CHAPTER VII.

COMMUNICATIONS.

Railways—Mileage of chief lines—Gross earnings—Trunk lines—Passenger fares and goods rates—Rivers—Roads—Canals—Tramways—Postal facilities—Telegraphs.

Railways.—By far the most important means of communication in India now are the railways. They are the chief products of British capital and enterprise in India. The mileage of the principal railways open for traffic at the end of 1900 was as follows:—

						Miles.
North-Western	•••		• • • •	•••		3,608
Bombay, Baroda, a	and Ce	ntral Ir	ndia, and	Rajpu	tana-	
Malwa	•••	•••	•••		•••	2,763
East Indian	•••	• • •	•••	•••		2,104
Southern Mahratt			1,591			
Great Indian Peninsula						1,560
Indian Midland	•••		•••			1,239
Bengal-Nagpur	•••		•••	•••	•••	1,283
Bengal and North-Western						
Oudh and Rohilku	and			•••	•••	1,149
Burma						1,124
South Indian	•••	•••				1,110
Eastern Bengal	•••		•••	•••	••	989
Madras			•••			871
East Coast	•••		•••	•••	•••	808
Nizam's			•••	•••		.736
Jodhpore-Bikaner	•••		•••	•••		609
Bhavnagar-Gondal-Junagad-Porbandar						455
Assam-Bengal	•••		•••			436
Other lines	•••	•••	•••	•••		1,049
						24,707
						,

Some of the above are, strictly speaking, systems of railways including many different lines. The great trunk lines are mostly of 5 feet 6 inches (or standard) gauge. Most of the others are of metre gauge, though a few have a still narrower gauge. The greater part of the lines belong to the State, but many of these are worked through the agency of companies. Some lines belong to Native States.

The gross railway traffic earnings have been as follows:—

			£		\$
1896	• • •	•••	16,908,000	=	84,540,000
1897	• • •	•••	17,068,000	=	85,340,000
1898			18,304,000	=	91,520,000
1899	• • •	•••	19,609,000	=	98,045,000
1900	• • •		21,064,000	==	105,320,000

A great trunk line runs north-west from Calcutta to Delhi and Peshawar, having branches to Bombay from Allahabad and from Agra, and to Karachi from Lahore. The distance from Calcutta to Bombay is 1,400 miles viâ Allahabad and Jubbulpore, and 1,280 miles viâ Asansol and Nagpur. From Calcutta to Karachi is a distance of 1,900 miles. Railway communication between Calcutta and Madras was completed in 1900. There is direct communication (800 miles) between Bombay and Madras. Rangoon, to which there is no railway from India proper, is a distance of 800 miles by steamer from Calcutta.

The passenger fares in India are about 1d. (2 cents) to $1\frac{1}{2}$ d. (3 cents) per mile first-class, and $\frac{1}{2}$ d. to $\frac{3}{4}$ d. (1 cent to $1\frac{1}{2}$ cents) second-class. There are third and fourth classes used by the natives at very low rates. The maximum goods rates vary from about $\frac{3}{4}$ d. ($1\frac{1}{2}$ cents) per ton per mile, to about $2\frac{1}{4}$ d. ($4\frac{1}{2}$ cents) per ton per mile according to the class of goods, plus terminal charges, on the State lines. The rates on other lines are usually somewhat higher.

Rivers.—Four great rivers, the Indus, the Ganges, the Brahmaputra, and the Irrawaddy, with their tributaries, constitute the chief means of inland navigation. They are especially useful for the transportation of cheap and bulky staples and for slow subsidiary traffic. The Indus carries produce from the Southern Punjab and Sind, and Karachi is its port. The Brahmaputra, with its tributary, the Surma, is the great channel for conveying the produce of

Eastern Bengal and Assam to Calcutta. The main stream is navigable for steamers up to Dibrugarh, 800 miles from the sea. Sirajganj is a busy emporium collecting produce for transport to Calcutta. There is a network of channels through the Sunderbunds, furnishing cheap water transit for bulky produce across the delta to the capital. The Ganges, which has played a great part in the commercial development of Upper India, still carries considerable traffic from the Northern plains to the seaboard. Important centres for cargo boats are Bamanghata, Hugli, and Patna. In Burma the Irrawaddy brings down rice and timber to the chief port, Rangoon. The construction of railways has much affected traffic on the Indus and Ganges, though the rivers often serve as feeders of, and not competitors with, the railways. As regards the Brahmaputra and the Irrawaddy, there is much less competition from the railways. The main channels of the Ganges and Brahmaputra are navigable throughout the year, and in the rainy season they supersede road carriage. The great rivers and their affluents probably afford over 10,000 miles of navigable waterway. The towage of native craft up stream is very slow, and therefore a drawback to river traffic.

Roads are unimportant relatively to railways; but their construction, which has been active only during the last fifty years, has enabled wheeled traffic to be substituted for pack animals, and they have proved useful as feeders for railways. The principal towns are connected by trunk roads, and the main roads are metalled. But out of an estimated total of 160,000 miles of roads, only about 40,000 are metalled. The great trunk road running from Calcutta to Jamrud, on the north-west frontier, is the main artery for cart traffic through the fertile plains of Northern India.

Canals.—The most important canals in India are designed for irrigation purposes, but such canals can often be used for several hundreds of miles by small craft. A few canals have been designed primarily or secondarily for navigation. The Calcutta and Eastern Canals are profitable navigation works, maintaining communication between Calcutta and Eastern Bengal through the Sunderbunds. The Orissa Coast Canal, with the Hidgili Tidal Canal, constitutes a line of communication between Calcutta and Orissa. The Nadia rivers' system in Bengal comprises nearly 500 miles of navigable channel. The Orissa, Sone, and Midnapur Canals in Bengal and the Ganges and Agra Canals in the North-Western Provinces are

used for both navigation and irrigation. In Madras the Buckingham Canal from Madras City to the Kistna Delta is important. Most of the canals constructed primarily for navigation have been unprofitable. Attempts to utilize the larger irrigation canals for navigation have met with little success, because the alignment and level suitable for irrigation are often unsuitable for navigation.

Tramways.—Some of the lighter railways in India are rather in the nature of steam tramways, and there is scope for the further construction of such lines. In some large towns, such as Calcutta and Bombay, there are street tramway systems.

Postal Facilities.—The Indian Post Office provides a cheap and admirable service. There are 13,000 post offices besides 26,000 other letter boxes.

The inland postage rates are as follows: Inland letters, ½ anna $(=\frac{1}{2}d. \text{ or } 1 \text{ cent})$ for letter not exceeding $\frac{1}{2}$ tola $(=3\frac{1}{3} \text{ drams},$ avoirdupois) and 1 anna (=1d. or 2 cents) up to $1\frac{1}{2}$ tolas (=10 drams), and 1 anna for each additional tola. A post-card costs a pice ($=\frac{1}{4}d$., or $\frac{1}{2}$ cent). Book and pattern packets, $\frac{1}{2}$ anna ($=\frac{1}{2}d$., or 1 cent) for every 10 tolas (= $4\frac{1}{9}$ ounces). Unregistered parcels, 2 annas (=2d., or 4 cents) per 20 tolas (= $8\frac{1}{4}$ ounces) up to 40 tolas and then 2 annas for each additional 40 tolas (= $16\frac{1}{2}$ ounces), up to 440 tolas (=11 lbs. 5 ounces). Parcels exceeding 440 tolas must be registered, and are charged 3 rupees (=4s., or \$1) up to 480 tolas (=12 lbs. $5\frac{1}{2}$ ounces), and 4 annas (=4d., or 8 cents) for every 40 tolas beyond. Value payable parcels, 2 annas (=2d., or 4 cents) for any sum specified for recovery not exceeding 10 rupees (=13s. 4d., or \$3 33c.) 4 annas (4d., or 8 cents) for 10 to 25 rupees (£1 13s. 4d., or \$8 33c.), and 4 annas for every 25 rupees additional. Value payable parcels are those of which the post office collects the declared value from the addressee, transmitting the money to the sender by money-order. Under this excellent system the number of articles carried is now about 2,600,000 per annum.

The registration fee is 2 annas (= 2d., or 4 cents) for letters, packets, and all other classes of articles sent inland or abroad.

Insurance fees, Rs. 50, 2 annas (=£3 6s. 8d. for 2d., or $$16\frac{2}{3}$$ for 4 cents); Rs. 100, 4 annas; and 4 annas for each additional Rs. 100 up*to a maximum of Rs. 2,000.

Inland money orders are issued for sums up to 600 rupees (=£40 or \$200). Commission on any sum up to 10 rupees (=13s. 4d., or

\$3 33c.), 2 annas (= 2d. or 4 cents), 10 rupees to 25 rupees, 4 annas, and also 4 annas for each additional 25 rupees.

Foreign Postage.—Elementary union rates of postage are adopted by India for correspondence with all parts of the world except the United Kingdom and most of the British Possessions. These rates are: for letters, $2\frac{1}{2}$ annas (= $2\frac{1}{2}$ d., or 5 cents) per $\frac{1}{2}$ ounce; for printed papers, $\frac{1}{2}$ anna (= $\frac{1}{2}$ d., or 1 cent) for 2 ounces; and the same for business papers, but with a minimum of $2\frac{1}{2}$ annas (= $2\frac{1}{2}$ d., or 5 cents); for samples, $\frac{1}{2}$ anna per 2 ounces (minimum, 1 anna). Rate for letters from India to United Kingdom and to nearly all British possessions, 1 anna (= 1d., or 2 cents) for $\frac{1}{2}$ ounce.

Foreign Parcel Post.—Parcels are exchanged by post between India and most foreign countries. Every parcel must be prepaid, and must be accompanied by a Customs declaration in prescribed form. Parcels exceeding 11 pounds and up to 50 pounds are received and delivered by the Peninsular and Oriental Steam Navigation Company. Transmission by foreign parcel post of any parcel containing coin or bullion exceeding £5 in value, is prohibited. Parcel Post is increasingly used for despatching small articles to India, such as millinery, dresses, gloves, boots, books, etc. There are various restrictions as to size and weight of parcels.

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PARCEL POST RATES TO UNITED
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                                                                                  UNITED STATES.
                       KINGDOM.
             THROUGH POST OFFICE.
                                                                  New York City, Brooklyn, Hobocken,
                     Vià Brindisi.
                                                                            and Jersey City via Italy.
Up to 3 lbs., R. 2 4a.(=3s.).
Over 3 lbs. up to 7 lbs., R. 3 6a.(=4s. 6d.).
,, 7 ,, ,, 11 ,, R. 4 8a.(=6s.).
                                                                  R. a. p.
Up to 2 lbs., 3 4 6 (=$1 9c.).
2 to 6 lbs., 4 6 0 (=$1 45c.).
6 to 11 lbs., 5 7 6 (=$1 81c.).
                    Viâ Gibraltar.
Up to 1 lb., 12 A. (=1s.).
Overland up to 2 lbs., R. 1 4a. (=1s.8d.).

,, 2 ,, 3 ,, R. 1 12a.(=2s.4d.).

,, 3 ,, 7 ,, R. 2 10a.(=3s.6d.).

,, 7 ,, 11 ,, R. 3 12a.(=5s.).
                                                                    Other places in United States (except
                                                                                        Alaska).
                                                                  R. a. p.
Up to 2 lbs., 3 14 6 (=$1 29c.).
        Direct, by P. and O. S. N. Co.
Direct, by P. and O. S. N. Co.
For each lb. or fraction thereof, 8a. (=8d.)

| 2 to 6 lbs., 6 6 6 (=$2 13c.). 6 to 11 lbs., 814 6 (=$3 0c.).
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Foreign money orders expressed in sterling may be drawn on the United Kingdom, the United States, and most British Possessions and foreign countries.

Telegraphs.—Over 60,000 miles of wire and cable are maintained by the Telegraph Department, which supervises more than 2,600 railway and canal offices and 1,600 offices worked by the Postal Department. It also supplies telephones to local bodies and to private persons whose requirements are not met by telephone companies. The inland rates are: "ordinary" rate, I rupee (=1s. 4d., or 33 cents), for eight words, and 2 annas (=2d., or 4 cents) for each additional word; deferred rate, half the ordinary; urgent rate, double the ordinary. Addresses telegraphed free. Telegrams to Europe are 1 rupee 14 annas (=2s. 6d.) per word viâ Suez or viâ Teheran, and 1 rupee 11 annas (=2s. 3d.) viâ Turkey. The rates for telegrams to the United States are 3 rupees 8 annas to 3 rupees 11 annas (=\$1 16 cents to \$1 22 cents) per word viâ Turkey, and from 3 rupees 12 annas to 3 rupees 15 annas (=\$1 24 cents to \$1 30 cents) viâ Teheran or viâ Suez. Rates from Burma are 4 cents more. The rates for telegrams to Europe have only just been reduced, and under certain conditions a further reduction to $1\frac{1}{2}$ rupees (2s.) per word may be made.