

the East Indian Company; and it is probable that a large additional portion of the line will be opened during the present year.

The Great Indian Peninsular line, embracing 1,235 miles, is making equally rapid progress to completion. 130 miles were opened and in use on the first of July last, and of the remainder, 732 miles were under contract, exclusive of the Nagpore branch of 262 miles, which, we believe, has been just let. The North-eastern line to Jubbulpore—of which the 556 miles not opened are under contract and in rapid progress—is to be finished by March, 1862. The tremendous works of the Bhore Ghaut will not be completed in much less than two years, or until February, 1861. Including the 2½ miles already in working to the east of Khandalia, this incline is 15¼ miles long, and rises 1831 feet, the average gradient being 1 in 18—1¼ miles, however, being as steep as 1 in 37.

Upon the whole length there are twelve tunnels through trap rock, the longest being 437 yards in length, and that of the whole being 2,535 yards. There are eight viaducts of from 52 to 163 yards in length, and in one instance of 139 feet in height; there are 1,623,102 cubic yards of cuttings, 1,849,934 yards of embankment; the maximum depth of the former being 80 feet, and the greatest height of the latter 74 feet. The estimated cost of this incline is nearly £600,000, or £41.188 per mile, and its execution will have taken five years. Beyond Khandalia, 42 miles of the line are open to Poonah, and 163 miles more are in construction up to Sholopore. On this portion, and on the Bhore Ghaut, no less than 43,000 laborers, mostly natives, have been employed at the same time.

The Madras lines, of a united length of 740 miles—to be increased probably by the construction of additional branches—are also making fair progress; 86 miles, between Madras and Goriattum, have been for some time in working, and it is expected that from 70 to 80 miles will be opened during the present year from the Malabar coast at Beypoor to Paul Ghaut. On the completion of the bridge at Goriattum, (the present Western terminus) 104 miles of the line will be opened to Salem, a distance of 200 miles from Madras. From Arconum on the trunk line, 42 miles from Madras, the North-western line will extend for from 320 to 340 miles to meet the great Indian Peninsula near Ballery, and that portion of the line between Arconum and Cuddapa will be pushed forward as rapidly as possible. An important branch of 80 miles will extend from Vaniembady on the main line to Bangalore. Forty engineers are already engaged upon the surveys of the various lines of the Madras system. The whole of the main line from its present terminus to Beypoor, on the opposite side of the Peninsula, will be finished as fast as the permanent way can be carried up and laid.

The Bombay, Baroda and Central India line of 330 miles, between Bombay and Ahmedabad, is in construction, and 80 miles between Surat and Bareda are ready, with the exception of two bridges, for immediate opening. Rolling stock is being contracted for, to be sent out in the Spring. The surveys for the second concession of 117 miles, from Surat to Veturnee river, have been completed, and the works will be soon commenced.

The Scinde railway, of 110 miles, from Kurachee to Kotree, is in rapid construction, and its complement, the Punjab railway of 230 miles, from Mooltan to Lahore, with an extension to Unritser, was commenced in October last. A portion of the Scinde railway was to have been opened by the end of last year, and the Company are now sending out light draught steamers to ply on the Indus to complete the communication between Kotree and Mooltan, a distance of 570 miles. In connection with the Scinde railway, a line has been surveyed also, extending to Peshawur and terminating at the Bolan Pass, with the ultimate object of connecting with a line through Central Asia, and with which a connection with the Euphrates valley railway from Constantinople will eventually be made. With this connection and completion of the East India line, Calcutta would be but about 5,000 miles from London, and the time of transit, by continuous and rapid travelling, would be reduced to seven days.

The Eastern Bengal is an important line, extending eastwardly from Calcutta, and of which 108 miles, up to Kooshtee, have been let to contract. The line will ultimately be extended to Decca, and a branch be made to Jessore, whereby the total length will be 300 miles.

The Great Southern or India Railway from Salem, on the Madras Railway, the Negapatam, and southward to Madura and Tinnevely, is about to be commenced. The cost of the first portion between Negamatam and Trichinopoly has been fixed under the government guarantee at £500,000.

The Calcutta and South-eastern Railway, extending to the port at the mouth of the Mutlah river, a distance of 30 miles, is about to be undertaken, also under a government guarantee. The port of the Mutlah is considered to be very much superior to that of Calcutta, the advantage in shipping cargoes being equal to a reduction of 10s. or 11s. a ton.

It has been announced that the Bengal government has sanctioned

a portion of the northern Bengal line between Rajmahal and Darjeeling, and that its construction is only a question of time.

A project has been started also for a railway from the mouth of the Godavery river to Nagpore, a distance of 400 miles. The line is to be called the Berar and East Coast of India Railway, and is to have a branch from Nagpore to Hyderabad, and ultimately a connection with the Madras and Bombay trunk lines. The mouth of the Godavery lies midway between Calcutta and Madras, constituting the only harbor on that portion of the coast; and a railway to that point, it is claimed, would give a sea outlet to the cotton of the Nagpore districts, and thus be likely to stimulate the growth of that staple.

In Ceylon a line of railway is in active construction between Columbo and Kandy.—*London Engineer.*

VII. THE GEOGRAPHICAL DISCOVERIES OF 1858 & 1859.

[Revised from *La France Coloniale.*]

The world has been pretty well discovered. Portions only of Africa, Australia, Indo-China, the Indian Archipelago and the Polar Regions, remain for the enterprise of governments, learned societies, and men who are brave as well as curious.

Mlle. Ida Pfeiffer, after travelling through Palestine, Northern Europe, and twice around the world, in a fifth journey attempted Madagascar. Queen Raravolo received her kindly, they became suspicious, and finally ordered her to leave the island immediately. She was taken with other Europeans, it is supposed intentionally, to a low, swampy coast, where foreigners never escape the fever. She took the fever, was made worse by her homeward voyage, and died on the 7th of October last, at the age of 61, in one of the suburbs of Vienna.

Africa.—On the 27th of February last, the Sardinian traveller, Brun-Rollet, died at Khartoum, on the boundary between Nubia and Abyssinia. He had penetrated all the country bordering on the upper Nile, and discovered Lake Noe, in lat. 12 deg., and the Bahr Keilak, or Misselad, which belongs to the western basin of the Nile. In 1855, he published in Paris *Le Nil Blanc and Soudan.*

Australia, &c.—The Englishman, Coulthard, died a terrible death, by thirst, in the inner desert of Australia. A traveller, Babbage, found his body in a thicket, and a tin cup near by on which he had scratched a few lines with a nail, which made known the frightful sufferings that preceded his death. Coulthard set out with two other Englishmen, Scott and Brooks, who probably have perished.

Mr. Stuart returned to Adelaide recently from Port Augusta, after an absence of six months. Mr. Stuart's first business was to survey and lay off the runs discovered and claimed by him some years ago. After that work was finished, he started with his party on a further exploratory expedition, and the result has been the discovery of an immense tract of country exceeding in richness of pasture and abundance of water anything that has yet been met with. The distance traversed was 300 miles beyond the furthest point reached by Mr. Babbage and Major Warburton, and the country was found to be luxuriant beyond description. Mr. Stuart started from the Emerald Springs about the beginning of April, and reached lat. 26° S., the Northern boundary of the colony, about the middle of May, and during the entire journey there and back he states that he was never a single day without water. The country traversed consisted chiefly of immense plains, interspersed with innumerable hillocks from 100 to 150 feet high, from the summits of which gushed springs of pure fresh water, intersecting the plains and discharging themselves into numerous creeks and rivers running in an easterly direction. One of the rivers discovered is reported by Mr. Stuart to be 3 miles broad in one part of its course. The ranges flanking the plains are chiefly table-topped and about 1,000 feet high. Mr. Stuart made a detour occasionally of from 20 to 30 miles on each side of his track, and found the country everywhere of the same beautiful description; and it seemed to be of a similar character as far as the eye could reach beyond the farthest point attained by him. Indeed, he seems to have turned back through surfeit of good country. He thinks there would not be any difficulty whatever in crossing over to the Gulf of Carpentaria or to any other portion of the North coast. His impression is that an inland lake or sea exists to the eastward, which probably discharges its waters into Stokes' Victoria river to the North-west. At any rate, the theory that the centre of New Holland is nothing but a desert may now be exploded. Mr. Stuart has brought back specimens of the grasses, seeds, and minerals of the country, the latter of which are said to include some precious stones. A considerable portion of the district traversed is represented as auriferous.

Adolph Schlagintweit has been murdered by a troop of rebels against the Chinese authorities, in a village of Thibet, not far from Yarkand.