be raised by the establishment of a Postal Savings Bank. The proposal was not sanctioned by Congress. A curious fact which has militated against the establishment of a Post Office Savings Bank is that there is practically no national debt. The working of the Post Office Savings Bank was during the earlier years of the institution connected with the idea of a permanent Government debt, in which the majority of the bank funds are invested. Interest cannot be paid to depositors for funds which are not needed, and which cannot be profitably employed. It is scarcely likely that the public will deposit money unless promised a certain interest; and if no public debt exists in which the funds can be invested, Government would be in the awkward position of having to levy a tax in order to pay the interest due to investors. The problem has not yet been solved, although in other countries funds are now partly invested in municipal securities, agricultural loans, and the erection of workmen's dwellings; and the United States still remain without a Post Office Savings Bank.

In France minors constitute nearly a fourth part of the entire number of depositors, whereas in Austria eighty per cent. are young people up to the age of thirty, and in the United Kingdom more than sixty per cent. are women and children, a proof of the untenable position of those who urge that the Post Office Savings Bank interferes with the business of ordinary bankers. In the United Kingdom at the end of 1895 the accounts showed the following division of deposits:—

| | | Per cent. |
|---|---|---|
| Balances not exceeding | .. £50 | 36·1 |
| Exceeding £50 and not exceeding | .. £100 | 24·5 |
| „ £100 and not exceeding | .. £150 | 17·3 |
| „ £150 and not exceeding | .. £200 | 14·8 |
| „ £200 | .. | 7·3 |
| | | 100·0 |

In India the number of accounts held by natives represented in 1907-08, 91·24 per cent. Nearly half the depositors belong to the professional classes, and very few of the large agricultural class, probably from ignorance, makes use of the bank. There was one account for every 237 persons, as compared with one for every 4·24 persons in the United Kingdom.

Almost every inducement has been held out to facilitate deposits. In the United Kingdom whenever a new bank office is opened a hand bill calling attention to the fact and describing the chief advantages of the Post Office Savings Bank system is distributed from house to house in the neighbourhood. Post Office clerks attend barracks and workshops on pay days to receive deposits, and also when railways are under construction on the days the gangs are paid, and sometimes at schools when pocket money is distributed. A novel experiment was made by the Ragged School Union as a first lesson in thrift. At the annual distribution of prizes 335 scholars received from the Union deposit books showing that 5s. had been placed at the credit of each in the Post Office Savings Bank. In ordinary circumstances the attendance of a depositor is required when an account is opened, but, as in this case such a requirement would have made the arrangement impossible, all the necessary preliminaries were settled in co-operation with the Secretary of the Union. There also exists an arrangement under which the amount of scholarships awarded by the Technical Education Board of the London County Council are paid into the Savings Bank accounts of the scholars. The deferred pay of soldiers leaving the army was invested on their behalf in the savings bank, but it was found that the majority of the soldiers drew out practically the whole amount at once, and the experiment was discontinued in 1901. At the request of large employers of labour, a postal official attends industrial establishments on pay days, and large numbers of workmen have thus been induced to become depositors. There are now 19 Foreign and Colonial Government Savings Banks parti-

cipating in the arrangement with the British Post Office Savings Banks made under the provisions of the Savings Bank Act, 1904, for the transfer of accounts.

Arrangements were made with the War Office enabling soldiers stationed abroad to remit money for deposit in the Post Office Savings Bank through the War Office Public Accounts, and this form of remittance continues to be highly popular.

In one case a firm awarded a bonus among their work people of £1,000 which was distributed amongst them, and entrusted to the Savings Bank.. In Belgium a suggestion has been made for supplying every new-born child with a savings bank pass book. The figures relating to the savings of the masses at all the various savings banks in a country (and not only those of the Post Office) are strikingly significant as far as the United Kingdom is concerned, apparently showing that the working classes in that country are abandoning the habit of thrift. While there are only £210,000,000 in British savings banks there are nearly eight hundred millions in the German savings banks. According to an enquiry instituted by the United States Government the increase in that country's savings bank deposits last year (1908) was nearly 208 million dollars; Germany came next with 192 million dollars, and the United Kingdom seventh with only 20¼ million dollars, Australia and New Zealand together beating the United Kingdom in this matter. Allowing for interest added to deposits popular savings in Great Britain are no longer increasing but actually decreasing, and for several years withdrawals from savings banks have exceeded deposits by more than two millions sterling a year.

In India much might be done in this direction, unfortunately heavy charges are incurred by the Post Office for working the savings bank, but no credit is allowed in the departmental accounts for this business. To show that when facilities are given they are taken advantage of, an experiment tried at Sibi by the Superintendent, Baluchistan Division, may be men-

tioned. At that place there is a small railway workshop where about 80 hands were employed. Permission was obtained from the District Locomotive Superintendent to allow a Post Office clerk to attend the workshop on pay days to receive deposits and open accounts. In a short time about 25 workmen had opened accounts, and the clerk had always some deposits. After the Superintendent's transfer from the division the plan was not continued by his successor and when the former re-visited the place about a year and a half afterwards only three workmen were said to have a savings bank account.

Under the Electoral Law, Savings Bank depositors, natives and inhabitants of Holland of the age of 25 years who have had to their credit in the Savings Bank at least 50 florins a year, are entitled to a vote at the elections to the Second Chamber of the States General. In 1897, 2,306 depositors claimed this franchise. Mr. Disraeli in one of his Reform Bills proposed a somewhat similar franchise for the United Kingdom but his proposal never became law.

In Japan with a population of 46,535,889, the number of individual deposits is nearly six millions. During the last decade business houses have been forced by competition to adopt many labour-saving appliances and methods and the Japanese Administration was the first to introduce the well-known card system in its Savings Bank branch by which a card is used for recording entries of deposits and withdrawals on accounts. A pass-book is given to the depositor and one card is kept in the bank as a ledger for each depositor. On the card are entered: the depositor's mark, which is put in the upper left hand corner; the number of the account; the depositor's name and address; and his occupation. The columns are ruled for the entry of deposits and withdrawals. The card is also used for the figuring of principal and the entry of the balance which is credited on any day to the depositor. It will thus be seen that this one card contains the total record and history of the depositor's account. For the effectiveness of

this method it is said that previous to its introduction 313,796 hours were spent by clerks in making entries, whereas under the card system the posting time has been reduced to 143,121 hours. In the Egyptian Post Office during 1908, the ledger system of recording was superseded by the vertical card filing system, which is said to be a most expeditious innovation and a great success.

It is found that the average value of the withdrawals is higher than the average value of deposits. This phenomenon occurs in all Savings Banks and is explained by the fact that money finds its way to the bank in small sums, but is not withdrawn until the savings have accumulated.

The withdrawals from the Savings Bank in the United Kingdom in 1907 exceeded in value the deposits by almost two and a quarter million pounds. Nevertheless, with the interest that had accrued, the total standing to the credit of depositors increased by a million and a half during the same period.

In India an abnormal number of withdrawals occurred during 1885. It was explained that they were undoubtedly due to a feeling of insecurity which prevailed for a short time during the month of March, when the prospect of a war with Russia appeared to be imminent and arrangements were being made on a large scale for sending troops to Pishin. The French Post Office has an important provision for such times of difficulty (dans les cas de force majeure) by which, under the direction of the Conseil d'Etat, with the approval of the Cabinet, no repayment of a larger sum than 50 francs need be made at any time, while an interval of 15 days must elapse between each such payment. In consequence of the very large sums held by Government as Savings Bank balances, a panic might cause such a run on the bank as would be difficult to meet in an emergency, and the French law referred to seems a very wise provision. During the famine year 1897-98 the deposits fell by 23 per cent. and the closing balance by 3·6 per cent. In 1903-04 the depositors numbered 1 out of 286 of the total popu-

lation, against 1 out of 4½ in the United Kingdom; and the amount at credit of depositors was nearly 7 annas per head of population, against £3 9*s.* 1*d.* per head in the United Kingdom.

In the United Kingdom Savings Bank funds are invested in Treasury Securities, and for some years there was a considerable profit, as the capital collected was placed at higher interest than had to be paid to depositors, and in 1874 this profit amounted, after the payment of all expenses for management and working to the sum of £118,000. It was first a philanthropic measure as the interest on Consols was high, and the securities were hard to find. But the Savings Bank deposits grew and Consols became scarcer, and by continuing the practice Government kept the price of Consols up, and the interest on Consols low. It was this policy which enabled Lord Goschen to initiate his "conversion." If Consols are low when money is scarce, the Treasury has to sell out at a loss to pay the withdrawals. The high price of Consols, due in part to the magnitude of purchases on Savings Bank account, proved a serious embarrassment to the profitable working of the institution, which after paying its working expenses and interest to its depositors at 2½ per cent., had shown a yearly profit until 1896. Down to 1896 a sum of £1,598,767 had been paid into the Exchequer under section 14 of the Act 40 Vict. c. 13, being the excess of interest that had accrued year by year. Since 1895 there have been yearly deficits, which in four years amounted to £34,123. Although the average cost per transaction was reduced in 1907 to 5*d.*, yet the year's working showed a loss of £86,247. A writer in *St. Martins-le-Grand* says:—"The monies invested in the Post Office Savings Bank are the national reserves of the poor—their sole shelter and support in times of national depression; and no greater calamity can happen to the nation than that it should regard with unconcern any measures which tend to weaken this reserve of national financial strength, or militate against the usefulness of an institution, which has constituted a harbour and refuge of safety for the masses in times of distress and difficulty."

Several writers have protested against a system by which the Treasury may use the savings of the poor for purposes remote from the benefit of the depositors, and the danger of putting such an enormous number of eggs into one basket has also been recognised. If the Treasury were called upon to meet a sudden run on the bank, the ensuing depreciation in Government credit might be enormous. The greatest evil of all to the minds of many is the way in which the system drains money from beneficial uses in the Provinces, and centres it in the Government Treasury chest. In Belgium, France, Italy, and Germany, the funds are used for Municipal loans, agricultural credit, the erection of workmen's dwellings: in fact any public investment which is considered safe by the authorities. The money instead of being withdrawn from industry, is placed at its service. It is a mistake to look at the Savings Bank as a means merely of saving money, it should be the means also of increasing wealth.

As already stated, in most Savings Banks, depositors have been able to invest their savings in Government stocks, the smallest purchase in the United Kingdom being one shilling, and in India Rs. 10.

*Life Insurance.*—In the United Kingdom a bill was passed in 1865 to enable a person to insure his life for any sum from £20 up to £100 on Government security and also to buy a deferred annuity of not more than £50, either by one payment, or annual payments, or such small payments at such periods as may be most convenient, provided the sums be not less than two shillings. When the terms were accepted, a depositor might pay his premia wherever he pleased, instead of having always to pay them at the same place. Finally, he could pay in any sums and at any time, instead of having to pay an exact sum at a particular time. The Post Office would take charge of all sums, and apply them in accordance with a direction given once for all. The depositor had only to take care that there should be a sufficient sum to his credit when the premium became due.

The desire of the poorer classes was undoubtedly to insure for such a sum as would defray their burial expenses and to save their surviving relatives from the undesirable necessity of applying to the parish for funds.

An important feature of the tables was the cheapness of their rates, as they were lower than those of industrial insurance companies. The Post Office does not tout for business so it saves all expenses in this respect as well as in regard to collectors. Naturally, therefore, as the loading of the tables in the case of the Post Office is less, so the rates are lower than those of industrial companies.

In Belgium an annuitant is not obliged to state the amount of the annuity he wishes to purchase, at the time of paying his first premium ; he has only to state the age at which he wishes the payment of the annuity. Further, an annuitant is not bound to pay premia at regular intervals, nor need the premia be of a fixed amount, on the contrary he makes the payments at the time and of an amount that suit him best, and the central administration of the General Savings and Annuity Bank calculates the amount of the annuity to which the balance standing at credit after each payment will entitle the annuitant to receive at the age specified in the contract.

In India, Postal Life Insurance and the purchase of Annuities, started in 1884, is restricted to Government servants.

## CHAPTER VII.

### THE VICTORIAN ERA—(*continued*).

*Postal Telegraphs.*—In many countries although the telegraphs are owned by the State, they do not form a part of the Post Office, and are worked by a separate department. This is the case in India, so only a brief reference will be made to the subject. In the British Post Office the engineering branch deals with the construction and maintenance of telegraph and telephone lines, and all technical questions, but has nothing to do with the internal management of telegraph offices.

In 1865 the Edinburgh Chamber of Commerce appointed a committee to consider the service rendered by the various telegraph companies. This committee reported that the charges, *viz.*, one shilling for 20 words over a distance not exceeding 100 miles, 1*s.* 6*d.* for a similar message between 100 and 200 miles, and 2*s.* when exceeding 200 miles, were excessive; that delays and inaccurate signalling were frequent; and that some large towns and districts were quite unprovided with telegraph facilities. The Edinburgh Chamber proposed a uniform six-penny rate, and that the service should be transferred to the Post Office. This proposal was supported by the other Chambers of Commerce throughout the kingdom, and as the desire seemed to be general, the Post Office began to take steps to work out the scheme. The arrangements were made by Mr. Scudamore, and in 1868 the Electric Telegraph Act authorised the Postmaster-General to purchase any existing telegraph company, but did not confer a legal monopoly on the Post Office. This, however, was conferred in the following year by "an Act to alter and amend the Telegraph Act." The great transfer from the private companies to the Post Office was made in 1868-70, and was carried out with credit to the department. The unit of charge remained one shilling, but

this was made uniform throughout the country, irrespective of locality or distance. On the day of the transfer a thousand post offices and 1,900 railway stations were opened as telegraph offices. The public at once showed their appreciation of the change by the increased traffic. In 1869 the companies transmitted seven millions of messages, whereas in 1870 ten millions were sent through the Post Office.

Mr. Bains, in 1856, had proposed a scheme for the State acquiring and working the telegraphs, and in his *Forty Years at the Post Office*, has described the purchase and acquisition. He says—"But all which was planned out in 1856 has come to pass—that is, except the net revenue; but, then, mine was a scheme for spending not more than a million and a quarter on postal telegraphs, whereas, thanks mainly to hesitation in adopting some such plan, about £11,000,000 have been laid out." And further:—"The millstone around the neck of the telegraph branch is the interest payable on eleven millions of capital outlay, equal at (say) 3 per cent. to a charge of £330,000 a year." The telegraphs have been worked at a loss, and the reasons given for the unfavourable financial results are, (1) the heavy price paid for acquiring the companies' properties. (2) The privilege given to railway companies at the time of transfer of sending messages free of charge. The number of these messages at first small, subsequently reached a very large amount, so that arrangements were made regulating this privilege by limiting the number of free messages that could be sent. (3) The loss on press messages. The first rate (1868) was 1s. for 75 words by day and 100 at night and copies were charged at 2*d.* for 75 or 100 words accordingly. The newspapers formed News Associations to receive messages in identical terms, so as to divide the cost, and the cost became nearer 2*d.* than 1s., the average being 4½*d.* per 100 words. The loss on Press telegrams in 1907 was estimated at £225,000.

It was only in 1881 that the net returns were sufficient to meet the interest on the capital.

When the system was taken over by the Post Office the average cost of a telegram was something over 2s. This was immediately reduced to a *uniform* charge of 1s., and, before many years had passed, there was a public demand for a further reduction to 6*d*. The result has been that whereas the companies only carried about 6,000,000 telegrams yielding £600,000 a year, the Post Office is now carrying 90,000,000 yielding a total revenue of over £4,000,000. Large as this revenue is, the expenses are still larger, so that it is obvious that 6*d*. is really less than the working cost of handling an average telegram. The loss on the telegraph and telephone business in 1907 amounted to £851,876. There are now 13,000 offices in the United Kingdom from which telegrams may be despatched as compared with 3,000 in the days of the Companies.

In 1885 the charge was reduced to a half-penny a word throughout, including address, with a minimum charge of sixpence. Abbreviated addresses could be registered on payment of a guinea a year. As a part of the Jubilee concessions in 1897, the charges for porterage were reduced. They were formerly 6*d*. per mile beyond the free postal delivery of a town or beyond one mile from an office, and 1s. a mile from the office door when the distance exceeded 3 miles and a mounted messenger was sent. These were reduced to: free delivery up to 3 miles, and beyond this distance 3*d*. per mile.

Much has been done to render the lines secure from damage and interruptions caused by storms, by a system of underground trunk wires.

Sir William Preece, one of the chief authorities in England, when recently addressing the Institute of Electrical Engineers, said:—"No reference whatever is made here to the *per contra*. The Press, with its ruinous rate of 2*d*. per 100 words, cost at one time £600,000 per annum. Messages are now delivered free. Nearly every village in the country has its telegraph. Innumerable offices are kept open all night. The railway companies have an immense free service over the whole Post

Office system. There is no capital account, and all extensions and renewals are charged to revenue. The annual income taken over was £600,000. It was for the year ending 31st March 1907, £4,369,227. The annual loss *on paper* may be one million per annum, but the above *per contra* will wipe that cut and leave the most magnificent telegraph system in the world the free asset of the British public—an asset which I once valued at £30,000,000."

There are more telegrams sent in the United Kingdom relatively to population, than in any other country, except perhaps the United States. For every 100 persons there are 181 telegrams, whereas in France there are but 108, and in Germany 66.

The first telephone exchange in London was established by a private company in 1878, and then several companies established exchanges in the United Kingdom, which became a formidable rival to the State telegraphs. The Postmaster-General considered that his monopoly had been infringed, and in 1880 the case was taken to the High Court, which ruled that "the telephone was a telegraph," and that "the Government monopoly is not limited to the property it acquired. It extends to all improvements in telegraphic communication." The companies were, however, allowed to continue their operations under a license and had to pay a royalty of 10 per cent. on gross receipts, and were placed under certain limitations and control.

In 1891 the last of the patents expired, and a motion was passed in the House of Commons to nationalize the telephone service. A Select Committee in 1892 recommended companies' licenses should not be extended, and the Telegraph Act, 1892, authorised the borrowing of one million pounds for the purchase of the companies' *trunk* lines. The fees were :—

| | s. | d. | |
|---|---|---|---|
| 25 miles or under ... ... ... | 0 | 3 | for 3 minutes. |
| Over 25 miles but not exceeding 50 ... ... | 0 | 6 | " " " |
| " 50 miles but not exceeding 75 ... ... | 0 | 9 | " " " |
| " 70 miles but not exceeding 100 ... ... | 1 | 0 | " " " |
| For each 40 miles beyond ... ... | 0 | 6 | " " " |

The transfer occupied a period of nearly 4 years. A Select Committee held on the service in 1898, reported that the trunk service worked on the toll system (*i.e.*, a separate payment for each service) was the most expensive in Europe, and the exchange service was behind the Continental standards. The Post Office opened its exchange service in London in 1902.

The last Committee, known as the Hanbury Committee, recommended that the Post Office should take up telephone "on business lines" with the view of taking over the National Company's system, at a valuation, on the expiration of their license in 1911.

As the telephone is a formidable competitor to the telegraph, it is recognized as essential towards an economical adjustment of facilities that both systems should be in one hand. The one service is a natural complement of the other, and the day may come when the telephones will play the chief part in the national system of electric communication just as the telegraph does now.

In the United Kingdom radio-telegrams are accepted at any telegraph office for transmission from various Coast Stations (both in the United Kingdom and abroad) to certain of the principal Ocean Liners and also to certain Mail Packets.

Radio-telegrams from ships are also received at such stations and are thence transmitted to their destination by wire.

*India.*—The term "telegraph" did not come into vogue with the use of electricity for the transmission of messages, but at an earlier date was applied to the method of signalling by semaphore of which the most notable example was the Admiralty telegraph from Portsmouth to London during the war with France. Between 1820 and 1830 the proposal was seriously entertained by the Indian Government to construct a series of semaphore towers 100 feet high and at intervals of eight miles signalling all the way from Calcutta to Bombay. The scheme never got very far, but some of these towers may be seen to this day in the Hooghly district.

In 1832 a line of semaphore posts extended for about 500 miles from Calcutta to Chunar, and it was stated that "in favourable weather" in eight minutes a return had been made through a line of 400 miles at a communication from the presidency or at the rate of a hundred miles in the minute.

In 1851 Dr. W. O'Shaughnessy, Professor of Chemistry, Calcutta Medical College, obtained sanction to construct experimental telegraph lines between Calcutta and Diamond Harbour, Bishtopur and Mayapur, and Kukrahati and Kedgeree for business chiefly connected with shipping in the Hooghly. As these experiments proved successful, Lord Dalhousie obtained sanction from the Court of Directors to construct lines from Calcutta to Bombay *via* Agra, from Agra to Peshawar, and from Bombay to Madras. These were opened for traffic in 1855, and were preceded by the Telegraph Act— Act XXXIV of 1854. The tariff was fixed at one rupee for sixteen words, including the address for 400 miles, and this was made uniform for all distances in 1882.

In India the telegraphs are owned by the State, and as already mentioned are worked by a separate department. During the Mutiny the lines in the North-West Provinces now called the United Provinces, and in parts of Central India, suffered considerable damage, about 700 miles being entirely demolished. A writer in alluding to this period says :—"The delay which led to so many disasters was due to terrible difficulties of transport. If in addition to these difficulties it had taken weeks instead of minutes to communicate between Calcutta and Bombay, it is doubtful whether the Mutiny could have been quelled at all."

There are now thirteen main trunk lines of communication. In 1885 a new Act, Act XIII, was passed, and the rates were revised the following year. Messages were divided into urgent, ordinary, and deferred. Ordinary telegrams were charged one rupee for eight words, and two annas for each additional word. Urgent messages were charged double, and deferred at half the ordinary rates. Subsequently a four

anna deferred telegram was introduced, and after four years of working no room was left for doubt that it did not pay, and that there was a loss on each message. It was felt that the general tax-payer could not in justice be called upon to pay a large subsidy each year for the maintenance of the telegraph system which is used by only four per cent. of the population, so on 1st January 1909 the triple classification was abolished and only ordinary and express messages received. Twelve words including the address are allowed for an ordinary message, at a charge of six annas; and for an express message the charge is one rupee.

All post offices were constituted receiving offices for telegrams in 1883, and in the following year a scheme was brought into effect for utilising the Post Office in extending the operations of the Telegraph Department, and telegraph work was undertaken by the Post Office staff. Such offices were designated Combined Post and Telegraph Offices. These now greatly outnumber those purely Telegraph Offices worked solely by the Telegraph Department, and the revenue derived from combined offices exceeds that derived from departmental telegraph offices.

In 1881 licenses were granted to the Oriental Telephone Company to establish exchanges at Bombay, Madras, Calcutta, Karachi and Rangoon, and the Government has established exchanges at other places.

An installation for wireless telegraphy between Port Blair in the Andamans and Diamond Island on the Burmese Coast was opened for public messages in 1905.

In 1868 it was decided in India not to amalgamate the Post and Telegraph Departments, and after the subject was re-opened in 1906 the same result was confirmed; and a similar decision was arrived at in Switzerland in the following year.

In the United States the telegraphs are not the property of the State, and are owned and worked by private companies. In France the posts and telegraphs were amalgamated in 1878.

which enabled the introduction of a reduced tariff of one halfpenny for each word, with a minimum charge of 5*d*.

The International Telegraph Union, with its office at Berne, performs similar functions towards the international telegraphs, that the *International* Postal Union performs towards the various postal administrations of the world.

The International Telegraph Union was founded in Paris 1865, and Conferences were held in succession, Vienna, 1868, Rome, 1871; St. Petersburg, 1875; London, 1879. The United Kingdom gave its adhesion on the acquisition of the telegraph by the State in 1870. By that time the Union comprised practically the whole of Europe, and of the extra-European countries India had already joined. The absence of the United States of America was due to the fact that in that country the telegraphs belong to private companies.

The sixth International Conference was held in Berlin in 1884, and effected a reduction in the charges to various countries, for example, the rate per word to India was reduced from 4*s*. 7*d*. to 4*s*. And the cost of repeating a message was reduced from one half to one fourth of the original charge for transmission.

The seventh Conference was held at Paris in 1890, and made further reductions in rates.

The eighth Conference was held at Budapest in 1896, and also made further reduction in rates. The most important questions discussed were:—The official vocabulary for code telegrams, the equivalent of the franc in local currency, and the German project of a uniform tariff in Europe. It was imposed on every State the fixing in its currency an equivalent to the standard gold rate. The limit of letters for one word was raised from 10 to 15, and of figures from 3 to 5. The International Bureau was directed to compile a code, which it was proposed to introduce as the recognised one for cypher messages.

The ninth Conference was held at London in 1903, and the subject that excited the most interest was the official

vocabulary for code telegrams prepared by the International Bureau. It was rejected as a compulsory standard, and the field of selecion for code words was greatly enlarged by the admissions of all combinations of letters, not exceeding ten in number, capable of being pronounced.

The tenth Conference held at Lisbon in 1908 decided (1) that the test for pronouncability should be the ordinary (or current) usage of each language, and (2) that code-makers should have the privilege of submitting their codes to certain Administrations, with a view to obtain an assurance from the International Telegraph Union that the words contained in the codes comply with the regulations. A reduction in the cost of obtaining repetition in cases of error was made, and permission to use both figure and letter cypher in a single telegram, and to combine figures and letters in a single group of 5 characters when denoting commercial marks. Also a general reduction was made of the "elementary" or normal rates for European telegrams. Regulations were also made for the acceptance, wire transmission and delivery of wireless telegrams, so that the wireless telegraph installations on ships and at shore stations are now, for purposes of public communication, joined to the general telegraph and cable system in most countries of the world.

## CHAPTER VIII.

### THE UNIVERSAL POSTAL UNION.

ON the adoption of uniform postage by most of the postal administrations it was found that the domestic or internal correspondence not only greatly increased, but that the foreign correspondence also increased. Each country had its own internal rates and regulations, and had to form conventions with every other country with which correspondence was exchanged, and to keep a mass of intricate returns and accounts. There were many units of weight in use; the scale of progression was variable; as were also the charges; and a letter which had to be sent through several countries was charged according to the different units and progressions of weight in vogue. The burden of making these conventions with each State, which had its own separate regulations, was found to be very laborious, so a conference of the leading administrations was convened in 1863 at the suggestion of the United States Post Office. It was held in Paris, and its object was "the improvement of postal communication between the principal commercial nations of the world." Among the subjects discussed was the pre-payment of foreign letters, the adoption of the metrical decimal system of weights and the principles of postal reciprocity. Although good as a preliminary effort, it was seen that further co-operation was required to consider and simplify the situation, and at the suggestion of the German Post Office, which in 1850 had concluded a treaty forming a Postal Union with Austria, a conference was held at Berne in 1874, resulting in the treaty of Berne, and the formation of the General Postal Union ("L'Union Gēnērale des Postes"). The project submitted by the German Post Office had been formulated by Herr von Stephen, who was the moving spirit at the Berne meeting and perhaps the only man present equal to the task of carrying

the scheme to a successful issue, and the eventful conclusions of the Congress are due to his leadership. The following principles were then laid down :—It was recognised that a general law had asserted itself in the exchange of international correspondence, whereby the current that flows from one country to another returns in practically the same volume. Thus if 20 million letters are sent from England to France, about as many would be returned from France to England. So the Congress decided to adopt the 'principle of 'reciprocal compensation, which had been introduced between France and Spain in 1660 or two hundred years previously, and it consequently abolished the settling of accounts relating to letters forwarded from one country to another. This is *the* great principle which is the basis of the Union. Two other fundamental laws of the Union are, a cheap rate of postage with uniform progression of weight, and the general liberty of transit for such mails as each country might find occasion to send. Every country of the Union has to give to the mails of every other the same transit advantages as it enjoys for its own mails.

At the suggestion of M. Vinchent of the Belgium Post Office an international office was created at Berne, with an official organ called *L'Union Postale*, a trilingual paper in French, German and English. The countries of the union are divided into six classes for the purpose of defraying the expenses of the central office. Class one contributes 25 parts; class two, 20; class three, 15; class four, 10; class five, 5; and class six, 3 parts of the total expenses.

The Union constituted all countries joining it a single territory, subjecting the countries, as far as postal matters were concerned, to the operation of the same laws and regulations. It abolished frontiers and dividing barriers, and has given complete liberty of intercourse. Formerly foreign rates were very high and almost prohibitive, and foreign correspondence which had before been the indulgence of the well-to-do classes, now became the privilege of all human beings of the

civilised world. Its unique inspiration is the interests of all peoples. The delegates of all nations elaborate laws which are carried out over the whole surface of the globe. From the idealists' point of view the Union was acclaimed as one of the links forming a brotherhood of all the nations. Some look forward to the time when there will be free international transit, and their motto is :—*one postal territory, one code of postal regulations, one uniform postal tariff, with free conveyance between nation and nation.*

It is curious that before great ideas are realised they are generally anticipated by various persons. Two hundred years before the Congress of Berne there was a general dread of the advance of France towards a predominating sway in Europe, and Beatus Fischer strove to form at Berne a postal union, to organise and administer a network of postal routes, independently of France. The States of this Union were to be Austria, Brandenberg, Great Britain, the Netherlands, Italy, Spain and Switzerland. France was, however, too strong, and the attempt was a failure.

The next Congress was held in Paris 1878, and it was decided that any State or colony could claim admission to the Union on the assurance of its readiness to conform to the convention. This act of sagacious liberality was signalised by an alteration of name, the Union was now styled the Universal Postal Union, as being potentially and by intention universal in its scope. In order to facilitate the adhesion of distant lands, England and France, as the great sea-carriers, consented to the reduction of the sea transit rate for letters and postcards from 25f. to 15f. per kilogramme. Propositions were discussed for the exchange of money orders, parcels and insured articles.

In 1880 a special conference was assembled at Paris to consider the possibility of establishing an international parcel post as a part of the Union system. A convention was prepared which adopted 3 kilogrammes (6½lbs.) as its unit, and fixed that weight also as its maximum limit. As India

already possessed special foreign post arrangements under which parcels could be sent to the United Kingdom, and to certain other countries in Europe and Asia, up to a maximum weight of 5olbs., at a charge of 8 as. (1 shilling) a pound, it was deemed that the existing arrangements were more convenient to the public than those adopted by the convention, so India declined to ratify the treaty.

The next Congress was held at Lisbon in 1885, and it affirmed the option of sending letters paid or unpaid, and introduced the "express" distribution of correspondence. Limited international agreements were signed by the delegates of several countries (1) for the collection of bills and drafts, and (2) for a system of certificates of identity, designed to facilitate the proceedings of travellers at foreign *postes restantes*.

The fourth Congress was held at Vienna in 1891, and it decided (1) that every country of the Union should supply the public with reply-post-cards, (2) that postage on letters posted on board a packet at sea will be pre-payable by means of stamps of the country to which the packet belongs; while for letters posted on board in a foreign port, the sender should use the stamps of the country to which the port belong, (3) provisions were made for the exchange of letters or parcels on what is variously called the "cash on delivery" or the "value-payable" system. The adoption of this arrangement was optional.

An administrative scheme, originally suggested by the Post Office of India, was brought forward by the German Post Office, and realised. This was a clearing-house scheme for the adjustment of the balances of postal accounts through the medium of the International Bureau of the Postal Union.

The fifth Congress was held at Washington 1897, and the chief subject discussed was transit charges. If the country of origin of a mail used for its conveyance the services of another country, the former had to pay for such conveyance the rates fixed by the Union Convention. Statistics of the weight of the mails were taken triennially, and payments by one ad-

ministration to another are based on these statistics. It was proposed that transit charges both on land and sea should be abolished, but on being pointed out that some States, like Belgium, where the postal service is largely occupied in transporting the mails of other countries, would be most adversely and seriously affected, it was adopted, that the transit rates be reduced 15 per cent. by gradual stages of 5 per cent. at intervals of two years.

The sixth Congress was held at Rome in 1906, and a simplification of statistics for the purposes of international accounts was arranged. The weight allowed for the initial charge of 2½*d*. on foreign letters was increased from ½ to 1oz., and after the first ounce the rate was reduced to 1½*d*. per oz. One ounce was adopted as the avoirdupois equivalent of 20 grammes. The International Bureau was ordered to issue to Postal Administrations special reply coupons exchangeable by the post office of any country which adopts the scheme for a postage stamp of 25 centimes or its equivalent. These coupons can, to a certain extent, answer the purpose of a small postal order, but the orginal idea is the pre-payment of a reply. Permission was given to write a message on the left hand half of the address side of postcards, and also to paste on an engraving or photograph.

The next Congress is to be held at Madrid.

At the end of 1909 China was the only civilised country which had not joined the Union.

## CHAPTER IX.

### MISCELLANEOUS SUBJECTS.

*Post Office functions*:—The main object of the department, for which it was originally instituted, is the prompt and rapid transmission of letters. The functions may be divided in general terms, into (1) collecting, (2) conveying, and (3) distributing or delivery. An ideal Post Office would collect a letter at the house of the sender, and deliver it at the house of the addressee. Practically no administrations undertake the collection in full. Although the United States Post Office only commenced a few years ago free delivery in rural districts which was already almost universal in most other administrations, yet it introduced in cities and towns, a most advanced measure of a house-to-house collection. Householders have to provide letter boxes of certain approved patterns, and the postman clears the boxes of any letters posted therein at the same time as he drops into them the letters for delivery. An arrangement is even made whereby an order for stamps with the accompanying money can be placed in the box and attended to by the postman. In India village postmen are required to collect letters, and also to register letters. It has been mentioned that special facilities are arranged by the London Post Office for collecting the parcels of private firms; and that in Austria rural letter carriers are authorised to receive on their rounds S. B. deposits up to 1,000 crowns on a single deposit book.

When a town postman is on his delivery, there is objection to allowing him to collect articles, as it delays the delivery, but after this distribution is finished and the furthest point of his beat is reached, there is no objection now to his collection, and also to the clearance of letter boxes during his return (empty-handed) journey to the office. Often a

separate staff is maintained for the clearance of street boxes and when this is the case there should be no objection to the clearance of private boxes by this staff. Whenever a collection of private boxes is not undertaken, facilities should be given for providing as many street letter boxes and post offices as possible. In some streets in London there are as many as eight pillar boxes to the mile, and according to *St. Martins-le-Grand*, Volume IV, London has a branch office for every 5,200 people, New York has one for every 50,000.

In Sind the author found that every village of 5,000 inhabitants could generally support a village office, and that towns should have at least one street letter box for every 5.000 of the population, excluding the letter boxes at post offices; in the 40 largest towns in the Punjab, there was one post office for every 6,412 inhabitants, and one letter box for every 1,733; and in the 30 largest towns of Eastern Bengal and Assam, there is one post office for every 4,303 inhabitants, and one letter box for every 1,271.

*Letter cards* with an imprinted penny stamp, and made to be closed against inspection were issued in the United Kingdom in 1892, at a charge of 10 cards for 1s., which was shortly afterwards reduced to 8 cards for 9*d*. Similar cards had been adopted previously by several European postal administrations, but they have not become very popular in the United Kingdom, the sale being about ten millions annually. They have not been adopted by the Post Office of India. These cards are inconvenient to handle in stamping and sorting.

*Post-cards* were introduced in Austria in 1869, and into the United Kingdom in 1870, where they were sold for a half-penny. In consequence of a representation by the Society of Stationers, a charge of ½*d*. for the material of the card was made in 1872. In 1874 private cards with an adhesive half-penny stamp were allowed, and more than half the cards which now pass through the post are private ones, and not the official cards purchased from post offices. The condition that private post-cards should be of a material at least as thick or as

stiff as that of the official post-cards is essential, because if they were thinner and more flexible they would become mere pieces of paper which could not be conveniently handled or sorted. The popularity of the picture of post-card continues. Reply post-cards were issued in 1893.

*Book-Packets.*—The rate of ½*d.* for 2 ozs. has been in force in the United Kingdom since 1870. Changes have been made from time to time in the regulations prescribing the mode of packing so as to admit of an easy examination for the purpose of detecting letters, etc., sent by the half-penny post. In 1892 permission was given to enclose book-packets in unsealed envelopes. It is, however, found that letters are very liable to slip inside the flaps of these open envelopes, and this is a frequent source of delay and loss. By the Jubilee rates the postage for articles weighing over 2 ozs. is the same for letters as for book-packets, so articles over 2 ozs. derive no advantage by being sent in open covers.

*Sample Post.*—The sample or pattern post which was restricted to *bonâ-fide* trade patterns and samples in 1870 in the United Kingdom, was then assimilated to the book post (½*d.* for 2ozs.); but the restriction was found to be both difficult to enforce and irritating to the public, and the sample post was abolished in 1871. It was re-established in 1887 (1*d.* for 4 ozs. and ½*d.* for each succeeding 2 ozs.); but when the Jubilee letter rates were introduced on 22nd June, 1897, it lost its *raison d'etre*, and ceased to exist for inland purposes. It was indefensible on its merits, as it was difficult to conceive why a pair of gloves or a packet of seeds should be allowed to travel more cheaply when sent as a sample than when sold outright, or why a trader should be entitled to send such things at a cheaper rate than a private person.

*Railway Letters.*—In the United Kingdom in 1891 an arrangement was made whereby at passenger stations on the principal railways a letter not exceeding 4 ozs. might be handed in at the booking office for conveyance by the next train. A fee of 2*d.* is payable to the railway company, in addition to

the postage of 1*d*. The article may be addressed to a railway station to be called for. If it bears any other address it is posted on arrival at its proper station. There is no such arrangement in India, although it would seem suitable to a country where the number of trains is comparatively few.

*Express Letters.*—In 1891 a private company was formed in London to supply the public with express messengers to execute errands or deliver letters. This was found to be an infringement of the Government monopoly, and as the public appreciated the services rendered by the company, and it supplied a demand not catered for by the Post Office, the Company was licensed to continue its business, on payment of a royalty till 1903, when the Post Office started its own service of messengers. Messengers can be summoned from the post office by telephone, and arrangements can be made for the special delivery by messenger of all packets arriving by a particular mail. The sender of a packet can have it conveyed all the way by express messenger, or may direct that after conveyance by ordinary post to the office of delivery, it shall then be delivered by express messenger. The fees in addition to ordinary postage were 2*d*. for the first mile, 3*d*. for the second, and 1*s*. a mile additional when the distance exceeded 2 miles, and there was no public conveyance. The present rate is 3*d*. for each mile conveyed by special messenger. The express service has been extended to the foreign post. Express letters arriving by a foreign mail too late for delivery on Saturday night, or on Sunday, would be delivered on a Sunday, although there is no delivery of ordinary letters in London on that day. Many express letters are sent to medical men, solicitors, bankers, and stock brokers ; but, as a class, editors of evening newspapers receive by far the largest number.

*Returned articles.*—In the United Kingdom, articles sent by what is termed the half-penny post are destroyed if they cannot be delivered ; but the sender may have such returned if he writes a request to that effect on the outside, together with his name and address. The article is then returned direct

without passing through the Returned Letter Office. In such a case a second postage is charged on its return. If similar rules were introduced in India, the Dead Letter Offices would be relieved of a considerable amount of work.

*Imperial Penny Post.*—In 1897 advantage was taken of the presence in England of representatives from the principal British colonies, to hold an Impérial Postal Conference in London, and the Postmaster-General who presided, was authorised by Government to announce that on Christmas Day 1898 an imperial penny post would be established with such colonies as agreed to reciprocate. The new rates 1*d.* for ½oz. had long been advocated by Mr. Henniker Heaton, and were adopted by India and most of the British colonies except Australia. At the same Conference it was proposed to lower and simplify the parcel rates to British possessions by the introduction of what was termed the triple scale for parcels sent by sea, of 1*s.* up to 3lbs, 2*s.* from 3 to 7 ; and 3*s.* from 7 to 11lbs. This was adopted by many of the colonies.

*Free Delivery in remote districts.*—It has recently been recognised in the United Kingdom that one object of a State post is, by means of uniform rates, to supply remote places even at a considerable loss with ample facilities of communication, any such loss being redressed by the profit made in populous places. The former Treasury regulations were relaxed in 1892 with the result that 155,000 letters a week were brought into the free delivery. Financial considerations have now been entirely disregarded for the benefit of these letters and the cost of their delivery alone excluding sorting, carriage, cost of post office buildings, etc., greatly exceeds the whole revenue derived from them. The experience of the United States Post Office in extending rural free delivery is that the revenue in rural districts increases five-fold which is attributed to the facilities afforded. The value of farm lands increased, that of isolated farms having been enhanced in value at least five per cent. in the older-settled states, and in more remote states and territories, where postal facilities had heretofore

been few and far between, the increase in value has been much greater. The assertion that if farmers were brought into close touch with the markets, they would obtain better prices for their products likewise proved to be true. Lastly, the claim that all these material advantages would be equalled, if not surpassed by the social and educational benefits conferred in relieving the monotony of rural life, by bringing city and country into close connection is claimed to have been fully justified.

In India the rules regarding the establishment of rural services are practically what existed in the United Kingdom previous to the relaxation of the Treasury regulations—all such services must be self-supporting.

*Delivery.*—Delivery is facilitated by street nomenclature and the numbering of houses. In India superintendents and independent postmasters should endeavour to get municipalities to name the streets and number the houses. Odd numbers should be on one side of the street and even numbers on the other, as this is better than a consecutive numbering, since it enables a person to know at once on which side of a street a particular house is situated. The present postal law in the United States of America limits the establishment of a city delivery service to communities having a population of at least 10,000, or with post offices producing a gross revenue of 10,000 dollars.

The extraordinary increase during the past few years in the street traffic in Berlin has directed the attention of the authorities to the question of avoiding this congestion, more especially in the centre of the town. A plan is being carried out of connecting the general post office with the various branch offices at the railway termini by the construction of a small underground electric railway, by means of which the more rapid despatch of the mail bags to and from the trains will be effected at a speed of about 25 miles an hour.

During Christmas in England four letters are posted for one at an ordinary period, and this increase, although the

staff is augmented, causes considerable congestion. In order to keep important letters from bankers, merchants, etc., unmixed with the mass of Christmas correspondence, and thus ensure their due despatch, arrangements are made for such letters to be specially collected or handed in over the counter at the London General Post Office or at the Lombard Street branch office. During Christmas 1890 altogether 80,000 important letters were thus saved the risk of delay, and satisfaction was given to City bankers and merchants. The best means for reducing the time occupied in the delivery of letters is to get each householder or firm to affix a private letter-box in the door of the premises. The postman has not then to wait until a servant is called.

*Postmen* are the means by which the letters are delivered, and the number they can deliver varies greatly according to circumstances and the length and density of the beat from 80 to 5,000. In London during five days of Christmas ten million of articles are dealt with each day, and the greatest number delivered by one postman in a single round was over 5,000. This, of course, is exceptional, as in London each postman delivers on an average 494 letters a day. *Bains* in his *Forty Years at the Post Office* says (Volume 1, page 20), "Now, the weekly walk of a rural postman, including a Sunday in turn, is on the average 94 single miles. His wages, counting the value of clothing, medical attendance, and Sunday pay, range from £1 to 22*s.* a week. Stripe pay raises the maximum to 25*s.* a week, which amount (although wages are now calculated rather by time than distance) is equal to 3*d.* for each mile walked by the postman or threefold the pay of the thirties." In the United Kingdom the maximum walk is 18 miles a day, and the average about 16, and there is complete rest on alternate Sundays. Lord Tweedmouth's Committee recommended that the burden carried by postmen should not exceed 35lbs., and that by rural postmen 28lbs.

In France the maximum walk of a rural postman is 32 kilometres, or about 20 miles, but this limit is occasionally

exceeded. In 1890 there were 10,428 walks of over 17½ miles, 7,038 between 15½ and 17½, 4,730 between 15½ and 12½ 1,380 between 10 and 12½ and only 328 of less than 10 miles. The scale of pay is calculated at 7½ centimes a kilometre, or a little more than a half-penny for every mile walked. In Germany the beats of rural messengers vary from 12½ to 18¾ miles daily.

Since 1891 in the United Kingdom, in order to encourage enlistment and reward service in either arm, navy and army pensioners have been given one half of the vacancies which occur in the classes of postmen, porters and labourers, the other half being reserved for persons already in the employment of the Department.

In the United Kingdom, letter carriers appear to be peculiarly liable to be attacked by savage dogs, and it is not known whether it is owing to being rendered conspicuous by their red uniform, or that their duty takes them into portions of premises not much frequented by other persons. In one town 20 per cent. of the postmen were bitten during the year.

And in the United Kingdom another curious fact is that some postmen are unwilling to receive promotion to sorters, as this entails the loss of the Christman box, averaging more than £8 a year, and in some walks exceeding even £20.

The object for which a badge was introduced is explained in the following Post Office Notice, dated 15th June, 1728,—"It is ordered by the Postmaster-General that every letter carrier whose walk is within London, Westminster, or Southwark, shall, as a badge of his employment, wear a brass ticket upon some (the most visible) part of his clothing, with the King's Arms upon it, which ticket he is always to wear whilst he is upon duty. And all persons who shall discover any Letter Carrier, Porter, or other person whatsoever, delivering letters which should have passed through the General Post Office, without such Badge or Ticket upon the most visible

part of their clothing are desired to give information thereof to the Postmaster-General, that the offenders may be prosecuted according to law and for such information they shall meet with all fitting encouragement."

Letter carriers were first put into uniform by the British Post Office in 1792, and the reason is explained by Mr. Joyce. "Nor can it be denied that, so long as there was no distinctive dress, letter carriers in want of holiday were a little apt to take one without permission, supplying their place by persons of whose character they knew little or nothing. It was in order to check irregularity of this kind and as a means of protection to themselves and the public that uniform was now introduced."

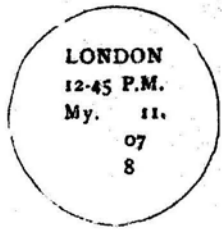
*Sorting.*—The chief object of the Department has been described as the prompt and rapid disposal of letters, and one of the most important functions on which the prompt disposal depends, is correct sorting. Fortunately sorting does not require any very special intelligence in the sorter; he should have a good memory so as to thoroughly know his sorting list by heart, and should show a certain dexterity in its practical application. This is recognised in the British Post Office by allowing primary sorting to be one of the duties of postmen, who are encouraged to make themselves proficient in sorting so as to be promoted and receive higher pay as sorters.

The actual preparation of a sorting list is done by a special branch, and requires a thorough knowledge of connections and mail routes, and when these are many, the correct preparation of the list becomes intricate. In order to simplify sorting lists, and reduce the number of bags to be made up, a system of sorted bundles is often resorted to.

It is necessary to prescribe for what places sorted bundles should be prepared. Slips are tied to each bundle, and the following is a sample of the slip used by the British Post Office.

Nth. Western T. P. O.
Mid-day Mail
1st Div.

Date stamp.




The correspondence in this bundle should be dealt with separately, and in case any missent letters or newspapers be found in it, care should be taken to send this label with the report.

*Bundle made up by*.....

*For despatch at*..... .....*on*.....

In a report on the working of the French Post Office, issued over thirty years ago, it was stated that the missorted letters in the ten postal arrondissenments of Paris, were in the proportion of six per cent. This would be a high rate of missending for a modern sorter, who should have little chance of employment now unless he could do more accurate work. In some tests made by the United States Post Office, in 1896, in which 22, 159, 757, articles were handled, of these, 21, 722, 913, or 98·03 per cent. were correctly distributed; and in another part of the report regarding tests made in the Railway Mail Service, it is said: "But one error was made for each 9,843 pieces distributed, as against one in every 2,834 in the fiscal year 1890, one in every 8,894 last year."

On the 11th. May 1907, I was accorded the privilege of travelling in the sorting van of the mid-day mail from Euston to Crewe. Four men disposed of about 8,000 letters, 100 registered letters, and 3 to 4 thousand newspapers between 1-30 and five P.M., or in about 3½ hours. I observed one man sort 50 letters, and another 57, during a minute.

*Postage Stamps.*—A post paid envelope was in common use in Paris in the year 1653. Stamped postal letter paper (*carta postale bollata*) was issued by the Sardinian Post Office in 1818, and stamped postal envelopes from 1820 to 1836.

Stamped wrappers for newspapers were made experimentally in London by Mr. Charles Whiting under the name of "go frees" in 1830.

Stamps printed from type and made adhesive by a wash of gum, were made experimentally by Mr. Chalmers in his printing-office at Dundee in 1834.

In his pamphlet on *Post Office Reform*, Mr. Hill advocated the use of stamped covers and adhesive labels for the collection of postage, and in 1837 he brought the adhesive label to the notice of the commissioners of post office enquiry. Mulready's allegorical cover was introduced on 1st May 1840, and was rejected by the public, although stamped paper met with its advocates in the mercantile and legal world, and on account of the body of the letter being in the case of envelopes separate from the address, and there being no proof of the letter having been written to the person professing to receive it, it was made a point of legal consequence that nothing but a sheet of paper shall be used.

Cheapness and security against forgery were two chief points, and these were overcome by the skill and ingenuity of Mr. Edwin Hill of the stamp-office and Mr. Perkins, an engraver. The Queen's head was first engraved on a single matrix, the effigy being encompassed with lines too fine for any but the most delicate machinery to engrave. The matrix was hardened, and employed to produce counterparts on a steel plate capable of working off at each impression 240 stamps.

Messrs. De la Rue & Co. were given the contract. The cost manufacture of a million being :—

| | £ | s. | d. |
|---|---|---|---|
| Paper ... ... ... | 5 | 14 | 5 |
| Printing and gumming ... ... | 22 | 1 | 9 |
| Perforating ... ... ... | 1 | 3 | 1 |
| Salaries ... ... ... | 0 | 16 | 8 |
| | 30 | 0 | 11 |
| add | | | |
| Poundage and commission on the sale ... ... ... | 45 | 2 | 4 |
| Total ... | 75 | 3 | 3 |

To Messrs. Dickenson & Longman was given in 1840 the first contract for the ordinary stamped envelopes. The average cost of a million was £376, of which sum £359-6s. was repaid by its sale, over and above the value of the stamp, leaving a nett deduction from the aggregate value of £16-14s. (as compared a nett deduction from the aggregate value of £16-1s. (as compared with £75-3s-3*d*. in the case of adhesive labels). This difference £58-9s-3*d*. of the deduction from postal revenue accruing from the nett produce of stamped envelopes and adhesive labels forms a large item when the supplies are thousands of millions.

The Government purchased Archer's patent for perforation in 1858 for £4,000, and stamps were then issued perforated.

By 1855 most of the administrations in Europe had adopted the use of postage labels.

Line-engraved stamps which are produced by engraving *en creux*, were superseded by typography and surface printing. These latter have several advantages over those first invented. They are more easily fixed to letters. The cancellation of them is more sure because they are printed with vegetable inks; and they are more economical, to the extent, it is said, of £10,000 a year.

In October, 1907, the colour of the 1½*d*. embossed postage stamp was changed from yellow to purple, as some difficulty had been experienced in distinguishing the yellow stamps in artificial light. When post-cards were first introduced into the United Kingdom, they were sold at their face value, and it was only on the representation of a deputation of stationers that the price of the card was charged for. The cost of printing post-cards is £234 a million.

The forgery of stamps for the purpose of defrauding the revenue is not only a dangerous but also an extremely unprofitable business, and this not on account of any difficulty in producing a passable imitation of a stamp, but from the very much greater difficulty of putting the imitations in circulation in sufficient quantity to pay expenses.

As already stated in a previous chapter the British Post Office introduced postage stamps in 1840; and this example was followed by Brazil in 1843, by Switzerland in 1844, by Finland in 1845, by the United States in 1846, by Russia in 1848, by France, Belgium and Bavaria in 1849, by Austria, Prussia and Saxony in 1850, and later by all other postal administrations.

*Post-marking.*—The old hand stamp which is used in all the smaller offices, requires two distinct operations for each post-mark,—one to ink the stamp, and the other to make the impression. From 80 to 90 letters can be stamped with it in a minute. The next advance was a self-inking machine by which a little over 100 could be stamped. This, the Daguin machine was used by France, Belgium, Austria, Sweden, and Chili. Then, Hoster's quick stamping machine was adopted by Italy and Belgium. Then, the American electric machines became popular wherever electric power was available, as from 500 to 1,000 articles could be post-marked in a minute. The Barr-Type could stamp 40,000 articles an hour. Lately the German Post Office has been trying experiments with 42 American machines, 38 Bickerdike and 4 Columbia, and it is now giving preference to the machines invented by the Norwegian Krag, which are made by the firm of Schuchardt and Schutte in Berlin. Three kinds of Krag machines are in the market, the electric, foot, and hand machines, so that they may also be used at post offices where electric current is not to be had, or where electric machines would be too expensive for limited traffic. The Krag-electric stamps 900 letters, 1,000 post-cards or 600 mixed articles a minute; the foot machine 500 to 600; and a little less with a hand machine. A Bickerdike stamps 125, and a Columbia 600.

In 1907 the New Zealand Post Office possessed nine motor-power, two foot power, and five hand power post-marking machines, and it was estimated that their use saved the department the cost of from seventeen to twenty officers who would otherwise be employed in hand stamping.

*Errors.*—It is a rule of the British Post Office that a report has to be made of every irregularity by the subordinate to his immediate superior, and in the Indian Post Office every error has to be recorded in the Error Book maintained for this purpose.

All human operations are liable to error, and it is even said that all machines have their co-efficient of mendacity. In taking notice of errors it is essential to discriminate whether the irregularity consists of a disregard of a rule or a blunder resulting from such disregard, or whether it was unwittingly committed in an honest endeavour to perform good work.

As the public place so great a dependence on the Post Office, and integrity and trustworthiness are essential for the discharge of official duties, no one not possessing these qualities is a fit person to be retained in the service.

*Pigeon and balloon posts.*—During the Franco-German War of 1870-71 the French Post Office successfully worked a pigeon and balloon post. The communications were printed in ordinary type and micro-photographed on to thin films of collodion. Each pellicle measured less than 2 inches by 1, and the reproduction of sixteen folio pages of type contained about 3,000 private letters. These pellicles were so light that 50,000 despatches, weighing less than 1 gramme, were regarded as the weight for one pigeon. The films were rolled up tightly and placed in a small quill, which was attached to one of the tail feathers of the bird. In the Seventeenth Report of the Postmaster-General, it is stated that the English Post Office received letters for Paris to be sent by pigeon post, *vid* Tours. The conditions being :—(1) no information concerning the war to be given, (2) the number of words not to exceed twenty, (3) that the letters were presented open. The rate was 5*d.* a word, and a registration fee of 6*d.*, pre-payment being compulsory. At this rate the postage on the 200 letters on each folio was £40, so that on the eighteen pellicles of sixteen folios each, carried by one pigeon was £11,520. Each despatch was repeated until acknowledged by balloon post. M. Durnouf

established a balloon service, and out of 64 ascents, 57 were successful, 5 balloons were captured, and 2 lost at sea. More than 8½ tons of mail matter, including over 3,000,000 articles and 91 passengers were conveyed by this service. The balloons had a capacity of 70,000 c. f., which is 20,000 c. f. in excess of the capacity required by the present day international competition rules to carry four persons and ballast. The postal charges of 20 centimes for every 4 grammes of weight were sufficient to pay the whole cost of the balloon.

*Army or field offices.*—The earliest field arrangements were by Johann Baptista von Taxis, who organised about 1535 for the Emperor Charles V field post offices with the Imperial armies in Italy, and with those fighting with the Turks.

During the Crimean War army post offices were established in the field, and this was also the case in the South African War, but the English Army Post Office Corps was first established in 1882. This Corps consists of selected sorters and postmen, who are trained members of the Post Office Rifle Volunteer Regiment, with officers of that regiment as Army Postmaster and Assistant Postmasters, all being enrolled in the first class Army Reserve. The Corps served with the Army in Egypt, and another detachment was again sent out with the expedition to Suakin in 1884.

During the Franco-Prussian War of 1870-71 there were delivered through the North German field post 89½ millions of letters, 2⅓ millions of newspapers, 180 millions of marks in money, and 2 millions of parcels.

The field post office arrangements in India are described in the chapter on the Post Office of India.

*Infection communicated by letters.*—In 1884 when Europe was very excited regarding the spread of cholera from Egypt, all mails from Asia to Europe had to undergo disinfection. Each article was perforated by sharp instruments, and then exposed for some time to a disinfectant. The fumigation of letters merely resulted in the destruction of photographs and the damage of delicate articles. This is a case in which practical

experience is more valuable than the theory of all the doctors who drew up the Convention. It is well known in India that neither cholera nor plague can be communicated by letters, or our sorters would have been those specially to suffer where cholera or plague were raging, but this is not the case. From an experience of 32 years in the Post Office of India I have only heard of one case in which infection was communicated by a letter, and this occurred in England. It was a case of "accidental small-pox" in which a patient at the West Bromwich Small-pox Hospital "unfortunately sent the germs of the disease in a letter to her sister." At last, the International Sanitary Conference held at Dresden in 1893 decided that all quarantine or disinfections of postal articles—with the exceptions of parcels—was of no value and consequently superfluous.

## CHAPTER X.

### MISCELLANEOUS SUBJECTS (CONTINUED).

*Foot lines.*—In India runners on the principal letter mail lines are required to proceed at a speed of five miles an hour with a maximum weight of 15 seers (30lbs.). Their stages are about five miles apart, and they do a double stage, that is, five miles out, and then five miles back with the return mail to their original stage. They thus have practically about two hours work a day. On parcel lines the speed is only three miles an hour, but the weight to be carried is 30 seers (60lbs.).

A mathematician would say that to carry 60lbs. for ten miles is equal to 250 foot-tons of energy, and that a man's ordinary work is equal to about 300, so that the work demanded is decidedly light. The standard load of a *coolie* in India, travelling an ordinary pace of 14 miles a day is about 60lbs., but in Nepal a *coolie* can carry 160lbs. across mountainous country.

Runners are supplied with spears, consisting of a bamboo shaft, with a metal spear head, to the base of which bells are attached. The mail bags are tied to the staff, which is carried over the shoulder. The spear head is for self-defence, but when the post was in its infancy the bells were adopted as a concession to the superstition of the people, who believed that the bells would charm away evil spirits and wild animals.

In Japan runners maintain a speed of eight or nine miles an hour, and their stages are from seven to ten miles apart.

The Swiss Post Office prohibits the transmission by post of articles of over 50 kilograms in weight for places served exclusively by foot messengers or mule services, whereas the rules in India allow the public to send a book-packet far in excess of the weight that can be carried by a runner. The following is an account given by G. Whyte-Melville, of the training of Chinese runners. "We think we know a great

deal in England of athletics, pedestrianism, and the art of training in general. It may astonish us to learn how a Chinese postman gets himself into condition for the work he has to do. The Celestials, it would appear, like meaner mortals, are extremely particular, not to say fidgety, about the due transmission of their correspondence. Over that vast empire extend postal arrangements, conducted, I believe, as in our country, by some mandarin of high rank, remarkable for their regularity and efficiency. The letters travel at a uniform rate of more than seven English miles an hour; and as they are conveyed by runners on foot, often through thinly populated districts in which it is impossible to establish frequent relays, the pedestrian capabilities of these postmen are of the greatest importance. This is how a Chinaman prepares himself to accomplish his thirty miles in less than four hours.

He has a quantity of bags constructed which he disposes over his whole person like Queen Mab's pouches—"Arms, legs, back, shoulders, sides and shins." Into these he dribbles handfuls of flour before he starts for walking exercise, increasing the quantity little by little every day till the bags are quite full, and carries clinging to every part of his body several pounds of dead weight, nor considers himself fit for his situation till he can move under it with the freedom and elasticity of a naked man. He will then tell you that, on throwing off his self-imposed burden, he finds all his muscles so invigorated by their own separate labours, his strength so stimulated, his wind so clear, his condition so perfect, that he shoots away over the planes, mountains and tea-gardens of the Flowery Land less like John Chinaman with a letter bag than an arrow from a bow.....I doubt if the Chinaman's theory of training be founded on sound principles."

*Coaches and mail carts.*—The mail coach period has been mentioned in a previous chapter, so it only remains to give a few details as to the working of the coaches, and these are chiefly taken from Mr. Banes' two works:—*On the Track of the Mail Coach* and *Forty years at the Post Office*. He says—

"It was in 1837 that the coaches attained the zenith of their success, and it was then also, that their splendour began to decline"..... "In sixty years mail coaches were born, attained perfection, and, alas! perished."

The mileage rates were very various as low as a half-penny per mile (indeed, the Liverpool and Manchester coach took the mails for nothing; the railway, however, had been some years at work between the two cities) and as high as 11⅛*d.* for the Carmarthen and Pembroke coach, or even 1*s.* 3¾*d.* for the London and Dover (foreign mail) coach.

In the report of the Postmaster-General, United States, for 1896, it is stated that the regulation and screen wagon service costs 16·50 cents per mile travelled.

A parcel coach of the present day is capable of carrying a ton of parcels, weighs a ton itself, and is about three hundred weight heavier than a model coach of the thirties. The speed varied on different lines. The day mail to Birmingham, *viâ* Barnet ran at a speed of 10 miles 1 furlong per hour for the small payment of one penny per double mile. The Greyhound another coach which passed through Barnet performed also a special trip from London to Shrewsbury (1838) at the rate of 12 miles an hour. It was found by experience that, in order to keep up an average speed of 9½ miles an hour from end to end, it was necessary to run at the rate of 10 between the stages.

A mail coach weighed between 17 and 18 cwt. cost £140, and could carry 1,680lbs. of mail matter. Its life was only five or six years. A good line needed an establishment of a horse per mile, which cost for maintenance a guinea, sundries 4*s.*, total 25*s.* per week. Eight miles an hour and 14 miles a day was considered as the amount of work proper (with occasional rests) for keeping a sound, well-bred, well-fed coach-horse in good health. It was necessary to change one-third of the stock every year, or, in other words, a mail coach horse remained fit for work not more than three years.

For coachmen a drive of 70 miles a day was deemed sufficient. Once Captain Barclay drove the Edinburgh mail, all the way down from London, 400 miles, without a break. The late Mr. Raikes attached much importance to the guards of the modern parcel mail coaches being efficiently armed, and each guard was not only properly instructed in the use of firearms, but was so equipped as to be a formidable adversary in case of attack, even when cartridges failed.

For coaches that ran at night proper lighting was essential. Quick coaches had five lamps, one had even six, *i.e.*, a tail lamp as well as five front lights. Unless well lighted they could not keep time. Six lamps cost £47-8s. a year for oil alone. The present night parcel coach surpasses the old time coach not only in the number, but also in the power, of its lamps. Five light the outside front—two being 9½ inch cone and three 7 inch cone lamps; two more lamps light the inside, and are fixed with reflectors, so that they may be seen from without. The guard carries a hand lamp. Thus eight lamps in all.

Reference has already been made to the passenger and mail carts line of India.

In the Annual Report for the year 1866-67, it is stated that an epidemic had appeared among the horses on the Nagpore-Jubbulpore and Indore-Agra lines, and 921 horses died in a month or so. The Kalka-Simla tonga service is the most efficient and best worked line in India, and for some years has successfully competed in speed and reliability with the railway. In 1908 the cost of the tonga service per mile was stated to be 7a. 6p. (about 9¼*d.*) At Lahore the mail vans, for the carriage of mails between the railway station and the post office, and for the conveyance of postmen to their beats, are horsed by contract. The horses do about 7½ miles a day, and the amount paid to the contractors in 1908 was about 2a. 7p. (3*d.*) a mile per horse. This does not include the capital cost of the stables, vans, and harness, and their repair.

*Bicycles & Tricycles.*—Bicycles are useful where the roads are good for the clearance of a number of scattered letter-boxes. The result of experiments in India was summed up in the report for 1899-1900 which is to the effect, that though not suitable for the transport of mails over lines of any length in the interior of the country, bicycles affords an efficient and economical means of conveyance in urban or suburban areas where roads are good, and the means are at hand for repairing the machines when necessary.

In a report of the Dutch Post Office it is said that the system of supplying mail carriers with tricycles for the purpose of enabling them to convey heavier mails, which was started in 1889 by way of experiment, was discontinued, the administration having arrived at the conclusion that the constant and expensive repairs required by these machines rendered the final adoption of the plan undesirable for financial reasons.

In London, tricycles, with specially arranged bodies, were used for a time for the suburban parcel post system, but journeys of from 8 to 10 miles out and in, with a load of 1 cwt. of parcels, through frost and rain proved too fatiguing for the riders, particularly when the roads were heavy in the winter, and the tricycles had to be abandoned.

In the United Kingdom it is said that a bicycle with a trailer, is, as a general rule, found more suitable for rural posts than a tricycle carrier, inasmuch as it is often possible for a postman to leave a trailer behind at some point of the journey (to be picked up on his return) and complete his delivery with the bicycle only.

*Motor Services.*—According to trials made in England where only two services with motor cars were classified as entirely satisfactory, the cost of every mile run by the cars was 1s. in one case and in the other, 1s. 3*d*. The maximum load in each case was one ton. It must be taken into consideration that these cars run over the best roads, and that one covered only 36 miles a day at a speed of nine miles an hour, and the

other 31¼ miles a day at 10 miles an hour. In the 51st report of the Postmaster-General it is said that the employment of motor vans has in many cases resulted in an acceleration of the service; and where the loads are heavy and the distances considerable, in a substantial economy. And in his fifty-sixth report the Postmaster-General says that further progress has been made in the use of motor vans for the conveyance of mails, and there has been a steady improvement in the working. The total number of services, or sets of services now performed by motor mail vans is about 60.

In discussing services for South Africa it was reported that the introduction of motor car services on the roads, six in number, most suitable for such a service, would involve an additional annual expense of £7,540. The administration did not think that any very considerable sum could be counted on by the conveyance of passengers, as on most routes the weight and bulk of mails to be conveyed on certain days would render passenger accommodation impossible. The motor mail service between Mafeking, Potchefstroom and Zeerust turned out a failure, and a similar service run by the post-contractor between Aberdeen Road and Aberdeen in Cape Colony, proved too costly and unreliable.

In a report on the Swiss post office it is said, that a fourth motor car was brought to increase the regularity of the service on the two experimental motor car lines served from Berne. Although the motor cars are very much taken advantage of by the public, the financial results of this undertaking are rather unfavourable on account of the exceptionally heavy cost of working. As in the previous year, three motor cars were used in Zurich for the transport of the mails. The execution of the service was satisfactory, but here also it was found that motor cars are much more expensive than horse cars. The cost of the motor car services was such that the administration was considering either their suppression or the restriction of these services in Berne and Zurich. During the year three horse services had to be substituted for motor

services, the private enterprise carrying on the mail motor service having failed.

As French cars have gained a reputation for superiority and reliability over those of any other country, it is interesting to note the result of experiments made by the French Post Office. The light motor car services in Paris seem to have been a success, but they were more costly than horse services. It is said that mechanical traction costs 15 centimes (1½*d.*) more per kilometre (1093½ yards) than horse traction, but it should be remembered that in this 15 centimes is included the cost of provision and maintenance of motor cars, and the writing off of the capital outlay. The chief advantage accruing from the motor services, was the speed with its average of 18 kilometre (11¼ miles) an hour as against 12 kilometre (7½ miles) of the mail cart service. It cost the French administration on an average 13 centimes (1¼*d.*) per kilometre (1093½ yards) for the conveyance of road-borne mails by horse service, whereas the contractors for a motor car service on 18 different routes asked from 12 to 107 centimes per kilometre, which on an average works out at 39·2 centimes (3¾*d.*)

*Steamboat Services.*—The overland mail route is described in a subsequent chapter. It has been the object of the Post Office whenever inviting tenders for a steamer service, to let the mails be conveyed, as far as practicable, along the usual channels of trade, so as to avoid the expense which must be incurred by any unnecessary departure, whether as regards the course or the rate of sailing, from the arrangements which would be adopted for freight and passengers only. With this view tenders are framed as to allow many modifications of the plan which the Post Office might prefer, and to bring out clearly the cost of each part of every service so that this cost might be compared with the benefit. For example, when a desire was expressed for the steamers between the United Kingdom and South Africa, which touch at the islands of St. Helena and Ascension on the homeward passage only, to call on the outward passage also, an arrangement which might naturally

be supposed would not be attended with much additional expense, it was found that the cost would add £8,000 a year to the subsidy, or more than a third of the whole sum demanded. Owing to prevailing unfavourable winds, this would have been the cost of an apparently small deviation from the natural course of trade.

The Germans and American mails by the German and Inman lines are conveyed for 1s. 8*d*. per pound, or about ½*d*. a letter, whereas the British Post Offices pay the English line across the Atlantic 3s. a pound or about 1*d*. per letter.

In a steamer service, regularity and punctuality are two essential elements of efficiency, not an embarrassing earliness one mail, and an exasperating lateness the next.

*Railway Mail Service.*—On the introduction of railways it was seen that the number of bags must either be enormously increased, and other complications arise, or the railways could not to any extent be rendered available for Post Office purposes. Just at this juncture it was suggested that the sorting might be done during the journey, and the obstacles were soon surmounted. The cars at present in use are of a very superior pattern to those first employed, and have much better lighting arrangements. In the United States, promising experiments are being made with steel cars, and the Postmaster-General reports that one of these cars passed through a wreck, and the clerks escaped with very slight injuries. He adds that, notwithstanding the fact that the test of all-steel cars thus far has been satisfactory, the experimental tests, however, have not been sufficiently broad or long continued under varying conditions to justify the administration in saying that they should displace the present construction of cars built of steel and wood combined.

Picking up mails by special apparatus was adopted on the East Indian Railway in 1890. In the United Kingdom the weight of a single pouch, including the bags which it protects, must not exceed fifty pounds when despatched from a road side standard, or sixty pounds when despatched from a

carriage arm. Parcels are also sorted in the train, but the exchanging apparatus cannot be brought in to play. The weight to be flung out and taken in would smash every known contrivance to pieces.

Once, in an emergency, Sir Rowland Hill hit on the expedient of directing that certain classes of correspondence for the metropolis from towns, north of London, should be forwarded by *down* mail train, to be sorted in the course of the journey, and brought eventually to London by *up* mail train. This plan is now followed, in principle, in a variety of cases, to the advantage of the service and the acceleration of the correspondence dealt with.

In 1838 the speed of the mail train was a gentle twenty miles an hour, but now the speed of expresses is nearly sixty miles an hour. Even in 1846 the Great Western Railway ran the broad gauge express from Didcot to Padding on, 53 miles, in less than an hour. The Post Office special leaving Euston on April 19th, 1894, was 448 feet, 5 inches long, from the front buffers of the engine to the tail lamp of the hindmost van. It trailed none but post office vehicles, and carried none but official passengers.

The accidents on American railways seem to be frequent, for out of a total number of 12,474 persons employed in the United States railway mail service, one in 24 met with an accident while on duty, and the administration grants clerks, injured on duty, leave of absence not exceeding one year on full pay to recover their health.

Excepting risks of accidents, Dr. Lewis, the medical officer of the British Post Office, is of opinion that, on the strong and healthy, railway travelling, if the amount be not excessive, and if the travellers take moderate care of themselves, produces little or no injurious effect ; and he points to the sanitary statistics in confirmation of this view, the sickness and mortality having been about the same among the officers employed on the railway as among other officers.

In the United States the railway mail service was inaugurated in 1864, and re-organised in 1874, and was one of the first exponents of a permanent civil service in that country, the appointments depending upon fitness for work, and removal being only for misconduct. It may be stated that most of the appointments in the civil departments in the United States are considered the spoils of party politics, and the incumbents are removed whenever a party comes into power. In one instance 17,000 postmasters were dismissed for this cause.

In Belgium the railways belong to the State, and the Post Office is not charged for haulage, and in New Zealand the mails are carried by railway, free of charge. In the United Kingdom the Post Office has to make contracts with each railway company. Mr. Bains says that, in a general way, the contracts which the Post Office makes with the railway companies provide for the conveyance of mails bags by any of the companies' trains, whether employed in the passenger or goods service; and unless a postal officer is sent in charge of the bags, the railway guard takes care of them. On all the great lines, however, certain trains are run for Post Office purposes, under a statutory notice, compulsory in its terms, or in accordance with the conditions of a time table settled by mutual agreement. These are the mail trains proper, the hours of which cannot be altered without the consent of the Postmaster-General. Mr. Bains also says that, surprise is often expressed that the Post Office continues to use mail carts when the railway could afford a swifter, perhaps even a safer, means of conveyance. But the explanation generally lies in the fact that a train is not running at a suitable hour, and to put one on for the mails means great expense. Railway accounts usually show that the average cost per train mile is 2*s.* or 2*s.* 3*d.* Some profit should, of course, be realised over the bare cost, and one great company holds that nothing less than 2*s.* 6*d.* per train mile is remunerative. Take, then, the post of a town 20 miles distant. The engine, going and returning, would

cover 40 miles, and at 2*s.* 6*d.* per single mile would cost £5 per trip, which multiplied by the days in the year works out to £1,825 per annum. A mail cart contractor usually receives about £10 per double mile for the year; so that £200 would, in this case, compare with £1,825.

It is often said that the cost of carriage of a letter by coach was considerably less than the cost of conveyance by railway in the present day of a letter on which a postage of one penny only has been paid; and it has been calculated that the cost of sorting in trains is about three times as expensive as sorting in a post office.

In India, when mails are sent in the custody of the guard of a train, the charge is at the rate of one pie (⅛*d.*) per maund (80 lbs.) per mile, subject to a minimum charge for each despatch as for ¼ maund. This seemingly cheap charge is at the rate of 14 annas a ton per mile, and should prove remunerative to the railway. In the Railway Administration Report for 1908 it is said that the average rate for goods charged on Indian railways was just under half-an-anna per ton per mile. The charge for the haulage of mail vans on State railways is 18 pies (about 2*d.*) per vehicle per mile.

## CHAPTER XI.

### MISCELLANEOUS SUBJECTS—*Continued.*

*State Management.*—The Post Office in every country is worked by the State, and this is universally admitted to be the only means of obtaining the maximum amount of efficiency together with the greatest convenience rendered to the public. And no one is found, except a few interested persons in the United States, to advocate the handing over of the undertaking to private enterprise. It has always been regarded as an exception to the rule against State interference in trade, and even Mr. Herbert Spencer hesitated to condemn its continuance, opposed as he was to State action. Adam Smith says—"It is, perhaps, the only mercantile project which has been successfully managed by, I believe, every sort of government." Mr. Fawcett, the able professor of political economy, after being Postmaster-General for some time, expressed the opinion that a private management might probably have introduced a half-penny post in London, and have left the country worse served than at present (about 1882). Mr. Henry George says in his work on *Social Problems*:—"The inefficiency, extravagance, and corruption which we commonly attribute to Governmental management are mostly in those departments which do not come under the public eye, and little concern, if they concern at all, public convenience. Whether the six new steel cruisers which the persistent lobbying of contractors has induced Congress to order, are well or ill built the American people will never know, except as they learn through the newspapers, and the fact will no more affect their comfort and convenience than does the fit of the Sultan's new breeches. But let the mails go astray or the postman fail in his rounds, and there is at once an outcry. The Post Office Department is managed with greater efficiency than any other department of the

national government, because it comes closer to the people. To say the very least it is managed as efficiently as any private company could manage such a vast business, and I think, on the whole, as economically. And the scandals and abuses that have arisen in it have been for the most part as to out-of-the-way places, and things of which there was little or no public consciousness. So in England, the telegraph and parcel carrying, and savings bank businesses, are managed by Government more efficiently and economically than before by private companies.....

Our postal service we merely aim to make self-sustaining, and no one would now think of proposing that the rates of postage should be increased, in order to furnish the public revenues, as they are yet made to furnish in England; still less would any one think of proposing to abandon the Government postal service, and turn the business over to individuals and companies. In the beginning, the postal service was carried on by individuals with a view to profits. Had the system been continued to the present day, it is certain that we would not begin to have such extensive and regular postal facilities as we have now, nor such cheap rates....."

The peculiar nature of the service is the cause of its fitness for State management. The work extends over the whole country, it is uniform and regular and conducted on a definite routine, and the necessary capital in small in proportion to the expenditure and receipts. The criticism of the public stimulates supervision. A monopoly is justified to prevent rivals competing in busy centres, in which case double postal arrangements would even there make a reduction of rates impossible. There is little interest to be paid on capital, and there is a saving from unity of management. One might almost add that the Post Office touches every imaginable interest and is in contact with humanity on its most sensitive side, as all Post Office servants can testify that nothing seems to raise such passions in the human breast or elicit such violent language as the

non-receipt of a letter, newspaper, or postcard. Finally it may be said that the Post Office exists, not to tax, but to facilitate correspondence; it possesses a monopoly only that it may do its work efficiently without loss to the State; and that it is kept enterprising and efficient under the spur of public opinion.

*Revenue.*—The United States shares with the Argentine Republic, Mexico, Greece, Japan, and a few other countries the honour or discredit, of spending more on the Post Office than it receives, but its deficit is greater than the total deficits of all the other countries in the Postal Union. Great Britain makes a larger profit from the postal service than any other country, and in 1877 the postal revenue was larger than the revenue produced by the income tax. Russia, France, and Germany come next in the order indicated. In the German Post Office for the year 1908, after deduction of special payments, the financial results showed a surplus of £2,339,930.

In the United Kingdom it was decided in 1850 that in future a post should only be established when it would pay its way, or in other words, was self-supporting. Applications are frequently made for increased postal accommodation; it may be an additional post office, a new mail line or for the acceleration of a mail. In such cases, it has to be seen whether the existing amount of correspondence warrants the alteration, or that the improvements will probably lead to such an increase of correspondence as will be sufficient to make good the additional expense, as increased accommodation can only be afforded by an expenditure of public money. It is sometimes urged that the particular correspondence concerned is of unusual importance, as, for instance, that it relates to large commercial transactions; but it is obviously impossible to investigate such statements and to judge between the comparative value of different classes of letters. A letter from the smallest village relating to a matter of life or death may be as important as one from a large town containing a great

mercantile order; but to provide in either case beyond the expense warranted by the amount of postage would be to tax the country at large for the benefit of a few. In a letter addressed to the Bengal Chamber of Commerce, by the Secretary to the Government of India in the Department of Finance and Commerce, in 1888, it was said:—".....in France and other continental countries the State avowedly accepts expense in order to provide cheap postal rates to the public—a principle which has never been admitted by the British Post Office or by India."

The actual revenue contributed by the British Post Office to the national exchequer is something like four millions per annum, an amount equal to about two pence in the pound income tax; and in the report of the Select Committee on Revenue Departments Estimates in 1888, it is said, "it is most likely to continue to be conducted satisfactorily, if it should also continue to be conducted with a view of profit, as one of the revenue yielding departments of the State."

Apart, however, from the question of political economy as to whether a Post Office should make a profit, it is argued that the British Parliament would be wanting in commonsense to give up a lucrative source of revenue, raised easily and in a manner absolutely unfelt by the people, in order to impose fresh burdens on the overpressed tax-payer. It has also been held by some authorities in the department that a postal service not producing revenue would be a non-progressive service, seeing that the difficulty of obtaining financial authority for expenditure on improvements would be insuperable, when the Postmaster-General could no longer plead his revenue.

In France the inland rate of 15 centimes for 15 grammes was deliberately adopted for revenue purposes after the war of 1870, previous to which a 10 centimes rate was in force.

The results of two exceedingly unfavourable years as to postal revenue in the United States are ascribed to the industrial and financial depression prevailing at the time.

*Accounts.*—In India the check over postal revenue and receipts to a great extent rests with the controlling officers of the department, whereas the audit of expenditure rests solely with the Accountant-General. It is a principle both in India and in England that the accounts of each office should be balanced and rendered daily. In India the accounts of sub and branch offices are amalgamated in the accounts of the head offices for the purpose of audit.

In the United Kingdom, "unpaid postage" is brought to account by means of postage stamps affixed to charged letter bills; and all revenue collections are paid into the Exchequer without deduction, and the money required for current services is issued by the Paymaster-General out of the supplies voted by Parliament. Also not a penny can be spent on the establishment without Treasury sanction. In India there are no such restrictions. The Director-General is given an allotment by Government for the year. Out of this each Postmaster-General is given an allotment for establishments and for fluctuating charges for his circle. The Postmaster-General distributes the allotment for fluctuating charges among his superintendents and head postmasters, and a careful check is kept during the year to see that the allotment is not exceeded.

It has already been mentioned in the chapter on the Universal Postal Union that *the* great principle which is the basis of the Union is the abolition of accounts relating to letters forwarded from one country to another.

*Rates.*—The principle that decides carrying companies such as railways and steamer companies, in their various charges for different classes of freight, seems to be the highest charge that a commodity can bear. Some classes of goods are conveyed at a cheap rate, whereas others are charged at a high rate. Also the rate of payment demanded from passengers depends in the first instance upon the cost of transport, and secondly on the power of passengers to pay. And it has been found by experience that a large trade with low rates gives a safer and steadier revenue than small traffic at high

rates; also that high rates generally tend to prohibit or unduly check traffic, and thus restrict trade and discourage extended production, and when this is the case, railways have not conferred upon the country the full benefits, nor yielded the profits, which they might have done.

Just before the introduction of penny postage it was pointed out that the average charge on an inland letter was 6¼*d.* and that the high rates pressed heavily on the poorer members of the community, besides being injurious to commerce. The rate of postage established in 1840 continued in operation till 1871, when a lower rate was introduced, *viz.*:

not exceeding 1 oz..... 1d.
over 1 oz. & not exceeding 2 ozs..... 1½d.
and a ½d. addition for
every 2 ozs.

In 1897 the Jubilee rates were introduced, *viz.*:

not exceeding 4 ozs..... 1d.
over 4 ozs. & not exceeding 6 ozs..... 1½d.
over 6 ozs. & not exceeding 8 ozs..... 2d.

with a ½*d.* for each succeeding 2 ozs. And with a letter rate so low as 2*d.* for half a pound and 4*d.* a pound, the letter post has tended to supersede the parcel post for light packets.

Four elements of cost require to be considered in fixing rates, (1) the weight of the article, (2) the distance it has to be carried, (3) its nature, and (4) the mode of conveyance used. The first is the basis of present letter rates. Mr. Rowland Hill showed that the second is so small an element of cost that its variation is of little importance. The real charges are those of collection and distribution and the maintenance of offices, the cost of which is equal on all letters. The cost of conveyance includes a variety of cirumstances, the element of distance being only one. But the cost of conveyance does not necessarily depend upon the distance to which a letter is carried, as the following example will show. Suppose two despatches are sent from the same place in different directions; one containing 100 letters to a place 500 miles distant, and the other containing 10 letters to a place 100 miles distant. If