

ORGANIZATION AND ADMINISTRATION OF ASIATIC AND AFRICAN TELEGRAPHS.

CHAPTER LIX.

History of the Telegraph in Hindostan—Rules and Regulations on the Bengal Lines—Classification and Qualification of Employés.

ASIA—HISTORY OF THE TELEGRAPH IN HINDOSTAN.

IN the months of April and May, 1839, in the vicinity of Calcutta, Hindostan, an experimental telegraph line of twenty-one miles, embracing 7,000 feet of river circuit, was constructed by Dr. O'Shaughnessy. The enterprise in India, after this experiment, remained at rest until 1851, at which time a line of 15 miles overground and 15 miles subterranean was constructed. In 1852 a branch line was built from Calcutta to Magapore and to Kedgerree, some 80 miles long. In 1852, the Hooghly and Huldee rivers were successfully crossed, by which Calcutta was brought into connection with the sea. In the same year the government of India directed the construction of lines from Calcutta to Agra, to Bombay, to Peshawur and Madras, and since then lines have been extended to other places.

The telegraphs of Hindostan have been constructed by the government upon a more expensive and permanent scale than the lines of any other country. Upon these lines a needle system, invented by Dr. O'Shaughnessy, has been successfully employed. He has given evidence of its superiority, in working, over the instruments employed on the lines in England.

RULES AND REGULATIONS ON THE BENGAL LINES.

The following rules, adopted on the telegraph lines of the government of Bengal, will show the mode of the management of telegraph lines throughout India :

1st. Until further orders, the services shall be conducted by the superintendent, in direct communication with the government of Bengal.

2d. The telegraph station shall be open continually, day and night, throughout the year, for the receipt and transmission of correspondence.

3d. The secretaries and under-secretaries of the government, superintendent of marine and his secretary, master-attendant and his assistants, collector of the customs, deputy collector and his assistants, are authorized to have their messages on public service conveyed, subject to *pro formâ* charge, at the usual rates, taking precedence of all private communications. Other public officers having messages on public service to transmit, will apply to the superintendent; or, in emergent cases, to one or other of the officers above named.

4th. All ordinary shipping intelligence is to be transmitted in writing hourly to the superintendent of marine, and the master attendant. Important shipping intelligence is to be transmitted, immediately upon its receipt, to the same authorities.

5th. Printed reports of intelligence are to be issued at 10 A. M., 1, 4, and 7 P. M. These will be forwarded to the members of the government, secretaries to the government, private secretaries to the governor-general, and deputy governor of Bengal, superintendent of marine, master-attendant, register of seamen, board of revenue, collector of customs, superintendent of preventive officers, military board, postmaster-general, &c.

6th. Special notice of the arrival of any specified vessel is to be sent immediately to the residence or office of any person within Calcutta, requiring it, at a charge of four annas (6d.) in the case of a subscriber, and one rupee (2s.) in the case of any other person.

7th. In case of any irregularity, delay, or interruption in the transmission of messages, or the delivery of notices or reports, on public or private service, complaint should be made to the superintendent.

8th. Any officer, signaler, clerk, or other person employed in the telegraph stations, disclosing improperly the particulars or tenor of any message sent by telegraph, whether on public or private service, shall be dismissed, forfeiting all arrears of salary; and shall be declared disqualified from serving government in any capacity.

9th. Messages will be transmitted at the following rates:

[The rates are something higher, but arranged as on the American lines. Two syllables is a word, and each additional syllable is counted as a separate word.]

10th. Between sunset and sunrise, the tariff of charges will be doubled, and the superintendent will be allowed to divide

the receipts, at his discretion, among the signalers who may be engaged in transmission of the messages.

11th. The transmission of messages gratuitously is prohibited on penalty of dismissal.

12th. Messages will have precedence in the following order, viz. :

a. Vessels in distress ; *b.* Mail steamers ; *c.* Public service ; *d.* Private service of subscribers ; *e.* Shipping business ; *f.* Private service of individual firms, not subscribers.

13th. Persons using the telegraph are admitted into the outer room of the office ; but no person, whether public officers or private individuals, will be admitted into the inner rooms. Visitors can be allowed access to the signal room only by the special order of the superintendent.

14th. No record or copy is to be kept of the nature or contents of any dispatch on business, but an entry will be made in the station journal, in the following form, viz. :

Message from A—— B——.
 Transmitted to ——.
 Words 25, not more than two syllables each, Tariff —— Additional ——
 Delivery —— Answer —— Signed by Signaler C—— D——

15th. All fees are to be paid in cash, before the sending of the message. All receipts on this account are to be carried to the credit of the government, and to be accounted for in the monthly reports.

16th. Subscribers' privileges are obtained by firms and individuals, on payment of a subscription of eight rupees a month.

17th. The superintendent is vested with the power of appointing and removing all persons employed in the establishment. He may inflict fines for neglect of duty ; but should such fines amount in any month to more than one-fourth of the salary or wages of the persons punished, the case shall be especially reported for the orders of the government.

CLASSIFICATION AND QUALIFICATION OF EMPLOYEES.

18th. The administration or establishment consists of a superintendent, assistant, and workmen. The assistants are of four classes :

FIRST CLASS—INSPECTORS.

Qualifications.—A good English education, a correct knowledge of orthography, a perfect knowledge of the principles, construction, working, adjustment, protection, and repairs of the lines of conductors, and of all the instruments employed.

Quickness and correctness in dispatching and receiving signals, knowledge of Marryat's and Bedford's Marine and River Codes. Good character for sobriety, diligence, activity, and good habitual health. Salary to be 100 rupees (£10) per month, with 40 rupees for traveling expenses when employed out of Calcutta.

SECOND CLASS—READERS.

Qualifications.—A good English education, correctness in orthography; rapidity and precision in transmitting and reading signals by spelling, and with needle telegraphs; knowledge of the adjustment of instruments, and of Marryat's and Bedford's codes. Salary 55 rupees (£5.10s.) to 75 rupees (£7.10s.) a month.

THIRD CLASS—SIGNALERS.

Qualifications.—A good English education, correctness in transmitting signals, and proficiency in reading signals. Salary 27½ rupees (£2.15s.) a month.

FOURTH CLASS—PROBATIONERS.

Qualifications.—A good English education. A guarantee from a guardian or parent, of readiness to enter into apprenticeship, according to government act.

Probationers receive no pay, but are permitted to learn the practice of signaling at such stations as may be convenient, for a period of three months, when they will be subjected to an examination, and discharged if not found qualified for admission on the apprentice list. If employed at out-stations, or on temporary duty, they will receive pay at the rate of 16 rupees (£1.12s.) per month.

In the foregoing I have not referred to the construction of the lines, preferring to embrace that subject in another part of this work, especially as the peculiarities of the telegraphs in Hindostan are different from other parts of the world. The character of the country, the climate, and other considerations, have required from Dr. O'Shaughnessy the exercise of wonderful inventive powers. In this, he has fully met every difficulty. And though his works exhibit a strange novelty, yet he has consummated the enterprise with a degree of perfection, as to construction and administration, singularly novel.

The lines of Hindostan are the most substantial in the world. They are subjected to severe trials, and such, too, as are not common to other climes; among which, for example, is the annoyance from the monkeys playing and swinging upon the wires.