languid." It is recorded of Mr. Grosvenor that he always insisted that his patients should "work with him." "Your own constant exertions are necessary as well as mine," he would say. He occupied a good deal of his leisure time in walking with his lame patients, in order that he might judge for himself what progress they were making. I cannot gather from the work itself whom he employed to carry out the requisite manipulations, but the following extract from "The Black Mousquetaire" throws some light on the subject:—

"'Oh woman!' Sir Walter observes, 'when the brow  
's wrung with pain, what a minist'ring Angel art thou!'  
Thou'rt a 'minist'ring Angel' in no less degree,  
I can boldly assert when the pain's in the knee:

And medical friction Is, past contradiction,  
Much better perform'd by a She than a He.

A fact which, indeed, comes within my own knowledge,  
For I well recollect, when a youngster at College,

And therefore can quote A surgeon of note,  
Mr. Grosvenor, of Oxford, who not only wrote  
On the subject a very fine treatise, but, still as his  
Patients came in, certain soft-handed Phyllises  
Were at once set to work on their legs, arms, and backs.  
And rubb'd out their complaints in a couple of cracks."



Massage is undoubtedly useful in some forms of chronic knee trouble. I recently had under treatment a young fellow from Cambridge, who, whilst playing football, had twisted his knee outwards, three or four men falling on him. It is not very clear what happened, but he must either have strained the external lateral ligament, or displaced the semilunar cartilage outwards. He had had a good deal of advice, and had rested for many months but without much benefit. He could walk but with considerable pain and difficulty, and anything like active exercise was out of the question. A careful examination of the joint showed nothing wrong. With the concurrence of Mr. William Rose and Mr. Boyce Barrow, of King's College Hospital, I ordered a cold douche and Massage to the joint daily. At the expiration of a month there was considerable improvement, and with the help of a carefully constructed support he was able to get about fairly well, though I am afraid his football days are over.

In a case of "weak ankles" Massage was useful. The patient, a retired general, found great difficulty

in getting about in consequence of the giving way of his ankles on the slightest exertion, but experienced great relief from a short course of treatment.

If some months ago I had been asked if Massage would be likely to do good in cases of fracture, I should have answered unhesitatingly in the negative. Now, however, I can answer equally positively in the affirmative, and I must acknowledge my indebtedness to Dr. Arvid Kellgren, a distinguished graduate in medicine of the University of Edinburgh, for setting me right on this point. Dr. Kellgren has been kind enough to take me to see a lady who, five weeks ago, fractured her fibula in the lower third whilst stepping from her carriage. Dr. Kellgren was fortunately close at hand, and treatment by Massage was commenced at once. I am assured that no splint of any kind was employed, and that the lady was never confined to her bed. The manipulation was carried out for about half-an-hour twice a day for the first week, and then only once a day for the remainder of the course. The lady is now perfectly well, and can walk up and down

stairs as easily as ever, and without assistance of any kind. It was a simple fracture, and the site of union can be distinctly felt. The lady is, I should think, about forty years of age, and she is not a very favourable subject for treatment as she suffers from gout in both feet. Dr. Kellgren's manipulations, which I witnessed, consisted chiefly of what we call *pétrissage*, commencing, however, from above the fracture and working downwards, with, in addition, slow and deliberate *effleurage*. I had also an opportunity of witnessing the results of a case of fracture of the humerus near the elbow joint, and one of fracture of the tibia, the result of a fall, both of which had been treated in a similar manner and with equal success. I find on reference to the literature of the subject—which I had previously overlooked—that this method of treatment is advocated by several continental writers. Dr. Lucas Champonnière, of Paris, points out that in the case of fractures near and into joints, immobilization is attended with considerable danger, whereas Massage, skilfully applied, acts well from the first, relieving pain, favouring repair, prevent-

ing stiffness, and reducing the duration of the treatment. He mentions the case of a doctor who in alighting from a tramcar twisted his foot, and experienced such great pain that he had to be taken home in a cab. On examination it was found that there was a fracture of the fibular *par arrachement*. Immobility and daily Massage avoiding the seat of fracture were ordered. The pain and swelling diminished gradually, and twelve days after the accident he was able to put on a boot and walk. Another remarkable case was that of a high government official who fell from his horse and fractured the radius. Massage was resorted to, and we are told that in forty-eight hours all pain had disappeared. At the expiration of four days he could write fairly well, and in a fortnight he had recovered every movement of the arm. Although it was a serious accident he had to employ a substitute only two days.

Dr. Georges Berne contributes to *La Pratique du Massage*—the French edition of this work—an admirable account of his method of treating fractures. He shows that Massage (1) promotes cir-

culation in the lymphatics and blood-vessels, (2) preserves the normal condition of the skin, (3) stimulates the cutaneous nerves and maintains the temperature, (4) excites and promotes muscular contraction, and (5) ensures mobility in the joints and parts adjacent to the seat of injury. He finds that fractures of the fibula unite so quickly that the patient can walk without risk on the seventeenth day. A plaster of Paris is applied so that it can be readily removed for the Massage, and re-adjusted by means of straps and buckles. This obviates the wasting of the muscles so frequently met with in cases treated by other methods. It is desirable that the treatment should be commenced as soon as possible after the accident. The treatment of all cases of fractured radius or tibia may be conducted on this plan, for when there is only one bone broken, the other acts as a kind of natural splint. In fracture of both bones it is necessary to wait until some union has taken place, in order to avoid displacement, and then effleurage must be resorted to very gently, and in such a way as not to interfere with the apposition of the parts. In compound

---

fractures nothing can be done until the integuments are healed and the fracture has been reduced to the condition of a simple one. In fractures of the olecranon or patella, the sooner treatment is commenced the better. In fractures of the radius without displacement, no splint is necessary, a simple sling serving as sufficient support for the forearm. In a case under Dr. Berne's care, the muscular power as measured by the dynamometer increased from eight to thirty-six kilos in sixteen days. In fracture of the radius with displacement, a splint is necessary, and twelve or fourteen days should elapse before resorting to Massage.

## CHAPTER XIII.

### MASSAGE IN POISONING.

**MASSAGE** is undoubtedly of much value in the treatment of many cases of poisoning, both acute and chronic. I would especially recommend it in acute chloral poisoning as a means of maintaining the temperature of the body. It is, I am sure, unnecessary to remind my readers that we technically recognize two forms of chloral poisoning, the chronic and the acute. When chloral is taken habitually as a sedative, as many ladies take it night after night during the season, and it produces injurious effects, we speak of it as chronic chloral poisoning, or "chloral tippling." When, however,

a large dose is taken with suicidal intent, and the patient is in danger of losing his life, we call it an acute case. A not over-wise critic recently objected, that in these so-called acute cases there would be no time to obtain the service of a *Masseur*, in evident ignorance of the fact that even after a large dose has been taken, life may be prolonged for many hours and even one or two days. I remember a case in point. A young and beautiful woman, recently married, took a large dose of chloral one night about ten o'clock, because her husband had some papers to read and would not come to bed. I saw her at midnight and she was then profoundly insensible, and so seriously ill as any respectable young married woman could wish to be. She was deadly cold, and I had to drag her round the room in her night-gown, followed by the cook and the housemaid, for the greater part of the night. She recovered, but it was not till daylight that she was out of danger. This occurred in London, and not the slightest difficulty would have been experienced in obtaining skilled assistance in performing Massage had it been considered



advisable to resort to it. In out-of-the-way country districts it would not be so easy, but it must be remembered that it is only in large towns that husbands decline to go to bed, and sit up late at night to read legal documents. In one of the most determined cases of suicide I ever witnessed, the poor fellow had taken three hundred grains of chloral and a hypodermic injection of thirty grains of morphine. Life was prolonged for four hours, and there was no difficulty in obtaining any amount of Massage. I can only repeat that I consider the Massage treatment an important factor in what to do in these cases, and I certainly advise its employment.

In the treatment of chronic lead poisoning, Massage is useful, not only for the colic, but in conjunction with electricity for the paralyzed muscles. In a case recently under my care it was of essential service, the patient regaining power over his wrist much more quickly than he would have done with electricity alone. All cases of lead poisoning are not benefited by Massage. If the muscles are so wasted that they will not contract on the applica-

tion of the electrical current there is very little hope of their complete restoration. A short time ago, I had under my care at Westminster Hospital a painter, who had suffered from wrist-drop for nine years. His electrical condition was examined by Dr. Syers, who reported that a Faradic current, which applied to the trunks of the median and ulnar nerves, caused contraction of the muscles supplied by them, when used to stimulate the musculo-spiral nerve, gave rise to faint contraction in the triceps and supinators only. On using a stronger current, no better response was obtained; the muscles of the wrist and hand remaining motionless. On applying the electrode to the motor points the only contraction which followed on the extensor aspect was of the extensor metacarpi pollicis on the left side, and of the extensor ossis metacarpi pollicis on the right. With galvanism no response was obtained except in the case of the supinators and the extensor ossis metacarpi pollicis, and these showed the action of degeneration. Massage was tried—it was not very good Massage I admit—with electrical treatment daily, but there was no improve-

ment, and the patient was discharged unrelieved. In many of these advanced cases I have seen benefit from the hypodermic injection of strychnine—a fiftieth of a grain into each arm once a day.

In chronic morphine poisoning, where the patient is accustomed to use hypodermic injections frequently, I know of nothing which so effectually allays the craving for the drug and enables the patient to dispense with its use as *Massage*. As Bartholow says: "The introduction of the hypodermatic syringe has placed in the hands of man a means of intoxication more seductive than any which has hitherto contributed to his craving for narcotic stimulation. So common now are the instances of its habitual use, and so enslaving is the habit when indulged in by this mode, that a lover of his kind must regard the future of society with no little apprehension. For every remote village has its slave, and not unfrequently several, to the hypodermatic syringe, and in the larger cities, men in business, and in the professions, women condemned to a life of constant invalidism, and ladies immersed in the gaieties of social life, are alike

bound to a habit which they loathe, but whose bonds they are powerless to break." Massage answers well both in Morphinism, where the drug is taken to allay pain, and in Morphinomania, where it is resorted to as a tonic, and for the sake of the pleasurable sensation it induces. The use of the drug should not be stopped suddenly, but the dose should be gradually reduced. The morphine during this process should not be given alone, but in combination with atropine. When the craving for the injection is great, nitro-glycerine should be administered, or, acting on the suggestion of Dr. Oscar Jennings, sulphate of sparteine, a salt of one of the active principles obtained from the common broom, may be injected. Tonics, such as quinine or nux vomica with capsicum and hydrochloric acid, are useful as accessories, and for the restlessness at night there is nothing better than bromide of sodium in half-drachm doses at bed-time. Dry iced champagne is useful, and so is coca-wine. The patient must come and live near his doctor, but he need not be isolated, at all events in the sense in which the word is now so commonly employed. He must

be occupied and amused, and in these cases I regard theatre-going as a powerful therapeutic agent. The beneficial effect of music judiciously employed is now generally recognized. The patient must be fed up, and a good cook is half the battle. Massage should be resorted to twice or thrice a day, and the sittings should be of short duration. Electricity is a useful adjunct. The course of treatment lasts six weeks, and if the patient will do as he is told and follow these directions implicitly, a cure may be safely promised. In connection with this subject I would advise a careful study of two admirable papers, which have just appeared. The first, by Professor Benjamin Ball and Dr. Oscar Jennings, of Paris, is entitled "*Considérations sur le Traitement de la Morphinomanie*," whilst the other, by Dr. Jennings alone, is "*Sur un Nouveau Mode de Traitement de la Morphinomanie*."

Massage, I think, is not to be recommended when the patient suffers from delusion. I remember a case in point, a patient whom I saw in consultation with Dr. Gowers. He was a highly intellectual man, a clergyman, forty-one years of age. There

was no insanity in the family, but he came of a phthisical stock on the father's side, and his mother suffered from asthma. When quite a child he had a bad attack of whooping-cough, which was followed by spasmodic asthma. He went to Eton, where his asthma was very bad, and then to Oxford, where it was worse. Soon after being ordained he married, and went to live at a popular seaside resort, where he bought a large and expensive house, with the view of taking pupils. He worked very hard coaching, doing parish work, and taking duty on Sundays. He was a nervous, anxious man, and usually sat up till two or three in the morning looking over exercises and examination papers, and trying to do his best for his boys. His attacks of asthma became more prolonged and more frequent, and one day he sent for a surgeon, who gave him a hypodermic injection of morphine. He at once obtained relief, and from that time the doctor was a constant visitor, the morphine being sometimes given several times a day. After about a year he moved, and then the hypodermic syringe and the bottle of morphine were entrusted to the

wife, and finally given to the patient himself. For years he took acetate of morphine at the rate of about five grains a week till his arms and legs were covered with the marks of the needle. His mental condition gradually underwent a change; he was unable to concentrate his attention and became extremely irritable. The result was that little by little he lost his pupils, and this added to his difficulties. His appetite fell off and he wasted rapidly. Finally his friends interfered, and he was induced to give up the morphine, and go with a relative to Oratava. He benefited so much by the change that he determined to undertake a long sea voyage to South America. He was placed under the care of the ship's surgeon, who refused to supply him with morphine; but advised him to take a little whisky when he felt a craving for it. He took the whisky—frequently. He drank whisky going out most of the time he was on shore, and all the way home, so that when he arrived in England it was obvious that he had not benefited much by his trip. He was suffering from delusions, and thought he heard voices. He was brought to London to be

under my care. The day after his arrival his wife went out for a walk, leaving him in charge of her maid. He was in the front room, she in the back so as to be at hand in case he wanted anything. He had not been alone many minutes before he heard voices under the window whispering that there was a warrant out against him, and that he was "wanted." He was greatly alarmed, put on his boots, gently made his way out of the house, and jumping into a hansom, told the man to drive to Scotland Yard. There he asked to see the inspector, and told him he had come to give himself up. The inspector, a sharp-headed kind-hearted fellow, without a particle of red tape about him, finding that there was no charge, sent a special messenger off to his wife, and a couple of hours later I obtained his release. A commissioner was obtained to watch over him, but the next day when he was off duty he made his escape again, and then there was a repetition of the same scene. Arrangements were made to place him under the care of a doctor at Teddington, and there the illusions completely disappeared, and little by little he recovered his mental



powers. In this case I was strongly urged to try Massage, and I am sure I was right in declining to do so.

Massage has been recommended in chronic alcoholism, but I fear nothing but total abstinence does much good for these unfortunate people. If they cannot adopt this measure they should consult an undertaker and not a doctor.

I used Massage with great success in the case of a lady who had a most inordinate craving for tobacco. She had lived much abroad and smoked incessantly from the first thing in the morning to the last thing at night, lighting one cigarette from another, and only knocking off for about an hour during dinner. Her usual allowance of strong Turkish cigarettes was a thousand a month, and even this was sometimes exceeded. Massage twice a day soothed her, and notably diminished the consumption of tobacco. This lady may, I think, be fairly said to take the palm as a female cigarette smoker, but I have known at least two men who could beat her on her own ground. One of them who had lived for many years in Constantinople

smoked incessantly, from the first thing in the morning to the last thing at night ; in fact, I believe he had never had a cigarette out of his mouth except when he was eating or asleep. He cared little for cigars, and complained that they failed to satisfy him. His friend, although not an inveterate smoker, could beat him for short distances. He told me he managed to get through two hundred and fifty Egyptian cigarettes on a three days' railway journey.

## CHAPTER XIV.

### MASSAGE IN UTERINE COMPLAINTS.

**FOR** many forms of menstrual disturbance Massage may be safely prescribed. I recently saw a young lady, aged 19, who suffered intensely at each monthly period, the pain being so severe that hypodermic injections of morphine had to be resorted to. Massage of the abdomen and pelvis was prescribed, and from that time there was no return of the trouble. Cazeaux has reported several similar cases in detail. Douglas Graham recommends general Massage in amenorrhœa and dysmenorrhœa, when neither local treatment nor operative procedure is indicated. He finds it especially useful in atony of the nervous and vascular systems, and when no abnormal state of the blood exists, but rather a condition of torpor of the pelvic organs. In these conditions Massage

may be employed with advantage, both during the catamenial periods and in the intervals. Dr. Graham and Dr. Henry B. Stoddard have published a number of cases of uterine disease treated by this method, and Dr. Asp has also obtained good results in chronic inflammation when other procedures have failed. It is said to be useful in fibroid degeneration of the uterus with long-standing menorrhagia. In many uterine affections I have used Massage in conjunction with the local application of glycerine pads, or the introduction of belladonna or ergot by means of Anderson's antiseptic vaginal capsules. In amenorrhœa, when the menses have been arrested temporarily from some slight disturbing cause, I usually recommend Massage for a few days before the expected period, and give tabloids of permanganate of potassium or binoxide of manganese internally.

In Professor Slavianski's Gynæcological Clinic at St. Petersburg, Dr. Semianikoff has recently employed Massage in twenty cases of chronic pelvic inflammation which resisted other forms of

treatment. The results were extremely satisfactory, the most marked effects being produced where there were periuterine effusions of moderate dimensions. In most cases a daily visit for three months was required to effect a cure. Equally good results were obtained in cases of chronic ovaritis.

I have read with much interest a work entitled "Die Massage in der Gynækologie," by Dr. Paul Profantes, edited with an introduction by Prof. Schultze, of Jena. The treatise, which is very elaborate, is illustrated by over thirty-four woodcuts, and details are given of sixteen typical cases. The best results seem to have been obtained in pelvic cellulitis in subinvolution of the uterus, and in endometritis and perimetritis. I doubt, however, if the methods of treatment advocated would find favour with an English audience, or with patients in this country.

A year or so ago a well-known physician in the provinces wrote to me asking if I would undertake the treatment of a lady, who was a confirmed invalid,

and had been practically confined to her bed for seventeen years. I was told that she was greatly emaciated, and that although she tried her best she could take very little nourishment. She had been under my friend's care for many years, and had from time to time been seen in consultation with him by most of the well-known physicians of the day. No definite diagnosis had been made, and treatment so far had been ineffectual. Her condition was a precarious one, and it was thought that one more effort should be made to effect some improvement, or at all events to prevent her getting worse. Arrangements were made for bringing her up to London, although this was not accomplished without difficulty. I was asked to see her especially with the view of giving an opinion as to the desirability of trying Massage. I found her terribly emaciated, looking like a patient in the last stage of consumption. She had a hacking cough, but a careful physical examination of the chest failed to disclose the presence of an abnormal physical sign. There was persistent constipation, but this was

hardly to be wondered at, for she took little or no solid food. I could not venture to offer any opinion as to whether Massage would do good or not, but after consultation and explaining the matter fully to her friends, we determined to make the attempt. The services of a good *masseuse* were obtained and treatment was commenced. At the very outset we were beset with difficulties. The skin was so thin and tender that anything like *effleurage* was out of the question. *Pétrissage* was better borne, but quickly tired the patient. The sittings had to be reduced first from a quarter of an hour to ten minutes, and then to five, the manipulations being performed most gently and softly. Peptonized milk was now ordered in place of asses' milk, which had previously been taken, and there was some improvement, so that little by little the length of the visits was extended, and Massage was performed daily for half-an-hour or more, the arms, legs, and abdomen being subjected to manipulation. A little solid food was given, and the patient had the Kepler extract of malt twice a day after meals, and a table-spoonful of Burroughs' beef and iron wine occasion-

ally. I thought a little Burgundy with meals would do good, but she found it turned acid and gave rise to vomiting. After trying several brands we were fortunate enough to get hold of a very fine Volnay, which had been ten years in bottle, and this, if carefully warmed, could, we found, be taken in small quantities without difficulty. The Massage was now proceeded with more energetically, and the bowels acted freely. I next tried raw beef sandwiches, with three times a day a tabloid of one hundredth of a grain of arsenious acid. This was a success, and the patient seemed to be on the high road to improvement, until one day the Volnay and the raw beef sandwiches disagreed, giving rise to a sharp attack of vomiting, when for a week little or no solid food was taken. After this the Burgundy had to be abandoned, and for a time Imperial Tokay was taken, a liqueur glassful at a time once or twice a day. Bananas were found useful in regulating the conduct of the bowels, and a supply was obtained from Malta. The Massage still progressed, but after a month's treatment I was fain to confess that very little improvement had been made. Sud-



denly it dawned on us that the masticatory apparatus was at fault, and the food was not digested because it was not properly mixed with saliva. The front teeth, I noticed, were in excellent condition, but I knew nothing about the molars. The subject was broached, and I then learned that the grinding apparatus had been defective for many years. This was an unfortunate complication, for if there were stumps to be extracted, great difficulty would be experienced, for the patient could not bear the pain of an operation, and she was hardly in a condition to take an anæsthetic.

The co-operation of a dental colleague was obtained, and fortunately it was found possible to fit an artificial denture without operative procedure. It was a work of time, however, and we had to proceed with caution, the patient being meanwhile supported by a milk and malt food, prepared by Messrs. Burroughs and Wellcome. The Massage treatment was continued steadily, and towards the end of the summer the patient was sufficiently improved to admit of her removal in an ambulance to a beautiful little country house, which had been

taken for her about ten miles from London. Here she was able to get out in a bath-chair, and sit under the trees in the warm, bright air for the greater part of the day. Everything was in her favour, food was now taken fairly well, there was no constipation, the cough had gone, she had gained strength, and yet she seemed almost as far off as ever from being restored to health. I felt convinced that there was a mistake somewhere, and that there was something we had failed to discover, or the importance of which we did not recognize. Her physician came up to town and we discussed the possibility of there being any hidden uterine mischief. My friend was a pure physician and did not practise gynæcology, so that he could not speak from personal knowledge, but he said the same idea occurred to him long ago, and that acting on his advice, an eminent specialist had been called in, who after due examination declared absolutely positively, and most emphatically, that there was nothing the matter with the lady and that the best treatment was to make her get up and walk three or four miles a day. That was begging the question, but still for

all that, an opinion which was undoubtedly deserving of much respect had been given, that there was nothing at all wrong in that special specialist's department. It seemed useless to pursue that line of investigation further, but still we were both uneasy, and the uneasiness was undoubtedly shared by the patient and her friends. At last I determined to cut the knot, and went to my old friend Dr. George Bird, and begged him to help me. Dr. Bird saw the lady alone, and the same evening wrote saying that there was erosion of the lower lip of the cervix, which was much drawn to the left from old inflammation and ovaritis. He ascertained that fifteen years ago, in getting out of a bath-chair, she had wrenched herself, and from that time had never been free from inguinal pain and swelling. Dr. Bird found that on pressing the womb upwards with the finger she had a sensation of traction in the groin. This suggested hernia of the ovary—a not very rare occurrence. She had also a fissure or ulcer of the rectum. She had three hours' pain after a motion, little pain previous to it, and almost none during defæcation. This was eminently

satisfactory, and she was placed temporarily under the care of Dr. Bird, who treated her with suppositories of oxide of zinc and hamamelidin, and for the pain after bowel action, a cocaine one grain suppository, which seemed to dull and limit the duration of the pain. She had also glycerine plugs, with cocaine, introduced daily by means of Anderson's Vaginal Capsules, No. 2, followed by an injection of a teaspoonful of glycerine, and a vaginal douche of hot water night and morning. For torpidity of the liver, a tenth of a grain calomel tablet triturate three times a day produced abundant action of the bowels without pain or inconvenience. The advisability of operating for the fissure was discussed, but the idea was abandoned. Massage was steadily kept up, and at the expiration of four months from the commencement of treatment the patient was sent home very much better than she had been for years previously.

I remember another case, which is of interest in this connection. The patient was from America, and she was sent to me by a physician, who wrote saying that she was a prominent lady who had an

elegant house located on one of the finest streets in a very progressive city out West. She was certainly a most attractive woman and was greatly to be pitied, for she was young, pretty, rich, and a widow. Her husband had made his pile cattle-farming, and had died leaving her a million of dollars totally unprovided for. Her lot was a hard one, and I could not help sympathizing with her. She had many complaints, the enumeration of which would occupy several pages. They varied greatly from day to day, so that it would be hopeless to attempt to classify them. I tried Massage, but she took to her bed and rapidly grew worse. It was then discovered that she had an enlarged and tender ovary, for which she was treated by Dr. George Bird with glycerine tampons, the hot vaginal douche, and the internal administration of bromide of sodium in large doses. She improved steadily, and I continued the Massage, which soothed her, calmed her excessive irritability, and gave her rest. She was greatly benefited during the latter part of the treatment by drop doses of tincture of ignatia every three hours. I am satisfied

that the condition of the ovary was the cause of much of her trouble.

Massage is recommended by many Continental writers in the treatment of Sterility, and there is strong evidence that it is useful in some forms of this condition.

Gentle effleurage, by exerting a sedative effect, is useful in cases of nymphomania. This complaint is but cursorily referred to in most of our text books on medicine, but from circumstances which have come to my knowledge, I am satisfied that it is by no means rare, especially in young women who have contracted alliances with husbands much older than themselves. Patients naturally do not consult a physician on this point, but it is referred to incidentally, and in a guarded manner, when describing other complaints. It is frequently a source of much mental anxiety and leads to complications, which are disastrous both physically and socially. I have no doubt that in many cases Massage is useful in allaying this abnormal sexual excitement.

On the other hand, I am assured that Massage is

extremely useful in the treatment of impotence, and in support of this contention am referred to Meibomius, "De Flagrorum usu in re veneria." I cannot say that I am intimately acquainted with this work, but am informed by a clerical friend that it is hardly the kind of book to offer as a prize in a young ladies' school. As I have never kept an establishment of this description I feel some diffidence in offering an opinion on so momentous a question.

In a well-known group of symptoms from which women frequently suffer, Massage is essentially useful. I some time ago saw a lady, aged 45, or thereabouts, a professional singer, who was labouring under the impression that she was going mad. She was so nervous that she was quite unable to accept an engagement, although she had constantly been before the public, and had hardly missed a night for twenty years. She told me that she felt she would do herself or her children an injury. She was afraid to go near an open window, so great was the temptation to throw herself out; and she even begged that the knives might be removed

from the table at dinner. These symptoms were greatly intensified after each monthly period, and she insisted that she was suffering from cancer, or some organic disease of the stomach or womb. She was restless at night, and would often get up in the morning and walk for hours, until thoroughly exhausted. She was given full doses of the bromides—a drachm or more, four times a day—but with only temporary benefit. Massage was then tried; and it seemed, to use her own expression, to soothe her, and calm her, and make her forget her troubles. The case was a prolonged one, but now, at the expiration of three months, she is much better, and will soon be able to resume her professional duties.

In another common and well-marked group of symptoms, Massage is of essential benefit. I saw a lady, aged 38, who had been reduced in circumstances, in consequence of the loss of her husband, who, after a long and painful illness, had died of diabetes. She complained of restlessness and pain at night, the pain affecting chiefly the legs and back. She said it was almost indescribable, but was



like electric shocks. She described it as "nervous restlessness," and found it was always intensified by worry and anxiety, and was usually worse after a hard day's work. It was worse than pain, and was often so severe that she had to get out of bed and walk about the room the greater part of the night. Three weeks' general Massage cured her entirely. I have met with several similar cases, and the condition seems to be allied to what is often called "fidgets." I have seen it in quite young women, chiefly in those who are nervous and excitable, and suffer from neuralgia. I do not know of any drug that takes in this group of symptoms, and have no doubt that Massage is the best remedy. A lady who suffered from it told me that she was often impelled to get up in the middle of the night and walk round the square in scanty attire.

Massage is a most valuable therapeutic agent, and will yield good results in many complaints, other than those I have roughly indicated.

# INDEX.

**ABDOMINAL MASSAGE**, 55  
 Absorption, experiments on, 79  
 Ague, 204  
 Aix-les-Bains, 24, 27  
 Alcoholism, chronic, 242  
 Amber oil, 145  
 Ἀναρρησις of the Greeks, 6  
 Anatriptic art, 199  
 Amenorrhœa, treatment of, 244  
 Amsterdam, 11  
 Anæmia, 200  
 Anderson's vaginal capsules, 253  
 Angina pectoris, 191, 192  
 Anorexia nervosa, 171, 175  
 Antifebrin, 213  
 Antipyrin, 210, 213  
 Antiseptic preparations for the hands, 59  
 Appetite improved by Massage, 76  
 Arabic origin, 13  
 Ascending paralysis, 111  
 Attributes of a good

Averbech on constipation, 113

**BACKACHE**, 154  
 Bacon, Francis, Lord Verulam, 89  
 Balfour, Dr. William, of Edinburgh, 140  
 Ball, Prof. Benjamin, of Paris, 238  
 Barrow, Mr. Boyce, 106

Baudin's travels, 7  
 Berghmann and Helleday, pupils of Mezger, 217  
 Berne, Dr. Georges, of Paris, 124, 229  
 Beuster, of Berlin, 37  
 Beveridge, Mr., of Edinburgh, 88  
 Biliary calculi, 130  
 Bird, Dr. George, 252, 254  
 Blache, on chorea, 112  
 Black eye, 223  
 Blanc, Dr. L., of Aix-les-Bains, 27  
 Bodily vigour improved by Massage, 76  
 Borax for the hands, 61  
 Boyle, Mr. Robert, 8  
 Brachet, Dr. L., of Aix-les-Bains, 27  
 Bright's disease, 190  
 Bucler, Dr., of Berne, 118  
 Busch, Dr., 59

**CÆLIUS AURELIANUS**, 7  
 Cancer, 203  
 Cannon ball treatment, 125  
 Catarrh of the bile duct, 134  
 Cazeaux, on uterine diseases, 244  
 Champounière, Dr. Lucas, of Paris, 228  
 Chaulmugra oil, 151  
 Children, Massage for, 91  
 Chinese manuscript, 6

- Chloral poisoning, 232  
 Chloral tipping, 232  
 Chronic alcoholism, 242  
 Chronic lead poisoning, 233  
 Chronic morphine poisoning, 236  
 Chronic myelitis, 103  
 Circulation improved by Massage, 77, 80  
 Cloebury, William, of Oxford, 223  
 Club-foot, 23  
 Coghill, Dr. Sinclair, on "Irritable Spine," 182  
 Constipation, 113  
 Constipation tabloids, 126  
 Consumption treated by Massage, 200  
 Contracted joints, 225  
 Contractility of muscles improved by Massage, 80  
 Contusions of joints, 216  
 Convalescence from acute diseases, 205  
 Corpulence, 136

### DANSEUSES' CRAMP, 99

- Definition of Massage, 3  
 Demarquay, 219  
 Deposits in subcutaneous tissues, 209  
 Deposits in the skin, 87  
 Diagrams, 35  
 Dietary table, 172  
 Diphtheritic paralysis, 101  
 Diuretic action of Massage, 85  
 Dollinger, Dr., of Buda Pesth, 146  
 Douglas Graham, 39, 216, 218  
 Dry Massage, 59  
 Duplay, M., 219  
 Duration of *stance*, 2  
 Dutch, thesis in, on Massage, 10

- Dysmenorrhœa, treatment of, 244

### EDUCATION necessary for a Masseuse, 63

- Effleurage*, 35  
 Effusions removed by Massage, 80  
 Electrical contractility improved by Massage, 80  
 Emerson, Mr. N. B., 10  
 Emperor Hadrian, 5  
 English health resorts, 29  
 Erb, Prof., on club-foot, 93  
 Ewald's observations, 83

### FACIAL PARALYSIS, 98

- Fæcal accumulation, 129  
 "Fat and Blood," 167  
 Fat, undigested, 204  
 Flat-foot, 222  
 Flatulence, 135  
 Football accidents, 226  
 Fota, 9  
 Fractures treated by Massage, 227, 229  
 France, Massage in, 11  
 Friction, 45  
 Friction in lameness and contracted joints, 223  
 Friction to the spine, 185

### GALEN, 6

- Gall stones, 131  
 Gastric retention, 83  
*Gazette des Hôpitaux*, 8  
 Gerst's method, 52, 211  
 Gopadze's experiments, 74  
 Graham, Dr. Douglas, of Boston, 39, 81, 87, 216, 218

Greatrack, Mr. Valentine, 8  
 Greek origin, 3  
 Griffin, Dr. and Mr., of Limerick,  
   177, 181  
 Grosvenor, the late John, Esq.,  
   of Oxford, 223, 224, 225  
 "Growing pains," 156  
 Guaiacum for rheumatism, 158

HAARLEM OIL, 145  
*Hachures*, 48  
*Hackungen* of Neumann, 48  
 Hæmorrhoids, 123  
 Hands, preparations for the, 61  
 Harley, Dr. George, on gall  
   stones, 130  
 Hawaiians, their customs, 10  
 Headache, congestive, 211  
 Headache, frontal, 208  
 "Health and Longevity," 90  
 Henry, Admiral, of Rolvenden,  
   143  
 Hippocrates, 6  
 Hirschberg's method, 56  
 Hirschberg, Rubens, of Odessa,  
   59, 81, 83, 86  
 History of Massage, 5  
 Hospital Massage, 67  
 Hoffinger's method, 53  
 Hünerfauth, Dr. Georg, of Hom-  
   burg, 114  
 Hypodermatic medication, 236  
 Hysteria, 169  
 Hysterical paralysis, 101

INDIAN INK, injection of into  
   the joints, 76  
 Impotence, 256  
 Infantile paralysis, 91, 96  
 Insomnia, 197  
 Intermittent fever, 204  
 Intestinal obstruction, 128

Introduction, 1  
 Irritable spine, 182  
 Isolation, 1

JACKSON, Dr. Arthur, of Shef-  
   field, on cancer, 203  
 Jacoby, on effleurage, 37, 211  
 Jaundice, 119  
 Jennings, Dr. Oscar, of Paris,  
   117, 165, 237, 238  
 Johnson, Dr. Walter, of Great  
   Malvern, 87, 199  
 Joint Affections, 215  
 Joints, contusions of, 216  
 Joints, experiments on, 79

KELLGREN, Dr. Arvid, 49, 227,  
   228  
 Kidneys, action of Massage on,  
   85  
 "Kong Fau," 6  
 Kriviakin, Dr. Ivan J., of Botlikh,  
   127

LABBÉ, M., 219  
*Laisné tapotéments de*, 47  
 Laisné's method, 55  
 Latin derivation, 3  
*Lancet*, Lecture in, 94  
*Lancette Française*, 8  
 Landerer, Dr. A., on flat foot,  
   222  
 Landry's paralysis, 111  
 Lanoline ointment, 60  
 Laplander's treatment, 8  
*La Pratique du Massage*, 229  
 Lead colic, 234  
 Lead poisoning, chronic, 233  
 Lee, Dr. Benjamin, of Philadel-  
   phia, 64, 138

Liebrich, Prof., of Berlin, 60  
 Life, an unnatural, 206  
 Limit of sphere of action, 2  
 Locomotor ataxy, 108  
 Lumbago, 152  
 Lymph circulation, 85

# MACHINERY, Massage by, 22

Maclean, Prof., of Netley, on  
 ague, 204

Manassein, Prof., of Petersburg,  
 76

Marlioz, 27

Martin, M., of Lyons

*Massage à frictions*, 45

*Masseur*, qualifications of, 63

Masson, the Rev. Dr. D. T., on  
 "Highland Massage," 201

Massotherapist, 4

Massotherapy, 4

Mechanical stimulation, 49

Medical rubbing, 17

Meibomius, "De Flagrorum usu  
 in re veneria," 256

Megrim, 207

Menstrual disorders, Massage  
 for, 244

Mental activity improved by  
 Massage, 76

Mezger's practice, 13

Mezger's Massage, 23

*Mili*, 9

Mills, Dr. Charles K., of Phila  
 delphia, 72

Mitchell, Dr. Weir, 110

Morphine poisoning, chronic,  
 236

Morphinism, 237

Morphinomania, 237, 238

Molbius, Dr. of Leipzig, 101

Motor points, 81

Moullin, Mr. Mansell, on sprains  
 220, 222

Mulgaradocks, 7

# NECK, Massage of the, 211

Nelaton, 219

Neuralgia, 207

Neurasthenia, 159

Neurasthenia spinalis, 159

Nicotinomaniacs, 242

Nitroglycerine, 237

Nördhoff on California, 10

Nymphomania, 255

# OBESITY, 136

Oribase, 6

Organic disease, Massage in,  
 188

# PARALYSIS, Massage in, 91

Peptonoids, formula for, 174

Persistent anæmia, 200

Petit, Dr. Léon, 49, 55

Pétrissage, 40

Phthisis, 200

Physiological action of Massage,  
 74

Pianoforte player's cramp, 99

Poisoning, Massage in, 232

Poore, Dr. Vivian, on professional  
 cramp, 99

Pseudo-hypertrophic paralysis,  
 98

RADCLIFFE, Dr., the late, on  
 spinal irritation, 181

- Reibmayr, 43, 71, 81, 215  
 "Resolvent pills," 108  
 Respiration, effect of Massage on, 11  
 Rheumatism, 140  
 Rheumatoid arthritis, 148  
 Rickets, 224  
 Roche's embrocation, 145  
 Rose, Mr. William, of King's College Hospital, 226  
 Rossander, Dr. Carl J., of Stockholm, 190  
 Roux, Dr., of Lausanne, 119  
 Royal Central Institute at Stockholm, 19  
 Russian flagellation, 8  
 Rutland, Duchess of, 7
- SALLI, Dr. Hermann, of Berne, 125  
 Sala, Mr. G. A.'s description of Amsterdam, 11  
 Sandwich Islanders, 10  
 Sanskrit root, 3  
 Sarchuna of the Persians, 6  
 Schüller, Prof. Max, of Berlin, 211  
 Sciatica, 212  
*Séance*, duration of, 70  
 Seguin's "Rest in Nervous Disease," 168  
 Semianikoff, Dr., of Petersburg, on uterine disorders, 246  
 Shampooing, 5  
 Sick headache, 207  
 Sinclair's, Sir John, "Code of Health," 143  
 Slavianski, Prof., of Petersburg, 245  
 Sleeplessness, 197  
 Spanish origin, 3  
 Spastic paralysis, 95  
 Spinal irritation, 177  
 Sprains treated by Massage, 216, 220  
 Sterility, Massage in, 255  
 Stomach, disorders of the, 135  
 Strabrovski, Dr. Ivan's paper, 76  
 Surgical affections, 215  
 Swedish system of medical gymnastics, 19  
 Synovitis, chronic, 217, 219  
 Syphilis, 203
- TAPOTEMENT*, 47  
 Teale, Mr. Pridgin, the late, 177, 179  
 Temperature raised by Massage, 79  
 Temple, Sir William, 90  
 Terms employed in Massage, 72  
 Thesis by Mezger, 11  
 Tonga, Massage in, 9  
*Toogi-toogi*, 9  
 Topographical anatomy, 68  
 Torngren, Professor, of Stockholm, 19  
 Tweedy, Mr. John, 105
- Urinary secretion after Massage, 85  
 Urine, excretion of under Massage, 85
- VRASCH*, The, 76, 99  
 Von Mosengeil, Prof., 14, 61, 78, 97, 215

- WASTING PALSY, 98  
Weir Mitchell treatment, 18, 165,  
175  
Williams, Dr. Charles Theodore,  
on consumption, 201  
Winter cough, 21  
"Wrist drop," 234  
ZABLUDOVSKI'S observations,  
74, 76, 99

WORKS BY THE SAME AUTHOR.

*Illustrated, 2s.*

# LA PRATIQUE DU MASSAGE:

*Action Physiologique Emploi Therapeutique.*

TRANSLATED BY

DR. OSCAR JENNINGS.

WITH AN INTRODUCTION BY

DR. DUJARDIN-BEAUMETZ,

OF PARIS.

This is a new work, and contains, in addition to a complete *résumé* of the subject, articles specially contributed by leading Physicians and Surgeons in France.

LONDON: H. K. LEWIS, 136, GOWER STREET, W.C.



Crown 8vo, 3s. 6d.

# NITRO-GLYCERINE AS A REMEDY FOR ANGINA PECTORIS.

## NOTICES OF THE PRESS.

"The profession are much indebted to the author of this brochure for having introduced to their notice the important power possessed by nitro-glycerine in controlling the attacks of the most painful, alarming, and fateful condition, known as angina pectoris."—*Lancet*.

"Dr. Murrell's results show that nitro-glycerine is a very valuable remedy, with the additional advantage that its physiological action is definite and known."—*Practitioner*.

"Dr. Murrell has identified his name with this remedy, and here brings together his published papers concerning it, in a connected form. Comparatively sphygmographic tracings show well the main difference in its action from that of amyl-nitrite, viz., that the characteristic effect on the circulation and tension is more slowly produced, but lasts longer. Several of the cases are very striking, and well illustrate the at least temporary advantage to be obtained from the drug."—*British Medical Journal*.

"To Dr. Murrell we must give the credit for the re-introduction of nitro-glycerine into practice, and especially for pointing out its value in certain cases of angina pectoris. This little book contains a short account of the history of the drug, and the notes of those cases of angina pectoris in which Dr. Murrell has administered it, together with some general remarks on the mode of administration, dosage, etc."—*Birmingham Medical Review*.

"In this well-arranged and clearly-written little volume, Dr. Murrell introduces to the serious notice of the profession a substance which has been long in use for its destructive powers; but which now promises well to do something for the relief of human suffering."—*London Medical Record*.

LONDON: H. K. LEWIS, 136, GOWER STREET, W.C.

Sixth Edition, Demy 32mo, 3s. 6d.

# WHAT TO DO IN CASES OF POISONING.

## NOTICES OF THE PRESS.

"It contains plain, straightforward directions for the treatment of the common poisons, and will be invaluable to practitioners."—*Lancet*.

"It is a little handy pocket-book, which contains a series of extremely practical and accurate directions for the application of antidotes in cases of the treatment of poisons. It is the handiest and most complete of the kind that we have ever seen."—*British Medical Journal*.

"Every medical man in active practice ought to provide himself with a copy of this excellent little work."—*London Medical Record*.

"We cannot recommend it too highly."—*Hospital Gazette*.

"We cordially recommend this improved edition to the notice of our readers. No house surgeon nor hospital resident pupil should hesitate to procure a copy for himself."—*Dublin Medical Journal*.

"The directions given could be safely carried out by any self-possessed individual, and the pharmacist would find it advantageous to have at hand so convenient and well-arranged a reference to what should be done in cases of emergency."—*Pharmaceutical Journal*.

LONDON: H. K. LEWIS, 136, GOWER STREET, W.C.

Just Out. Illustrated. 4s. 6d.

# CHRONIC BRONCHITIS AND ITS TREATMENT.

## A CLINICAL STUDY.

### NOTICES OF THE PRESS.

"Dr. Murrell deserves the thanks of the profession for his praiseworthy endeavour to stimulate the spirit of aggressiveness in this important department of therapeutics."—*British Medical Journal*.

"The author's methods of treatment are simply invaluable. On a large scale he has tested the remedies, new and old, which have been recommended for chronic bronchitis, and his observations will go far towards consigning some time-honoured remedies to the dust-bin, and pushing into prominence some new ones whose names are as yet unfamiliar to many a practitioner."—*Therapeutic Gazette*.

"The author has evidently made a careful and systematic study of a large number of cases, and his work can be confidently recommended as a valuable contribution to the therapeutics of the disease."—*Montreal Medical Journal*.

"This volume is a small one, and no practitioner will regret the time spent in reading it. He will get many hints of much service to him; he will lay it down with a feeling of confidence in the treatment of chronic bronchitis, which, we hope, experience will confirm."—*Glasgow Medical Journal*.

"To the practitioner oft perplexed in the treatment of this obstinate complaint, this small volume will prove a boon. Here are full and pleasant records of the value of a large variety of therapeutic methods, including those by medicine, spray and inhalation, and all from the point of view of an extensive clinical experience."—*Bristol Medical-Chirurgical Journal*.

"The author has compressed a large amount of useful matter into a very small space; each chapter being devoted to a single remedy renders reference easy. The reader cannot fail to get help in a class of cases which, though troublesome, are often very curable."—*Dublin Journal of Medical Sciences*.

LONDON : H. K. LEWIS, 136, GOWER STREET, W.C.

SELECTED LIST  
OF  
NEW AND RECENT WORKS

PUBLISHED BY

H. K. LEWIS,  
136 GOWER STREET, LONDON, W.C.

(ESTABLISHED 1844)

---

*For full list of works in Medicine and Surgery published by  
H. K. Lewis see complete Catalogue sent post free on application.*

---

ANGEL MONEY, M.D., F.R.C.P.

Assistant Physician to University College Hospital, and to the Hospital for  
Sick Children, Great Ormond Street.

I.  
**THE STUDENT'S TEXTBOOK OF THE PRACTICE  
OF MEDICINE.** Fcap. 8vo, 6s. 6d. [*Just published.*]

II.  
**TREATMENT OF DISEASE IN CHILDREN:**  
Embodying the Outlines of Diagnosis and the chief Patho-  
logical differences between Children and Adults. Second Edition,  
crown 8vo.

*Lewis's Practical Series.*]

LOUIS C. PARKES, M.D., D.P.H. LOND. UNIV.

Assistant Professor of Hygiene, University College, London; Fellow and  
Member of the Board of Examiners of the Sanitary Institute; Assistant  
Examiner in Hygiene, Science and Art Department South Kensington.

**HYGIENE AND PUBLIC HEALTH.** With Illustrations, crown 8vo, 9s. [*Now ready.*]  
*Lewis's Practical Series.*]

HORATIO R. BIGELOW, M.D.

Permanent Member of the American Medical Association; Fellow of the  
British Gynæcological Society, etc.

**GYNÆCOLOGICAL ELECTRO-THERAPEUTICS.**  
With an introduction by DR. GEORGES APOSTOLI. With  
Illustrations, demy 8vo, 8s. 6d.

H. RADOLIFFE CROCKER, M.D. LOND., B.S., F.R.C.P.

Physician, Skin Department, University College Hospital.

**DISEASES OF THE SKIN: THEIR DESCRIPTION,  
PATHOLOGY, DIAGNOSIS, AND TREATMENT.**  
With Illustrations, 8vo, 21s.

SIR WILLIAM AITKEN, KNT., M.D., F.R.S.

Professor of Pathology in the Army Medical School.

**ON THE ANIMAL ALKALOIDS, THE PTOMAINES, LEUCOMAINES, AND EXTRACTIVES IN THEIR PATHOLOGICAL RELATIONS.** Second edition, crown 8vo, 3s. 6d. *[Now ready.]*

E. CRESSWELL BABER, M.B. LOND.

Surgeon to the Brighton and Sussex Throat and Ear Dispensary.

**A GUIDE TO THE EXAMINATION OF THE NOSE WITH REMARKS ON THE DIAGNOSIS OF DISEASES OF THE NASAL CAVITIES.** With Illustrations, small 8vo, 5s. 6d.

G. GRANVILLE BANTOCK, M.D., F.R.C.S. EDIN.

Surgeon to the Samaritan Free Hospital for Women and Children.

**I.**  
**RUPTURE OF THE FEMALE PERINEUM.** Second Edition, with Illustrations, 8vo, 3s. 6d.

**II.**  
**ON THE USE AND ABUSE OF PESSARIES.** With Illustrations, Second Edition, 8vo, 5s.

FANCOURT BARNES, M.D., M.R.C.P.

Physician to the Chelsea Hospital; Obstetric Physician to the Great Northern Hospital, &c.

**A GERMAN-ENGLISH DICTIONARY OF WORDS AND TERMS USED IN MEDICINE AND ITS COGNATE SCIENCES.** Square 12mo, Roxburgh binding, 9s.

H. CHARLTON BASTIAN, M.A., M.D., F.R.S.

Examiner in Medicine at the Royal College of Physicians; Physician to University College Hospital, etc.

**PARALYSES: CEREBRAL, BULBAR, AND SPINAL.** A Manual of Diagnosis for Students and Practitioners. With numerous Illustrations, 8vo, 12s. 6d.

E. H. BENNETT, M.D., F.R.C.S.I.

Professor of Surgery, University of Dublin.

AND

D. J. CUNNINGHAM, M.D., F.R.C.S.I.

Professor of Anatomy and Chirurgery, University of Dublin.

**THE SECTIONAL ANATOMY OF CONGENITAL CÆCAL HERNIA.** With coloured plates, sm. folio, 5s. 6d.

**DRS. BOURNEVILLE AND BRICON.**

**M**ANUAL OF HYPODERMIC MEDICATION. Translated from the Second Edition, and Edited, with Therapeutic Index of Diseases, by **ANDREW S. CURRIE, M.D. Edin., etc.** Crown 8vo, 6s.

**STEPHEN S. BURT, M.D.**

Professor of Clinical Medicine and Physical Diagnosis in the New York Post-graduate Medical School and Hospital.

**E**XPLORATION OF THE CHEST IN HEALTH AND DISEASE. Post 8vo, 6s. [*Just published.*]

**DUDLEY W. BUXTON, M.D., B.S., M.R.C.P.**

Administrator of Anæsthetics to University College Hospital and to the Hospital for Women, etc.

**A**NÆSTHETICS THEIR USES AND ADMINISTRATION. With Illustrations, crown 8vo, 4s. [*Lewis's Practical Series.*]

**HARRY CAMPBELL, M.D., B.S. LOND.**

Member of the Royal College of Physicians; Assistant Physician and Pathologist to the North-West London Hospital.

**T**HE CAUSATION OF DISEASE. An exposition of the ultimate factors which induce it. Demy 8vo, 12s. 6d.

**ALFRED H. CARTER, M.D. LOND.**

Member of the Royal College of Physicians; Physician to the Queen's Hospital, Birmingham; late Examiner in Medicine for the University of Aberdeen, &c.

**E**LEMENTS OF PRACTICAL MEDICINE. Fifth Edition, crown 8vo, 9s.

**P. CAZEAUX.**

Adjunct Professor in the Faculty of Medicine of Paris, &c.

AND

**S. TARNIER.**

Professor of Obstetrics and Diseases of Women and Children in the Faculty of Medicine of Paris.

**O**BSTETRICS: THE THEORY AND PRACTICE; including the Diseases of Pregnancy and Parturition, Obstetrical Operations, &c. Seventh Edition, edited and revised by **ROBERT J. HESS, M.D.**, with twelve full-page plates, five being coloured, and 165 wood-engravings, 1081 pages, royal 8vo, 35s.

#### **4      New and Recent Works published by**

**FRANCIS HENRY CHAMPNEYS, M.A., M.B. OXON., F.R.C.P.**  
Obstetric Physician and Lecturer on Obstetric Medicine at St. George's Hospital; Examiner in Obstetric Medicine in the University of London, etc.

**E****XPERIMENTAL RESEARCHES IN ARTIFICIAL  
RESPIRATION IN STILLBORN CHILDREN, AND  
ALLIED SUBJECTS.** Crown 8vo, 3s. 6d.

**W. BRUCE CLARKE, M.A., M.B. OXON., F.R.C.S.**  
Assistant Surgeon to, and Senior Demonstrator of Anatomy and Operative Surgery at St. Bartholomew's Hospital; Surgeon to the West London Hospital; Examiner in Anatomy to the University of Oxford.

**T****HE DIAGNOSIS AND TREATMENT OF DIS-  
EASES OF THE KIDNEY AMENABLE TO DIRECT  
SURGICAL INTERFERENCE.** Demy 8vo, with Illustrations,  
7s. 6d.

**WALTER S. COLMAN, M.B. LOND.**  
Formerly Assistant to the Professor of Pathology in the University of Edinburgh.

**S****ECTION CUTTING AND STAINING: A Practical  
Guide to the Preparation of Normal and Morbid Histologi-  
cal Specimens.** Illustrations, crown 8vo, 3s. [*Just published.*]

**ALFRED COOPER, F.R.C.S.**  
Surgeon to the St. Mark's Hospital for Fistula and other Diseases of the Rectum.

**A****PRACTICAL TREATISE ON DISEASES OF THE  
RECTUM.** Crown 8vo, 4s.

**W. H. CORFIELD, M.A., M.D. OXON.**  
Professor of Hygiene and Public Health in University College, London.

**D****WELLING HOUSES: their Sanitary Construction and  
Arrangements.** Second Edition, with Illustrations, crown  
8vo, 3s. 6d.

**EDWARD COTTERELL, M.R.C.S. ENG., L.R.O.P. LOND.**  
Late House Surgeon, University College Hospital; Atkinson Morley Surgical Scholar, University College, London, etc.

**O****N SOME COMMON INJURIES TO LIMBS: their  
Treatment and After-Treatment including Bone-Setting (so-  
called).** Imp. 16mo, with Illustrations, 3s. 6d.

CHARLES CREIGHTON, M.D.

I.  
**ILLUSTRATIONS OF UNCONSCIOUS MEMORY**  
IN DISEASE, including a Theory of Alteratives. Post  
8vo, 6s.

II.  
**CONTRIBUTIONS TO THE PHYSIOLOGY AND**  
PATHOLOGY OF THE BREAST AND LYMPHA-  
TIC GLANDS. Second Edition, illustrated, 8vo, 9s.

III.  
**BOVINE TUBERCULOSIS IN MAN:** An Account of  
the Pathology of Suspected Cases. With Chromo-litho-  
graphs and other Illustrations, 8vo, 8s. 6d.

EDGAR M. CROOKSHANK, M.B. LOND., F.R.M.S.  
Professor of Bacteriology, King's College, London.

I.  
**HISTORY AND PATHOLOGY OF VACCINATION.**  
2 vols., royal 8vo, coloured plates, 36s.

II.  
**MANUAL OF BACTERIOLOGY: BEING AN IN-**  
TRODUCTION TO PRACTICAL BACTERIOLOGY.  
Illustrated with coloured plates from original drawings and  
numerous coloured illustrations embodied in the text. Second  
Edition, 8vo, 21s.

III.  
**PHOTOGRAPHY OF BACTERIA.** Illustrated with 86  
Photographs reproduced in autotype and numerous wood  
engravings, royal 8vo, 12s. 6d.

RIDLEY DALE, M.D., L.R.C.P. EDIN., M.R.C.S. ENG.  
**EPITOME OF SURGERY.** Large 8vo, 10s. 6d.

HERBERT DAVIES, M.D., F.R.C.P.  
Late Consulting Physician to the London Hospital, and formerly Fellow of  
Queen's College, Cambridge.  
**THE MECHANISM OF THE CIRCULATION OF**  
THE BLOOD THROUGH ORGANICALLY DIS-  
EASED HEARTS. Edited by ARTHUR TEMPLER DAVIES, B.A.  
M.B. Cantab., M.R.C.P. Crown 8vo, 3s. 6d.



**6      New and Recent Works published by**

---

**HENRY DAVIS, M.R.C.S. ENG.**

Teacher and Administrator of Anæsthetics to St. Mary's and the National Dental Hospitals.

**G** **UIDE TO THE ADMINISTRATION OF ANÆSTHETICS.** Fcap. 8vo, 2s.

**AUSTIN FLINT, M.D., LL.D.**

Professor of Physiology and Physiological Anatomy at the Bellevue Hospital Medical College, New York, &c., &c.

**A** **TEXT-BOOK OF HUMAN PHYSIOLOGY.** Fourth edition, with 316 illustrations, royal 8vo, 25s.  
[Just published.]

**J. MILNER FOTHERGILL, M.D.**

Member of the Royal College of Physicians of London; Physician to the City of London Hospital for Diseases of the Chest, Victoria Park, &c.

**I.**  
**A** **MANUAL OF DIETETICS.** Large 8vo, 10s. 6d.

**II.**  
**T** **HE HEART AND ITS DISEASES, WITH THEIR TREATMENT; INCLUDING THE GOUTY HEART.** Second Edition, entirely re-written, copiously illustrated with woodcuts and lithographic plates. 8vo, 16s.

**III.**  
**I** **NDIGESTION, BILIOUSNESS, AND GOUT IN ITS PROTEAN ASPECTS.**

**PART I.—INDIGESTION AND BILIOUSNESS.** Second Edition, post 8vo, 7s. 6d.

**PART II.—GOUT IN ITS PROTEAN ASPECTS.** Post 8vo, 7s. 6d.

**IV.**  
**T** **HE TOWN DWELLER: HIS NEEDS AND HIS WANTS.** Post 8vo, 3s. 6d.  
[Now ready.]

**FORTESCUE FOX, M.D. LOND.**

Fellow of the Medical Society of London.

**S** **TRATHPEFFER SPA, ITS CLIMATE AND WATERS,** with observations, historical, medical, and general, descriptive of the vicinity. Illustrated, cr. 8vo, 2s. 6d. nett.  
[Just published.]

**ALFRED W. GERRARD, F.C.S.**

Pharmaceutical Chemist ; Examiner to the Pharmaceutical Society ; Teacher of Pharmacy and Demonstrator of Materia Medica to University College Hospital, etc,

**ELEMENTS OF MATERIA MEDICA AND PHARMACY.** Crown 8vo, 8s. 6d.

**HENEAGE GIBBES, M.D.**

Lecturer on Physiology and on Normal and Morbid Histology in the Medical School of Westminster Hospital; etc.

**PRACTICAL HISTOLOGY AND PATHOLOGY.**

Third Edition, revised and enlarged, crown 8vo, 6s.

**JOHN GORHAM,**

Member of the Royal College of Surgeons, London ; Fellow of the Physical Society of Guy's Hospital, etc.

**TOOTH EXTRACTION :** A manual of the proper mode of extracting teeth, with a Table exhibiting the names of all the teeth, the instruments required for extraction and the most approved methods of using them. Third edition, fcap 8vo, 1s. 6d.  
*[Just published.]*

**J. B. GRESSWELL, M.R.C.V.S.**

Provincial Veterinary Surgeon to the Royal Agricultural Society.

**VETERINARY PHARMACOLOGY AND THERAPEUTICS.** Fcap. 8vo, 5s.

**C. HIGGENS, F.R.C.S.**

Ophthalmic Surgeon to Guy's Hospital ; Lecturer on Ophthalmology at Guy's Hospital Medical School.

**MANUAL OF OPHTHALMIC PRACTICE.** Illustrations, crown 8vo, 6s.

*Lewis's Practical Series.]*

**BERKELEY HILL, M.B. LOND., F.R.C.S.**

Professor of Clinical Surgery in University College; Surgeon to University College Hospital, and to the Lock Hospital.

**THE ESSENTIALS OF BANDAGING.** For Managing Fractures and Dislocations ; for administering Ether and Chloroform ; and for using other Surgical Apparatus. Sixth Edition, with Illustrations, fcap. 8vo, 5s.

**8      New and Recent Works published by**

---

**BERKELEY HILL, M.B. LOND., F.R.C.S.**

Professor of Clinical Surgery in University College; Surgeon to University College Hospital, and to the Lock Hospital.

AND

**ARTHUR COOPER, L.R.C.P., M.R.C.S.**

Surgeon to the Westminster General Dispensary, &c.

**I.**  
**SYPHILIS AND LOCAL CONTAGIOUS DISORDERS.** Second Edition, entirely re-written, royal 8vo, 18s.

**II.**  
**THE STUDENT'S MANUAL OF VENEREAL DISEASES.** Being a Concise Description of those Affections and of their Treatment. Fourth Edition, post 8vo, 2s. 6d.

**NORMAN KERR, M.D., F.L.S.**

President of the Society for the Study of Inebriety; Consulting Physician, Dalrymple Home for Inebriates, etc.

**INEBRIETY: ITS ETIOLOGY, PATHOLOGY, TREATMENT, AND JURISPRUDENCE.** Second Edition, crown 8vo, 12s. 6d. [Now ready]

**J. WICKHAM LEGG, F.R.C.P.**

Assistant Physician to Saint Bartholomew's Hospital, and Lecturer on Pathological Anatomy in the Medical School.

**A GUIDE TO THE EXAMINATION OF THE URINE;** intended chiefly for Clinical Clerks and Students. Sixth Edition, revised and enlarged, with additional Illustrations, fcap. 8vo, 2s. 6d.

**ARTHUR H. N. LEWERS, M.D. LOND., M.R.C.P. LOND.**

Assistant Obstetric Physician to the London Hospital; Examiner in Midwifery and Diseases of Women to the Society of Apothecaries of London.

**A PRACTICAL TEXT-BOOK OF THE DISEASES OF WOMEN.** Second Edition, with Illustrations, cr. 8vo. [Lewis's Practical Series.]

**LEWIS'S POCKET CASE BOOK FOR PRACTITIONERS AND STUDENTS.** Designed by A. T. BRAND, M.D. Roan, with pencil, 3s. 6d. *nett.*

**LEWIS'S POCKET MEDICAL VOCABULARY.**  
Over 200 pp., 32mo, limp roan, 3s. 6d.

**LEWIS'S PRACTICAL SERIES.**

These volumes are written by well-known Hospital Physicians and Surgeons recognised as authorities in the subjects of which they treat. They are of a thoroughly Practical nature, and calculated to meet the requirements of the general Practitioner and Student and to present the most recent information in a compact and readable form; the volumes are handsomely got up and issued at low prices, varying with the size of the works.

**HYGIENE AND PUBLIC HEALTH.**

By LOUIS C. PARKES, M.D., D.P.H. Lond. Univ., Assistant Professor of Hygiene, University College, London; Fellow, and Member of the Board of Examiners of the Sanitary Institute; Assistant Examiner in Hygiene, Science and Art Department South Kensington. With Illustrations, cr. 8vo., 9s. [Now ready.]

**MANUAL OF OPHTHALMIC PRACTICE.**

By C. HIGGINS, F.R.C.S., Ophthalmic Surgeon to Guy's Hospital; Lecturer on Ophthalmology at Guy's Hospital Medical School. Illustrations, crown 8vo, 6s.

**A PRACTICAL TEXTBOOK OF THE DISEASES OF WOMEN.** By ARTHUR H. N. LEWERS, M.D. Lond., M.R.C.P. Lond., Assistant Obstetric Physician to the London Hospital; Examiner in Midwifery and Diseases of Women to the Society of Apothecaries of London; etc. Second Edition, with Illustrations, crown 8vo.

**ANÆSTHETICS THEIR USES AND ADMINISTRATION.**

By DUDLEY W. BUXTON, M.D., B.S., M.R.C.P., Administrator of Anæsthetics to University College Hospital and to the Hospital for Women, Soho Square. Crown 8vo, 4s.

**TREATMENT OF DISEASE IN CHILDREN: EMBODYING THE OUTLINES OF DIAGNOSIS AND THE CHIEF PATHOLOGICAL DIFFERENCES BETWEEN CHILDREN AND ADULTS.** By ANGEL MONEY, M.D., F.R.C.P., Assistant Physician to the Hospital for Children, Great Ormond Street, and to University College Hospital. Second Edition, Crown 8vo.

**ON FEVERS: THEIR HISTORY, ETIOLOGY, DIAGNOSIS, PROGNOSIS, AND TREATMENT.** By ALEXANDER COLLIE, M.D. (Aberdeen), Medical Superintendent of the Eastern Hospitals. Coloured plates, cr. 8vo, 8s. 6d.

**HANDBOOK OF DISEASES OF THE EAR FOR THE USE OF STUDENTS AND PRACTITIONERS.** By URBAN PRITCHARD, M.D. (Edin.), F.R.C.S. (Eng.), Professor of Aural Surgery at King's College, London; Aural Surgeon to King's College Hospital. With Illustrations, crown 8vo, 4s. 6d.

**A PRACTICAL TREATISE ON DISEASES OF THE KIDNEYS AND URINARY DERANGEMENTS.** By C. H. RALFE, M.A., M.D. Cantab., F.R.C.P. Lond., Assistant Physician to the London Hospital. With Illustrations, crown 8vo, 10s. 6d.

**DENTAL SURGERY FOR GENERAL PRACTITIONERS AND STUDENTS OF MEDICINE.** By ASHLEY W. BARRETT, M.B. Lond., M.R.C.S., L.D.S., Dental Surgeon to, and Lecturer on Dental Surgery and Pathology in the Medical School of, the London Hospital. Second Edition, with Illustrations, crown 8vo.

**BODILY DEFORMITIES AND THEIR TREATMENT: A Handbook of Practical Orthopædics.** By H. A. REEVES, F.R.C.S. Ed., Senior Assistant Surgeon and Teacher of Practical Surgery at the London Hospital. With numerous Illustrations, crown 8vo, 8s. 6d.

\*. \* Further Volumes will be announced in due course.

**T. R. LEWIS, M.B., F.R.S. ELECT, ETC.**

Late Fellow of the Calcutta University; Surgeon-Major Army Medical Staff.

**PHYSIOLOGICAL AND PATHOLOGICAL RE-  
SEARCHES.** Arranged and edited by SIR WM. AITKEN,  
M.D., F.R.S., G. E. DOBSON, M.B., F.R.S., and A. E. BROWN,  
B.Sc. Crown 4to, portrait, 5 maps, 43 plates including 15 chromo-  
lithographs, and 67 wood engravings, 3os. *nett*.

**WILLIAM THOMPSON LUSK, A.M., M.D.**

Professor of Obstetrics and Diseases of Women in the Bellevue Hospital  
Medical College, &c.

**THE SCIENCE AND ART OF MIDWIFERY.** Third  
Edition, revised and enlarged, with numerous Illustrations,  
8vo, 18s.

**WILLIAM MARTINDALE, F.C.S.**

Late Examiner of the Pharmaceutical Society, and late Teacher of Pharmacy  
and Demonstrator of Materia Medica at University College.

AND

**W. WYNN WESTCOTT, M.B. LOND.**

Deputy Coroner for Central Middlesex.

**THE EXTRA PHARMACOPŒIA** with the additions  
introduced into the British Pharmacopœia 1885; and  
Medical References, and a Therapeutic Index of Diseases and  
Symptoms. Sixth Edition, revised, limp roan, med. 24mo.

*[Just ready.]*

**A. STANFORD MORTON, M.B., F.R.C.S. ENG.**

Senior Assistant Surgeon, Royal South London Ophthalmic Hospital.

**REFRACTION OF THE EYE:** Its Diagnosis, and the  
Correction of its Errors, with Chapter on Keratoscopy.  
Third Edition. Small 8vo, 3s.

**C. W. MANSELL MOULLIN, M.A., M.D. OXON., F.R.C.S. ENG.**

Assistant Surgeon and Senior Demonstrator of Anatomy at the London  
Hospital; formerly Radcliffe Travelling Fellow and Fellow of  
Pembroke College, Oxford.

**SPRAINS; THEIR CONSEQUENCES AND TREAT-  
MENT.** Crown 8vo, 5s.

WILLIAM MURRELL, M.D., F.R.C.P.

Lecturer on Materia Medica and Therapeutics at Westminster Hospital;  
late Examiner in Materia Medica and Therapeutics to the  
Royal College of Physicians, London.

I.

**MASSOTHERAPEUTICS; OR MASSAGE AS A  
MODE OF TREATMENT.** Fourth Edition, crown 8vo,  
4s. 6d. [*Just published.*]

II.

**WHAT TO DO IN CASES OF POISONING.** Sixth  
Edition, royal 32mo, 3s. 6d. [*Just published.*]

G. OLIVER, M.D., F.R.C.P.

I.

**ON BEDSIDE URINE TESTING:** a Clinical Guide to  
the Observation of Urine in the course of Work. Fourth  
Edition, fcap. 8vo, 3s. 6d. [*Just published.*]

II.

**THE HARROGATE WATERS:** Data Chemical and  
Therapeutical, with notes on the Climate of Harrogate.  
Addressed to the Medical Profession. Crown 8vo, with Map of  
the Wells, 3s. 6d.

R. DOUGLAS POWELL, M.D., F.R.C.P., M.R.C.S.

Physician to the Hospital for Consumption and Diseases of the Chest at  
Brompton, Physician to the Middlesex Hospital.

**DISEASES OF THE LUNGS AND PLEURÆ IN-  
CLUDING CONSUMPTION.** Third Edition, re-written  
and enlarged, with coloured plates and wood-engravings, 8vo,  
16s.

SAMUEL RIDEAL, D.SC. (LOND.), F.I.C., F.C.S., F.G.S.

Fellow of University College, London.

**PRACTICAL ORGANIC CHEMISTRY.** The detection  
and properties of some of the more important organic com-  
pounds. 12mo, 2s. 6d. [*Just published.*]

E. A. RIDSDALE.

Associate of the Royal School of Mines.

**COSMIC EVOLUTION:** being Speculations on the Origin  
of our Environment. Fcap. 8vo, 3s.

**12      New and Recent Works published by**

---

**SYDNEY RINGER, M.D., F.R.S.**

Professor of the Principles and Practice of Medicine in University College;  
Physician to, and Professor of Clinical Medicine in, University  
College Hospital.

**A HANDBOOK OF THERAPEUTICS.** Twelfth Edition,  
revised, 8vo, 15s.

**FREDERICK T. ROBERTS, M.D., B.SC., F.R.C.P.**

Examiner in Medicine at the University of London; Professor of Therapeu-  
tics in University College; Physician to University College Hospital;  
Physician to the Brompton Consumption Hospital, &c.

I.

**A HANDBOOK OF THE THEORY AND PRACTICE  
OF MEDICINE.** Seventh Edition, with Illustrations,  
large 8vo, 21s.

II.

**THE OFFICINAL MATERIA MEDICA.** Second Edit.,  
entirely rewritten in accordance with the latest British  
Pharmacopœia, fcap. 8vo, 7s. 6d.

**ROBSON ROOSE, M.D., F.R.C.P. EDIN.**

I.

**LEPROSY, AND ITS TREATMENT AS ILLUS-  
TRATED BY NORWEGIAN EXPERIENCE.** Crown  
8vo, 3s. 6d.

II.

**GOUT, AND ITS RELATIONS TO DISEASES OF  
THE LIVER AND KIDNEYS.** Sixth Edition, crown  
8vo, 3s. 6d. [Now ready.]

III.

**NERVE PROSTRATION AND OTHER FUNC-  
TIONAL DISORDERS OF DAILY LIFE.** Crown  
8vo, 10s. 6d.

---

**BERNARD ROTH, F.R.C.S.**

Fellow of the Medical Society of London.

**THE TREATMENT OF LATERAL CURVATURE  
OF THE SPINE.** Demy 8vo, with Photographic and  
other Illustrations, 5s. [Just published.]

**DR. B. S. SCHULTZE.**

**THE PATHOLOGY AND TREATMENT OF DIS-  
PLACEMENTS OF THE UTERUS.** Translated by  
J. J. MACAN, M.A., M.R.C.S., and edited by A. V. MACAN B.A.,  
M.B., Master of the Rotunda Lying-in Hospital, Dublin. With  
Illustrations, medium 8vo, 12s. 6d. [Now ready.]

**WM. JAPP SINCLAIR, M.A., M.D.**

Honorary Physician to the Manchester Southern Hospital for Women and Children, and Manchester Maternity Hospital.

**ON GONORRHOEAL INFECTION IN WOMEN.**  
Post 8vo, 4s.

**ALEXANDER J. C. SKENE, M.D.**

Professor of Gynæcology in the Long Island College Hospital, Brooklyn.

**TREATISE ON THE DISEASES OF WOMEN.**  
With 251 engravings and 9 chromo-lithographs, medium 8vo, 28s. [Just published.]

**ALDER SMITH, M.B. LOND., F.R.C.S.**

Resident Medical Officer, Christ's Hospital, London.

**RINGWORM: ITS DIAGNOSIS AND TREATMENT.**  
Third Edition, rewritten and enlarged, with Illustrations, fcap. 8vo, 5s. 6d.

**JOHN KENT SPENDER, M.D. LOND.**

Physician to the Royal Mineral Water Hospital, Bath.

**THE EARLY SYMPTOMS AND THE EARLY TREATMENT OF OSTEO-ARTHRITIS,** commonly called Rheumatoid Arthritis. With special reference to the Bath Thermal Waters. Small 8vo, 2s. 6d. [Just published.]

**LOUIS STARR, M.D.**

Clinical Professor of Diseases of Children in the Hospital of the University of Pennsylvania.

**HYGIENE OF THE NURSERY.** Including the General Regimen and Feeding of Infants and Children, and the Domestic Management of the Ordinary Emergencies of Early Life. Second edition, with illustrations, crown 8vo, 3s. 6d. [Now ready.]

**W. R. H. STEWART, F.R.C.S., L.R.C.P. EDIN.**

Aural Surgeon to the Great Northern Central Hospital; Surgeon to the London Throat Hospital; Surgeon to the Throat and Ear Department, Establishment for Invalid Ladies, Harley Street.

**EPITOME OF DISEASES AND INJURIES OF THE EAR.** Royal 32mo, 2s. 6d. [Just published.]

**LEWIS A. STIMSON, B.A., M.D.**

Surgeon to the Presbyterian and Bellevue Hospitals; Professor of Clinical Surgery in the Medical Faculty of the University of the City of New York, etc.

**A MANUAL OF OPERATIVE SURGERY.** With three hundred and forty-two Illustrations. Second Edition, post 8vo, 10s. 6d.



**ADOLF STRÜMPPELL, M.D.**

Director of the Medical Clinic in the University of Erlangen.

**A TEXT-BOOK OF MEDICINE FOR STUDENTS AND PRACTITIONERS.** Translated from the latest German Edition by Dr. H. F. VICKERY and Dr. P. C. KNAPP, with Editorial Notes by Dr. F. C. SHATTUCK, Visiting Physician to the Massachusetts General Hospital, etc. Complete in one volume, with 111 Illustrations imp. 8vo, 28s.

**JUKES DE STYRAP, M.K.Q.C.P.**

Physician-Extraordinary, late Physician in Ordinary to the Salop Infirmary;  
Consulting Physician to the South Salop and Montgomeryshire  
Infirmary, etc.

**THE MEDICO-CHIRURGICAL TARIFFS PREPARED FOR THE LATE SHROPSHIRE ETHICAL BRANCH OF THE BRITISH MEDICAL ASSOCIATION.** Fourth Edition, revised and enlarged, fcap. 4to, 2s. *nett*.

**C. W. SUCKLING, M.D. LOND., M.R.C.P.**

Professor of Materia Medica and Therapeutics at the Queen's College,  
Physician to the Queen's Hospital, Birmingham, etc.

**ON THE DIAGNOSIS OF DISEASES OF THE BRAIN, SPINAL CORD, AND NERVES.** With Illustrations, crown 8vo, 8s. 6d.

**JOHN BLAND SUTTON, F.R.C.S.**

Lecturer on Comparative Anatomy, Senior Demonstrator of Anatomy, and  
Assistant Surgeon to the Middlesex Hospital; Erasmus Wilson  
Lecturer, Royal College of Surgeons, England.

**LIGAMENTS: THEIR NATURE AND MORPHOLOGY.** Wood engravings, post 8vo, 4s. 6d.

**HENRY R. SWANZY, A.M., M.B., F.R.C.S.I.**

Examiner in Ophthalmic Surgery at the Royal College of Surgeons, Ireland  
Surgeon to the National Eye and Ear Infirmary, Dublin; Ophthalmic  
Surgeon to the Adelaide Hospital, Dublin; etc.

**A HANDBOOK OF DISEASES OF THE EYE AND THEIR TREATMENT.** Second Edition, Illustrated with Wood Engravings, Colour Tests, etc., large post 8vo, 10s. 6d.

**EUGENE S. TALBOT, M.D., D.D.S.**

Professor of Dental Surgery in the Women's Medical College; Lecturer on  
Dental Pathology and Surgery in Rush Medical College, Chicago.

**IRREGULARITIES OF THE TEETH AND THEIR TREATMENT.** With 152 Illustrations, royal 8vo, 10s. 6d.

**E. G. WHITTLE, M.D. LOND., F.R.C.S. ENG.**

Senior Surgeon to the Royal Alexandra Hospital, for Sick Children, Brighton.

**CONGESTIVE NEURASTHENIA, OR INSOMNIA  
AND NERVE DEPRESSION.** Crown 8vo, 3s. 6d.

**JOHN WILLIAMS, M.D., F.R.C.P.**

Professor of Midwifery in University College, London; Obstetric Physician to  
University College Hospital; Physician Accoucheur to Her Royal  
Highness Princess Beatrice.

**CANCER OF THE UTERUS: BEING THE HAR-  
VEIAN LECTURES FOR 1886.** Illustrated with Litho-  
graphic Plates, royal 8vo, 10s. 6d.

**BERTRAM C. A. WINDLE, M.A., M.D. DUBL.**

Professor of Anatomy in the Queen's College, Birmingham; Examiner in  
Anatomy in the Universities of Cambridge and Durham.

**A HANDBOOK OF SURFACE ANATOMY AND  
LANDMARKS.** Illustrations, post 8vo, 3s. 6d.

*[Just published.]*

**EDWARD WOAKES, M.D.**

Senior Aural Surgeon and Lecturer on Aural Surgery at the London Hospital;  
Surgeon to the London Throat Hospital.

I.

**POST-NASAL CATARRH, AND DISEASES OF THE  
NOSE CAUSING DEAFNESS.** With Illustrations,  
crown 8vo, 6s. 6d.

II.

**NASAL POLYPUS: WITH NEURALGIA, HAY-  
FEVER, AND ASTHMA, IN RELATION TO ETH-  
MOIDITIS.** With Illustrations, crown 8vo, 4s. 6d. *[Now ready.]*

**DAVID YOUNG, M.C., M.B., M.D.**

Licentiate of the Royal College of Physicians, Edinburgh; Licentiate of the  
Royal College of Surgeons, Edinburgh; Fellow of, and late  
Examiner in Midwifery to, the University  
of Bombay, etc.

**ROME IN WINTER AND THE TUSCAN HILLS  
IN SUMMER.** A Contribution to the Climate of Italy.  
Small 8vo, 6s.

---

**CLINICAL CHARTS FOR TEMPERATURE OBSERVATIONS, ETC.**

Arranged by **W. RIGDEN, M.R.C.S.** Price 1s. per doz.,

7s. per 100, 15s. per 250, 28s. per 500, 50s. per 1000.

Each Chart is arranged for four weeks, and is ruled at the back for making  
notes of cases; they are convenient in size, and are suitable both for hospital  
and private practice.

## Periodical Works.

PERIODICAL WORKS PUBLISHED BY H. K. LEWIS.

**THE NEW SYDENHAM SOCIETY'S PUBLICATIONS.** Annual Subscription, One Guinea.

Report of the Society, with Complete List of Works and other information, gratis on application.

**THE BRITISH JOURNAL OF DERMATOLOGY.** Edited by Malcolm Morris and H. G. Brooke. Published monthly, 1s. per no. Annual Subscription, 12s., post free.

**THE NEW YORK MEDICAL JOURNAL.** A Weekly Review of Medicine. Annual Subscription, One Guinea, post free.

**THE THERAPEUTIC GAZETTE.** A Monthly Journal, devoted to the Science of Pharmacology, and to the introduction of New Therapeutic Agents. Edited by Drs. H. C. Wood and R. M. Smith. Annual Subscription, 10s., post free.

**THE GLASGOW MEDICAL JOURNAL.** Published Monthly. Annual Subscription, 20s., post free. Single numbers, 2s. each.

**LIVERPOOL MEDICO-CHIRURGICAL JOURNAL,** including the Proceedings of the Liverpool Medical Institution. Published twice yearly, 3s. 6d. each number.

**MIDDLESEX HOSPITAL.** Reports of the Medical, Surgical, and Pathological Registrars for 1883 to 1886. Demy 8vo, 2s. 6d. *nett* each volume.

**TRANSACTIONS OF THE COLLEGE OF PHYSICIANS OF PHILADELPHIA.** Volumes I. to VI., 8vo, 10s. 6d. each.

\*. \* Mr. LEWIS is in constant communication with the leading publishing firms in America and has transactions with them for the sale of his publications in that country. Advantageous arrangements are made in the interests of Authors for the publishing of their works in the United States.

Mr. LEWIS's publications can be procured of any Bookseller in any part of the world.

*Complete Catalogue of Publications post free on application.*

*Printed by H. K. Lewis, Gower Street, London, W.C.*









