Map
of Routes from
EUROPE TO UPPER INDIA
AND
CENTRAL ASIA.
VIA
THE RED SEA, THE EUPHRATES VALLEY,
AND
KURRACHEE
Route by Steamer Coloured Red
do Railway Blue
NORTH SEA
ATLANTIC OCEAN
BAY OF BISCAY
FRANCE
SPAIN
PORTUGAL
ITALY
GREECE
TURKEY
BLACK SEA
ASIA MINOR
PERSIA
ARABIA
ARABIAN SEA
BELOOCHISTAN
HINDOOSTAN
HYDRABAD
KURRACHEE
CALCUTTA
Bombay
Madras
CEYLON
Laccadives
Maldives
Cape Verd Is
Canary Is
Madeira
Azores
Tropic of Cancer
Equator
Meridian of Greenwich
Upper Guinea
Gulf of Guinea
Gulf of Aden
Gulf of Persia
Gulf of Cambay
Lake Tchad
Lake Aral
Sea of Azof
Sea of Marmora
Black Sea
Caspian Sea
Red Sea
Mediterranean Sea
Cape of Good Hope
Cape Town
Sierra Leone
Cape Coast Castle
Gibraltar
Malta
Corfu
Constantinople
Smyrna
Aleppo
Jerusalem
Cairo
Mecca
Medina
Bagdad
Bassorah
Ispahan
Shiraz
Muscat
Kabool
Peshawur
Lahore
Delhi
Agra
Calcutta
Bombay
Madras
Goa
Mangalore
Cochin
Colombo
Galle
Point de Galle
Aden
Mocha
Jeddah
Suez
Alexandria
Rhodes
Cyprus
Candia
Sicily
Sardinia
Corsica
Malta
Lisbon
Oporto
Madrid
Paris
London
Edinburgh
Dublin
Liverpool
Hamburg
Bremen
Amsterdam
Antwerp
Copenhagen
Christiania
Danzig
Königsberg
Vienna
Venice
Genoa
Rome
Naples
Belgrade
Constantinople
Tripoli
Tunis
Algiers
Tangier
Mogador
Madeira
Canary Is
Cape Verd Is
Sierra Leone
Cape Coast Castle
Cape Town
Gibraltar
Malta
Corfu
Candia
Cyprus
Rhodes

130 F 3

THE

SCINDE RAILWAY

AND ITS RELATIONS TO

THE EUPHRATES VALLEY,

AND

THE OTHER ROUTES TO INDIA,

With Illustrative Maps, Statistical Tables, &c.

FROM OFFICIAL SOURCES.

BY

W. P. ANDREW, ESQ.,

CHAIRMAN OF THE SCINDE RAILWAY COMPANY,

Author of "Indian Railways and their Probable Results, by An Old Indian Postmaster," "Railways in Bengal," "Is India to have Railways?" &c.

"Heretofore, and until very recently, every recruit that joined his corps from England—every invalid that was sent back shattered to his home, was obliged to travel the long, slow, weary track to Calcutta, however distant the station at which he was placed. Within the last two years, the establishment of steam communication regularly on the Indus has *enabled the Government greatly to lessen this evil. This dispatch of recruits by Bombay* to Kurrachee for that large portion of the Bengal army that is stationed to the westward of the Jumna, and the conveyance of the invalids of the same portion of the army from Ferozepore to the sea, have been a vast improvement."—*Minute by the Governor-General of India*, 1853.

"Indeed these two essentials, viz., the Railroad and the Steamers, may be said with truth to be the crying wants of the Punjaub in the Department of Public Works.

"These provided, the commerce and produce of these territories will be turned to their due course, viz., the Indus and its feeders and to their natural outlet, viz., the Port of Kurrachee.

"For the Railroad, the face of the Doab offers an unusual equality of surface.

"If carried out, they (the railway and steamers) would effect more for the development of the resources of these territories than any other work, or number of works that could be devised."—*The Chief Commissioner of the Punjaub to the Government of India*, 1855.

LONDON:

WM. H. ALLEN & CO., 7, LEADENHALL STREET.

1856.

THE PROPERTY OF THE

INDIA BOARD

and requested to be returned

W. LEWIS AND SON, PRINTERS, 21, FINCH LANE, CORNHILL.

"The sea stages of the present route to India, exclusive of the trip across the Channel, are two; one from Marseilles or Trieste to Alexandria; and the other from Suez to Kurrachee) Bombay, or Calcutta. These stages constitute by far the longest part of the journey, being 5075 miles, performed by steamers; from which an average speed of some ten miles an hour is all that can be expected. The longer again of these two stages is that from Suez to Hindostan, as it includes a circuit round two sides of the triangular territory of Arabia. The first object, therefore, is to get rid of the detour by Aden; and this is to be done by carrying the passengers to the mouths of the Orontes, instead of the mouths of the Nile, and forwarding them across the Turkish territory to Bussorah, at the head of the Persian Gulf. The railroad required for this purpose would run along the Euphrates Valley, and its length would not exceed 900 miles; whereas, its completion would reduce the distance from London to Calcutta by more than *one-half*,—by twenty days in fact out of thirty-nine!"—*The Times.*

"There is scarcely one important article of tropical production which is consumed in this country, either as the raw material of our manufactures, or as articles of daily use, for the production of which India is not as well or better adapted than any other country; while its dense and industrious population would seem to offer an illimitable demand for our manufactures. Nor are there opposed to these national and flattering elements of commerce any fiscal restrictions to counteract their beneficial results." —*The Economist.*

"It is to India that the chief enterprise of British commerce and civilisation should be directed by an intelligent legislature." —*Blackwood's Magazine.*

EQUIVALENTS IN INDIAN AND ENGLISH CURRENCY.

12 Pie	= 1 Anna	= 1½d.
16 Annas	= 1 Rupee	= 2s.
100,000 Rupees	= 1 Lac	= £10,000.
100 Lacs	= 1 Crore	= £1,000,000.

EQUIVALENTS IN INDIAN AND ENGLISH WEIGHTS.

80 Tolas	= 1 Seer	= 2 lbs.
40 Seers	= 1 Maund	= 80 lbs.
28 Maunds	= 2240 lbs.	= 1 ton.

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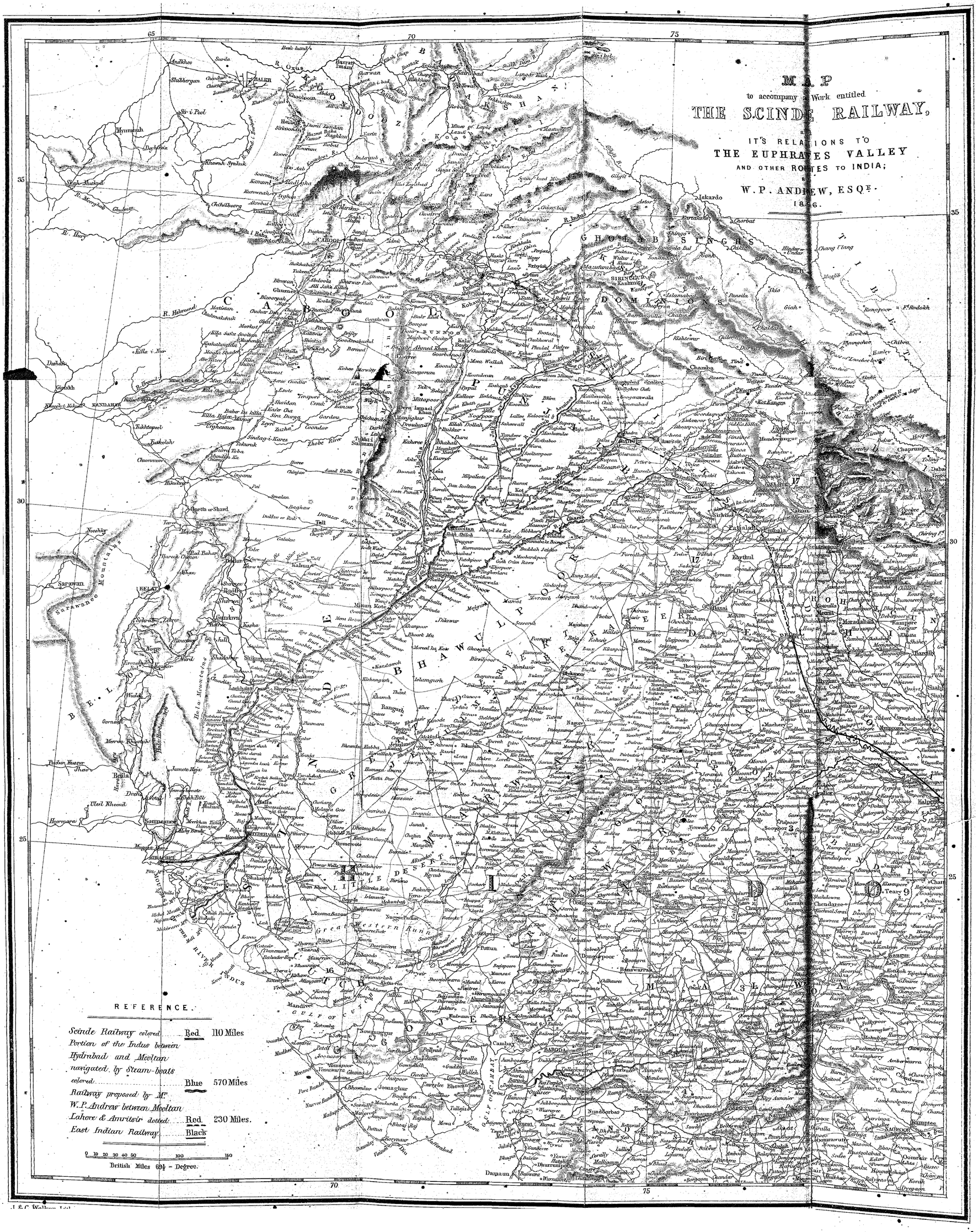
NOTE.

An influential body of English merchants and manufacturers sent a memorial to Lord Clarendon on the eve of his departure to the Peace Congress at Paris, praying that in the arrangements about to be entered into, due regard should be had to the securing new outlets for the products of British manufacturing science and skill.

Those who are interested in the extension of British commerce should turn their eyes to the once rich, but now forgotten plains of the Euphrates and Tigris, and the great countries drained by the Indus and its tributaries, and learn the wants, the capabilities, and the resources of those vast, interesting, and most important regions.

The author has, as on former occasions, to express his acknowledgments to the Government Authorities for the ready access to official papers. Mr. Frere, the Commissioner of Scinde, especially has favoured him with valuable data as to the trade of Scinde and the Indus, at once authentic and recent, and not otherwise obtainable. General Chesney, several officers of the Euphrates Expedition, and more recent travellers in Eastern countries have also placed him under obligation.


MAP
to accompany a Work entitled
THE SCINDE RAILWAY,
and
IT'S RELATIONS TO
THE EUPHRATES VALLEY
AND OTHER ROUTES TO INDIA;
by
W. P. ANDREW, ESQE.
1856.
REFERENCE.
Scinde Railway colored Red 110 Miles
Portion of the Indus between Hydrabad and Mooltan navigated by Steam-boats colored Blue 570 Miles
Railway proposed by Mr. W. P. Andrew between Mooltan Lahore & Amritsir dotted Red 230 Miles.
East Indian Railway Black
British Miles 69½ = Degree.
GULF OF CUTCH
GULF OF CAMBAY
Great Western Runn
LITTLE DESERT
THE INDUS
Sarawan Mountains
Hala Mountains
Kirthar Range
Sulimani Range
Salt Range
Himalaya Mountains
Iskardo
Leh
Simla
Delhi
Agra
Lahore
Multan
Hydrabad
Kurrachee
Jeypoor
Ajmeer
Jodhpur
Bhawulpur
Bahawulpur
Cabul
Kandahar
Herat
Balkh
Kelat
Quetta
Sukkur
Tatta
Bombay
Baroda
Surat
Nagpoor
Indore
Gwalior
Lucknow
Cawnpore
Meerut
Rampoor
Patiala
Umbala
Ferozepoor
Jeypoor
Ajmeer
Jodhpur
Bikaner
Jeisalmer
Hyderabad
Mooltan
Lahore
Amritsir
Jummoo
Simla
Kurrachee
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Hydrabad
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THE

SCINDE RAILWAY,

AND ITS RELATIONS TO

THE EUPHRATES VALLEY

AND OTHER ROUTES TO INDIA.

IMMEDIATE OBJECTS CONTEMPLATED.—The Scinde Railway Company was established to introduce railways into the province of Scinde,—the first section commencing at the port of Kurrachee, and proceeding to a point on the Indus in the vicinity of Hydrabad.

This line about 110 miles in length, will place Kurrachee, the only seaport of Scinde, in communication with the Indus, the great commercial artery of the countries on our north-west frontier, at a point where the river becomes free from the intricacies, dangers and delays of the navigation of the Delta.

The great political and commercial advantages which may be fairly expected from this undertaking are clearly set forth in the despatches of the Commissioner of Scinde and the reports of the Engineer officers in the service of the Honourable East India Company, who have made a preliminary survey of the line. (Vide pp. 65, 74, 77, 81.)

CONTRACT WITH EAST INDIA COMPANY.—The effect of the contract between the Honourable East India Company and the Scinde Railway Company is, that the East India Company guarantee a minimum rate of interest on the capital of 5 per cent. per annum for 99 years

The Honourable East India Company grant a lease of the land necessary for the railway and works for ninety-nine

years, free of charge. On the opening of the line, all net profits exceeding the rate of interest guaranteed are to be divided—one half of the surplus is to go to the shareholders, and the other half to the East India Company, in liquidation of the interest they have advanced. When this interest is repaid, the entire surplus profit goes to the shareholders. The East India Company reserve a right to regulate the trains and fares; and as soon as the dividend exceeds 10 per cent., to lower the fares, but not so as to reduce the profit below that rate. The East India Company also reserve power, after the first twenty-five or fifty years, to purchase the line at a price equal to the average market value of the shares for the three preceding years. On the other hand, the railway Company have the power, at any time after the line has been three months in work, to require the East India Company to take it off their hands at six months' notice, and repay them the capital expended.

PROFITABLE CHARACTER OF THE LINE.—Irrespective of the guarantee, this enterprise possesses, in the opinion of those personally acquainted with Scinde and its resources, a highly remunerative character:—

1st. From the country, presenting a series of firm and level plains, it is admirably adapted for the construction of a railway. (Vide pp. 75, 78, 81, 120.)

2nd. From the line being of moderate length and complete in itself, having an important town at either terminus, (Kurrachee, the lower terminus, the present seat of Government, being the only sea-port for many hundred miles, and Hydrabad, the upper terminus, the former capital, being still the chief entrepôt for the inland trade of the province,) thus of necessity forming the most important portion of any system of railways, or other form of transit,

which shall follow the course of the Valley of the Indus or its tributaries. (Vide pp. 69, 82.)

3rd. From the *actual existence* of a paying goods traffic all the year round, which, in the opinion of the late Deputy Collector of Kurrachee, will have doubled its present value, and of a passenger traffic which will have increased tenfold, before a railway can be in operation. (Vide pp. 80, 104, 116.)

HARBOUR AND PORT OF KURRACHEE.—Kurrachee is the only land-locked harbour on the coast between Bombay and the Red Sea; it is on the sea coast of the Indus valley, and is the nearest safe port to the Persian Gulf.

This port is perfectly safe and easy of access for large ships during the height of the south-west monsoon.

During the last year the following ships, among others, entered the harbour of Kurrachee :—

		From London.	Tons.			
	Dec. 1,	Marion,	684,	18 ft.	6 in.	draught.
	Nov. 23,	Norwood,	850,	15 ft.	0 in.	,,
	Oct. 19,	El Dorado,	841,	21 ft.	0 in.	,,
	Sept. 24,	James Gibb,	813,	21 ft.	6 in.	,,
Monsoon months	Aug. 12,	Marmion,	388,	16 ft.	3 in.	,,
	,, 6,	Kenilworth,	582,	16 ft.	6 in.	,,
	July 30,	Granger,	878	19 ft.	6 in.	,,
	,, ,,	Sir James,	646,			
	,, 26,	Alex. Wise,	295,	15 ft.	0 in.	,,
	,, 2,	Saxon,	526,	15 ft.	2 in.	,,
	,, ,,	Tamar,	556,	17 ft.	10 in.	,,
	June 30,	Semiramis,*		large steamer.		
	,, 14,	Agamemnon,	756,	16 ft.	3 in.	,,

(Vide pp. 121, 165, 174.)

* From Bombay.

THE INDUS AND ITS STEAMERS. — From Mooltan in the Punjaub to Kotree (port of Hydrabad), a distance of 570 miles of permanently open navigation, the steamer *best adapted* for this portion of the Indus cannot get out and round by sea to Kurrachee, nor thread the narrow channels of the Delta. If the troops and stores could be landed at Kurrachee and conveyed by railway to Kotree, a large saving would, according to the officer in charge of the Indus flotilla, accrue to the state on that service, while steam boats of improved construction could be employed for the inland navigation from Kotree to Mooltan.

At present, large quantities of stores, particularly porter, obliged to be sent by country boats, are found to be worthless on reaching the Punjaub, the voyage of 800 miles from Kurrachee to Mooltan lasting five months. During the last season, the cost of transport of government stores by country boats was about £150,000. By the railway, stores would be delivered in one day at Kotree on board steamers, which in a week might deliver them in the Punjaub.

This railway would exert a powerful influence in promoting the development of the trade of the Indus valley. The annual losses are very large, from the accidents which take place in threading the narrow channels of the Delta. Major Preedy, the Collector of Lower Scinde, states, that "*if one or two boats only out of a batch of six or so were lost, it is considered a good venture.*"

TRADE OF KURRACHEE, THE INDUS, &c.—In the port of Kurrachee, the average of the shipping is from 90,000 to 100,000 tons yearly, of which about 40,000 tons were, last year, square-rigged vessels. (Vide pp. 100, 104.)

The following is the return for boats which run the whole distance from Kurrachee to Sukkur :—

1851-2	1,284,920 maunds	= 45,890 tons.
1852-3	1,565,120 „	= 55,500 „
1853-4	1,624,740 „	= 58,026 „
1854-5	1,681,720 „	= 60,060 „

The return of the number of boats passing any one station below Sukkur would be much higher than the above.

The number of laden steamers passing Hydrabad and Kotree is 170 in the year, with a tonnage of 1,190,000 maunds, or 42,500 tons.

The Government receipts for goods and passengers carried in the river steamers have been—

		Gross	Net.
1852-3, (the first year of the experiment,)	„	Rs. 50,273	Rs. 43,291
1853-4, „	„	59,865	49,277
1854-5, „	„	67,981	60,554

The returns of camel traffic leaving Kurrachee are not complete,—but, assuming one half of the amounts ascertainable as being intended for the Indus, the total is 112,000 maunds, or 4,000 tons.

The post-office outlay on the line is £2,400 per annum.

From the recent orders transmitted to India, that the Government stores for the Punjaub and neighbouring territories should be sent from Bombay, up the line of the Indus, instead of as heretofore from Calcutta, up the Gangetic valley, a great increase of the above-shewn traffic must ensue, and a revenue, at railway rates, derived, which would give a large return on the capital of the Company. The preceding figures convey but a moderate idea of the amount of tonnage which would come upon the railway.

The increase of the import and export trade is still continuing, especially in the exports of the staple products of the valley.

VALUE OF THE SEABORNE TRADE OF SCINDE.

Year	Imports.	Exports.	Total.
	£	£	£
1843-4	121,150	1,010	122,160
1844-5	217,700	9,300	227,000
1845-6	312,900	40,500	353,400
1846-7	293,400	49,300	342,700
1847-8	287,872	154,730	442,600
1848-9	344,715	107,133	451,849
1849-50	419,352	114,378	533,731
1850-51	425,831	196,461	622,293
1851-52	489,220	244,122	733,343
1852-53	535,690	376,337	800,000
1853-54	——	——	900,000
1854-55	——	——	1,000,000 *

VALUE OF STAPLE EXPORTS.

	1847 8.	1851-52.	1852-53.	Increase per cent. in 5 years.
	£	£	£	
Wool	18,159	75,716	160,000	800
Indigo . . .	2,825	21,595	24,000	750
Saltpetre . . .	8	4,323	9,600	12,000
Ghee	726	9,616	18,300	2,400
Piece Goods Silk & Cotton	1,288	3,921	4,750	260

Every increase in facility and safety of transport will give fresh impulse to all native products. The export of wool, corn, oil seeds, saltpetre,† and indigo, madder, and

* I have not exact returns of the total value of the Sea Trade for 1853-4 and 1854-5, but the latter was over a million sterling.

† The following shows the growth of the saltpetre export trade from Scinde :—

1847-48	Maunds	33
48-49	"	0
49-50	"	426
50-51	"	6,052
51-52	Cwt	6,822
52-53	"	13,949
53-54	"	25,066

other dye stuffs, is capable of almost indefinite extension.

Besides the European and native troops, European travellers and native traders will, it is believed, largely avail themselves of the Indus Valley line of transit, when relieved of the obstructions of the Delta.

From the large number of passengers proceeding from the Punjaub and Upper India to Europe, and *vice versa*, there can be little doubt but that a direct steam communication will soon be established between Kurrachee, and Aden and Suez—this route being actually the shortest, while it is the safest from the prevailing direction of the periodical winds. (Vide pp. 71, 165.)

The pilgrims from the countries on our North-west Border *en route* to Mecca, and other holy cities, would supply traffic to the railway, and increase the intercourse already established between Kurrachee and the ports of the Persian Gulf.

LOCAL AUTHORITIES' OPINION OF LINE.—The Line was preliminarily examined by that late distinguished officer, Lieutenant Chapman, of the Bombay Engineers, who reports it to present the greatest possible facilities for the construction of a railway, with the very best gradients (in fact nearly level), and at a low rate of cost. Colonel Turner, the Superintending Engineer in Scinde, Mr. Frere, the Commissioner of the Province, and Lord Elphinstone, the Governor of Bombay, all concur in desiring the early completion of the Line, which is now in the hands of the Scinde Railway Company's engineers; and the requisite material for a portion of the permanent way is now in the course of shipment from this country for Kurrachee. (Vide pp. 65, 74, 77, 81, 127.)

PUBLIC ADVANTAGES OF LINE.—The public

advantages to be derived from this Company's exertions may be thus recapitulated, viz.:—

By the construction of a Railway from Kurrachee to the Indus—

1st. Greatly increased facilities will be afforded for the landing and conveyance of troops intended for any part of the Punjaub, and neighbouring territories. (Vide pp. 118, 190.)

2nd. A sum, estimated at £50,000 per annum at least, will be saved to government in the transport of stores.

3rd. Improvements, to the extent of nearly £10,000 per annum, may be effected in the Indus Flotilla service, without any increased charges on the finances of the province.

4th. A very large sum would be annually saved to the country in freight alone, besides the saving in loss and damage to goods, which in itself would be a very large item.

5th. Sources of trade would be opened which at present are not in action.

It is believed that, in accomplishing these objects, a very large profit will result to the Company.

ACT OF INCORPORATION. — An Act of Parliament during the last Session, limiting the liability of the shareholders to the amount of their subscriptions, and conferring the necessary powers, has been obtained, with the concurrence of the authorities.

KURRACHEE THE GATE OF CENTRAL ASIA. —"From the Sutlej to the Oxus, whoever wishes to communicate with any place beyond the sea, must pass through Kurrachee. It occupies a position scarcely less favourable to commerce than that of Alexandria."

The port is protected from the sea and bad weather by Munorah, a bluff rocky headland, projecting south east-

ward from the mainland, and leaving a space of about two miles between the extreme point and the coast to the east.

The harbour is spacious, extending about five miles northward from Munorah Point, and about the same distance from the town, on the eastern shore, to the extreme western point.

"Kurrachee is a position of very great importance, whether regarded in a commercial, a political, or a military point of view. In a commercial point of view, it may be defined the gate of central Asia, and is likely to become to India what Liverpool is to England.

"It has been officially reported that accommodation exists for the reception within the harbour, at the same time, of twenty ships of 800 tons (and any number of smaller craft).

"The climate of Kurrachee is cool in proportion to its latitude; and under British auspices, the town must speedily become a most important place. Lat. 24°, 51″, long. 67°, 2″.*

Its value was manifested and tested during the recent campaigns on the Sutlej.

It became the grand depot whence our field forces were supplied with all the munitions of war. Thousands upon thousands of tons of military stores were imported into its harbour. The population of Kurrachee is about 30,000, and is rapidly increasing; and boats, as well as labour, in the harbour are abundant and cheap.

Kurrachee then is not only the natural port of Scinde, but also of the Punjaub and central Asia; and the Scinde Railway, which connects it with permanently deep water in the Indus at Hydrabad, is only the first link in that chain of improved communication which must, at no distant period, connect Peshawer, on the borders of Affghanistan, with the sea.

* Thornton's Gazetteer.

PUNJAUB REQUIRES CONNEXION WITH NATURAL PORT.—The resources of the Punjaub, with its 13,000,000 of inhabitants, have lain dormant for the want of an outlet; the surplus produce of the country has had no market sufficiently remunerative, owing to the expensive and defective inland transit, and the absence of European agency. It is evident, that the demands of the State, and the wants of the inhabitants on the banks of the Indus and its tributaries, require the development, with as little delay as possible, of a comprehensive system of improved transit from Lahore and Umritsir, by the valley of the Indus, to Kurrachee.

LORD DALHOUSIE'S OPINION AS TO THE POLITICAL IMPORTANCE OF IMPROVED TRANSIT BY INDUS VALLEY.—Lord Dalhousie, in his celebrated Minute on railways in India, dated 20th April, 1853, makes the following suggestions:—

"I attach no great value to the connexion by railway of the several capitals and seats of government, considered merely as such. But it appears to be of the first importance to connect the several Presidencies by a line of rail, each with the other, and to unite Hindostan and the districts to the north-west with the western ports in the Peninsula.

"Whatever strength there may be in the arguments by which a general line through Hindostan has been urged on political grounds, they bear as strongly in favour of a junction line with the Presidency of Bombay. The military power of the government of India would be incalculably advanced thereby. The Presidency of Bombay may be said to have no foreign frontier, except in Scinde.

"*Heretofore, and until very recently, every recruit that joined his corps from England—every invalid that was sent*

back shattered to his home, was obliged to travel the long, slow, weary track to Calcutta, however distant the station at which he was placed. Within the last two years, the establishment of steam communication regularly on the Indus has enabled the Government greatly to lessen this evil. The dispatch of recruits by Bombay to Kurrachee for that large portion of the Bengal army that is stationed to the westward of the Jumna, and the conveyance of the invalids of the same portion of the army from Ferozepore to the sea, have been a vast improvement. Furthermore, I hope before long, to see the cost of the conveyance of troops to India reduced by still another step, and the time occupied upon the voyage equally curtailed, by obtaining permission to convey them across the Isthmus of Suez.

"When Hindostan is connected by rail to the western coast of India, the conveyance by rail across Egypt will, I venture to hope, remove any objection which might be felt there to the passage of foreign troops; while, if the permission should be granted, a corps might leave England after the heat of summer was over, and might be quartered before Christmas upon the banks of the Sutlej, without any exposure in its way, and with four months before it of the finest climate under the sun; so that the men would enter the first heats of India with constitutions vigorous and unimpaired by the accident of voyage or march."

When the Governor General penned the above, the merits of Kurrachee had not been ascertained; and in August last, little more than two years after the date of the Minute, we find the Commissioner in the Province of Scinde, presiding at a public meeting at Kurrachee, giving the following character of its port:—

GEOGRAPHICAL ADVANTAGES OF KURRACHEE.—"The idea of a direct communication between

Kurrachee and Suez was no new one; it had been mooted by the late Sir C. Napier, very shortly after the conquest of the Province, and it would in fact suggest itself to almost any one who considered the physical configuration of this part of the continent of Asia. A glance at the outline map hung up in the room (which was taken from a parliamentary Blue Book very recently published), would show the meeting that from Aden to Bombay the direct distance was 1640 miles; while from Aden to Kurrachee the distance was but 1435 miles, making a saving of 205 miles—but this was during the fair weather. In the south-west monsoon, the distance to be run from Bombay to Aden was 2170 miles, which would make a difference in favour of the passage from Kurrachee to Aden of 745 miles, whenever the passage could be made direct. There appeared reason to suppose that the cases would be very rare, in which the direct passage along the Arabian coast would be impracticable; and even if a vessel from Kurrachee were obliged to deviate from the straight course, the difference would still be many hundred miles in her favour, as compared with a vessel going from Bombay. The advantages of Bombay, as regarded geographical position, were well known, and therefore a knowledge of these facts was sufficient to show the superior geographical position of Kurrachee as the port of communication with Suez, and for all parts of India which were as near, or nearer to Kurrachee than they were to Bombay.

"Colonel Turner instituted a series of very careful experiments by boring, and showed most conclusively that there was not a particle of rock anywhere on the bar; that the whole was composed, to considerable depth, of soft sand. The establishment of this fact of course removed one principal ground of the fear which mariners before had—of approaching or touching on the bar.

"But the principal share of the credit of practically proving the absence of any danger in entering the port, was due to Lieut. Leeds, the port officer, who with great skill and judgment, and on his own responsibility, piloted in ships of considerable burthen, and had practically shown that this might be safely done, even without any aid from steamers. The result was, that during the monsoon just closed, four large steamers from Bombay and Aden, and eight sailing vessels of from 300 to 878 tons, had come in and gone out, and with one exception, it had never been found necessary to wait even a single day for any particular tide. And it must be further remembered, that each of these eight sailing vessels was towed in and towed out of the harbour by a steamer (the *Victoria*), which, no later than last year, was employed in conveying passengers at the most crowded season between Bombay and Suez.

"*Facts like these prove beyond a possibility of doubt, that there was no difficulty whatever in getting vessels, even of a considerable size, into and out of Kurrachee harbour during the south-west monsoon, the most unfavourable period of the year.*" (See pp. 66, 166).

Brigadier Parr, commanding at Kurrachee, stated, on the occasion before referred to, that, "by the facilities for rapid communication with Suez and Mooltan, which were glanced at in the Report, and which the statements they had heard showed to be strictly within the limits of what was possible, and he hoped practical at no distant date, it would positively take less time to move a brigade from Southampton to the Punjaub, than it would at present take to move the Kurrachee brigade from this camp to Mooltan; in other words, *you might have Southampton, instead of Kurrachee, the base of your operations for any campaigns in the Punjaub, or any countries beyond it.* This facility appeared to him, as a military man, to afford advantages so enormous, that

he was sure the meeting would excuse his dilating on the other aspects of the scheme." (Vide p. 190.)

RAILWAYS, IN CONNECTION WITH STEAMERS.—So far back as 1846, I suggested that railroads should be introduced into Bengal, in connexion with river navigation, so that the new mode of transit should, instead of superseding, co-operate with the old—at all events in the first instance; and the same views and arguments are as applicable to the Indus as to the Ganges.

"Our opinion remains unchanged, notwithstanding that the Railway Commissioners have enunciated propositions, and proposed projects in exact accordance with the views entertained by the East Indian, or Mirzapore Railway Company; but which they have failed to demonstrate, not even supplying the requisite data, on which to found the demonstration of the plans and propositions proposed and enunciated by themselves—we say that our opinion remains unchanged, as to the impolicy of *commencing* the rail-road system by an attempt to supersede the river navigation, where it is comparatively free from obstruction, and is always available for steam navigation, as is the case between Rajmahl and Allahabad. The former is situated at the head of the Delta of the Ganges, and the latter at the confluence of the Ganges and Jumna, the distance between the two towns, by the river route, being 500 miles. *But should a line be determined on for this portion of the country, an extension of the Rajmahl line up the Gangetic valley to Mirzapore and Allahabad, would have many advantages over the direct route indicated by the East Indian, or Mirzapore Railway Company. These advantages we shall notice in detail when we come to review the report of the Railway Commission. It may, however, be mentioned now, that although the actual, or lineal, distance between Calcutta and Mirzapore by the valley of the*

Ganges, would be 100 *miles longer than by the direct route, yet taking the difference of gradients into account (assistant power being required on the latter, and* pro rata *to the power required so is the distance) the gain in time by the direct line, would not be more than three or four hours, which would be too trivial to be an element in any calculation of the comparative merits of the two lines, in a country, where time occupied in travelling is estimated by months instead of hours.*"*

SAME KIND OF IMPROVED TRANSIT ALIKE APPLICABLE TO THE VALLEY OF THE INDUS AND TO THAT OF THE GANGES.—Turning from the valley of the Ganges to that of the Indus and its tributaries, I would recommend precisely the same mode of introducing improved transit, substituting Hydrabad for Rajmahal, and Mooltan for Allahabad. The rail from Kurrachee to Hydrabad will, as formerly explained, avoid the dangers and delays of the Delta, and debouche on a point of the river above which there is permanently open navigation for 570 miles, to Mooltan.

WANTS OF COMMERCE.—To improve the means of communication, is the *primary* duty of every government. The steamers at present on the Indus are ill adapted to the peculiar requirements of that river, and are quite inadequate to meet the pressing demands for passage and freight. Goods frequently remain months at Kurrachee and Mooltan from the want of the means

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* Indian Railways, by An Old Indian Postmaster. 2nd ed., 1846. As the Bengal Line is at this moment exciting great attention, both in India and in this country, I may remark that the Gangetic Valley Line is now being constructed by the East Indian Railway Company, as above publicly recommended by me ten years ago, and subsequently in a Report, the original of which is at the Board of Control.

of transport on the Indus; and notwithstanding that the home Government have ordered out from this country several additional steamers, of a superior description to the present flotilla, the residents in Scinde and the Punjaub are desirous that the impetus which private enterprise alone can impart, should be brought to bear on the navigation of the inland waters of the Indus, in connexion with the railway and direct steam communication between Kurrachee and Suez.

I am assured, on the best authority, that "The steamers ordered out by the Court of Directors will do no more than replace those now on the river, which are old and worn out. They will add little to the available accommodation for goods.

"I have been," says the same authority, "repeatedly assured by the government agents for the river steamers, that they every month reject twice as much freight as the steamers are able to carry; and that this freight is applied for with a knowledge on the part of shippers, that the chance of its being taken is very small.

"Of course, if there were ample accommodation, the applications would be much more numerous.

"The Government river steamers on the Indus never take native second class passengers for hire. This would of course be a source of great profit to any private company, as the natives are most anxious to avail themselves of steamers whenever they can.

"*I have known instances of goods* AT KURRACHEE *intended for the Punjaub being sent back to Bombay, with a view of being forwarded by the Peninsula and Oriental Company's boats, via Galle and Calcutta, and so up the Ganges to the Punjaub, because there appeared no hope of tonnage being available for them in the Indus river steamers for several months to come.*"

RAILWAY FROM MOOLTAN TO LAHORE AND UMRITSIR.—The navigation above Mooltan is tedious and precarious, from the want of water, the tortuous course of some of the rivers and other causes, except to small steamers and country boats of light draught. The country, however, between Mooltan, Lahore, and Umritsir, is singularly favourable for a railway, being almost level throughout, and having no rivers of any magnitude to cross.

In brief, then, it is my opinion that the line of rails from Kurrachee to Hydrabad, and another line of rails from Mooltan to Lahore and Umritsir, co-operating with fleets of river steamers, of improved construction, such as those, for example, recommended by Mr. John Bourne, from Hydrabad to Mooltan, would at once be the most judicious, the easiest, the least costly, the soonest constructed, and in every other point of view, the most advantageous mode of *introducing* the railway system into the Valley of the Indus and its tributaries.

The local authorities, especially Mr. Frere, the Commissioner in Scinde, Colonel Turner, Superintending Engineer of the Province, Sir John Lawrence, the Chief Commissioner of the Punjaub, Colonel Glasfurd, late Executive Engineer at Lahore, Major Hamilton, late Commissioner at Mooltan, and Mr. Edgeworth, the Commissioner of the trans-Sutlej States, corroborate the above views, which the writer has long entertained. The last-mentioned gentleman expresses himself as follows:—

"*But the main and only permanent improvement will be the formation of a railway from either Umritsir or Lahore to Mooltan.*

"*With regard to the communication below Mooltan, the main point is, increased accommodation for travellers and greater comfort in the boats, which are at present peculiarly ill-suited for the purpose.*

"The proposed Scinde Railway will do almost all that is required for the lower communication.

"For the conveyance of goods, the present steam accommodation is utterly insufficient.

"In fine, I may express my fervent hope that the proposed measure may be carried out, (*i. e.*, direct steam communication between Kurrachee and Suez,) as I am convinced it will be one of very great importance to the improvement of these provinces."

The Chief Commissioner of the Punjaub, in a recent dispatch to the Government of India, makes the following forcible remarks :—

"*Indeed, these two essentials, viz., the railroad and the steamers, may be said with truth to be the crying wants of the Punjaub in the department of public works. These provided, the commerce and produce of these territories will be turned to their due course, viz., the Indus and its feeders, and to their natural outlet, viz., the Port of Kurrachee.*

"For the railroad the face of the Doab offers an unusual equality of surface, while it possesses few or none of the requisite resources for metalling a road. For the rivers, it were preferable, instead of improving the navigable stream, to concentrate all efforts on the provision of powerful steamers of the smallest possible draught. The Chief Commissioner, while deprecating any general extension of the public works department in the Punjaub for the present, would yet beg most earnestly to press these cardinal objects on the attention of the Government. He believes that, if carried out, they would effect more for the development of the resources of those territories than any other work, or number of works, that could be devised.

"He (the Chief Commissioner) would suggest that, if possible, private enterprise be directed to the Umritsir, Lahore and Mooltan Railway. It is understood that

possibly the Scinde Railway Company may be disposed to extend their line northwards."

PUNJAUB AND PROVINCES DRAINED BY THE INDUS. — The provinces on the Indus and its tributaries are cut off from India by the Great Desert, and cannot naturally communicate with the sea by any other route than by the valley of the Indus. Of course, goods do find their way to the Punjaub, through Calcutta and Bombay, but they have to follow round-about and unnatural routes; and if they can be supplied through the direct and natural channel, the benefit to the provinces so supplied will be felt even at Calcutta and Bombay, far more than the loss of any traffic which may leave those ports, to pursue a more direct and cheaper route.

What are the resources of the Punjaub, North-west Provinces, and Scinde, which, under the improved facilities of communication suggested, are calculated to feed and maintain independent steam communication between Kurrachee and Suez?

AMOUNT OF MILITARY FORCE, &c.—SUPPLY OF EUROPEAN GOODS.—The military force of these provinces, going no further east than Umballa, numbers upwards of 70,000 men, more than 15,000 of whom are Europeans. This is independent of officers, which, allowing for absentees, cannot fall short of 2,000, without taking into account their wives and children, besides the covenanted and uncovenanted civil servants and their families, which must make the total European population of these provinces little short of 20,000.

The large supplies of overland goods which the army we have alluded to must annually consume, would, doubtless, form a considerable item in the receipts of the proposed undertaking. We have no means of forming an estimate of the probable consumption of such goods; but

some idea of their extent may be obtained from a statement of Colonel Jacob, the Political Superintendent of the Upper Scinde frontier, and Commandant of the Scinde Irregular Horse; that about fifty camel loads, or 24,000lbs., is about the average annual supply of European goods required by the regiments he commands; and which, were the proposed steam communication established, could be forwarded to him with much greater ease and celerity.

If, then, this be the annual consumption of overland borne goods of two native regiments, 1,600 strong, what must be the consumption of an army of 70,000, of which above 15,000 are Europeans, besides civilians, women, and children?

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TRANSIT OF EUROPEAN GOODS TO CENTRAL ASIA.—A proper system of transit, once established through Scinde and the Punjaub, a few enterprising European merchants at Kurrachee would soon afford a medium for extensive shipments from the Punjaub and provinces to the north-west of Delhi, and the distribution of our manufactures to the remote parts of central Asia finding customers along the valleys of Affghanistan as far as Herat, and in Balkh, Khiva and Bokhara.

I will now point for a moment to the extensive provinces of Central Asia, which are now our near neighbours, and explain briefly how those important and comparatively far advanced countries have been supplied with merchandize, and have disposed of produce since the course of the Indus was comparatively closed to commerce by the exactions of the native princes. To follow the description the reader must refer to a large map of Asia. First, he will find to the north-east of our frontier, in the immediate vicinity, the celebrated valley of Cashmere, inhabited by a people renowned for their great skill and ingenuity. Beyond that lies Thibet, famous for its fine goat wool, and the manufacture of yarn for the shawls woven in Cashmere.

To the west and south-west we find the Affghan territory, with the large towns of Cabul, Ghizni, Kandahar, and Herat the *Gate of India;* in the same direction, the northern provinces of Persia. In a north-westerly direction we find the extensive and fertile countries of Turkestan and Bokhara, with the large central towns of Balkh, Khiva, and Bokhara; and, at a great distance westerly, we find the Caspian Sea.

The commerce of this vast territory is now carried on by so circuitous and expensive a route, that it will be easy to restore it to the ancient and natural channel of the Indus, and by that means how much it is likely to be increased, now that it is freed by the supremacy of England from the political obstructions and exorbitant demands of the turbulent and semi-barbarous states on its banks may be readily conceived.

"In former times the Indus was the great highway of commerce between India and Central Asia; but upon the dismemberment of the empire of the Great Mogul, the river fell under the power of a multitude of petty chiefs, whose exactions gradually extinguished the traffic. One consequence of this revolution was, that Cabul, Bokhara, and Persia, instead of being supplied from India with manufactured goods, as had previously been the case, received most of their supplies from Russia, which, from the facilities of conveyance afforded by the Volga, running into the Caspian Sea, was enabled to come into the markets of the East upon eligible terms. These advantages possessed by Russia have, it is understood, been latterly augmented by the establishment of steam-vessels upon the Volga and the Caspian; and the Russian are now supplanting the English manufactures in the Punjaub, and even threatening to do so in the north-west provinces of Bengal."*

* Indian River Navigation, by John Bourne, C. E.

"The imports into Central Asia consist of European manufactures of every description:—Calicoes, long cloths, chintzes, muslins, and other kinds of cotton goods, broad cloths, velvets, nankeens, gold-thread, copper, and brass wares of all descriptions, cutlery, and jewellery, and, in fact, of almost every article which compose British exports, and including considerable quantities of refined sugar. At present, (besides the valley of the Indus,) there are three routes by which these imports are received:—1st. By the Persian Gulf, through Persia; 2nd. By the caravans from Smyrna and the ports in the Levant; and 3rd. chiefly, and by far in the largest proportion, through Russia. Let us trace the route from the latter, as being the chief source. Goods either manufactured in, or imported into Russia from England, France, and Germany, many of them purchased at the great German fairs, after paying very high transit duties, are shipped at some point on the Volga, and conveyed by steam-boats down that river to the head of the Caspian Sea. They are then conveyed the whole length of that sea by other steam-boats established thereon to Balfrush, where they are again landed. From that point they are conveyed by the eastern caravans by the high road through Sari to Bustum. At this point one road diverges in a north-easterly direction to Bokhara, Khiva, and Balkh. Another road continues onward in an easterly course to Herat thence to Candahar, and so on to Ghizni and Cabul; from whence Peshawur, Attock, Lahore and all the country of the Punjaub and Cashmere have partly been supplied."*

"The imports of Cabul are indigo, cotton, sugar, calicoes, muslins and shawls; and the exports are horses, the madder of Ghizni and Candahar, and fresh and dried fruits. The chief carriers of the trade are the Lohanee merchants,† a

* The Economist.

† Lohanee Merchants. — The following is an extract from a

pastoral race of Affghans, who occupy the country eastward from Ghizni to the Indus. The Lohanee caravan usually

recent letter from Mr. H. B. E. Frere:—"These men are the great carriers of the Affghan trade. They have their homes about Guzni, where they spend the summer. Since the trade via Tatta and the Indus was extinguished in the latter end of the last century, these people have supplied themselves with seaborne goods via Calcutta. They descend the passes before they are blocked up by snow, between Guzni and the Indus, in vast caravans of eight or ten thousand souls —the whole tribe moving bodily—men, women, children and cattle—their goods being on camels and ponies. Arrived in the Derajat, they leave the aged men, women and children in black felt tents, with their flocks and herds in the rich pastures bordering on the Indus, while the able-bodied men push across the Punjaub with their goods for sale either in that province or on the banks of the Ganges. The leading merchants precede the main body on dromedaries, taking with them a few samples, letters of credit, &c. &c, make their purchases at Delhi, Agra, Allahabad, Cawnpoor, Mirzapoor, and even Calcutta, and return with them express—collect their families and flocks, and force their way up the passes. Their numbers generally enable them to compound with the tribes of the mountains for a reasonable amount of blackmail, but they have sometimes to fight their way. I have heard of the wife of an eminent merchant of this tribe, whose husband had been detained longer than he expected at Delhi, offering the "Kaffila-bashee" (head of the caravan) demurrage at the rate of 10,000 rupees a day, to defer the upward march of the caravan, and enable her husband to rejoin, as she knew that if left behind he would be unable to follow them through the passes, except at great risk to his life and the property he might have with him.

"*Last year, the first of this tribe came down to Kurrachee*, and told me that they would soon all come that way; that they had no idea of its comparative shortness and other facilities. When I met them, they had shipped the wool they had brought down from Guzni on board river boats at Dhera Ismael Khan, and were taking their unladen camels down to Kurrachee, expecting there to find return loads, with which they would go back to Affghanistan.

"The fact that the merchants who carry on this trade *have* turned their attention to Kurrachee as a substitute for Calcutta, seems to me a point of much importance."

reaches Cabul about the beginning of June; and after the merchants have disposed of their goods they prosecute their journey onward to Bokhara. The imports which Bokhara receives from India are the same as those received by Cabul. About 2000 camel-loads of goods reach Cabul from India yearly, and about half this quantity is transmitted to Turkestan.

"The imports into Bokhara from Russia are—white cloths, muslins, chintzes, broadcloths, velvets, brocade, nankeen, gold thread, cochineal, refined sugar, honey, furs, locks, iron, iron pots, wire, copper and brass, leather, paper, needles, inferior cutlery and jewellery, hardware, and a variety of other small articles. English broadcloth is much prized in Bokhara, but none reaches that country, except through Russia or Persia; from which countries, although its transmission is subject to heavy imposts, it can be brought at a cheaper rate than from India, in consequence of the expense of the land-carriage through Affghanistan, which, however, the opening of the Indus would in a great measure supersede.

"Besides the Russian and Indian trade, Bokhara carries on a considerable traffic with China, by way of Cashgar and Yarkund. The imports to Bokhara, from China, are—China ware, musk, bullion, and tea. Of the latter article there are nine hundred and fifty horse-loads, or two hundred thousand pounds, transmitted annually, although the difficulties of the roads, and the long land-carriage through Thibet, necessarily much enhance the price. A horse-load of two hundred and fifty pounds costs sixty tillas in Yarkund, and sells for one hundred tillas in Bokhara. It is entirely green tea which is carried to Turkestan, and the best comes from a place in China called Turkht, and is packed in small boxes of Banca tin, from whence it is called Banca tea. The sugar-candy of China is also imported into Turkestan,

but being a comparatively cumbrous article, it cannot be carried by the same route as the tea, but is conveyed from China to Bombay, from thence up the Persian Gulf, and on by land to Teheran: from thence a large quantity is carried across the Caspian to the Bay of Balkhan, from whence it is carried to Khiva,* and a small quantity is also carried by way of Meshed. It is obvious, that if the Indus were available for commerce, it would afford a much easier route for the produce of China to Khiva and Bokhara, than either the route through Thibet, or the route through Persia; and many of the commodities which find their way into Central Asia through circuitous routes, would necessarily take the route of the Indus, so soon as that channel of communication was properly opened up.

"The principal exports of Bokhara are silk, wool, and lamb-skins. The silk is chiefly produced on the banks of the Oxus, where the mulberry grows in the most luxuriant

* "Khiva, of the site of which Major Abbott gives a new determination, placing it in latitude 41° 20″, and longitude 60°, is the modern capital of the kingdom of Khaurasm, the ancient Chorasmin. On the north-west this is separated from the district of Orenburg by a belt of steppe inhabited by Kirghese Cossacks, or as Captain Abbott chooses to call them, *Kuss-auks,* whose Chief is a nominal tributary of the Russian government—an allegiance, probably, secured mainly by the market which his people find at Samara for the skins that their flocks produce. On the west, Khaurasm is bounded by the Caspian Sea, on the south west by Persia and Herat, on the south-east by Bokhara, and on the north-east by Kokann. Taken roughly, its area extends about 800 miles from north to south, and 600 from east to west, and it entirely separates Russia from Bokhara, and consequently commands the line of traffic between those two places."

Merv, the principal town of the district of Yoollataun, is an extremely important position, as the trade between Bokhara and Persia, and also that between Khiva and Affghanistan passes through it, and contemptible as its present appearance is, it might, with judicious care, rapidly rise into wealth and consequence.

manner, and nearly all the inhabitants are engaged in rearing the silk-worm during the summer months. The lamb-skins of Bokhara are renowned throughout the East, and are only procurable at Karahool, a small district lying between Bokhara and the Oxus. These skins are chiefly carried to Persia; but the risks of the transport are great, in consequence of the unsettled condition of the tribes between the two countries. From these causes it is not possible to negotiate a bill between Meshed and Bokhara, and the cost of transport is very high.

"The manufactures of Russia find ready access into Persia by the Caspian; but Tabreez and Teheran also receive Russian goods by way of Tiflis and the Caucasus. Latterly a route has been opened for English goods into the northern parts of Persia by way of Trebizonde, from which much benefit has accrued—the southern districts being supplied with English goods from Bushire, on the Persian Gulf. To the north-west of Bushire the Karoon, a large and navigable river, ascends into the heart of Persia; and, under suitable arrangements, goods might be carried by this route to within a comparatively short distance of Ispahan."*

TRADE OF INDIA WITH CENTRAL ASIA.—Goods brought to Attok, on the Indus, by steamer and rail, may be placed in the Cabul, Ghizni, Candahar, Herat, Balkh and Bokhara markets, at a much less cost than by the expensive caravan route from Novogorod and the Volga.

There is a great trade in silk between Bokhara and the Punjaub.

The trade of India, with central Asia, amounts to about one million sterling. One portion of this seeks egress and ingress on the borders of Scinde, and the remainder passes

* Indian River Navigation, by JOHN BOURNE, C.E.

through the Punjaub. By the former route the trade is carried on by means of the Indus, and by camels, horses, mules, and more recently by carts; by the latter route it is carried on by multitudes of camels, mules and ponies which are used in the transit instead of wheel carriages. A string of camels, numbering five thousand, occasionally comes from Bokhara to Dhera Ismael Khan, on the Indus. The merchants travel armed, and are accompanied by their families, and the caravan constitutes as it were a moveable bazaar. Silks and wools, groceries and spices, furs from Russia, and gold with the Bokhara stamp, although extracted from the Ural Mountains, dyes, books, cloths and metals are the wares they carry. Arrived at Dhera Ismael Khan, the families and baggage are deposited, and the merchants severally start, with their trains and merchandise, for the south. About 20,000 camels are employed in this trade, exclusive of ponies and mules. A large number of armed retainers accompany the caravans, besides 8,000 servants.* The import trade carried on in this truly primitive fashion, *cost for transit from* 6*d. to* 1*s.* 6*d. per ton per mile,* and "amounted on the average of the five years, ending 1849 to—

Article.	Country of Produce.	Value.
Raw silk	Bokhara, Khorasan	Rs. 2,80,000
Wools	Hills north of Cabul, Ghuzni	12,000
Notions	Affghanistan, Herat and Bokhara, Persia and Khorasan	85,000
Dried fruits	Cabul, Jellalabad and Kandahar	91,000
Red dye	Kandahar	1,20,000
Iron	Mines west of Bunoo	33,500
Alum	Kalabagh	22,000
	Carried forward	Rs. 6,43,500

* Vide Note, page 23, *supra.*

Brought forward		Rs. 6,43,500
Raw fruits	Affghanistan, except pomegranates from Kandahar	22,000
Horse cloths	D.-Ismael-Khan	12,000
Gold	Bokhara	3,00,000
Horses	Affghanistan and Persia	1,50,000
Light articles		30,000
Total		11,57,500
Add specie payments		6,00,000
Grand total		Rs. 17,57,000

"The word which we have translated by the American equivalent 'notions,' includes, gum-arabic, rose leaves, assafœtida, *yellow amber*, medicines, sulphur, liquorice, antimony, dyes, and a variety of groceries, spices, and all that is pleasant—and unpleasant—to taste and smell. The phrase 'light articles' covers a variety as miscellaneous as the stock-in-trade of a marine store dealer, or a shop in the Calcutta China bazaar. It includes Persian silks, Russia leather, Russia chintzes, pet animals, great coats, Ispahan and Damascus blades, fans, punkahs, ermine and sable furs;"* in fact anything and everything not absolutely necessary. "Silk, it will be perceived, is, with one exception, the most important item. Of the whole quantity imported, one-half is consigned to a single house at Umritsir, and a moiety of the remainder to a second. The latter, moreover, the house of Tukht Mull, imports half the wool. The raw fruits are confined chiefly to Jewan Singh of the same place, and we may remark generally, that although the trade is widely scattered, the greater portion alike of merchandise and profits remains in exceedingly few hands. The traders are generally 'Kabulees,' 'Lohanees,'

* Friend of India.

and 'Purachas,' the two latter being natives of Daman and Attock. The Purachas are remarkable for their branch establishments. They maintain them throughout the Punjaub at Umritsir, Mooltan, and Hooshearpore, in Behar, in Moorshedabad, and at Radhanagore. The only caravans apparently which reach Calcutta are those which convey the articles under the head 'notions.' "*

The export trade during the same period amounted on the average to—

	Place.		Value
"Shawls	Cashmere	(Rs.)	6,50,000
Loaf sugar .	Jullundur		50,000
Rough sugar (goor)	Baree and Rechna Doab		8,000
Indigo	Mooltan and Upper India		1,57,000
Coarse native cloth	Punjaub		3,54,000
Piece goods	Manchester		3,80,000
Notions	Europe		45,000
	Total		16,44,000

"The 'notions' again include hardware, glass, cutlery, camphor, cloves, cinnamon, sandal wood, verdigris, quicksilver, tea, and everything with which Sheffield can tempt the taste of semi-barbarian tribes."† The amounts of exports and imports through the Punjaub, was only £340,000; but it has increased since the estimates were made, and there is little doubt but that it, taken in conjunction with that traversing the province of Scinde, approaches nearly a million sterling. The appearance of bullion amongst the imports, shows that the balance of trade is in favour of India, and the trade being in every item susceptible of considerable extension is well worth the

* Friend of India. † Ibid.

attention of Manchester and Yorkshire. English chintzes and broadcloths are greatly esteemed in central Asia; and broadcloth of light texture, such as *lady's cloth,* at moderate rates, would meet with a ready and extensive sale.

"We have already mentioned the many products which Central Asia has to give in exchange! but there is one very important one which appears to have been almost entirely overlooked, and which is capable of great extension—we mean sheeps' wool. All the countries bordering on the Indus, and especially those to the west, contain very extensive pastoral districts, where wool is produced in great abundance. The rapid increase in the supply of wool to this country from that territory during the last few years, even under all the disadvantages which have existed, and the great cost of transit and re-shipment from the ports on the coast to Bombay and thence to England, is the best proof of what may fairly be expected with the facilities now for the first time about to be offered. Little as India is noticed as a source for the supply of wool, the quantity now imported is as large as our whole Australian colonies produced as lately as 1836. In 1833, the quantity of sheeps' wool imported from India was but 3,721 lbs; in 1841 it had risen to about 3,008,000 lbs."

"But it is quite essential to its success that direct communication between this country and Kurrachee should be established as early as possible, and there can be no doubt that private interest and competition will soon lead to such arrangements. According to the most recent accounts from India, it appears that some American trading ships have already availed themselves of the new facilities afforded by the improvement of Kurrachee as a port. A direct communication between the Indus and this country will be of even more importance as respects the importation of the raw productions of Asia, than the export of the

more expensive and less bulky articles of British manufacture."*

Our trade with India, important as it is, is only to be regarded as in its infancy. In 1834 it was scarcely £4,000,000 in value, while it now amounts to nearly £20,000,000.

Holding as we do the Indus from Cashmere to the sea we have a power which, if "well understood and wisely improved, puts us in possession of the key to the whole commerce of Central Asia; which cannot be pursued without adding to the prosperity and productiveness of our new territories."†

The Indus debouching into the plains, separates the Himalayah range from the Hindoo Koosh, and after receiving the Punjaub rivers and other tributaries, flows through many mouths into the Arabian Sea.

The Indus and its affluents being now subject to us, it becomes our duty to re-open to the world this ancient highway of nations. The resources of modern science judiciously applied to this line of communication would at once not only be of inestimable benefit to our own provinces, but would loosen the political hold which Russia possesses over Central Asia by her commercial relations with that country.

It remains for private enterprise to occupy this magnificent field for commerce and civilization.

The transit duties being abolished and all fiscal restrictions removed, and the energetic and turbulent races of the valley of the Indus having been reduced to peaceful cultivators of the soil, the life and property of the trader are as safe as in this country, and the advent of the steam engine, that herald of commerce, enlightenment and peace,

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* *The Economist.* † *Ibid.*

is alone wanting to enable enterprise to take possession of a field which has been hitherto to the British merchant almost hermetically sealed, and "with the facilities which will be afforded to the traders of Cabul, and those who supply the extensive markets of Khiva and Bokhara; and, lastly, with the impetus that will be given to the coasting trade of the Persian Gulf, by the establishment of Kurrachee as a great emporium of British commerce, it is not difficult to foresee that in a few years it must become one of the most extensive and lucrative markets in our Eastern possessions."*

The importance of completing trunk lines is apparent. The railway from Lahore and Umritsir to Mooltan, once in operation, the rivers of the Punjaub, covered with the smaller boats of the country, will act as feeders of the railway, which will become the highway of an extended commerce; while the river steamers from Mooltan to Hydrabad, and the railway from Hydrabad to Kurrachee, will give a continuous steam communication to the natural port of the valley of the Indus.

GRANTS OF LAND, EFFECT OF.—Grants of land, on conditions similar to those recently conceded for tea cultivation in the province of Kumaon, (page 157) would rapidly extend in the country of the five rivers, the cultivation of cotton, wheat, tea, flax,† hemp, and the mulberry. (Vide p. 157.)

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* The Economist.

† Linseed. — Eleven hundred bags of Punjaub linseed were sold at Kurrachee on the 26th September last. The average price was 4rs. 8a. a maund. Seven hundred bags, not yet arrived, were sold at 4rs. 10a., and an offer to sell all that might arrive before October, brought 4rs. 5a. a maund. A quantity of Scinde linseed was also sold at 4rs. 6a. a maund. These prices are extremely profitable to the growers.

EUROPEAN AGENCY.—Land obtainable, and the means of transit established, manufactories of indigo, salt, saltpetre, silk, and produce marts will spring up under the direction of European agency; while the inexhaustible supply of iron ore, and other mineral wealth, lying dormant on the very surface of the soil, will be accessible and appreciated and cease to be a reproach.

Transport to the sea once provided, the borax, from the far lake of Mansoreewar, will no longer seek a market eastward; and the more useful articles of the looms of Cashmere will form part of the exports from beyond the Sutlej, while the export of wool, the great staple of the valley of the Indus, would be incalculably increased.

DIRECT STEAM COMMUNICATION BETWEEN KURRACHEE AND SUEZ. — Steam transit in the Valley of the Indus once fairly established, the overland route, turning from the Nile to the Euphrates, Aleppo and Seleucia, will supersede Cairo and Alexandria. With a rail from Seleucia, by way of Aleppo to Bussorah, and a steam service across to Kurrachee, our mails will reach that port in fifteen days, and with the aid of improved steamers and the rail, passengers and goods will reach Lahore in a tenth part of the time now occupied. But years are required to establish and perfect such a comprehensive arrangement; and as it is of the utmost importance to this country to have the existing route kept up as an alternative line of communication with the empire in the east, it is of primary urgency to give effect to the wishes of the Commissioners and other authorities of Scinde and the Punjaub, as well as the inhabitants generally, that the countries bordering on the Indus should be brought nearer Europe, by establishing a direct steam communication between Kurrachee and Suez. Kurrachee, from its geographical position, must become the European port of India. It is 205 miles nearer

Aden than Bombay is to Aden; and during the prevalence of the south-west monsoon, it is virtually 745 miles nearer Aden than Bombay is to Aden.

The present distinguished Commissioner of Scinde has manifested a great interest in obtaining a direct steam communication between Kurrachee and Aden and Suez. He has repeatedly urged his views on the attention of Government, and has collected data on the subject from the Punjaub and north-west provinces which, we believe, will afford a guarantee that if this project is undertaken by a private company, and supported liberally by the local Government, it bids fair to become a safe and remunerative enterprise. "It is well known," observes a Kurrachee paper, "that the passenger traffic alone from the north-west provinces *via* the Indus to Kurrachee, has increased four hundred fold during the past year, and the goods traffic has expanded itself in a still larger ratio. The expenses which passengers from up-country are put to, who prefer the Bombay to the Calcutta homeward route, are enormous. Their temporary sojourn here whilst waiting for a Bombay steamer, their passage-money hence to the presidency, and their detention there, frequently cost them as much, or nearly so, as their overland journey. Now, all these delays, inconveniences, and heavy charges would at once be done away with by the establishment of regular and direct communication with Aden or Suez, say once a month; and the natural result of this arrangement would be, that for one passenger that now comes down the Indus on the way to Europe, there would be twenty who would gladly patronise the new route. Again, it is not unreasonable to expect that Government would pay any private company who might undertake this enterprise, a handsome sum annually for the conveyance of the mails to and from Scinde, the Punjaub, and north-west provinces. The parcels and light goods would likewise help to swell the returns; and altogether we think

there can be little doubt that such a company, properly managed, would be a paying concern, and a safe investment for capital."

Were a direct steam communication between Kurrachee and Suez once established, at moderate rates, numerous Moslem pilgrims and merchants from the banks of the Indus, Central Asia, and the Persian Gulf, would take ad-advantage of this route to visit the holy cities of Mecca and Medina, especially Mecca, "the grand mart of the Moslem world, or the meeting-place of nations."

We know that thousands of pilgrims annually resort thither from the Persian Gulf; some travelling across Arabia, others in native craft to Bombay, and thence by boat and steamers to Aden and Suez.

Were a company to take up the Kurrachee and Suez line, it might be so arranged, either that the Suez steamers should touch at Muscat and embark pilgrims thence, which would not perhaps entail more than a day's delay; or a branch steamer might ply between the Persian Gulf and Kurrachee as a feeder of the Suez steamer; and there is a considerable traffic in merchandize carried on between the ports in the Persian Gulf, Muscat and Kurrachee. This steamer could also carry the Persian Gulf mail; and, viewing the present aspect of the political horizon, would it not be a matter of the highest importance to have a regular communication with the Gulf, upon which we could always depend?

The thousands of pilgrims who for four months in the year pass through Egypt to embark at Suez for Arabia, would gladly exchange the prolonged misery which they endure in the wretched vessels of the country for permission to couch on the deck of an English steamer.

According to an authority long resident in the East, "The heterogeneous mass of pilgrims (passing through Egypt) is composed of people of all classes, colours, and costumes. One sees among them not only the natives of

countries contiguous to Egypt, but also a large proportion of Central Asians from Bokhara, Persia, Circassia, Turkey, and the Crimea, who prefer this route by way of Constantinople to the difficult, expensive, and dangerous caravan line through the Desert from Damascus and Bagdad. The West sends us Moors, Algerines, and Tunisians; and inner Africa a mass of sable Takrouri and others from Bornu, the Sudan, Ghedamah near the Niger, and Jabarti from the Habash."* (p. 165).

THE EUPHRATES VALLEY ROUTE TO INDIA. —"The Indian government contributes £70,000 a year towards the charges of an extended communication with India and China, and the intercourse with England, by way of Egypt, is now regular and rapid. The prejudices, and even the imperial considerations, which favoured the old circuitous communication by way of the Cape of Good Hope, have given way before the irresistible desire for rapid locomotion and intercourse with all parts of the world. This influence is still exerting itself with full force. As soon as the war with Russia is over, and Turkey becomes settled down into a state of peace, and is gradually brought within the range of European enterprise, improvements, and civilisation, we are satisfied that the desire to secure *the shortest route to India will be revived in full force, and that eventually we shall penetrate through Asia Minor to the Persian Gulf, so as to make that mighty river once more, as in ancient times, a highway to the commerce of the East.* If any one had predicted three years ago, that an English railway would be constructed from Balaklava to Sebastopol, the notion would have been quite derided. It is, indeed, far more probable that this generation will not pass away before a railway is perfected, so as

* "Pilgrimage to El Medina and Mecca," by Lieut. R F. Burton and Mr. Levick's "Notes on Suez and the Suezians."

to unite the Euphrates at some accessible point with the Mediterranean, and thereby shorten and render still more easy the overland communication with the East, through the Persian Gulf."*

A glance at a map will demonstrate the commercial and geographical advantages of the position of Kurrachee, both in relation to the existing route by Egypt and the Red Sea, as well as to that by the Euphrates Valley and Persian Gulf, proposed by that eminent authority General Chesney and advocated by the late Dr. James Bowen Thompson.

This latter truly excellent and talented gentleman died lately at Constantinople, after having devoted many years to the advocacy of the Euphrates valley route, and with his latest breath he urged the early and energetic prosecution of the design.

The route from Europe *viâ* Suez and Kurrachee to Lahore is about 2,700 miles shorter than the route *viâ* Suez and Calcutta to Lahore; and by the opening of the Euphrates Valley Route, the distance will be reduced in all by 3,594 miles, viz.:—

	Miles.
London to Lahore, *viâ* Trieste, Suez, Aden and Calcutta - - - - - - -	9,615
London to Lahore, *viâ* Trieste, Suez, Aden and Kurrachee - - - - - -	6,908
London to Lahore, *viâ* Trieste, Seleucia, the Euphrates Valley and Kurrachee - -	6,021†

* Madras Athenæum.

† London to Lahore, *via* Trieste, Aden and Calcutta.

	Miles.	Miles
London to Trieste . . .	1,593	
Trieste to Aden . . .	3,000	
Aden to Calcutta . . .	3,789	
Calcutta to Lahore . .	1,233	
		9,615

Independently of the foregoing considerations, the value of the line of intercourse proposed to be established from the northern coast of Syria to the Euphrates, and thence to Bussorah and the Persian Gulf, will appear still greater when we estimate it as combined with the commercial importance which the four great rivers of western Asia must add to it. In this respect, General Chesney observes, that "the elevated plateau, which extends from the base of Mount Ararat into northern Armenia, Kurdhistan, and part of Asia Minor, contains the sources of four noble rivers, having their estuaries in three different seas; and thus, from Armenia, as from the centre of a great continent, giving an easy communication to the nations of Europe and Asia." A reference to General Chesney's map will shew, "that by following the *Kizil-Irmak* through Asia Minor, we reach the Black Sea; from whence there are inlets into Russia, Austria, Turkey, &c. In the same way, the *Aras*, by terminating in the Caspian, opens several routes towards Great Tartary, as well as towards the rest of Central Asia and China; while the Tigris and Euphrates, with their numerous ramifications, afford abundant means of commu-

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London to Lahore, *via* Trieste, Aden and Kurrachee :—

London to Trieste . .	1,593	
Trieste to Aden . . .	3,000	
Aden to Kurrachee . .	1,435	
Kurrachee to Lahore . .	880	
	——	6,908

London to Lahore, *via* Seleucia, Euphrates, Bussora and Kurrachee .—

London to Trieste . .	1,593	
Trieste to Seleucia . .	1,600	
Seleucia to Bussora (Air Line 660)	1,008	
Bussora to Kurrachee . .	940	
Kurrachee to Lahore . .	880	
	——	6,021

nicating with Persia, India, Arabia, and the continent of Africa."* With these regions, an extensive commercial traffic is maintained to this day, through the medium of very large and numerous caravans, which, from a very early period, have provided the countries traversed by those four rivers with the produce and merchandise of Eastern Africa, and furnished the latter with those of Asiatic and European origin. (Vide p. 200.)

A NEW FIELD FOR BRITISH CAPITAL AND ENTERPRISE.—A correspondent from Mooltan writes:—"It is a matter of surprise to not a few here that British capitalists have not ere now been attracted to this quarter of the globe. The Mooltan district presents a field for enterprise which is enjoyed by but few of the districts in the Punjaub. The country is intersected by canals and water-cuts, and is almost entirely independent of the periodical rains. The soil is rich and fertile. There is a vast area of culturable land lying waste—the lease of which could be obtained on very favourable terms. The banks of the rivers are fringed with luxuriant cultivation. Indigo and cotton are extensively grown, particularly in Shoojabad, where the absence of cultivation is a feature unknown in the landscape of that portion of the district. The whole perguna presents an unbroken scene of perpetual verdure. The district must have been, at no remote period, in a very prosperous condition for the ruins of ancient towns and villages are to be met with everywhere, while the vestiges of numerous canals indicate that agriculture was the chief means of subsistence of a generation now passed away."

FIBROUS SUBSTANCES.—The demand for flax,

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* Expedition to Euphrates and Tigris by Colonel, now Major-General, Chesney, R.A., F.R.S., &c., &c.

hemp, silk, cotton, and hair is now becoming so great that the market cannot be supplied with a sufficiency of these raw materials to keep our large manufactories in full operation, and India is now looked to as the country whence these supplies must be derived.

COTTON.—A recent correspondent of an Indian paper says:—"In April last (1855), I brought to England a small quantity of cotton (the raw material) grown from *acclimated* American cotton seed in a district on the banks of the river Jhelum; this specimen I had shown to several cotton spinners in Manchester. They pronounced it to be the finest specimen of cotton they had seen grown in India, even directly from American seed, and to be worth from 6¼d. to 6½d. per lb.

"Along the banks of our Punjaub rivers lie tracts of land admirably situated for the growth of cotton. It only requires steady encouragement on the part of the local Government, trouble and perseverance on the part of the district officer, to cover those lands with cotton of the finest quality.

"The cotton that could thus be grown might, with ease and at trifling cost, be conveyed in country boats, (until we have, as we ought to have, steamers on those rivers) down the Indus to Kurrachee, and there shipped for England.

"Kurrachee is a port of great importance; but, like many things of great importance, not heeded or taken advantage of. *The one article, cotton, if properly cultivated in the Punjaub and in Scinde, would afford export freight for a vast number of ships visiting Kurrachee, while Government stores for the Punjaub, private property and merchandize would afford endless import freight, to say nothing of the great number of passengers who would avail themselves of that route.*"

According to a Scinde paper—"Any one located on the banks of the river Indus might observe fleets of boats coming down the river in the winter months, all laden with cotton." The cotton brought to Scinde and shipped at Sukkur comes across the Jaysulmere Desert from Rajpootana, and is either consumed in Scinde or exported to Affghanistan.

WOOL.—The western presidency yields her millions of tons annually of this article of commerce (wool), and she is indebted for it chiefly to the countries which are in greater proximity to Kurrachee than to Bombay. "Why, therefore, (says a Kurrachee paper) should we not avail ourselves of the advantages of our position, and establish a direct commercial communication with England?

"There existed one drawback to this before, which was the circumstance of no European vessels calling here likely to receive cargo. The example set us by the Court of Directors, in making Scinde the highway for troops for the far north-west, should, however, remove this difficulty. The Punjaubee, Affghan, and Patan merchants would, we are certain, be glad to avail themselves of the opportunity of shipping their wool at Kurrachee, and thereby avoid a sea trip to Bombay; but the first step towards overcoming the present apathy, must be the establishment of a screw company,* or perhaps, more appropriately, a *working* company, of people who will undertake and guarantee the screwing of the wool; and our ships, which bring us annually cargoes of human beings, for the service of their country in India, may receive in return cargoes of wool and other raw produce, for the use and the benefit of our brethren at home."

* This has been accomplished, in some degree, by private enterprise, and screws for cotton and wool are about being provided for Mooltan and Kurrachee by the liberality of the East India Company.

LINSEED AND FLAX.—"One consequence of the war with Russia will be, to make us, to a great extent, independent of many of her staple exports. In the case of oil seeds, the trade with Calcutta has been so greatly developed, as to render seeds one of the most important features in our trade with that port; and our East Indian possessions bid fair, at no distant period, to supply the entire consumption of this country."*

Major Hollings, Deputy Commissioner of Shahpore, in the Punjaub, observes:—"During the past season my attention has been directed to the cultivation of linseed and the preparation of flax—subjects which have been taken up by the Financial Commissioner, Mr. McLeod, with a view to the exportation of these products to the markets in England. The position of the Punjaub is peculiarly favorable for the development of commerce, and there are in it soils and climates suitable for the production of every kind of fruit and vegetable. When the mineral resources are better known, it will be found that the Punjaub contains unlimited supplies of those valuable manures which chemistry has lately introduced to agriculture."

"When intelligence reached us," says the *Bombay Times*, "that war had been declared by our Queen against the Emperor of Russia, Mr. Frere, the Commissioner of Scinde, and his friends here, began to consider how they could assist our manufacturers and their territory by supplying us with raw material usually heretofore received from Russia. If we were only able to take their goods during hostilities, it might be a profitless transaction for Scinde to supply part of the vacuum caused by war; but one use of this quarrel is to compel a thorough search of our own resources, and one loss to Russia from its existence will be the employment of other lands to grow those staples that

* Messrs. Laing and Campbell's Annual Circular for 1856.

it has hitherto supplied. Two productions of Russia which we buy in large quantities may be profitably grown in Northern India. Wheat is the first, and probably the more important of these articles. Flax is the second staple of Russia referred to in the preceding sentences, and which the friends of Scinde expect it to supply. Egypt is a somewhat similar country, and the flax of the Egyptians must have been of high quality thousands of years since; for their fine linen was, at that distance of time, in high reputation. We have, therefore, no reason to doubt the capabilities of Scinde to produce fine flax. The value of the staple in a great measure depends upon its quality. Very few articles present an equally long range of quotations. It has been sold at £30, and it has brought £140 per ton. The average price in this country is higher, however, than that of cotton; and therefore no great difficulty will arise regarding the freight, although the construction of railways, or the improvement of the Indus, is still an important essential to a great flax trade from Northern India."

Some 5,000 maunds of linseed have been recently sold in Lahore at two rupees a maund. This is a price which amply repays the cultivator, and the demand is likely to continue. The seed was intended for Kurrachee and Bombay, to be exported to England, where prices were then ranging about equal to seven rupees a maund.

The *Bombay Telegraph and Courier*, 5th October last has the following statement, from a correspondent, regarding the sale of the seed sent down to Scinde to be disposed of:—

"We have now the pleasure to wait on you with the result of the first sale of Punjaub linseed, which took place yesterday, when 1,200 bags were submitted for competition in lots of 25 bags each, and sold at prices varying from rs. 4 to 4 13-16th per maund of 80 lbs.

"After this a lot of 40 maunds of Scinde linseed was put up, which realized rs. 4 8-6th per maund, and another batch of 84 packages, in six different lots, which realized rs. 4 8-6th to 4 12-6th per maund.

"Shortly afterwards a batch of 700 bags of Punjaub linseed, now on its way from Mooltan, was sold to arrive at rs. 4 10-16th per maund. After which the whole of the remaining quantity of the Punjaub linseed, estimated at 7,000 or 8,000 maunds, was offered for sale to arrive. The bidders at first showed some hesitation in offering for the quantity in consequence of the uncertainty as to the time of delivery, when it was agreed that the whole quantity that may arrive before the end of October becomes the property of the purchaser. With this stipulation, the lot was knocked down at 4 8-16th per maund."

WHEAT.—"Till within the last two years, we had but a few isolated cases of this article being imported from India, and, from various causes, these importations gave no encouragement to importers to continue them. Several thousand quarters imported in 1854, however, have induced further shipments; and about 60,000 qrs. were shipped at Calcutta for England during the last year, from January to the 22nd of November. The article being little known, the importers found it difficult to sell for arrival on satisfactory terms till November last, when sales on c. f. and i. terms commenced to be made; and since then to the present time upwards of 40,000 qrs. have been sold. The highest price paid for good qualities of soft wheats was 70*s.* c. f. and i., on terms considered equal to 80*s.* delivered; and this was when the price of good white English wheat was 85*s.* per qr. The lowest price since the decline in the corn market has been 62*s.*, c. f. and i., for hard wheat. We are informed that some few thousand quarters are now on the way from Bombay (no doubt Punjaub wheat, which is

the best grown in India); and, from the samples shown, we estimate the value of the hard at about the same as Spanish hard, and the soft the same as good soft English. Some quantity of the Calcutta wheat has lately arrived, and most of it in excellent condition, and its present value on the spot is 68*s.* to 72*s.* per quarter of 504 lbs."*

With an immense wheat country at its back, Kurrachee can at present export no wheat. Scinde has almost boundless means for the production of wheat, and could, without difficulty, and at a moderate price, supply the entire consumption of Great Britain and Ireland. In these days, when the price of the quartern loaf is a serious matter for consideration to all housekeepers, and a terror to the poor, the opening of such a source of supply is like the finding of concealed treasure. At present, the capabilities of production are useless from the want of means of transport. Colonel Turner, Superintending Engineer in Scinde, observes that—"In travelling through the country after the inundation of 1851, I found at a place called Naree, a few miles above Sehwan, stocks of Government grain of three successive years:—the excessive inundation of that year had swamped it, and it was utterly spoiled, fit only for manure. At first I imagined the Kardar must be to blame, but on enquiry, I learned that there had been repeated attempts to sell it by auction, but that no one would buy it, *because the cost of conveying it to a market would render it an unprofitable speculation.*" (Vide pp. 78, 119.)

Major Preedy on this head remarks, "that as the proposed Railway was to be constructed entirely in his collectorate, he considered it his duty to bear testimony to the great commercial advantages likely to be gained by it, in the transport of large quantities

* Messrs Laing and Campbell's Annual Circular for 1856

of grain of all descriptions, which are produced in such luxuriance in Upper and Middle Scinde. The quantity of grain which might be exported from Kurrachee, was immense; when Sir C. Napier was here—in the year of the Irish famine, he offered to have ready 11,000 tons of grain at Kurrachee for transmission, and such a quantity might and could have been spared without interfering with the consumption of the country. The cost of carriage now was so great as actually to prohibit grain as an export. The price of wheat and grain was at Shikarpore and Hydrabad, just one half its price in Kurrachee, the navigation of the Indus rendering attempts to bring grain down as an export very hazardous. Major Preedy instanced a case where *out of seven boats laden with grain which started from Kotree, but one arrived in Kurrachee, the other six being lost; if one or two boats only out of a batch of six or so were lost, it was generally considered a good venture.* He looked, therefore, upon the grain transport alone to give a large return—a return far exceeding what Lieut. Chapman had allowed towards the profits of a railroad in Scinde." (Vide p. 120.)

SALT —Salt, of the purest quality, is formed naturally on the coasts of Scinde, and the Indian system of taxing salt is not extended to that province. The immense trade which might be carried on in this article was pointed out eight or ten years ago, by Lieut. (now Major) Burke, of the Bombay Engineers, who published a small pamphlet, giving an account of the vast and practically-inexhaustible deposit whence the supply might be derived. But no notice was taken of the fact by mercantile men till January 1855, when the captain of a vessel going round to Calcutta in ballast took a cargo. The venture was so succesful that it has since been repeated. The duty paid on

import of Scinde salt into Calcutta for the portion of the year up to August 1855, was Rs. 30,000.

A Company was formed at Kurrachee last year, for the purpose of exporting Scinde salt to Calcutta. Its operations have not been very extensive, but so far they appear to have been successful. From information, supplied by the Bombay Government, we learn that about half a lakh of maunds of Kurrachee salt have been exported to Calcutta by the Company since December 1854, and that, "though previously unknown there, it has commanded prices beyond the prices obtained for Bombay salt, which, next to Liverpool and foreign Europe salt, had heretofore stood in the highest favour in the Calcutta market." But according to the Scinde Commissioner:—"There is one cause which retards the development of this trade, that is the apparent ignorance, in the mercantile circles in England, that we have such an article as salt in the province, though some pains had been taken last year to give the fact publicity through the medium of the Prospectus of the Salt Company."

PROGRESSIVE IMPROVEMENT OF SCINDE. —"Mr. Frere is leading the way," says the *Friend of India*, "in an enterprise which, if successful, will do more for his capital even than his own energy. Kurrachee, from its position on the Indus, is the natural port of Central Asia. From the Sutlej to the Oxus whoever wishes to communicate with any place beyond the sea, must pass through Kurrachee. It occupies a position scarcely less favourable to commerce than that of Alexandria." "The produce which ought to float down the Scindian Nile must either be carried overland, at an expense which sucks away all profit, or incur imminent risk of destruction. With an immense wheat country at its back, Kurrachee can export no wheat. At Sehwan, the wheat of three years, tens of thousands of maunds, rotted away under the eyes of Major Turner, for

want of the means of transport. The trade is already too large for the flotilla."

"The difficulties of the Indus commence at a place called Jurruck. Above that point, the river will bear steamers of any reasonable burden, and from its rocky bed is exempt from the incessant changes which harass Lieutenant Garforth in the Hoogly. From thence to Kurrachee, over a country which presents few natural difficulties, a railway of one hundred and ten miles, three-fourths of our Raneegunge line, would bring goods and passengers to the Kurrachee harbour."

"It is this scheme which Mr. Frere, on the 28th August (1854), explained to a meeting of all the respectable inhabitants of Kurrachee. The prominent and energetic part taken by Mr. Frere in the matter is highly to his credit, but it is unnecessary for us to write his eulogium. He is understood both in Scinde and in India, and we prefer to support the undertaking in which he has displayed so commendable an interest."

Scinde is happy in her rulers. The head of the government of the province (now in this country) is identified with enlightenment and progress; and Mr. Frere's good deeds are worthily emulated by Colonel Jacob, of the famous Scinde Horse, now acting as Commissioner in his absence. The latter officer established himself about nine years ago, on the frontier of the Desert between the Indus and the Bolan Pass, at a village which had then three small shops and a well, protected from the Desert plunderers by a small fort. He has now a town on the same spot with about 7000 inhabitants, exclusive of those belonging to the garrison; and the country has, by his judicious measures, and by the digging of a canal from the Indus, been rendered so quiet that the Desert, for twelve miles from Jacobabad, has become a sheet of cultivation, and life and property are more secure than in most parts of India.

The predatory tribes of Scinde now cultivate the arts of peace; its language has been reduced to a definite shape; its hitherto oppressed inhabitants, who, not many years ago, trembled to touch the white man's money, have not only become reconciled to the British mode of government, but have quietly submitted to all the imposts and taxes levied upon them for the internal improvement of the country. Wells, tanks, roads, bridges, bunds and canals, have all been, and are now being, constructed, to develop more fully the latent and long neglected resources of the land. Such of its products as have already been conveyed to the continent of India, or to the home market, have met with a ready and remunerative sale. The demand, in fact, is greater than the supply; and the district officers are now engaged in fostering, encouraging, and urging on the cultivation of those staples, which can be raised at so little cost, from the peculiar soil of the province, and which are likely to realise such handsome returns to the producer. The means for the transport of these productions to other parts of the world will soon be, as it were, at the door. The number of English vessels chartered for Kurrachee is yearly increasing; and with the improvements now in progress, we may expect a large augmentation to the trade of the port.

KURRACHEE, THE EUROPEAN PORT OF INDIA.—To be the nearest point to Europe of all our Indian possessions, is important in many points of view, but more especially with reference to "the Euphrates Valley route;" and when the electric wire shall have connected Kurrachee with the Punjaub (already, there is reason to believe, decided upon by the Supreme Government), and the proposed communication established with Europe, the advantage will be great, of being the first to disseminate the political and commercial intelligence of Europe to the most distant parts of our Indian possessions.

Hitherto beyond the pale of the electric chain that spans the empire, Kurrachee is destined, ere long, to become the chief seat of the telegraph in India. (Vide p. 218.)

JUNCTION AT KURRACHEE OF EUROPEAN AND INDIAN TELEGRAPHS.—Mr. John W. Brett, the inventor and projector of submarine telegraphs, so far back as 1845, proposed to the late Sir Robert Peel to connect England with India by the telegraphic wire. The importance of Scinde and its port will become really apparent when Mr. Brett has placed England and India in daily communication, by passing his electric wire, already in the Island of Sardinia, on to Malta, Egypt, and by the Red Sea (or rather by the Orontes, the Euphrates, and the Persian Gulf) to Kurrachee; thus uniting the European and Indian systems of telegraph in one magic circle. This would establish a real and practical bond of sympathy and identity of interests between this country and her most valuable and magnificent dependency, —place in the hands of Government over 100,000,000 of our distant fellow subjects, a power of supervision and control hitherto unknown,—giving at the same time to the ship-owner and merchant a means of imparting and receiving information of inestimable value—to dissevered families a bond which will at once re unite them—to the inhabitants of two empires widely apart a mode of inter-communication which would enable them to meet, as it were, face to face—in a word, the telegraph between England and India will be at once the pledge and the instrument of good and vigorous government, and of moral and material progress. (Vide p. 217).

IDENTITY OF INTERESTS OF PUNJAUB AND SCINDE.—Mr. Frere has done good service to the latest acquisitions of the British Crown in these parts, by advocating independent steam communication with Suez, rails

in Scinde and the Punjaub, and the electric telegraph. Whatever may be the official and technical difficulties in the way, sooner or later they must be overcome; therefore the sooner the better.

Judging by the past administration of the Punjaub, we feel convinced that the authorities want no spur to induce movement in matters so important and interesting. The Punjaub may soon be united by the closest administrative ties to Scinde. Not so to the Agra presidency; and therefore it should be an additional incentive in these eminently practical questions that, as the fortunes of the Punjaub are concerned, so its influence should be legitimately exercised by its Government, to secure objects advantageous alike to both Provinces.

"The two provinces (Scinde and the Punjaub) have been inseparably connected by the hand which made them. They have been connected also, by the fortunes of the great empire to which both belong. They are *the provinces of the Indus*, as Bengal and Behar are *the provinces of the Ganges*. They constitute one section of the empire, and are separated from every other part of it by rivers, mountains, the sea, or broad belts of sandy desert. Their commercial interests are inseparably united. Both must ultimately depend upon the traffic of the mighty river, which is the artery fed by the five veins of the Punjaub.

"Both depend for their communication with the external world upon one and the same port. The Punjaub has no outlet towards the north, but an imperfect outlet towards the west, and a long, difficult, and expensive, though open outlet towards the east. This river system, which is already equal in magnitude, and may be equal in value to that of the Ganges, should be under one government, and improved on one system, devised by a single mind. Would the Government place Bengal under one authority, and the

Hooghly, from Cutwa downwards, under the commissioner of Pegu? Yet that is exactly what we have done with our north-west possessions. Our Danube has its mouth occupied, not by enemies, it is true, but by allies, owing allegiance to a different authority. (Vide p. 168.)

"Again, the physical, political, and social characteristics of the two countries are identically the same. Physically, the districts of Mooltan, Dhera Ghazee Khan, and Khangurh might be districts of Scinde. The soil is the same, the products are the same, the people are the same. Politically, both have the same disadvantages, and the same military necessities. Both have a turbulent frontier to be guarded, which is identical in character from one end to the other, and which should be arranged on one principle, and be obedient to one head. The vast chain of military forts which stretch along the Scindian and Punjabee frontiers, depend upon each other, and should alike for military effectiveness and economy depend upon one head. Both have populations whom it is necessary to disarm and overawe, and in both an enormous military force requires an energetic central administration. The system, too, of the Punjaub, would suit the province of Scinde better than that of Bombay. It is less regular, and better adapted to the fierce passions and uncontrolled habits of a wild Mohammedan people. The revenue settlement, too, is more in consonance with the ancient ideas of the population. The administration would be infinitely cheaper; for, with a slight re-distribution of force in the Punjaub, much of the military expenditure of Scinde might be removed;—while, after two years of expense, the customs' receipts of Kurrachee, as the foreign entrepôt of Central Asia and the Punjaub, would totally remove the deficit. Of course, with the improvement, the pressure on the more fertile province would be removed, and the strong counter argu-

ment with which we commenced our article becomes of none effect. Scinde and the Punjaub, then, we submit, should be united."

"It (the union) would strengthen, not root up, the system already successful; and on every other ground it is indispensable. The presidency would be the second of the great divisions of British India. The immense triangle, broadest between Kurrachee and Peshawur, and tapering almost to a point below Mooltan, would cover an area of 130,000 square miles.* This vast area is occupied by a population of nearly twenty-five millions, thus:—

Punjaub, by census	13,000,000
States under control, including Cis-Sutlej chiefs, and Cashmere	8,000,000
Scinde (probably)	2,000,000
States under Scinde (at a guess) . . .	1,000,000
Populations of Presidency . . .	24,000,000

"The revenue, unimproved, would be two-and-a-half millions. The surplus is far more than adequate to the necessities of Scinde, and Lord Dalhousie would thus have redeemed the consequences of the act of Sir C. Napier. Amid this population, all warlike, is stationed a great irregular force, which must be directly subject to the civil authority, and is apt to be jealous of a mere commissioner. The flower of the European and native army is there also, and occasionally even with these the weight of high official dignity is imperatively required. Our most dangerous foreign relations, with Central Asia and Dost Mahomed, with the Beloochees and Daoodpootras, and with the innumerable warrior chieftains of the highlands, must be conducted at Lahore. Whoever may be the final authority, every

* Great Britain covers 53,000 square miles.

word of the Commissioner reverberates among the hills, every blunder is bitterly resented in Cabul." *

EXPECTED DEVELOPMENT OF RESOURCES AND REVENUE OF INDIA.—To make roads is the first duty of every Government; but the wars in India have unhappily succeeded each other with such brief intermittent periods of peace, that this essential to good government has not been sufficiently attended to. Steam navigation, the railway system, the electric telegraph, free commerce, and a more enlightened and liberal system of government at home and in India, have now opened a new era in its history.

Yet what is now recommended by those who ought to know better? 'Withdraw all expenditure on public works not necessary for repairs, and let the revenue resume its normal condition; and be careful not to undertake any more liabilities to complete your railways now in progress to make them useful and productive.' That is, destroy the profit within your grasp, be careful not to make any more by making India prosperous, and you will see how flourishing the revenue will again become.

Allusion has been made to the expediency of the Government promoting some project for working the iron mines to supply the railways now in course of completion. At the Great Exhibition of 1851, the quality of the Indian iron attracted marked attention, and its steel has been always celebrated for its quality. It is desirable to detach the natives from the almost universal pursuit of agriculture and to induce them to prosecute the mechanical arts.

In the latter part of 1854 the Indian authorities sent to India, on my recommendation, a commission of mining engineers and smelters to aid Lieutenant Colonel Henry Drummond in his important mineralogical researches

* Friend of India.

in the provinces of Kumaon and Gurhwal, and it is gratifying to find a public announcement to the effect that Colonel Drummond laid the foundation of the first blast furnace in Northern India on the 22nd of November last, and that the Himalayan iron works are progressing rapidly, and in three months it is hoped the furnaces may be at work. The locality chosen is easy of access, surrounded with enormous surface deposits of ore of the finest quality, with abundance of fuel, lime, clay, fire-bricks, and water-power close at hand. India has now a fair prospect of manufacturing her own iron; we shall hear no more, we hope, of iron suspension bridges sent out from this country to span rivers and ravines, whose sides are composed of a far superior ore to that from which the bridge itself was made.

In a state of peace and with perfect freedom of trade with all parts of the world, it becomes a comparatively easy task for the Indian Government to promote inland communication and navigation, so as to render inter-communication of all parts of the continent easy and complete. India is not only a self-supporting,—it is a *precious* possession. It furnishes honourable and lucrative employment in its military and civil services to a vast number of the gentry of England; its commerce enriches our merchants and employs our artisans. All that it needs is a Government at once wise and energetic to develop its resources, which are believed to be boundless. In this way our trade with India would advance with a still more gigantic stride into the inmost recesses of that lethargic land, carrying in its train the arts, the sciences, and the civilisation of the west for the elevation and enlightenment of a patient and loyal people.

"When the spirit of enterprise still shows so feebly in India; when the employment of English capital on a great scale within the interior of this country is so rare;

and when there is such good reason to anticipate the best effects from its profitable investment in any one branch of Indian undertakings, by the encouragement that would thereby be given to its introduction through many other and various channels;—I submit, that it would be impolitic for the Honourable Court to put aside the several associations that are now presenting themselves to compete for the advantage of supplying India with that which she much needs; in order that it may itself undertake these vast works, on no stronger ground than the assumption (which, after all, is only an assumption), that some little time and money would be saved;—I submit, on the contrary, that all the money and time which the Honourable Board may contemplate being able to save thereby, would be well expended in securing the introduction at this time, of a large amount of English capital and English energy, so as to encourage, by the successful issue which I anticipate for these railway undertakings, a more extensive employment of similar capital, and similar efforts hereafter, in connection with the products and the trade of India."*

These facts ought to be considered in conjunction with the important fact, that the Government of India is, to speak generally, landlord of the soil, and sinks money therefore in public works, not merely for the hope of a general benefit accruing from increased prosperity, but with the certainty of a direct immediate return upon the money spent.

"Lord Dalhousie is reported to have said that he went to India not to elevate England by foreign conquest, but to elevate and enrich both England and India by sending home cotton; it were 'a solecism of power to think to command the end, and yet not to endure the means,'†

* Minute by Lord Dalhousie, dated 20th April, 1853.

† Bacon's Essays of Empire

to accomplish this great object he must have railroads; then — and not till then — will the supply of the raw material of the greatest of the staple manufactures of this country be placed upon a firm basis, and the energy and skill of Europe come fairly into contact with the inexhaustible resources of a soil which has for ages, repaid, with three harvests in the year, the most rude and inefficient husbandry. Then will our commercial and manufacturing greatness be placed beyond the caprice of a jealous rival, himself dependant on the labour of his slaves; but even with America well affected, and the reverence of the lash unimpaired, the premature advent of a frost or a visitation of a grub to the cotton fields of New Orleans might at any moment be fatal to us!" *

MUTUAL DEPENDENCE OF OUR WESTERN AND EASTERN EMPIRES.—PRESTIGE IN ASIA ESSENTIAL TO POWER.—There never was a crisis in the history of this country when the public mind was more keenly alive to the necessity of developing the territorial value of India, and of approximating, by a rapid means of communication, the distant limits of that vast empire.

At this moment, all who are alive to the inestimable importance of British India, knowing as they do that its possession is essential to the grandeur and prosperity, if not to the very existence of this country, have watched with painful interest the varying fortunes of the campaign against the Russians in Asia. The events of this campaign are fraught with results of immeasurably greater import to us than to our allies. *They* have no great Indian empire, and Asia Minor is not the route to any of their possessions. Between the outer limits of Asia Minor and the borders of the golden peninsula of India, as well as within the bounds of the peninsula itself,

* Indian Railways, by an Old Indian Postmaster. 3rd edition, 1848.

the rulers and tribes accustomed to the dominion of the sword yield a scant allegiance to a sovereign they have ceased to dread, and little respect to a neighbour whose might is not superior to their own. Much is being done to enlighten and advance the people of India and develop the latent resources of that country; but, as yet, we hold with a mailed hand our empire in the East. It is dangerous to let our subject populations or our unsettled neighbours think that we have an equal in the field, much more a superior, and that superior, Russia, so long and so notoriously a candidate for their suffrages.

In these days, the connection between events in the East and in the West is far better understood than it was at the beginning of the present century, and news travels infinitely faster; but even at the beginning of the present century, we may remember that it was the superiority of the arms of France in Europe that induced Tippoo to rise against us, and led to the contest with him which ended in the taking of Seringapatam. Indeed, there is no one who really knows India that is not aware how greatly even the extremities of our empire there are agitated by the slightest appearance of a reverse in any quarter, so sensitive is the bond by which those vast subject populations are held.

We did not relish the idea of the Czar at Stamboul, and we may find his influence not quite agreeable at Tehran; neither must we close our eyes to the fact, that Persia is insidiously and perseveringly advancing her outposts both in Central Asia and along the line of the sea-board of the Gulf of Oman. She has already taken Herat, formerly regarded as the key of India, from the Affghans, and has wrested Bunder Abbass in the Persian Gulf from the Imam of Muscat.* Had the British minister at the Persian

* In the beginning of December, 1854, the seaport town of Bunder Abbass, belonging to the Imam of Muscat and governed by his son,

court been under the *immediate* orders of the Governor General of India, the Shah would speedily have recoiled before the remonstrances of an authority backed by 300,000 men. We do not fear a Russian invasion of India, but we must guard our prestige of invincibility with the treacherous and semi-barbarous courts of Asia, as the best means of protecting our Indian dominions from the dire effects of internal commotions, and from the hostile incursions of the turbulent and warlike tribes on our north-west frontier. While the ancient seat of empire of the Cæsars in the East is in the hands of the soldiers of the West, and while British enterprise is surely, though gradually, adding the Sultan's empire to the area of its wide exertions, his dominion in Asia Minor, and our name in the East, have received a shock by the capitulation of Kars. "We owe India a victory in Asia;" we owe it a victory that shall efface from the standards of Russia the record of our heroic misfortunes at Kars. But now that the Temple of Janus is closed for a season, let us stamp on Asia the impress of our genius and our power;—let us render the invasion of Asia Minor by Russia for ever impossible, by throwing open to the world, by the irresistible power of steam, the rich and forgotten plains of the Euphrates and Tigris—the once-famed granaries of the East, and subduing to Industry their wild inhabitants.

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was attacked by a force of about 12,000 Persian horsemen with two mortars and six guns. For two days and nights a heavy fire of shot and shells was kept upon the fort, and the garrison, about 1,700 strong, finding this too hot for them on the third day, sallied out under command of the young prince, and met them at the gates. A battle of several hours ensued, when the Arabs, seeing that they were overpowered by numbers, betook themselves to their boats and found refuge on board a Muscat man-of-war at anchor outside. A large proportion of the garrison had been either killed or wounded.

This would be a greater triumph than the re-capture of Kars, and at once a colossal and enduring monument of our science and enlightenment, as well as of our energy and might as a people.

The Indian army has not only fought the battles of England in India and Central Asia, but the sepoy of Bengal and Madras has crossed bayonets with the best soldiers of Europe, in Java and the Mauritius, while their brethren of Bombay marched to oppose the same gallant enemy in Egypt. Notwithstanding this, our tried and magnificent army in India has been practically ignored in the late war.

There is now in India an army of nearly 300,000 men at the disposal of this country, apart from 31,000 subsidiary troops and contingents from Native States. In that army, there are about 26,000 Europeans belonging to the Queen's service, including cavalry and infantry of the line; and 15,000 European troops in the Company's service, of every arm except cavalry, and 240,465 native troops. This last figure includes 233,699 exclusively native troops, together with 3,644 European commissioned officers, and 3,122 European warrant and non-commissioned officers and rank and file. The number of the commissioned officers of the Queen's troops amounts to 588. The police corps regularly organised consists of 24,015 native commissioned and non-commissioned officers and privates, and 35 commissioned European officers. Large and costly as this army may be, it might easily be increased, especially from the warlike tribes lately added to our dominion. Here, then, is a reserve, and an ample reserve, well organised, officered, and generally with some experience of war. How could it be said that we had no reserve? Of this immense force, 40,000 are British soldiers. Of the rest, the irregular native cavalry is just the force we most required in the late war, and could not supply from

home. Here then is everything that we have ascribed to Russia.

"All former empires that ever pretended to hold distant countries in subjection made a fair exchange of armies, so that while Italians were holding Britain, or Numidia, or Dacia, Britons, Numidians, and Dacians were stationed in Italy, and even supplying candidates to the imperial purple. Whatever the final results, the Roman empire would not have lasted ten years without that interchange."* Russia carried on the war with forces drawn from the heart and extremities of Asia, as well as from the most northern shores of Europe; and when we talk thoughtlessly of her overpowering population, it is these distant regions that we are unconsciously thinking of. "Our case is the same as Russia's, only we have not got the sense to see it, and shall not see it till our eyes have been opened and our wits quickened by a succession of disasters." †

The mutual dependence of our Western and Eastern empires was clearly pointed out many years ago in these words: "In case our enemies should prove sufficiently powerful to press us hard either in Europe or Asia, it would be a matter of inestimable importance to have it in our power to transport our military forces from Europe to Asia, and from Asia to Europe, with the greatest possible celerity, as the exigences of war may demand. A rapid means of communicating between India and Malta, both by means of the Red Sea and of the Persian Gulf, through Egypt and through Syria, would multiply tenfold the resources of Britain, and secure the defences of our possessions from Canada to Hong Kong. Indeed, England, with her small standing army, with her population not trained and disciplined to defend their own territory against invaders, and

* The Times. † Ibid.

with ministers who neglect her navy, can never be duly secured against the sudden attacks of her rivals and enemies, until she can impose some restraint on their ambition, by having it in her power to array the sepoy on the shores of the Mediterranean, and the Highlander of Scotland and the gallant sons of Erin on the banks of the Indus and the Ganges, with a degree of speed which no other power can equal. The small amount of our military force, in comparison with the enormous extent of our empire, must be counterbalanced by abundant means of communication and extraordinary rapidity of transport." *

Russia, aware of the mistake she committed in going to war with imperfect means of transit, is, with *our money*, about connecting the shores of the Caspian, the Black Sea, and the Baltic, with the heart of the empire by means of railways communicating with her navigable rivers.

In America, ten miles of railway are on the average opened every day for the accommodation of the regular traffic of the country.

And shall we, while enriching with railways Russia, America, France, Italy and Austria, forget what is due to India with her boundless resources and vast population?

It is evident that to have the benefit of even the moral weight of our magnificent and well-appointed army in India, on the great events which are now in progress, and of the consequent changes which must necessarily flow from them, that we must have, above all things, increased facilities for moving troops and stores upwards or downwards along the line of the Indus, as well as up the Persian Gulf, or to the Red Sea, as circumstances might render necessary.

While these pages are passing through the press, the

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* On the Communications between Europe and India, by George Finlay, Esq, 1847.

shadow of coming events in the East is deepening and extending, and it becomes more emphatically the duty of this country to make their army in India, by proper means of transit, not only sufficient for the internal peace of that country, but that some portion of it should also by the same means, be made available wherever and whenever the welfare or the honour of the paramount state might demand its service. There never was put forward a greater fallacy, or an error more likely to be mischievous, than "that the Turkish question was of no importance in an Indian point of view." The grand problem, now in course of solution in Turkey, must affect in its results, whatever they may be, in the most immediate and powerful manner, our power and prosperity in India.

Every act in the grand drama of the war, has elicited either the apprehension or the applause of the nations of the East.* In the mosques of Bokhara, five thousand Moolahs

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* "Dera Ismael Khan (on the Upper Indus) has not been far behind Lahore in celebrating the fall of Sebastopol. The official news was received with the greatest enthusiasm by all classes, and the inhabitants resolved to have illuminations, fireworks, &c. The bazaars of the city were brilliantly illuminated; every shroff, or wealthy shopkeeper, displaying from 1,000 to 1,200 lamps before his shop, and all other shopkeepers from 200 to 300 lamps."—*Lahore Chronicle.*

On the 3rd of December last, the day appointed by the Governor-General for a general thanksgiving on account of the Fall of Sebastopol, the great Parsee community, (of which Sir Jamsetjee Jejeebhoy is so justly regarded as the leader and ornament) *spontaneously* assembled in the Town Hall at Bombay, and Dosabhoy Framjee read a lecture detailing the events of the war, and the successes of the Allied Forces. He then proceeded to enlarge on the blessings which the British rule secures to the natives of India; and concluded his address by offering, on behalf of his crowded audience, the first public prayer to Almighty God ever uttered by a Parsee in his native tongue; for the ordinary religious services

prayed daily for the success of the Sultan of Room, and "the name of *Mouravieff* is probably now repeated with awe by the Persian and Affghan."

The Eastern shepherd, in his solitude, pondered over, and the warrior in his fastness, watched with kindling eye the varying fortunes of the field, while every incident of the campaign, whether in Europe or Asia, has been minutely discussed, and will be well remembered in the bazaars throughout the length and breadth of India.

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of the Parsees are still performed in the *Pehlevi*, their ancient language, which in the course of ages has become quite unintelligible to all but the very learned. He prayed "that the shadow of the Almighty might rest wherever the British rule extends, and that its moral influence might be established over a still greater portion of the globe; that God would bless their Sovereign, and give success to her armies: that his own brethren might live, as they now do, in perfect security, and be ever impressed with a grateful sense of the blessings they enjoy under the benign rule of their gracious Queen."

The address was received with enthusiasm by the meeting, which signified its hearty acquiescence in the concluding prayer. The event marks an era in the annals of India. Instances are not wanting of sovereigns who have enjoyed an extensive popularity among the varied races of Hindostan; but her history furnishes no parallel example of a whole people thus rising above the prejudices of ages, and in a way so opposed to their usual apathetic movements in political matters, convening a large public assembly, to give spontaneous expression to their belief in the superiority of British rule, and in the power of its protection, while they invoked the Divine aid for the success of its arms.

The novelty and gravity of such a meeting as has been just described cannot fail to make a wide impression throughout Asia. most favourable to the British character. — *From a Memoir of Sir Jamesetjee Jejeebhoy, by T. W. Ramsay, Esq., late Commissioner of Revenue, Bombay.*

From the COMMISSIONER IN SCINDE to Mr. HARDY WELLS,
Civil Engineer in Scinde.

DEAR SIR,

I HAVE the pleasure to return the papers you forwarded for my perusal, relative to a proposed Company for improving the Harbour of this Port (Kurrachee), and connecting it by Railway with the Indus.

I will briefly state the reasons which induce me to consider the scheme a most feasible and promising one.

A glance at the map shows that the coast of Scinde is the natural outlet for all the Commerce of the valley of the Indus and its tributaries, as well as of the frontier countries to the north and west—Cashmere, Affghanistan, and the countries of Central Asia still further inland. Hemmed in between the deserts of Mekran on the west, and the "Thur," or great sandy desert, which extends from near Ferozepore to Cutch on the east, the traffic of the countries above-named, naturally converges to the coast of Scinde as to the mouth of a funnel.

The region to which the trade in question belongs will bear no unfavorable comparison as regards extent, population, and variety of productions with the tract, the commerce of which seeks the line of the Ganges, and centres at Calcutta. Though it must be borne in mind that the trade on the one line is in its infancy, that on the other has been developed through a long series of years.

On the coast of Scinde there is but *one* port, Kurrachee, and there is no other which can be compared with it as a Harbour for several hundred miles, east or west.

The Indus has never, during the last century, been navigable for sea-going ships of any size; hence the river traffic is transferred, either at the mouth of the river, or at Kurrachee, into sea-going coasters, which convey it to Bombay and other ports of India, as well as to Arabia, Persia, &c.

Two obstacles were supposed to exist to Kurrachee becoming a harbour for direct intercourse with England and other distant countries. The Harbour was supposed to be inaccessible to large vessels, and it was believed that it was not safe during the south-west monsoon.

While these two drawbacks were supposed to exist, Kurrachee could of course only rank as a harbour for coasting traders, and an outport of Bombay.

But during the past years both these obstacles have been practically and conclusively proved to be imaginary. Three sailing vessels direct from England, the largest of 800 tons old measurement, have visited the port and come in and out without difficulty, one of them in the beginning of August, when the south-west monsoon was blowing as strongly as at any time during the season; all the commanders of these ships expressed themselves as equally surprised and pleased at the ease with which they made and entered the harbour, and with its excellence when they were inside. The Honorable Company's steamers, Queen and Auckland, made three experimental trips, coming in and out at the dates noted in the margin, and the ease and safety with which this was effected, showed conclusively that the Harbour is accessible to vessels of very considerable tonnage throughout the year, including the monsoon.*

20th June.
5th July.
23rd July.
3rd August.
5th August.
6th August.

* Since the foregoing letter was written, Mr. Frere stated in his speech at the Public Meeting held at Kurrachee in favour of the

That the Harbour may be still further improved by the means you have suggested, and at an expense by no means disproportioned to the object of making it accessible to ships of the largest size, I have no doubt; but even in its present state, it is clear it possesses all that is required for a trade vastly exceeding what now passes through it.

How large that trade is, even at present, and how rapidly it is increasing, is shown in the tables, which are among the papers you furnished to me. I find they agree with the official returns, and may, I believe, be relied on as correct.

Scinde Railway, on the 28th of August, 1854, that "last monsoon "Sir Henry Leeke, (Commander in-Chief of the Indian navy), sent "up the Queen, the first large vessel which had ever come there in "the monsoon, and the following were the results of the last season's "experience, as to the possibility of entering and leaving the harbour "during the monsoon months:—

1853.

June 20th, Queen, 750 tons, drawing 16 feet.
July 5th, Do.
,, 23rd, Do.
August 3d, Auckland, 800 tons, 15½ feet.
,, 5th, Do.
,, 6th, Queen.
,, 16th, Rubicon, 16 feet.
,, 20th, Auckland.
,, 27th, Do.
February 8th, Victoria, 478 tons, 15½ feet.
,, 11th Rubicon

"But this experience of one season was, of course, inconclusive, and "here is the result of the present season:—

1854.

July 11th, Queen, 750 tons, drawing 16 feet.
,, 22nd, Sea Queen, 414 tons, 15ft. 8in.
August 2nd, Ann Black, 513 tons, 16ft. 3in.
,, 7th, Two Dingeys from Guadur.
,, 13th, Queen, 750 tons, 16 feet.
,, 23rd, Auckland, 800 tons, 15½ feet.
,, 27th, Do.

SINDIAN, Aug. 30, 1854.

Your Railway will join this port, with the river Indus, the great inland artery of the trade we are considering, above the point where the difficulties, delays and dangers of the Delta navigation commence. These obstacles are so great that I have no doubt a Railway would almost entirely supersede the river water carriage below Jerruck, for all goods passing between the country above Jerruck and Kurrachee, or any point beyond sea.

The operation of the Railway on the steam navigation of the Indus will be most important.

From the confluence of the five rivers of the Punjaub to Tatta, the steamer best adapted to the Indus is a large powerful boat, of great capacity in proportion to her working expenses.

But from Tatta to Kurrachee such a boat is unsuited. She can neither thread the narrow winding channels of the Delta without constant risk of accident, nor face the ocean swell, by running out at the mouth of the Indus, and so coasting to Kurrachee harbour.

This short piece of Delta navigation, therefore, renders it necessary either to tranship from one description of steamer to the other, or to use throughout the river trip as far as Mooltan, a smaller, less capacious, and more expensive steamer

Your railway, by avoiding the Delta altogether, will render it possible to use the larger and more economical class of steamers throughout the river voyage, and thus add greatly to the facilities of steam navigation on the river.

I may observe that I have every reason to believe that the establishment of a railway to Kotree would effect a saving of at least Rs. 75,000 per annum in the expenses of the Government steam flotilla on the Indus, or what is in effect the same, increase its efficiency to the same extent as an addition to its strength costing that sum.

The post office at present expends a sum of Rs. 24,000 per annum for the conveyance of the mails on lines which will be superseded by the railway.

Of the military and political advantages of the line, I feel justified in saying that they will be such as to ensure for the project the attentive consideration, and I think I may feel assured, the cordial approval of the Government in this country.

Your plans and sections will enable professional men at home to judge of the line, and I will only add that, from my personal knowledge of the country, I can safely say, you have not, in my opinion, overstated the extremely favourable character of the line, its remarkable freedom from engineering difficulties, the facilities for procuring materials, and for obtaining the land almost without cost.

Yours faithfully,

(*Signed*) H. B. E. FRERE,
Commissioner in Scinde.

KURRACHEE,
14*th October*, 1853.

P.S.—I have omitted to point out one great recommendation of the line you propose, viz. that it is complete in itself, connecting the only port on this coast for sea-going, square-rigged vessels (Kurrachee) with the lowest of the few fixed points on the river (Jurruck), which at the same time happens to be sufficiently far north to be quite clear of all the dangers and delays of the Delta navigation. No further extension beyond Kotree is necessary to secure every advantage belonging to the line, as the connecting link between the Indus and its only seaport. But though complete in itself, your line is a necessary part of any system of railways which shall follow the course of the valley of the Indus or its tributaries. By no other line

can the Punjaub be directly connected with the sea; and should it hereafter be found expedient to extend the railway, there is, I believe, not a single serious engineering obstacle to such extension, from Kotree towards Peshawar till you reach Kaladagh, or on the other bank, from Hydrabad to Ferozepore.

I need not point out the immense effect which increased facilities for transport would have on agricultural production; but I cannot resist the temptation to quote from a private letter lately received from an officer well acquainted with Scinde and justly ranking among the first authorities in this part of India on all engineering questions. He alludes to some American statistics showing that a ton of wheat valued on the spot where it is grown at 49½ dollars, if carried 330 miles by railway, is still worth more than 49½ dollars, but if carried by ordinary highway, the cost of conveyance becomes equal to the cost price of the grain; and that cheaper descriptions of corn, costing where produced 26¾ dollars, can be carried 330 miles by railway at a cost of five dollars, whereas if carried only 160 miles by ordinary highway, the cost of carriage would equal the original cost price of the grain.

He uses this as an illustration of "the immense im-
"petus a railway would give to cultivation in Scinde,
"where wheat is very cheap (I have seen it at 80lbs. for
"1*s.* 6*d.* at Sehwan and Sukkur) and the cost of con-
"veyance is excessive—provide the means of carrying it
"to a market cheaply, and cultivation would, I believe,
"immediately increase beyond all expectation, land" (and he might truly have said of the finest description abundantly irrigated) "capable of cultivation is very abundant,
"but the sole obstacle to an almost unlimited production,

" at a cost less than, I believe, any country in the world, " is want of cheap means of transport."

It might be premature to dwell on the certainty of this port (Kurrachee) becoming ere long, the channel of a direct steam communication with Aden. But, compare the length of the run hither from Aden, with the length of the run to Bombay, and consider that the passage from Bombay to Aden is for three months in the year in the teeth of the south-west monsoon; that on the line from this to Aden, the south-west monsoon does not blow with violence, and is in fact not more than a steady trade wind, equally favorable for the run to or from Aden. The result of a consideration of these circumstances, can hardly be other than a conviction, that a direct steam communication will be established at no distant period, and from the large number of passengers between the Punjaub and England, to whom it is of importance to avoid the delays and expenses of going round by Bombay, there can be little doubt but that it would prove a good passenger line. The construction of your railway would, I am of opinion, at once lead to the establishment of such a line.*

(Signed) H. B. E. FRERE.

HARDY WELLS, ESQ.,
Civil Engineer.

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* The local press confirm the accuracy of the above views :—

" KURRACHEE TO ADEN DIRECT.

"A direct steam communication between Aden and Kurrachee is now much discussed, and the *Lahore Chronicle* has even assured its readers that an offer on the subject has been made to Government by the Bombay Steam Navigation Company. A Kurrachee Steam

Navigation Company, could it be got up, would, we venture to say, manage the line much better than the Bombay one, or any Bombay one. It would be a fine lesson to our venerable progenitrix, who for some time has been urged on to have a company of her own, to send boats to Aden, could we start a-head of her and put her to shame.

"For a monthly communication between this and Aden, two small steamers would suffice, each of 600 tons burden, and 100 horse power, capable, when necessary, of being worked up to 200; and these, we find, could be procured each at a lakh and a-half of rupees. The monthly working expenses would be about 7,000 rupees. Coal would certainly not cost more than 10,000 rupees. Two steamers, then, running monthly, would only require barely one month's coal, so that the expenses for two months would amount only to 24,000 rupees each, or 48,000 for the two, in which sum we include insurance, repairs and loss on ten years' purchase.

"These two steamers would go four single trips in two months, and we might calculate on eight first-class passengers, five second, and twenty deck, for at certain seasons the number of pilgrims going to and returning from Mecca, would be very great, so excluding provisions, we would have

			Rs.		Rs.
8	First class Passengers,	each at	150	=	1,200
5	Second ditto	ditto	100	=	500
20	Deck ditto	ditto	50	=	1,000

But if charges were reasonable, the boats might calculate on pretty full freight, and they would take 300 tons, or 24,000 cubic feet, which at the rate of five rupees per cubic foot, would give us

Receipts from Passengers.....	2,700
Ditto ditto Freight.....	120,000
Total of receipts from one trip	122,700
And total from four trips	490,800
Deduct from this the expenses.....	48,000
And we have two-monthly profits	442,800

which would give monthly returns of 221,400 rupees, on an outlay, for the steamers, of 300,000 rupees, and say a general capital of 800,000 rupees. Out of these returns, of course, would have to be deducted the expenses of agency, which we have no means at present of estimating.

"The returns look so large as to be suspicious. Were there fewer passengers than we have allowed, and were only three rupees per cubic foot charged for freight, the returns would be considerably less; but enough appears above to show that a line could be run, were it well managed. Any private speculator could make it most profitable; but we confess to 'no confidence' in large Indian Joint Stock Companies. They can do nothing rightly. If any persons in Scinde are really in earnest in this matter, and are unwilling to take the responsibility upon themselves, let them apply to the Austrian Lloyd's Company for aid, which Company professes to be paying a dividend of 8 per cent. just now, and notoriously is anxious, if any guarantee or encouragement from Government be held out, to commence operations on this side of the Isthmus of Suez.

"On the extension of steam communication in the East, much remains to be done, and we shall discuss the subject more fully and elaborately in our next issue."—*Sindian*, Nov. 8, 1854.

From the COMMISSIONER IN SCINDE, to the Right Honorable LORD VISCOUNT FALKLAND, *Governor and President in Council, Bombay.*

(EXTRACTS)

MY LORD, *Dated* 16*th November*, 1853.

I have now the honour to transmit a letter from Major Turner, superintending engineer, forwarding the Reports, in which Lieutenant Chapman details the results of the season's work, and the plans with which he illustrates them.

Lieutenant Chapman has taken no credit for the certain increase of trade.

It will, in all probability, by the unaided result of causes now in operation, be 60 or 80 per cent. greater than at present before the line can be possibly opened, however speedily it may be commenced; and the making, and, still more, the opening of the line, will, of course, give it a vast impetus.

Nor has Lieutenant Chapman taken credit for anything which was not before him officially, *e. g.* the vast amount of commissariat and other government stores now in progress to the Punjaub, or expected, such as 10,000 barrels of porter this year, 3,000 tons of iron expected next season for a bridge at Attock—facts which might have materially swelled his prospective returns.

He might also have fairly taken credit for the saving his projects, if carried out, will effect in such heavy items of expense as wear and tear of tents and camp equipage, deterioration of stores by delay and exposure, and the

saving in the local expenses of the commissariat which will be possible when a vessel can discharge direct into a railway truck, which will a few hours afterwards deliver its contents on the river bank at Kotree,—a point to reach which at present occupies generally a month at least, and often much more.

I therefore consider Lieutenant Chapman's estimates quite on the safe side; and I believe he might, without rashness, have greatly enhanced the amount of his prospective returns.

As regards the extraordinary facilities which the line presents for either canal or railway, I may be allowed to add my testimony, as an unprofessional traveller, to the more competent testimony of both engineer officers. I have certainly never seen a country with superior facilities for the easy and cheap execution of such works.

Of the two projects I prefer the railway, as being the more perfect means of attaining the desired object, as regards position of the river, terminus, speed, and cheapness; as the more profitable; the less liable to mishaps from unforeseen accidents, and caprices of the river; the more comprehensive, as regards the classes of traffic it will accommodate; but more especially because there is no rival or alternative means of communication which can compete with it: whereas the success of a canal would be the most certain means of ensuring the speedy rivalry of a railway.

Moreover, a railway would meet with ready support from capitalists at a distance, who would be less likely to view a canal as a favourable investment.

Such capitalists are, I believe, prepared to find the means of carrying out a railway over the line in question, as soon as they hear that the scheme is approved of and supported by Government as sound in itself, and that the

Government of India is willing to extend to the undertaking the usual guarantee of interest.

Mr. Hardy Wells, a civil engineer now employed in the province, was so struck by the facilities for constructing a railway over the line in question, when he traversed it on duty last year, that he communicated his observations to friends at home, and supported them by sections of most of the watercourses, which Major Turner procured for him, and by Custom House and traffic returns. The result has been, that a company is now, as I learn from him, in course of formation in England, with a view to undertake the line, if supported by Government, in the manner above alluded to.

The very satisfactory mode in which the duty entrusted to Lieutenant Chapman has been performed is, I believe, in no small degree owing to the effective support and assistance he has in every case met with, and the valuable advice he has received from Major Turner, the superintending engineer.

I have the honour to be, &c.,
(Signed) H. B. E. FRERE,

Commissioner's Office, Kurrachee, *Commissioner.*
16*th November*, 1853.

From the Superintending Engineer, to the Commissioner in Scinde.

(EXTRACTS.)

Sir,

As the commerce and the traffic of the country have increased, so also have the risk and inconvenience of the existing means of communication become more apparent; and it has now become absolutely necessary to improve those means, in order to meet the urgent demands of Government and of the public, for the conveyance of stores and merchandize to the countries through which the Indus and the other rivers which fall into it flow, as well as to enable the produce of those countries to be brought to a market.

During the last two years the necessity for such means have become even more pressing: unusually heavy falls of rain and high inundations have closed the direct land route to the river for many months in each year, while the constant changes inseparable from all delta navigation threaten at no distant period to cut off the communication from Kurrachee to the river through the tidal creeks altogether; besides which, the opening of the harbour to English merchant shipping, arising from improved knowledge of its capabilities, has created a disposition to carry on trade direct with England, instead of through the port of Bombay.

Moreover, Government are in a variety of other ways directly interested in improving the means of communication: the existing state of matters cripples the enterprise of the cultivators, and in many places limits the extent of

cultivation to the local demand. You will remember a fact brought forward in my Report, on the Roads in Scinde, dated the 30th March, 1852, *that at Narree I found stocks of government grain of three years' standing, which, though repeatedly submitted to public auction, nobody would buy, in consequence of the cost of conveying it to a market: the grain was eventually destroyed by the inundation of* 1851. The effects of improved communication on cultivation were very clearly explained in a late American journal: wheat, valued in that country at $49 50*c.* at the nearest market, if carried 330 miles by ordinary highway, cost in conveyance its full prime cost, and its value was therefore doubled; while if conveyed by railway the same distance, it would have cost in carriage no more than $5. In cheaper kinds of grain, the cost price, $21 75*c.*, would be expended in carriage, if conveyed only 160 miles by highway, whereas it would have cost $2 40*c.* only to have conveyed it to the same distance by railway. In Scinde, the proportion the cost of conveyance bears to the price of grain on the spot where it is grown is much greater; and it could be easily proved, that in parts of the country, at even short distances from markets where the demand is not limited by local consumption, the cost of carriage to that market is so great, that it is unprofitable to cultivate, and that the cultivation is therefore checked, and limited to the consumption of the immediate localities.

Having carefully examined the country through which it is proposed the railway shall pass, I can assure you that it is admirably adapted for such a work: it consists of a number of level, or nearly level plains, with a generally hard and smooth surface. Abundant stone will be found along it for ballasting, as well as for stone blocks, should they (as I believe will be the case) be found preferable to wooden sleepers. The measured distance of

the present road is 100½ miles, so that in taking 110 miles I conclude Lieutenant Chapman provides for extending it to Keeamaree, and the town, but even then 110 miles is a very ample allowance.

I approve of Lieutenant Chapman's proposal to extend the line of railway to Kotree: Hydrabad and Kurrachee are two of the three principal towns of Scinde, and should be united, and, for the reasons given in the 1st to 3rd paragraphs of his Report, I do not think any communication from Kurrachee to the river by railway short of Kotree would pay.

The two objections raised to Kotree as a terminus, I do not consider of much moment: the Bahran has yet to be examined, and I believe, that at an inconsiderable distance to the west of the direct line, a rocky bed for the foundations of the bridge will be discovered, and there is no doubt that if the bank of the river above Kotree were faced with dry rubble, it would be quite safe. The cost of the measure is at present the difficulty: when a railway has been laid down from the hills, that difficulty will be removed.

Great credit is due to Lieutenant Chapman for the labour and forethought with which, in so short a time, he has succeeded in getting together so much valuable information, and for the business-like manner in which he has collated and arranged it In neither of his projects (railway or canal) has he made the most of the facts he had adduced: not only has he discarded all information not strictly official, but he has used the official returns with the greatest caution; and with the knowledge that it has been a very common practice in England, when framing traffic returns, to double all the existing traffic, and that the result has generally shown that the projectors have been by no means too sanguine, I am certain a much larger return

might very fairly have been promised. For instance, the commerce of Scinde has been found, without the stimulus of improved means of communication, steadily to have increased at the rate of 20 per cent. per annum: the removal of all transit duties will certainly tend to increase the commerce still more rapidly; yet, notwithstanding the Deputy Collector asserts that by the time the railway could be opened (say four years hence) the trade will be doubled, Lieutenant Chapman has not taken any credit for even the ordinary per-centage of increase due to the years the railway must be in progress. So, again, with respect to taxing the boats: he proposes not more than the actual saving of food to the crews, whereas decrease of wear and tear, the absence of risk, saving of time, and consequent preservation of perishable goods, are all advantages, which would willingly be paid for.

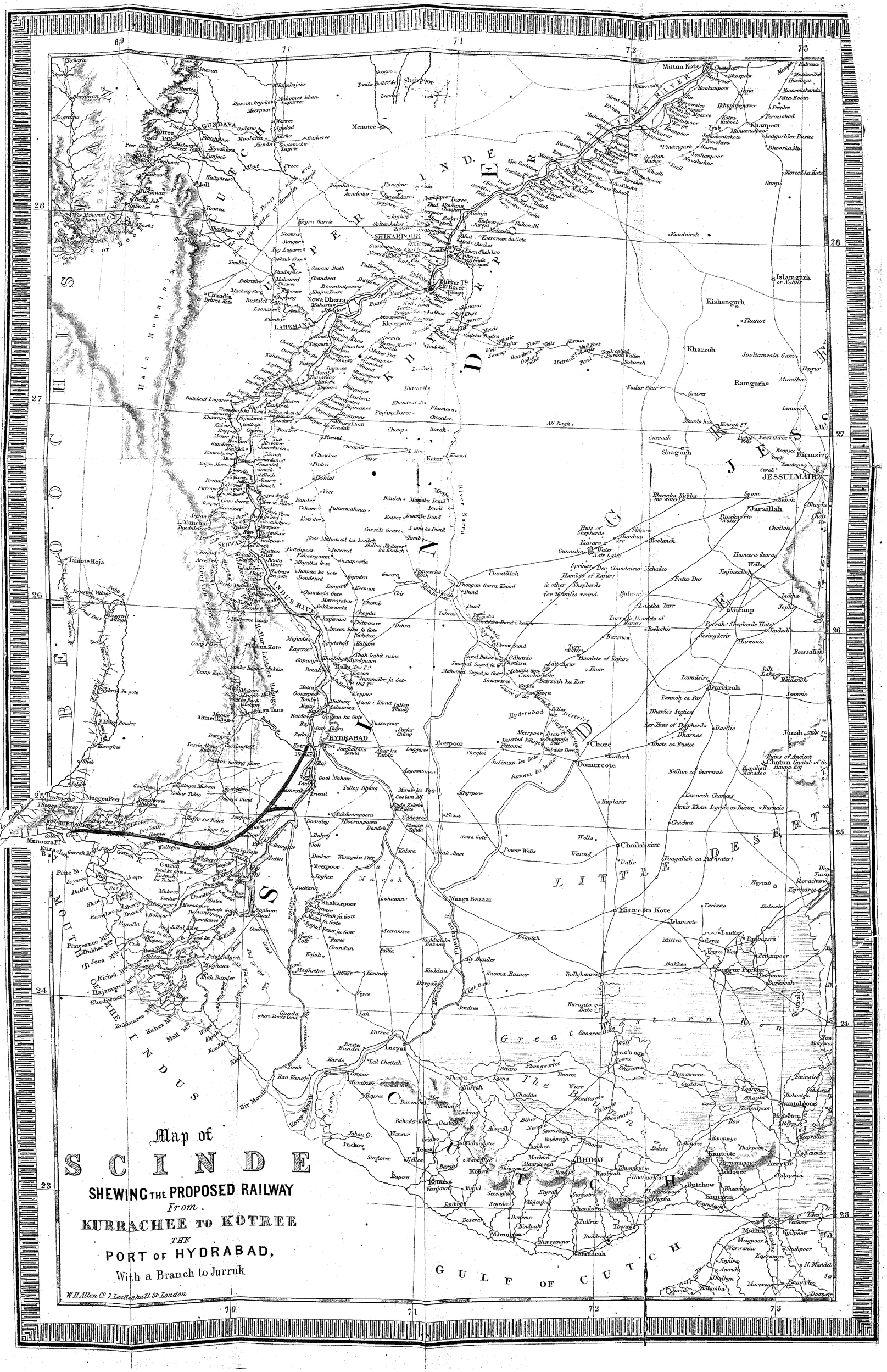
In the single item of 10,000 casks of ale and porter now being sent to the Punjaub, I am confident a large profit could be shown, either in the canal or railway project; while, as the length of voyage would be decreased some twenty-four days, there would be a much better chance of its arrival at its destination in good order. In the Commissariat, too, the saving of expense would be immense, were there direct communication from the harbour to Kotree.

I have the honor to be, &c.,

(Signed) H. B. TURNER, Major,

Superintending Engineer, Scinde.

Kurrachee, 15th November, 1853.


Map of
SCINDE
SHEWING THE PROPOSED RAILWAY
From
KURRACHEE TO KOTREE
THE
PORT OF HYDRABAD,
With a Branch to Jurruk
W.H. Allen Co. 7 Leadenhall St. London
GULF OF CUTCH
LITTLE DESERT
THE GREAT DESERT
INDUS RIVER
HYDRABAD
KURRACHEE
SHIKARPOOR
JESSULMAIR
Bukker
Sukkur
Nowa Dherra
LARKHANA
Khyrpore
Shahpoor
Menotee
GUNDAVA
Mittun Kote
Khairpoor
Islamgurh
Kishengurh
Kharroh
Ramgurh
Shagurh
Barmsir
Jaraillah
Gurrirah
Chore
Oomercote
Chailahsirr
Wanga Bazaar
Shakarpoor
Meerpoor
Tatta
Jamote Hoja
Muggea Peer
Munoora
Almeda Kote
Kotree
Lucpur
Bhooj
Butchow
Anjar
Mundrah
Tuna
Mandavee
Hyderabad District
Great Western Rann
The Runn
Sindree
Kotaree
Tera
Juckow
Sindoree
Nellea
Kotree
Lal Chettah
Rao Kaneje
Six Mouth
Kotree River
Indus River
Gunda
Kaber Mt.
Mall Mt.
Kuldvaree Mt.
Hajamree Mt.
Richel Mt.
Dubber Mt.
Puteeanee Mt.
Pitte M.
Kurachee Bay
Munoora Pt.
Garrah Mt.
Cape Monze
Hala Mountains
Sehwan
L. Manchur
Tatta
Almeda Kote
Ahmedabad
Tana
Kotree
Mirpoor
Cheylee
Sulimar ka Gote
Summa ka Gote
Kairpoor
Phaut
Yowa Gote
Powar Wells
Wells
Waind
Dalic
Fongalioh ca Kar water)
Mittre ka Kote
Islamcote
Tariano
Bakasir
Mittra
Veera Wow
Nuggur Parkar
Bullyhauree
Raoma Bazaar
Deeplah
Kuddun ka Bazaar
Ely Bander
Kotree
Lucpur
Lal Chettah
Rao Kaneje
Cotasir
Nanitsir
Bhooj
Butchow
Anjar
Mundrah
Tuna
Mandavee
Kotaree
Tera
Juckow
Sindoree
Nellea
Kotree
Sindree
Kotree River
Indus River
Six Mouth

RAILROAD REPORT.

From LIEUTENANT W. CHAPMAN, Bombay Engineers, on Special Duty in Scinde, to the Superintending Engineer.

(EXTRACTS)

A cursory inspection of the map of Scinde, and a slight knowledge of the commercial routes of the province, are requisite to determine on the valley of the Indus as the *direction* that any contemplated railroad must of necessity take; and since the unequivocal success which attended the construction of the first line of railroad in England is universally attributed to a complete communication having been *at once* established between two important points, while the wisdom of the principle laid down has been so fully borne out, as well by the failures as successes of subsequent undertakings, as to have become almost an axiom in railway considerations, no further argument appears necessary to demonstrate the advisability of at once connecting the two most considerable places in the general line of communication desired.

In ascending the valley of the Indus, the first point of political and commercial importance presenting itself, on the right bank of the river, is Kotree; and as a railroad with its terminus here would fully satisfy the requirements of a direct communication with the Indus, which forms the subject of this Report, it appears advisable that Kotree, —the port of Hyderabad, should be at once connected with Kurrachee,—the harbour of Scinde.

The latter derives its consequence from being the head quarters of the Civil government and Military establishments of the province, in addition to being a rising seaport, dependent only upon the improvement of its harbour for European commercial importance; while the former, in addition to its immediate proximity to the large station of Hyderabad, and being itself the depôt of the Indus flotilla, presents also, in conjunction with Hyderabad, a centre, to which all the great lines of traffic from Upper and Lower Scinde, Southern Rajpootana, and Cutch, severally converge; whilst its position on the Indus adds to these the additional advantages of intercepting the down river traffic before the navigation becomes difficult and attended with risk.

As the only other important preliminary consideration necessary to be noticed, *i. e.* that of capability of extension along the valley of the Indus, is answered by the position of Kotree, little doubt appears to exist as to the advisability of selecting Kotree, (or, as will be hereafter explained, a spot near it,) and Kurrachee, as the termini of the first railway to be constructed in Scinde, provided it can be shown that no financial objections exist.

From the position of Kurrachee with respect to the Indus, the traffic naturally classifies itself under two divisions:—

1*st*. The traffic by river.
2*nd*. The traffic by land.

Each of these, again, resolves itself into two heads:—

1*st*. The traffic carried on by Native river craft.
2*nd*. That conveyed by the steamers of the Indus flotilla.

And again:—

1*st*. The traffic by the main road through Tatta and Jerruck to Kotree.

2nd. That existing on several direct routes through the hills, varying in extent, as the supplies of water and forage are scarce or abundant.

Under these heads, the goods' traffic must first be considered.

To enable a judgment to be formed of the amount under the first head, a return of the exports and imports of the different ports of the Indus furnished, by the Collector of Customs, is available, from which it will be seen, that the river traffic by native craft is estimated at 30,406 tons.

A slight check upon this amount is derivable from a register, kept by the authorities of the Indus flotilla, of the number of boats passing different stations of the river from which an approximation to the maundage of goods passing Tatta, (which only, for reasons given in the Canal Report, can be safely taken,) is calculated at 15,46,600 maunds.* Reducing this by one-third, as an allowance for vessels being imperfectly filled, it gives a tonnage of 55,236 tons, which is no doubt exaggerated, but so far valuable as to show that the first estimate, which must be taken as representing the river traffic, is probably on the safe side.

The quantities of goods and merchandize, both Government and private, conveyed by the Indus flotilla, are shown in the returns, furnished by Captain Ethersey. The first item, Government stores, amounted from the 1st February 1848, to 30th April 1853, or during the course of 62 months, to 10,936 tons. The proportion of this for one year is 2,117 tons. Private merchandize, again, conveyed from the 1st May 1851, to the 30th April 1853, was 23,622 maunds. The half of this for one year amounts to 4122

* Maund = 80 lbs.

tons. The tonnage under this head may consequently be set down at 2,539 tons per annum.

The overland routes, divided into, 1*st*, the traffic by the main road by Tatta and Jerruck; 2*nd*, by the various hill routes.

In considering this branch of the traffic, the returns furnished by the police authorities constitute the only official documents available: though imperfect for the purpose, still some approximation may be deduced from them, upon which an estimate of the probable amount of traffic may be based.

These returns are taken at four places on the high road between Kurrachee and Hyderabad: two of these, *i. e.* those at Gharra and Tatta, the central stations, cannot clearly be taken as representing the *through* traffic, on account of the registers at Jemedar-ke-Landi and Jerruck, the outer stations, showing a great decrease in almost every item. The great difference observable may be accounted for, in the instance of Tatta, by its being a large city, and consequently subject to great local movement; and in the case of Gharra, by a much frequented cross-communication from the Sakra Purgunna passing through it, as well as from its neighbourhood being a favourite grazing-ground for camels, of which animals a large number is shown in its register.

To assume the returns of Jemedar-ke-Landi, would be to suppose that everything passing through that place continued on to Kotree, which would manifestly lead to error.

The mean between the returns of Jemedar-ke-Landi and Jerruck must, therefore, be taken to represent the *through* traffic between Kurrachee and Kotree, on this road.

As the returns do not distinguish between laden

and unladen, the usual proportion of two-thirds to one-third will be taken for all descriptions of conveyance. The abstract statement attached to the Police Returns shows the calculation, agreeably to the above considerations; and the amount, 1,571 tons, must be supposed to represent the overland traffic by this route.

But a correction is still required for the various routes mentioned under the second head of this division, for which no register of any description exists.

This is supplied by a return furnished me by the Captain of Police, from inquiries made of all the principal merchants of the town, and by written statements received from those of Camp, including, in all instances, the entire trade of their firms by the land route. From an abstract of these statements, in which the necessary deductions are made in certain cases, it will be seen that 3,792 tons are deduced.

In order to apply this correction, it will be necessary to take the mean of the two estimates, or 2,681 tons, as the total amount of traffic to be calculated upon the land route from Kurrachee through to Kotree.

The entire present traffic in goods and merchandize which would be carried by a railroad would therefore be as follows :—

By river	Native craft . . .	30,406 tons.
	Indus flotilla . . .	2,539 ,,
By the land routes		2,681 ,,
	Total	35,626 tons.

As a check upon this total, again, the Collector of Customs, in a return furnished by him of the exports and imports by the sea face (*vide* page 95*), after making de-

* Appendix to Lieutenant Chapman's Report, printed for Bombay Government.

ductions,—1*st*, for the consumption at Kurrachee; 2*nd*, for the imports and exports across the western frontier; and 3*rd*, for the partial lading of vessels,—estimates the probable amount of exports and imports of the land face, both by the direct routes and by the river, at 57,050 tons.

Considering, then, the sources from which the totals of the above summary have been derived, and the authority which supports the last estimated amount, it appears to me that 40,000 tons may be very safely assumed as the smallest amount of goods which will probably be carried over its entire length each year by a railroad.

N.B.—All stores forwarded by the Commissariat and Ordnance Departments are transmitted through the agency of the Indus flotilla, and are consequently included in the returns furnished by the Superintendent.

Before proceeding to the consideration of the amount of passenger traffic that may be expected upon a railway, I would quote an extract from a letter from Captain Crawford, the Superintending Engineer Railway Department, Bombay, on this head, which, though of the greatest importance at home, has not always been allowed a place in railway calculations in India, an omission arising from a general conviction that natives would be slow to take advantage of a new means of locomotion supposed to be incompatible with their present habits, and in fact, much beyond their appreciation.

Captain Crawford, in speaking of the experimental line at Bombay, more than three months after its opening, when the novelty must to a certain degree have worn off, says:—"It answers well, and conveys a regular traffic,

even during the monsoon, of some 5,000 passengers a-week, and considerably more than pays its own expenses. All classes use it—men, women, and children; and the poorest avail themselves of it in travelling on business, which is a good sign for the further extension."*

This testimony, supported by the combined reports of the different Presidency journals, appears a sufficient authority for believing that passenger traffic in India, provided the fares are low, will form a very important item in railway returns; and that taking into account the marvellous increase of movement which has always followed the introduction of railroads, it fully warrants the assumption that at least one-third of the number of passengers at present found on any line of road affected are likely to avail themselves of the new means of transport.

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* A further confirmation of the readiness with which the poorer class of the natives of India avail themselves of railway transit is furnished by the Report of the Directors of the East Indian Railway Company, under date the 20th February, 1855:—

"EAST INDIAN RAILWAY COMPANY.

"The Report of the Directors of this Company states that the first sections of the experimental lines—namely, from Howrah to Hooghly, and from Hooghly to Pundoah, in all 37½ miles—were opened for passenger traffic on the 15th of August and the 1st of September respectively. The traffic returns for the first sixteen weeks shows that 109,634 passengers were carried, being an average of 6,852 per week, the trains not running on Sundays. The gross receipts for the same period amounted to £6,793, or an average of £424 per week. The traffic on the portion of line open has far exceeded the Board's most sanguine expectations, and the most gratifying feature of all is the fact that by far the largest number of passengers carried has been of the third-class. The number of first-class passengers was 5,511; second-class, 21,005; and third-class, 83,118."

Suppose this to be admitted, the following passengers may be expected on the line:—

		Per annum.
1st Class, say		600
2nd Class, say		1,200
3rd Class, the mean of the Police Return of Jemedar-ke-Landi and Kotree, taking one-third	11,342	
Troops, the average of Five Years (vide Deputy Assistant Quarter Master General's Return, page 107) . .	9,300	
Total Third Class .	———	20,642
4th Class, servants and camp followers for above, 2 to each . . .		18,600

In the above calculations, no credit is taken for the great increase of the trade of the port, which is stated by the Collector of Customs (vide his letter, page 99), to have steadily augmented "for several years past at the rate of 20 per cent. per annum," and which bids fair to show a greater proportional increase for the future, from the desire evinced by the commissariat authorities to take advantage of the Indus route, in providing European necessaries to the troops in the Upper Provinces and the Punjaub.

As an experiment, 10,000 casks of ale and porter, during the present year alone, have been forwarded from England direct to Kurrachee, for transmission by the Indus. Should this not answer as an economical arrangement, from the serious drawbacks existing in the navigation of the tidal channels, and lower part of the river, a railroad, removing all these obstacles, could not fail to

have the effect of turning the scale in favour of the route, and a considerable traffic would be opened out in the conveyance of Government stores alone, to the no small benefit of Government itself.

It appears unnecessary to dwell upon the advantages, political, commercial, and social, which have invariably followed the introduction of railroads in all parts of the world, and which, I cannot but think are to be equally claimed for India, where British enterprise would still lead the way; nor need arguments be adduced to prove that India is in a position, from the immense capability which she possesses in her wide-spreading fertile plains for the growth of surplus produce, to take a prominent position among countries exporting raw materials and grain, provided only the means of transporting these staple sources of wealth to her numerous ports were adequately provided.

Scinde in itself is a crying proof of this prevailing want. Here, on account of the scarcity of a coined medium, a great portion of the Government revenue is annually paid in kind; and I have heard upon good authority, that it is not uncommon, in seasons more than usually abundant, to see masses of grain, which under other circumstances might possibly have been the means of mitigating in a distant part the horrors of famine, lying rotting on the ground. This necessity is further exemplified, in the case of the province, by the great disproportion which exists in the price of grain in the producing and consuming districts, as seen in the weekly tariffs (vide page 108), evincing an absence of the necessary means for regulating market prices, and rendering apparent the existence of a monopoly in the supply of the necessaries of life, which cannot but act prejudicially in any place or state of society.

A conviction of the general importance of Scinde, as a commercial acquisition, has so grown upon me during the course of the inquiries on which I have been engaged, that I cannot close this Report, especially since the examination shows that no financial objection exists to either project (canal or railway), without respectfully urging, through you, upon Government, the advisability of at once securing to the province and Upper India the manifold benefits which the adoption of either scheme, preferably doubtless the latter (the railway), is unquestionably calculated to bestow; and I would conclude by trusting, that the statistical information collated and embodied in the documents now submitted will, in some measure, excuse the length to which this Report has necessarily been extended.

I have the honor to be, &c.,

(Signed) W. CHAPMAN,

Lieutenant, Engineers,

On Special Duty, Scinde.

Kurrachee, November 1*st*, 1853.

From the FOREST RANGER IN SCINDE, on Circuit, to LIEUTENANT CHAPMAN, Engineer Department, on Special Duty, Scinde.

(EXTRACTS.)

SIR,

The red babool of Scinde, from the density of its fibre, and its lasting properties, is particularly suited, in my opinion, for railway sleepers.

After it is well seasoned, say for nearly two years, nothing is required to preserve the red babool from dry-rot, or the attacks of white ants.

If used before it is perfectly seasoned, I would recommend the simple and cheap process of giving a coating of tar to the babool, to protect it against the influence of water, and that only the *red wood* should be used.

If your Department will be at the expense of felling and removing the timber, and will lay no claim to the cuttings or chips therefrom, removed in the dressing, but will allow them to be disposed of by the Forest Department, you may *choose* timber from the forests, taking only the red wood for sleepers, by paying at the rate of Rs. 1 for each sleeper 8 feet in length × 10″ × 6″; or, if you will cause the timber to be dressed by the saw, instead of the hatchet, and allow the Forest Department to have the disposal of the planks, you may have the sleepers at Rs. 15 per score.

According to the above terms, no discount or deduction will be allowed on your bills.

You will be better able than I to form an estimate of the expense of cutting and conveying the sleepers from the forests.

The larger and older the trees from which the timber is taken, the better properties will it possess, and the less wastage of sap-wood will there be.

I would recommend trees not less than 4 feet in girth, from which 2 sleepers could be sawn.

Timbers may be sawn at the rate of Rs. 2 per hundred square feet, and pieces 8′ × 12″ × 10″ might be removed to the line of railway, leaving the cuttings in the forest.

I append a list of the forests from which timber may be had for your purpose, with their situation, &c.

I have the honour to be, &c.,

(Signed) R. W. BAYNE,

Forest Ranger in Scinde.

Bunnhur, Ranger's Office,

16*th May,* 1853.

Statement of Imports and Exports, also the Tonnage employed in conveying Merchandize, and the Amount of Freight paid thereon, from May 1851 to April 1852,

	Imports from			Exports to			On Import, No. of Tons employed in conveying Merchandize, and the Amount of Freight paid thereon.				On Export, No. of Tons employed in conveying Merchandize, and the Amount of Freight paid thereon.				Number of Days occupied in Upward Trip.		Number of Days occupied in Downward Trip.	
							Number of Tons.	Amount of Freight			Number of Tons.	Amount of Freight.			Fair Season.	Cold Season.	Fair Season.	Cold Season.
	Rs.	A.	P.	Rs	A.	P.		Rs.	A	P.		Rs	A.	P.				
Tatta	3,362	5	0	7,613	4	0	117	67	13	0	254	130	4	0	2 days.	5 days.	$1\frac{1}{2}$ day	4 days.
Jeruck	2,156	8	0	187	13	0	68	39	0	0	66	35	12	0	3 ,,	7 ,,	$2\frac{1}{2}$,,	6 ,,
Kotree	2,250	8	0	15,070	0	0	112	101	8	0	24	26	0	0	4 ,,	10 ,,	3 ,,	9 ,,
Hyderabad	90,391	0	0	2,09,267	5	6	3,385	2,690	10	0	3,074	2,131	12	0	4 ,,	10 ,,	3 ,,	9 ,,
Muttara	24,231	8	0	3,815	0	0	879	480	12	0	594	195	12	0	5 ,,	11 ,,	5 ,,	10 ,,
Gotannah	1,76,866	8	0	37,775	8	0	6,664	5,404	13	0	3,132	1,618	12	0	6 ,,	13 ,,	5 ,,	11 ,,
Mazendah	10,715	8	0	1,567	0	0	452	395	4	0	608	371	0	0	7 ,,	14 ,,	7 ,,	13 ,,
Sehwan	16,796	0	0	7,847	0	0	736	1,237	8	0	352	270	8	0	8 ,,	16 ,,	9 ,,	14 ,,
Larkhana	4,664	0	0	1,457	0	0	73	242	8	0	34	38	8	0	14 ,,	40 ,,	11 ,,	28 ,,
Sukkur	5,40,268	8	0	4,07,871	13	8	6,398	12,484	0	0	3,360	5,768	11	0	15 ,,	45 ,,	12 ,,	40 ,,
Shikarpore	3,211	0	0	.....			24	56	6	0	..	.....			16 ,,	48 ,,	15 ,,	45 ,,
	8,74,913	5	0	6,92,471	12	2	18,908	23,200	2	0	11,498	10,586	15	0	84 days.	219 days.	$73\frac{3}{4}$ days.	199 days.

Khettie Custom House, 3rd June, 1853.

(True copy)
(Signed) J. MACLEOD,
Deputy Collector.

(Signed) M M. D'ABREO,
Clerk in Charge.

Statement showing the Number of Government Troops, Stores, and Passengers, conveyed by the different Steamers and Flats of the Indus Flotilla, between Kurrachee and Mooltan, and vice versâ, between the 1st February, 1848, and 30th April, 1853.

No. of	Government Stores: Quantity or No. of Packages.	Government Stores: Tonnage.				No. of Government Passengers.	Remarks.
		Tons.	cwt.	qrs.	lbs.		
28,022	133,319	10,935	13	3	21¾	20,831	The Stores comprise Military, Ordnance, Commissariat, and Flotilla Stores, which are usually numerous and bulky; grain for the Commissariat Departments in the province; boxes of treasures; iron stores for the Punjaub, which have been excessively heavy, and will, in all probability, increase yearly; Regimental kit and baggage of Troops; and ale and porter for the Punjaub, which will also increase in quantity.

Kotree, 23rd June, 1853.

(True copy)
W. CHAPMAN, Lieutenant, Engineers,
On Special Duty, Scinde.

(Signed) R. ETHERSEY, Captain I. N.,
Commanding Indus Flotilla.

Return of the Traffic at the undermentioned Places, from June 1852, to May 1853 inclusive, compiled from the Monthly Returns furnished by the Police Authorities.

	Jemedar-ke-Landi.											Gharra.										
	Carts.	Camels.	Horses.	Donkeys & Mules.	Horned Cattle.	Sheep and Goats.	Porters with Loads	Foot Passengers, European.	Foot Passengers, Native	Palkies or Litters	European Carriages.	Carts.	Camels.	Horses.	Donkeys & Mules.	Horned Cattle.	Sheep and Goats.	Porters with Loads	Foot Passengers, European.	Foot Passengers, Native.	European Carriages.	Palkies or Litters.
1852.																						
June	19	722	316	463	406	58	641	5	1 307	2	2	..	1,696	962	1,421	910	2,409	243	16	3,624	1	..
July	12	950	398	395	311	42	1,421	6	1,329	..	..	..	848	691	1,240	1,920	1,640	1,779	11	2,753	.	..
August	..	500	339	430	263	63	853	5	1,343	1	..	..	389	561	978	2,774	2,468	1,513	..	2,462	1	..
September	1	682	559	639	614	143	413	10	1,339	3	..	..	236	511	934	1,091	1,834	1,370	1	2,282	..	..
October	..	812	685	595	720	112	315	29	2,722	5	2	.	1,709	1,470	3.172	622	5,197	3,220	12	3,219	3	1
November	13	792	882	478	812	80	682	28	6,985	6	..	3	1,192	666	1,793	240	3,093	1,718	3	2,996	1	..
December	12	1,235	927	635	879	75	598	33	7,879	18	15	7	1,892	821	1,081	1,777	62	2,182	25	3,760	10	6
1853.																						
January	20	458	1,112	847	927	109	735	75	7,975	25	7	9	2,648	1,178	1,821	3,140	2,078	3,101	38	4,196	16	2
February	42	119	1,019	994	1,124	48	712	38	2,562	4	10	42	1,531	775	1,434	1,350	12	1,094	19	3 648	.	5
March	25	457	389	512	585	112	372	87	4,912	15	12	13	3,715	2,666	2,337	3,019	790	2 061	32	4 714	4	5
April	27	430	157	540	415	625	289	49	5,678	12	5	39	3,593	3,039	2,618	4,547	1,300	2 689	39	4,970	3	1
May	30	540	379	412	327	217	256	27	2,927	2	3	33	4,349	3,047	3,114	5,121	303	3,712	14	5,493	..	1
Total	201	7,697	7,162	6,940	7,416	1.684	7,287	392	46,958	93	56	146	23,798	16,387	21,943	26,511	21,186	24,682	210	44,117	39	21
Gharra	146	23,798	16,387	21,943	26,511	21,186	24.682	210	44,117	39	21											
Tatta	132	13,438	6,850	6,052	9,041	4,138	5,142	218	34,475	34	15											
Jeiruck	66	4,391	2,339	3,843	4,460	5,561	718	81	21,094	7	13											
Total	344	41,627	25,576	31,838	40,012	30,885	30,542	509	99,686	80	49											
Grand Total	545	65,425	32,738	38,778	47,528	32,569	37,829	901	146644	173	103											
Mean of the above four places	136	16,356	8,184	9,694	11,882	8,142	9,457	225	36,661	43	25											

Roll of the Merchants residing in Kurrachee, showing the Amount of Merchandize transported by them during the Year 1852 from Kurrachee up Country, Weight and Approximate Value of each Load, and the Number of Camels and Tattoos used for the carriage thereof.

No.	Names of Merchants.			Camels.		Tattoos.		Total Value of Loads.	Remarks
	Name of Owner.	Resident of	Name of Agent or Carrier.	No.	Value of Load.	No.	Value of Load		
	Merchants of Kurrachee.				R. A. P.		Rs. A. P.	Rs A. P.	
1	Sett Khemchund	Kurrachee	.....	100	12,500 0 0	25	5,000 0 0	17,500 0 0	
2	Sett Ayudass	Majundeh.....	Khanchund	350	23,750 0 0	..	... .	23,750 0 0	
3	Numga Bhattia	Gumbat.....	Kowul wullud Hassah	400	50,000 0 0	..	.....	50,000 0 0	
4	Sawutt wullud Golla	Ditto	Mungut wullud Oomema.....	380	47,500 0 0	..	.....	47,500 0 0	
5	Gool Patolee.....	Allyar-ke-Tanda ..	Godoo Bhattia	160	19,000 0 0	.	..... .	19,000 0 0	
6	Seekeeamull.	Gumbat.....	Gooloomull wullud Butchamull.	625	78,125 0 0	.	... .	78,125 0 0	
7	Gungoomull wullud Hoonda	Gorrabarry	Ramjeemull	128	16,100 0 0	..	.....	16,100 0 0	
8	Muggunmull wullud Chutta	Ditto.....	Achoomull wullud Amund	571	91,375 0 0	..	.....	91,375 0 0	
9	Nuwoomull	Kurrachee.....	Mahboob wullud Khemchund..	80	10,000 0 0	..	.....	10,000 0 0	
10	Anoomull wullud Endas	Majundeh.....	.....	141	16,625 0 0	..	.....	16,625 0 0	
11	Narroomull wullud Butcha.....	Barry	Gungoomull	272	34,000 0 0	..	.....	34,000 0 0	
12	Tarramull wullud Tawoomull ..	Sehwan...	.....	208	26,000 0 0	..	. .....	26,000 0 0	
13	Oomurnamull wullud Assamund..	Allyar ke-Tanda ..	.....	64	8,000 0 0	..	....	8,000 0 0	
14	Ayudass	Majundeh	Dinomull wullud Tilokchund ..	225	28,125 0 0	..	. . ....	28,125 0 0	
15	Husraz wullud Gam	Ragoo Ghotna	.....	64	8,000 0 0	..	.....	8,000 0 0	
16	Bheeromull wullud Darvun ...	Sehwan	....	245	30,625 0 0	..	.. ..	30,625 0 0	
17	Kawulmull wullud Rajoonund ..	Allyar-ke-Tanda ..	Harput wullud Allumchund ..	60	7,500 0 0	..	... .	7,500 0 0	
18	Sungut Wurrie	Ditto	Sukoomull wullud Lallchund ..	128	16,100 0 0	..	....	16,100 0 0	
19	Tellchund wullud Chundun ...	Gumbat.....	.....	160	19,000 0 0	..	.....	19,000 0 0	
20	Suntoo wullud Chellah	Ditto..	.. ..	322	40,250 0 0	..	.....	40,250 0 0	
21	Gungoo wullud Toolsia	Allyar-ke Tanda .	Duryanah wullud Sookhoo....	172	21,500 0 0	..	.....	21,500 0 0	
22	Vapareemull..... ...	Hyderabad	Bhumba wullud Tacoordass ..	601	75,125 0 0	..	.....	75,125 0 0	
23	Alla Bux	Tatta..	Bheewa wullud Suchanund....	625	78,125 0 0	..	.....	78,125 0 0	
24	Tarachund Mookhie	Hyderabad	Amvut wullud Suchanund	400	50,000 0 0	..	.....	50,000 0 0	
25	Bhoola wullud Gunoo.....	Ditto.....	....	250	31,250 0 0	.	.....	31,250 0 0	
26	Wunundmull	Ditto.....	Bhomull wullud Susanah	200	25,000 0 0	..	.....	25,000 0 0	
27	Halfiz Wurrianee	Tatta	Roshun wullud Niboodha	250	31,250 0 0	..	.....	31,250 0 0	
28	Goolam wullud Kadindinah	Ditto.....	.....	225	28,125 0 0	..	.....	28,125 0 0	Total camels 7,406; tattoos 25.
					9,22,950 0 0		5,000 0 0	9,27,950 0 0	

No.	Names of Merchants.			Camels				Tattoos.				Total Value of Loads				Remarks.
	Name of Owner.	Resident of	Name of Agent or Carrier.	No.	Value of Load.			No.	Value of Load.							
	Merchants of Shikarpore.				Rs.	A.	P.		Rs.	A.	P.	Rs.	A.	P.		
1	Mungoomull	Shikarpore	Rungoomull wullud Khooshial	150	45,000	0	0	..	...			45,000	0	0		
2	Lallchund wullud Boollamull	Ditto	.....	150	45,000	0	0	..	.....			45,000	0	0		
3	Madowdass	Ditto	Purushram wullud Chumondass	100	30,000	0	0	.	.....			30,000	0	0		
4	Choowur wullud Nanoo	Ditto	.....	150	45,000	0	0	..	.....			45,000	0	0		
5	Ramdass	Ditto	Beerban	150	45,000	0	0	..	.....			45,000	0	0		
6	Heerânund wullud Meghraz	Ditto	.....	250	75,000	0	0	..	.....			75,000	0	0		
7	Boollamul wullud Mohunmull	Ditto	.....	150	45,000	0	0	..	.....			45,000	0	0		
8	Narraindass wullud Goollamull	Ditto	Jumnadass	325	97,500	0	0	..	.....			97,500	0	0		
9	Rahakisson wullud Nundram	Ditto	Meghraz wullud Suchanund	271	81,300	0	0	..	.....			81,300	0	0		
					5,08,800	0	0					5,08,800	0	0		Total camels 1,696
	Merchants of Tatta.															
1	Assoomull	Tatta	Takoordass wullud Runchore	25	3,125	0	0	25	5,000	0	0	8,125	0	0		
2	Assoomull Ghunsawun	Ditto	Loodhunmull Bhattia	25	3,125	0	0	25	5,000	0	0	8,125	0	0		
3	Alla Bux Sakranee	Ditto	Gungoomull wullud Mungoomull	100	12,500	0	0	25	5,000	0	0	17,500	0	0		
4	Damoother	Ditto	Gowmull wullud Samee	100	12,500	0	0	25	5,000	0	0	17,500	0	0		
5	Assumull wullud Kissamull	Ditto	.....	250	31,250	0	0	50	10,000	0	0	41,250	0	0		
6	Wussund wullud Kara	Ditto	.....	250	31,250	0	0	50	10,000	0	0	41,250	0	0		
7	Edun wullud Kissamull	Ditto	.....	250	31,250	0	0	50	10,000	0	0	41,250	0	0		
8	Ruttonmull wullud Kissamull	Ditto	.....	250	31,250	0	0	50	10,000	0	0	41,250	0	0		
9	Jettamull wullud Hema	Ditto	.....	150	18,750	0	0	40	8,000	0	0	26,750	0	0		
10	Gundoowullud Lukku	Ditto	.....	100	12,500	0	0	25	5,000	0	0	17,500	0	0		
11	Hafiz Wumanee	Ditto	Roshun wullud Nibooda	100	12,500	0	0	40	8,000	0	0	20,500	0	0		
					2,00,000	0	0		81,000	0	0	2,81,000	0	0		Total camels 1,600; tattoos 430
			Grand Total	....	16,31,750	0	0		86,000	0	0	17,17,750	0	0		

(True copy) W. CHAPMAN, Lieutenant,
Engineers.

Estimate of the Average Load carried by Camels and Tattoos, and Approximate Value of each Load.

A camel load varies from seven to eight maunds; the merchants pay for eight maunds. It is optional with the Jhutts to use one or more animals for this load.

The value of a camel load of goods belonging to a Kurrachee merchant is averaged as low as Rs. 125, which is attributable to many of the loads consisting of grocery, cocoa-nuts, and dates, the maximum value of the loads being Rs. 130, minimum Rs. 12: the most valuable loads consist of sugar-candy.

The Shikarpore merchants' loads are much more valuable, consisting chiefly of silks and fine cloth, the maximum value of such being Rs. 800, minimum Rs. 300, average value Rs. 500.

The load of a tattoo is three maunds, valued at Rs. 200 per load, and is thus highly priced, as it consists of valuable silks and fine cloth.

From information obtained from various individuals, it is calculated that last year the Kurrachee merchants forwarded Rs. 9,27,950 worth of merchandize.

The Shikarpore merchants, or their agents residing in Kurrachee, Rs. 3,30,000 worth, the Tatta merchants Rs. 2,86,000.

The amount of the Kojahs' has not been ascertained, as also of one of Shikarpore, Sett Narraindoss, but the amount of merchandize transported up country by these parties is supposed to be about one lakh.

It is estimated that one lakh of goods is transported away by various people who do not reside permanently in Kurrachee, but come in to hire out their camels at the

opening of the season. The above account gives a total of Rs. 17,43,950 worth of goods transported from Kurrachee bunder. I feel pretty sure that this falls far short of the actual amount that was transported; but from a great dislike on the part of the merchants to disclose the amount of their business; from a foolish dread that the inquiry is only a forerunner of some kind of limitation, it was impossible to gain very accurate information on this subject.

(*Signed*) E. P. ARTHUR,
Officiating Captain of Police.

Kurrachee, 10*th October*, 1853.

From DEPUTY COLLECTOR OF CUSTOMS, Kurrachee, to LIEUTENANT CHAPMAN, Engineers, on Special Duty, Scinde, Kurrachee.

(EXTRACTS.)

There can be no doubt as to the benefits which must accrue to the province should a line of railway be carried out between Kurrachee and any point on the river. At present, the traffic is conducted partly by camels between Sehwan, Kotree and Kurrachee, and in part by the river doondas, which navigate the tidal channels at all seasons of the year: both are most tedious, and far from inexpensive, owing to the waste of time, more especially in the case of doondas, as also to the serious losses which occasionally occur, owing to the foundering of these unwieldy craft. In rainy weather, laden camels are unable to travel, so that the road line may be considered closed should a wet season occur.

As my duty extends to the registry of the external trade only, I am able to say nothing positive with regard to the internal traffic by land. One point, however, I am satisfied of—that is, that the whole of the trade which now finds its way by the direct line to Sehwan, to Kotree, and to Tatta, and by doondas and other cargo boats by the tidal channels, will all enter the railroad.

The external trade of Scinde has steadily increased at the rate of 20 per cent. per annum for several years past: this may form an index, though but a faint one, to the future progress of the province. We have already commenced a direct traffic with England, and once we are able to export produce to the mother country, Kurrachee will command the trade of Mekran, of Eastern Arabia, and of the Persian Gulf.

I may also add that the Indus, though nominally open to commerce since Lord Ellenborough's proclamation after the conquest of the country in 1843, yet was virtually sealed up to the beginning of last year, when river dues were finally abolished: we may therefore expect that the raw produce of the Punjaub and the North-west Provinces will now find its way continuously and uninterruptedly by the line of the Indus, in exchange for the manufactures of Europe—a trade which has already received considerable impetus from the establishment of the regular monthly steamer between Mooltan and Kurrachee. And here I must not forget to mention the important fact, that the Indus is now the highway for troops and military stores to the Punjaub and Upper India. During the present year, 5,000 casks of ale and porter alone passed through Kurrachee, and as much more is hourly expected. All this is conveyed in carts from Kemaree to Ghizree, a distance of six miles, where it is shipped in country boats, many of which will spend the greater part of a month in the salt-

water creeks before they get to the Indus. The cost of all these operations has yet to be ascertained, but were the projected railway in existence, there cannot remain a doubt, that not only a considerable saving would be made in carriage, but that the article itself would have every chance of reaching the Indus in good order and condition, a point which, under present arrangements, must be considered doubtful.

I have, in conclusion, to regret that I am unable to furnish you with more precise information on the various subjects touched on by you. The tables which accompany this are,—

1*st.* The last Trade Report of External Commerce.*

2*nd.* An Abstract of Shipping for 1852-53, with remarks thereon.

3*rd.* Statement of the River Traffic for 1851-52, and 1852-53, as registered at Khettie.

I have the honour to be, SIR,
Your most obedient Servant,
(*Signed*) J. MACLEOD.
Deputy Collector of Customs.

Kurrachee Custom House, 19*th October,* 1853.

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* *Vide* Appendix to Lieutenant Chapman's Report, printed for Bombay Government.

Abstract of Shipping for 1852-53 (*of the Port of Kurrachee*).

Ports.	Arrivals (at Kurrachee).								Departures (from Kurrachee).							
	Merchandize		Government Stores and Troops.		Empty.		Total.		Merchandize.		Government Stores and Troops.		Empty.		Total.	
	Vessels.		Vessels.		Vessels.		Vessels.		Vessels.		Vessels.		Vessels.		Vessels.	
	No.	Tons	No.	Tons.	No.	Tons.	No.	Tons.	No.	Tons.	No.	Tons.	No.	Tons.	No.	Tons.
Bombay	460	25,935	38	2,002	2	1,387	500	29,324	631	33,446	9	482	10		650	34,767
Concan	50	1,775	4	157	1	33	55	1,965	....	....	..	....	3	100	3	100
Cutch	389	10,529	30	1,283	19	655	438	12,467	273	6,730	43	2,089	59	2,264	375	11,083
Goa and Demaun	12	411	..	....	..	....	12	411	11	333	.	....	17	613	28	946
Guzerat	56	2,377	3	286	..	....	59	2,663	28	982	..	....	14	656	42	1,638
Malabar	53	2,924	..	....	..	....	53	2,924	20	907	..	....	3	175	23	1,082
Arabian and Persian Gulfs	92	3,166	.	.. .	1	38	93	3,204	45	1,611	..	....	4	158	49	1,769
Mekran	41	832	..	....	7	190	48	1,022	51	1,421	..	....	28	704	79	2,125
Total	1,153	47,949	75	3,728	30	2,303	1,258	53,980	1,059	45,430	52	2,571	138	5 509	1,249	53,510
Scinde	1,279	15,288	2	19	7	121	1,288	15,428	513	7,236	11	2	985	14,975	1,509	22,403
Grand Total	2,432	63,237	77	3,747	37	2,424	2,546	69,408	1,572	52,666	63	2,763	1,123	20,484	2,758	75,913

(*True copy*)

W. CHAPMAN, Lieutenant, Engineers.
On Special Duty, Scinde.

(*Signed*) J MACLEOD,
Deputy Collector of Customs.

From these statements, (says Mr. Macleod,) it will be observed, that the amount of tonnage entered inwards in 1852-53 amounted to, say, 48,000 tons, exclusive of the provincial coasting trade; and that the outgoing tonnage was 45,000 tons.

It would not, however, be correct to assume these figures as the amount or weight of our internal traffic, or rather as the weight of the traffic passing between Kurrachee and the upper country by the line of the proposed railway. To estimate this traffic, we must exclude from the above figures, 1*st*, the consumption at Kurrachee, Khettie, and the neighbouring places; 2*nd*, the imports and exports across our western frontier: and 3*rd*, an allowance should be made for the partial lading of vessels. The balance may then be taken as the probable amount of traffic which passed upwards and downwards.

PORTS.	ARRIVALS.			DEPARTURES.		
	Tonnage of Merchandize as registered.	Deduct Allowance as above.	Probable Amount passed upwards by Land & River	Tonnage of Merchandize as registered.	Deduct Allowance as above, Re-exports.	Probable Amount brought down by Land & River.
Bombay	25,935	6,935	19,000	33,446	8,446	25,000
Concan	1,775	1,775	....	....	....	....
Cutch	10,529	7,529	3,000	6,730	2,730	4,000
Goa and Demaun	411	411	....	333	183	150
Guzerat	2,377	2,177	200	982	682	300
Malabar	2,924	1,424	1,500	907	907	....
Arabian & Persian Gulfs	3,166	1,166	2,000	1,611	811	800
Mekran	832	432	400	1,421	721	700
Tons	47,949	21,849	26,100	45,430	14,480	30,950

As the internal traffic of the province has not been registered, the above is the only data that can be offered for a railway statistic. This department has not the means of estimating the village to village traffic, nor the

number of passengers passing upwards and downwards, both of which form important items in railway business.

The commerce of the port has been progressing during the past few years at the rate of 20 *per cent. per annum, and there is every reason to expect a continuance of the progressive ratio. The residents in the Punjaub have shown a desire to procure their supplies by the Indus, in preference to the line of the Ganges, and in a few years their desire will in all probability be gratified to the fullest extent. An extensive Affghan trader, who has had dealings with Calcutta for years, having tried the Bombay market during the two past seasons, has given the latter the preference. Others will follow his example. These prospects of the Scinde trade lead me to believe, that by the time a railway shall be laid down, and be prepared for action,* OUR COMMERCE WILL HAVE DOUBLED ITS PRESENT VALUE, AND THE PASSENGER TRAFFIC BE TEN TIMES AS MUCH AS IT IS AT PRESENT.

(*Signed*) J. MACLEOD,
Deputy Collector of Customs.

Kurrachee Custom House, 19*th October,* 1853.

Tabular View of the Returns of the Custom House, Kurrachee, Scinde, for the Official Years 1847-48, 1850-51, *and* 1851-52, *with a Contrasted Statement of the Increase and Decrease in Exports for* 1850-51, *and* 1851-52.

Names of Articles.	1847-48.		1850-51.		1851-52.		Increase in 1851-52.	Decrease in 1851-52.
	Imports.	Exports.	Imports.	Exports.	Imports.	Exports.		
	Value.	Value	Value.	Value.	Value.	Value.		
	Rupees.	Rupees.	Rupees.	Rupees.	Rupees.	Rupees.	Rupees.	Rupees.
Alum..	1,533	32	6,515	....	8,563	....	2 048	....
Almonds	3,919	18	4,700	1,025	3,157	2,105	....	463
Apparel, Hosiery, and Millinery	35,083	3,845	82,361	2.956	97,597	4,877	17,157	....
Bullion and Coins	2,150	7,73,719	12,870	4,919	14,097	8,810	5,118	....
Beads	412	37	1,464	619	1,648	918	483	....
Beer	77,225	....	1,39,956	301	1,55,219	870	15,832	....
Betelnut	11,995	380	9,280	3,142	17,630	2,227	7,435	....
China and Earthenware..	4,947	575	17,027	1,015	21,285	502	3,745	....
Cochineal	14,236	35	23,361	....	41,490	....	21,129	....
Cocoanuts	46,425	....	6,959	1,013	15,500	973	8,501	....
Ditto dry	....	26	75,290	264	87,775	189	12,410	....
Coffee	6,409	....	5,001	....	5,066	....	65	....
Cotton, raw	1,13,453	4,760	52,217	3,285	94.883	3,909	43,290	....
Dates	1,22,955	12,937	1,06,603	6,726	94,535	3.314	....	15,480
Drugs and Medicines	13,795	23,934	33,214	28,906	41,061	23,470	2,411	....
Fishmaws..	....	20,835	219	9,924	145	11,926	1,928	....
Ghee	2,184	7,268	30,569	22,879	3,307	96,161	46,020	....
Glassware	11,914	11,617	26,667	7,110	29,138	10,349	5,710	....
Grain of sorts	3,04,367	46,510	84,830	5,97,257	2,02,591	6,97,756	2,18,260	....
Gums	1,945	1,777	2,270	1,033	2,459	510	....	334
Gunnies	268	1,610	1,209	2,856	2,643	2,195	773	....
Horses, and live Animals	....	2,05,800	....	82,000	....	1,01,600	19,600	....
Hardware and Cutlery	12.616	1,219	89,109	1,890	75,382	1,648	....	13,959
Indigo	4,149	28,252	....	1,56.550	....	2,15,958	59,408	....
Ivory	11,233	174	11,745	211	17,864	1,310	7,218	....
Marine Stores	946	....	....	....	....	....	....	....
Metals	32 915	675	1,55,111	1,073	1,64,916	392	9,124	....
Oils of sorts	14,103	1,435	4,759	25,082	2,244	23,802	...	3,795
Carried over....Rs.	8,51,177	11,47,470	9,83,506	9,62,026	12,03,195	12,15,771	5,07,665	34,031

Names of Articles.	1847-48.		1850-51.		1851-52.		Increase in 1851-52.	Decrease in 1851-52.
	Imports.	Exports	Imports.	Exports	Imports	Exports		
	Value	Value.	Value.	Value.	Value.	Value		
	Rupees.	Rupees	Rupees	Rupees	Rupees.	Rupees.	Rupees	Rupees
Brought over....Rs	8,51,177	11,47,170	9,83,506	9,62,026	12,03,195	12,15,771	5,07,665	34,031
Oilman's Stores	3,881	....	49,759	4,076	56,363	223	2,751	....
Piece Goods, Cotton and Silk	9,22,064	12,881	15,60,297	17,161	18,70,958	39,213	3,32,713	....
Plate and Plated Ware	3,588	50	5,649	....	6,284	195	830	....
Precious Stones and Pearls	545	....	9,623	455	16,703	650	7,275	....
Perfumery	3,295	261	8,956	133	11,624	....	2,635	....
Sharkfins	....	9,[illegible]39	298	15,613	50	17,607	1,746	....
Shawls	....	1,293	2,814	10,311	1,080	5,058	....	6,987
Silk, raw	67,107	537	1,50,500	1,225	1,17,063	5,196	....	29,466
Spice	61,656	427	1,12,801	585	1,88,029	183	74,826	....
Spirits	52,375	9,715	1,06,144	606	1,10,530	157	3,937	....
Stationery	18,050	133	47,634	455	51,756	2,543	6,210	....
Sugar	4,39,204	1,469	4,35,163	334	3,69,256	424	....	65,817
Sugar Candy	11,696	....	19,377	...	26,239	....	6,862	....
Tea	32,739	....	27,108	128	51,200	150	24,114	....
Tobacco	31,980	5,130	31,600	111	51,582	877	17,748	....
Timber	12,421	....	24,478	4,684	40,980	248	12,066	....
Twist and Yarn, Cotton of sorts	47,900	337	1,40,820	216	1,89,481	453	48,898	....
Wines of sorts	40,795	110	1,12,090	3,803	1,18,964	...	3,071	....
Wool	....	1,81,598	2,675	5,19,318	950	7,67,162	2,36,119	....
Woollens, British and Country	22,342	1,102	29,460	3,673	48,172	2,094	17,133	...
All Articles not enumerated above	2,56,005	1,75,453	3,94,764	4,19,805	3,61,743	3,93,021	....	59,802
Total....	28,78,720	15,47,308	42,58,316	19,64,618	48,92,202	21,41,228	13,06,599	1,96,103
						Less decrease	1,96,103	
						Net Increase for 1851-52....Rs.	11,10,496	

Statement showing the Number of Troops conveyed by the different Steamers and Flats of the Indus Flotilla between Kurrachee and Mooltan, and vice versa, *between the* 1st *February*, 1848, *and* 30*th April* 1853, *also the Number that marched from Kurrachee to Sukkur, and* vice versâ

	Number.	Remarks.
Troops	28,022	These comprise Invalids, &c. from Upper Provinces, Treasury Guards, Escort Parties, and Recruits from the Punjaub.
Ditto	18,480	These comprise the Troops proceeded on Field Service, and Reliefs.
Years 5	46,502	
	9,300	Men per annum.

(Signed) JAMES L. EVANS, Lieutenant,
Deputy Assistant Quarter Master General.

(True copy)
W. CHAPMAN, Lieutenant, Engineers,
On Special Duty, Scinde

Prices Current in the Districts during the Week ending 20th June, 1853. (*Scindian, July 2nd, 1853.*)

	Doaba.			Nowshera			Meerpoor.			Mahomed Khan's Tanda.			Habla.			Kurrachee Town.			Shwan.			Ghorabaree.			Shah Bunder.			Shikarpore.			Sukkur.			Larkhana			Mahur.		
	Rs.	A	P.	Rs	A.	P	Rs.	A.	P	Rs.	A.	P.	Rs.	A.	P	Rs.	A.	P	Rs.	A.	P	Rs	A.	P.	Rs.	A.	P	Rs.	A.	P	Rs.	A.	P	Rs	A.	P	Rs	A.	P
Wheat...	0	11	0	1	1	6	1	2	0	1	5	0	1	0	0	2	0	0	0	11	6	1	6	0	1	5	0	1	0	6	0	10	10	0	11	10	0	13	8
Wheat Flour ..	1	3	0	1	4	0	1	8	0	1	14	0	1	4	0	1	10	0	1	4	0	2	0	0	2	1	3	1	1	8	0	14	6	1	2	6	1	4	3
Jowarree	0	14	0	0	14	0	0	13	0	0	13	0	0	11	5	.....			0	13	9	1	0	0	0	12	0	0	12	9	0	13	0	0	12	0	0	12	3
Bajeree	0	14	0	0	13	0	0	15	6	0	15	6	0	13	6	1	0	0	0	13	9	1	1	6	0	15	3	0	11	0	0	11	0	0	10	10	0	11	6
Barley	0	10	0	0	14	0	0	14	0	0	12	0	1	0	9	0	11	0	0	11	3	0	8	1	0	6	3	.....			0	9	2	0	11	2	0	9	5
Rice in husk, White	1	2	0	....			3	1	3	1	12	0	1	5	0	.....			3	5	4	1	5	0	1	5	3	1	1	9	1	4	0	1	4	6	1	2	9
Rice, Red	1	0	0	....			2	10	0	1	4	0	1	0	0	1	10	6	2	5	8	1	2	2	1	0	0	.....			2	0	0	0	14	11	0	14	10
Rice	2	14	0	3	8	0	3	1	3	2	12	0	2	8	0	1	14	0	4	0	0	2	12	0	1	8	8	2	10	0	3	1	3	2	5	5	2	11	0
Gram	1	1	0	1	7	0	1	10	0	2	0	0	1	0	0	0	12	0	1	8	7	2	0	0	.....			1	0	0	0	13	1	0	15	6	0	15	11
Jambha	0	11	0	0	10	0	0	10	0	0	12	0	0	14	0	1	15	0	0	11	10	0	13	0	.....			0	11	9	0	14	6	0	10	4	0	9	0
Moong...	1	8	0	1	12	6	1	12	0	1	8	0	1	8	6	0	11	0	1	8	0	1	8	11	1	4	0	1	13	6	2	13	0	1	8	9	1	7	10
Muttar	0	7	0	0	12	0	0	11	9	0	12	0	0	7	0	11	0	0	0	7	8	0	10	11	.....			0	11	0	0	8	0	0	9	6	0	8	2
Cotton...	10	0	0	10	0	0	10	0	0	12	8	0	9	0	0	18	0	0	10	0	0	12	8	0	13	2	0	8	14	0	10	0	0	8	5	0	10	6	0
Wool	10	8	0	9	0	0	7	10	0	14	0	0	10	0	0	11	0	0	11	0	0	8	0	0	4	6	0	12	15	6	12	8	0	10	14	10	10	10	0
Ghee	10	10	0	8	0	0	11	0	6	11	13	0	11	0	0	11	0	0	10	10	8	10	10	6	10	0	0	11	1	6	11	0	6	10	3	2	9	1	0
Indigo	83	14	6	60	0	0	1	12	0	70	0	0	60	0	0	65	0	0	80	0	0	80	0	0	65	0	0	57	8	0	60	0	0	60	3	2	60	6	8
Goor	4	0	0	....			5	0	0	4	12	0	4	4	0	4	12	0	5	0	0	4	0	0	5	0	0	3	14	0	4	4	0	3	9	0	4	1	4
Tobacco	....			....			3	10	0	....			.....			.....			.....			.....			.....			....			....			....			....		

REMARKS.

Taking the first item, or wheat, the profits derivable by the merchants from want of competition may be deduced as below. Take Sukkur and Kurrachee, the former place being on the river, distance by land 290 miles :—

Rs.	
2 0 0	per maund at Kurrachee.
0 10 0	ditto at Sukkur.
Rs. 1 5 2	difference in price.
(Rs. 0 10 10	ditto = Rs. 37 0 8 per ton.
For carriage—Deduct 1 anna per ton per mile, or 290, as =	18 3 4 per ton at Sukkur.)
	18 2 0
	Rs. 18 4 8 remaining.

Being nearly 100 per cent. for profits and risk, which is exorbitant in the extreme.

W. C.

Kurrachee, October, 1853.

(True copy, corrected from the original Returns,)
W. CHAPMAN, Lieutenant, Engineers, on Special Duty, Scinde.

From the SUPERINTENDING ENGINEER, Railway Department to the Government of Bombay, to H. E. GOLDSMID, Esq, Secretary to Government. Dated *Bombay, 2nd December,* 1853.

(EXTRACTS.)

SIR,

In paragraph 12 of Mr. Chapman's report, he says, "The gauge has been fixed at 4′ 8½″, as being that now, by common consent, most generally adopted." Without entering into any discussion as to the relative merits of various widths of gauge, I may mention, that that chosen for the lines now in progress at the three Presidencies is a medium one of 5′ 6″; and although there is no absolute necessity for keeping to the same in any line west of the Indus, as the public could not at any future period be inconvenienced by such break of gauge, still, if only for uniformity's sake, it might be advisable in all Indian railways to adhere to one gauge, should no good reasons exist for adopting another in any particular instance. In laying out the plans for the proposed line from Kurrachee to Kotree, I would recommend, unless there are reasons to the contrary, that a gauge of 5′ 6″ be adopted.

As regards sleepers, a large proportion of the line, where it may be surface line, or in cutting, would, I presume, from the facilities of procuring the material, be laid with stone blocks: these, certainly, do not make so easy and smooth a road as a line laid with wooden sleepers, but the economy would probably be great. Sleepers for the embankments, then, would only have to be provided for. And with reference to what Major Turner mentions respecting the ravages of white-ants, there seems reason to suppose, from our present experience on the Bombay and Tanna line, that the vibration of the passing trains is sufficient to deter that insect from attacking the wood, but longer experience is necessary to be quite certain on this point. I have, &c.,

(*Signed*) J. H. G. CRAWFORD, Captain.

PROCEEDINGS OF A PUBLIC MEETING AT KURRACHEE, *on the 28th August*, 1854, for promoting Railways in Scinde.

PURSUANT to notice, a Meeting was held at the Collector's Cutcherry Kurrachee, on Monday August 28th, 1854. The Meeting was numerously attended by most of the influential Members of the community. Amongst those present were Mr. Frere, the Commissioner in Scinde, the General commanding the Division, the Brigadier commanding at Kurrachee, and all the heads of departments.

Mr. FRERE having taken the chair, said that he was sure the Meeting would be very sorry to hear that Mr. Hardy Wells, whom he had hoped to see there to take a prominent part in their proceedings that evening, had been prevented by sudden and severe illness from being present. Mr. Wells had, however, addressed a letter to Major Preedy, from which and from other communications which he had himself received from Mr. Wells, he (the chairman) would as far as possible supply the information which he had hoped Mr. Wells would have been able personally to communicate to them. He would now say a few words as to the object of the Meeting. The requisition calling it was addressed to all who were interested in the introduction of railways into the province. It might therefore be taken for granted that all there present wished to see railways introduced, and that they did not require any argument to convince them of the utility of railways in general. As to the peculiar advantages

which railways would confer on this province, much would doubtless be stated incidentally in the course of the evening. He would not, therefore, detain them with any discussion on the subject now, but briefly describe the history of the present undertaking. They were aware that the present scheme contemplated a line of Railway to connect Kurrachee with the Indus. After describing the great length of the navigable channel of the Indus and its tributaries, and the difficulties in the navigation of the Delta, Mr. Frere explained that the Railway was to connect Kurrachee, the only port on the coast near the mouth of the river, with Jerruck, which had been selected as being the lowest point on the stream where the channel was fixed and invariable in consequence of the river there flowing over a rocky bed. He then described how Mr. Hardy Wells had, in passing over the districts between Kurrachee and the Indus about two years ago, been struck by the peculiar advantages it offered for the construction of a railway. Mr. Wells reported the results of his observations to parties at home who were interested in the subject, and forwarded detailed surveys which had been procured for him by Major (now Colonel) Turner, and statistical and other data furnished by the late Mr. Macleod, Deputy Collector of Customs, Kurrachee.

In the same season 1852-53 Lieut. Chapman, employed on a project for connecting the Indus with Kurrachee by a canal, pointed out the superior advantages of a railway in his published report. The project was taken up by Government, and detailed surveys ordered, the prosecution of which was interrupted by Lieut. Chapman's untimely death. In the mean time, the scheme proposed by the parties to whom Mr. Wells had reported in England was making progress. In Mr. Wells's unavoidable absence, he (the chairman) had been authorized to state that the

reception which the scheme had met with from the home authorities was as favourable as could be reasonably expected; and the Home Government was prepared to consider favourably any propositions on behalf of the Railway which might be laid before them, backed by the recommendation of the Government of India. It was not necessary for him (the chairman) to state that he felt confident any scheme possessing such intrinsic merits, as he believed this did, would meet with every reasonable consideration from the Governor-General, who had organized and was now executing a vast scheme of railways for the whole of India, and he felt equally sure of like support from the Government of Bombay.

Among the obstacles which had delayed the scheme, one was the want of certainty as to the character of the port. Of course, if the port were closed for four months of every year, it could never become better than the minor ports on the coast of India, and no railway terminating at such a port could be of more than local value. Mr. Wells, in his published pamphlet, and Colonel Turner in his report on the bar, had shown that the natural advantages of the port were very great, and that the difficulties which existed were all capable of removal, provided the trade of the port were such as to justify the requisite expense. Last monsoon, Sir H. Leeke sent up the *Queen*, the first large vessel which had ever come there in the monsoon, and the following were the results of last season's experience, as to the possibility of entering and leaving the harbour during the monsoon months.

1853.

June 20th, *Queen*, 750 tons, drawing 16 feet.
July 5th, *Do.*
„ 23rd, *Do.*

1853.

August 3d, *Auckland*, 800 tons, 15½ feet.
„ 5th, *Do.*
„ 6th, *Queen.*
„ 16th, *Rubicon*, 16 feet.
„ 20th, *Auckland.*
„ 27th, *Do.*
Feb. 8th, *Victoria*, 478 tons, 15½ feet.
„ 11th, *Rubicon.*

But this experience of one season was of course inconclusive, and here is the result of the present season.

1854.

July 11th, *Queen*, 750 tons, drawing 16 feet.
„ 22nd, *Sea Queen*, 414 tons, 15 feet 8 inches.
August 2nd, *Ann Black*, 513 tons, 16 feet 3 inches.
„ 7th, 2 *Dingeys* from Guadur.
„ 13th, *Queen*, 750 tons, 16 feet.
„ 23rd, *Auckland*, 800 tons, 15½ feet.
„ 27th, *Do.* do. do.

Now after these results, during two monsoons, there can hardly be said to be any further doubt, but that even in its present state the Port of Kurrachee is not closed to ships of any burden not drawing more than 16 or 17 feet water. After showing how much this most satisfactory result was due to Captain Young of the H.C.S. *Queen* and to Lieut. Leeds, I.N. the Port Officer who had shown so much judgment and intrepidity under most trying circumstances, the Chairman proceeded to refer to Colonel Turner for information as to the working surveys of the line which were still incomplete, and which must of course be executed before any steps could be taken to commence the actual construction of the Railway, but which he hoped would be completed before the close of another season. But the great difficulty of all was of

course the capital. It had been found necessary to execute all Indian Railways under a Government guarantee, and Mr. Wells had assured him, that the promoters of the scheme at home had every reason to hope that terms as favourable as those guaranteed to other lines would be obtained by them, provided they could satisfy the Government of India as to the intrinsic merits of their line. The war had deranged the money-market, and there were questions still open as to the exact terms which might be reasonably asked for, but the promoters were sanguine that such questions would receive a satisfactory solution.

Capitalists in England would naturally ask what was the local opinion as to the project, and this was a question which the Meeting might this evening answer.

The Meeting would also afford an opportunity for parties so inclined to ask for information, which would as far as possible be afforded.

Colonel Turner then rose, and addressed the Meeting as follows:—

Gentlemen,—Our Chairman has referred you to me for information on various points, relative to the subject we have here assembled to consider, and I will endeavour to place that information briefly before you.

The early history of the proposed Railway has been explained to you. My connection with it is set forth in a letter written to the Commissioner, on the occasion of my submitting to him the very lucid and able report, of my lamented brother officer, the late Lieut. Chapman; that letter having been published by Government has I doubt not been read by most of you, but it is desirable that you should know what has been since done in the matter and how far subsequent experience may have led me to modify the opinions I therein expressed.

In that letter I stated the reasons why improved communication from Kurrachee to the Indus was so urgently

required; subsequent experience proves more and more the necessity of some work for the attainment of that object; last year the communication from the mouth of the main river to the tidal creeks was cut off and the river steamers had to pass by a circuitous route—this year the Hujjamree, a very useful channel last year, has been closed to steam vessels, and the pilots on it have been withdrawn; it has been proposed to improve these creeks, but though possible, such improvement can neither be durable nor certain, and will cost a very large sum of money. For the river navigation it is generally believed, that a class of boats larger than any now on the river, will be found the best adapted, but the *Indus*, one of the vessels now on the river, is already too large to be trusted in the tidal creeks, and thus improvement is checked.

In my letter before referred to, I mentioned an instance, showing very palpably, the want of improved means of communication, from the river to Kurrachee. I also explained how well the Americans understood these matters: in that country it is said, that with much better made roads than anything we can boast of in this Province, the cost of conveying wheat by such roads doubles its cost price, if carried a distance of 330 miles, while the same result is produced by carrying cheaper grains only 160 miles, whereas both could be carried, the wheat 330 miles, and the cheaper grain 160, by railway, for less than 10 per cent. on their cost prices.

The effect of this, Gentlemen, we all feel at Kurrachee, we see by the prices current in the districts how cheap grain is there, and we know to our cost how much we have to pay to feed our horses here, are we not then individually interested in the object, leaving public spirit wholly out of the question?

As an Engineering work, further experience confirms me in the opinion I have already expressed, that there is no difficulty of any serious consequence to be contended

with; the country I consider peculiarly favourable for railways—the hills may easily be avoided, and to the two principal difficulties, crossing the "Mullear" and the "Bahran," rivers I attach very little importance. In my letter before referred to, I stated my belief, that an examination of the "Bahran" would prove that it might be crossed higher up than the direct line of road, without difficulty: that examination has been made by Mr. Woodhouse of the Indian Navy, and my expectation has been realized, for he has found a point, not out of the way, with rock on both banks, and throughout the bed of the river, at a depth of 12 feet.

I have never been sanguine of the success of Railways in India, as an investment for private capital, though I fully recognise the advantage they must prove to the country both politically and commercially. I was in Bombay when the Great Indian Peninsular Railway was got up, and did not take shares in it, because I did not believe it would pay as large a rate of interest as other equally safe investments, and notwithstanding the success of the portion of that line open, I still think it will not pay when the extensions are completed. I do not mean to say it never will pay, but that it will not pay the first subscribers to it. The principal goods' traffic expected, Cotton, we all know is ready to be sent to a market at one season of the year, it can all be carried to Bombay in a few months, and for the rest of the year a traffic must spring up;—not so, however, in Scinde, here we have two seasons, and the statistics before us prove that a paying goods' traffic all the year round *already exists*—my objections therefore to invest in railways in general are not applicable to Scinde, and I hope to become a shareholder in the Kurrachee and Indus Railway.

The Chairman has referred to me on the question of how the preliminary surveys are to be made; I wish I could definitely solve the difficulty; I fully anticipated

until very lately that an engineering staff engaged by the Railway Company now forming in England would have been here in the field early in November; in this hope I fear we shall be disappointed, I know that the Government is anxious that the surveys shall be set in hand, means indeed were sanctioned, and I do not doubt that Government would still carry on the work if only efficient men to undertake it could be found. I have been and still am in communication with several, but though I have by no means given up all hope that they may yet be forthcoming, I am sorry to say, I have not succeeded in securing their services up to the present time.

MAJOR-GENERAL SIR H. SOMERSET rose, and said that he had been entrusted with a Resolution, which he begged permission to read to the Meeting. It ran as follows:—

"That this Meeting having heard that a Company is forming in England to construct a Railway between Kurrachee and the Indus, request the Commissioner to state to Government their sense of the incalculable commercial and political advantages which such a work would confer on the Province, and that he will express their hope that the Government of India may be solicited to assist the undertaking by the grant of the same privileges as may be conceded to undertakings of a similar character in other parts of India."

The Resolution was one in the tenor of which he so fully concurred that he felt much pleasure in being permitted to lay it before the highly influential and numerous Meeting assembled on this occasion. He had not been long in the Province, but his residence had been of sufficient duration to convince him beyond a doubt that the Railroad now proposed was *the* measure most urgently required, and most immediately called for, to promote the well-being of this and the neighbouring countries. The Commissioner had suggested that he (the General) would

demonstrate the advantages to be derived from a Railroad in a military point of view. With all deference he would state that the first point for consideration was whether there would be any return for the outlay. Capitalists must ensure some return before they would venture their capital—he need not tell them that this was an universal law with monied men all over the world. And what was there to ensure this? After the perusal of Lieutenant Chapman's careful report founded upon facts and figures, framed from statements of actual traffic, no one could doubt as to the returns from commercial sources. They had just heard, too, from Mr. Frere further illustrations of Lieut. Chapman's opinion. He would add one important item which had not been taken into calculation at all—and he would beg their attention to the fact that Government had determined to forward all troops and stores for the Punjaub and adjacent Provinces by this route, which even with its present difficulties is far superior to any other. Here then was one source of emolument at once secured. The Government stores, the iron and other materials required for stupendous public works, the large supplies of porter and ale—would form a very considerable item; the recruits arriving, the invalids returning to their homes, the troops relieving and relieved, the numerous officers taking or returning from leave—all these would swell the passenger returns far beyond the numbers for which calculation had been made. He had drawn attention to these military matters only so far as the profits of the Company would be affected, for, as he before obeerved, it was to a return for the outlay expended that the capitalist would look—and if capitalists would be convinced on this point, it would be better than any speechifying in this or any other place. He could not, however, overlook the advantages in a purely military point of view—the great benefit which the Government would derive from

being enabled on emergency to transport large bodies of troops and set them down at their destination a hundred miles from their starting point in a few hours—or from forwarding for active service stores and provisions, or the other munitions of war. These are such palpable considerations, that he may be excused for only briefly touching thereon. But he is assured that they will have no small weight with the authorities in according favorable terms to any company that may contribute to the attainment of such great political and military advantages.

Sir Henry Somerset's motion was carried by acclama- without a dissentient voice.

In reference to Sir Henry Somerset's remarks as to the number of troops and Government stores which would take this route, the Chairman stated that last season 9,105 hogsheads of malt liquor were sent up from Kurrachee to Ferozepore for the troops; they had arrived in excellent order, though they were of necessity exposed on the Indus during the whole hot season. They occupied from twenty days to more than a month in getting into Kotree from Kurrachee, a distance which by railway would be traversed in five or six hours. In 1852-3 only 200 tons of Government stores were sent to the Punjaub—last season 1853-4 the quantity was 3429 tons.

Major Preedy then rose and addressed the Meeting, he said that as the proposed Railway was to be constructed entirely in his collectorate, he considered it his duty to bear testimony to the great commercial advantages likely to be gained by it, in the transport of large quantities of grain of all descriptions, which are produced in such luxuriance in Upper and Middle Scinde. The quantity of grain which might be exported from Kurrachee, was immense; when Sir C. Napier was here—in the year of the Irish famine, he offered to have ready 11,000 tons of grain at Kurrachee for transmission, and such a quantity might and could have

been spared without interfering with the consumption of the country. The cost of carriage now was so great as actually to prohibit grain as an export. The price of wheat and grain was at Shikarpore and Hydrabad, just one half its price in Kurrachee, the navigation of the Indus rendering attempts to bring grain down as an export very hazardous. Major Preedy instanced a case where *out of seven boats laden with grain which started from Kotree, but one arrived in Kurrachee, the other six being lost; if one or two boats only out of a batch of six or so were lost, it was generally considered a good venture.* He looked, therefore, upon the grain transports alone to give a large return—a return far exceeding what Lieut. Chapman had allowed towards the profits of a railroad in Scinde. Personally unacquainted with railways as he was, he could not speak to the nature of the country as being well adapted or otherwise, but if flat, hard and level plains were required, he was certain there would be no better country for a railroad than that over which the proposed line was intended to pass. He, in conclusion, begged most cordially to support the proposition of General Somerset.

Captain Ashburner asked whether the proposed Railway was connected with any plan for the improvement of the Harbour? The Chairman replied that in the absence of Mr. Hardy Wells, who could have spoken more positively on the subject, he could only state that the two schemes would, he believed, be separately considered and decided on by Government as perfectly distinct and independent undertakings.

On the motion of Colonel Sinclair seconded by Sir H. Somerset, thanks were voted to the Chairman for his conduct in the chair, and the meeting separated.

From Lieut. Gen. the Right Hon. Sir HENRY POTTINGER, Bart., G. C. B., to the Chairman of the Scinde Railway Company.

HOVETON HALL, NORWICH,
January 8th, 1855.

SIR,

I have had the honour to receive your letter of the 15th ultimo, and beg to return you my thanks, for the papers regarding the proposed Scinde Railway, which accompanied it. From my long and intimate acquaintance, with the province of Scinde, I most entirely and cordially concur in all that has been advanced in support of the proposed scheme, and I trust that early sanction will be obtained from the East India Company, to its being carried out, on the same terms that have been accorded to other railways in India.

To the intended line of railway, over which I have travelled frequently, I am not aware of a single objection that can be urged, and of the Harbour of Kurrachee, I have always had the highest opinion. I went there with a mission in 1809, in the cruiser "Princess of Wales," and the "Maria," country ship. These vessels entered the Harbour with perfect facility, and lay inside for above a month, when they were sent back to Bombay, owing to its being determined that the mission should return to India, through Kutch. This was in the height of the south-west monsoon, and demonstrated at that early period, the capabilities of the Port. I mention this fact, as I see it is not alluded to in the papers you have been so good as to send to me. I had a very complete journal of all the

events and circumstances attending the first mission to Scinde in 1809, in which the dangers and difficulties of the navigation of the lower Delta, of the Indus, were fully described, and exactly tallied with what have now been brought forward. My journal and all my notes and papers were destroyed, on the breaking out of the war in 1818, when the residency at Poonah was burned by the Mahratta army.

What I now state may be so far satisfactory, perhaps, to the Directors, as showing the views which were early forced on me, with regard to the important question now under discussion.

I have the honour to be, &c.,

(Signed) HENRY POTTINGER

W. P. ANDREW, Esq.
&c. &c.

Sir JAMES C. MELVILL, K.C.B., to the CHAIRMAN of the Scinde Railway Company.

EAST INDIA HOUSE,
10*th January*, 1855.

SIR,

The Court of Directors of the East India Company have had under their consideration your letter dated the 9th November, submitting a scheme for the construction of a railway in Scinde from Kurrachee to the Indus, also your letter of the 19th ult., stating that a Company has been formed for the purpose, and that the necessary capital has been subscribed for, and expressing a hope that the Court

will extend their support and encouragement to the undertaking.

In reply, I am commanded to acquaint you that, adverting to the opinion expressed by the local authorities regarding the importance of the proposed railway, the Court will be prepared, when the Scinde Railway has been duly registered and incorporated, to give their sanction to the undertaking by arrangements with the Company, similar to those which exist with the other Indian Railway Companies.

With this view, the Court will guarantee interest at the rate of 5 per cent. per annum upon £500,000 of capital, upon condition that 25 per cent. of that amount is paid into the treasury of the East India Company, within two months after the Act of Incorporation has passed, 25 per cent. more within four months after that date, and the remainder at such times as the Court of Directors may prescribe.

The Court desire me to add, with reference to the suggestion contained in your letter of the 9th November upon the subject, that they fully concur in the expediency of the Railway Company securing all the powers that may be necessary for facilitating the transfer of shares in India, and for establishing a registry in that country, such provisions must be included in the Act of Incorporation, the draft of which, the Court request that you will submit for their perusal.

I am, SIR,

&c., &c.,

(*Signed*) JAMES C. MELVILL.

W. P. ANDREW, Esq.,

&c. &c.

From the CHAIRMAN of the Scinde Railway Company to the SECRETARY of the Honourable East India Company.

SCINDE RAILWAY COMPANY,
2, MOORGATE STREET, LONDON,
23rd January, 1855.

SIR,

Having submitted to the Directors of this Company your letter of the 10th instant, conveying the assurance of the favourable opinion entertained by the local authorities of the proposed Scinde Railway, and that, in consequence, the Honourable Court would be prepared, when this Company has been sufficiently established, to give their sanction to the undertaking, by arrangements similar to those which exist with the other Indian Railway Companies, and with this view, guaranteeing interest at the rate of 5 per cent. per annum, upon £500,000 of capital, upon condition that 25 per cent. of that amount is paid within two months after the act has passed, 25 per cent. more within four months after that date, and the remainder as the Court might direct.

2nd. In reply, I have the honour to express the gratification my colleagues and myself derive from the assurance of the opinion of the local authorities in India, as to the importance of the proposed railroad from Kurrachee to the Indus, and in consequence, the approval and support of the Court, on the terms and conditions prescribed by your letter under acknowledgment.

3rd. The Board entirely acquiesce in the conditions imposed on them, as to raising the necessary funds, by two payments of 25 per cent. each upon the capital, after the Act of Incorporation has been obtained. The subsequent payments being made as the Court may direct.

4th. Agreeably to your request, I beg to enclose a copy of the bill for obtaining an Act of Incorporation, which was

duly lodged in the Private Bill Office of the House of Commons.

5th. The Court having been good enough to extend their sanction to the Scinde Railway, and to concur in several suggestions which I had ventured to make, affecting the interests of shareholders in the Company in India, I would respectfully beg their favourable consideration to the annexed memorandum, regarding an Engineering Staff for Scinde.

6th. It is obvious that it is of the utmost importance that as little delay as possible should take place in completing the survey of the line, with the view to its early commencement and rapid completion, and this Company in its present stage is unable legally to receive the money offered to it by investors; and pending this legal disability, which will cease upon full registration, it would not fail to have a highly beneficial effect upon the future progress of this Company, if the Court would sanction and pay the moderate outlay mentioned in paragraph 8 of the memorandum before referred to, and have Mr. Hardy Wells, now employed in Scinde, transferred from the Canal Department to that of the Railway, as Resident Engineer, on the understanding that the disbursements would hereafter be refunded by the Railway Company.

7th. If some such arrangement were approved by the Court, little liability would be incurred, and no time would be lost in prosecuting a most important design.

8th. I have also to express, on behalf of my colleagues and myself, our readiness to place ourselves at once, or whenever it may be thought desirable, under the supervision of any officer that may be appointed to represent the authorities as a member of this Board, and to submit our accounts to the inspection of the Accountants' Department of the India House, whenever directed so to do.

9. In conclusion, I beg you will be good enough to assure the Court that nothing shall be wanting on the part of the gentlemen with whom I have the honour to co-operate, to bring to a speedy and successful issue the important and interesting undertaking confided to them.

Thanking the Honourable Court for the liberal manner in which my propositions have been met, and for their prompt and courteous answer to the last communication I had the honour to address to them,

I have the honour to be,

&c., &c.,

(*Signed*) W. P. ANDREW.

Sir JAMES C. MELVILL, K.C.B.

&c., &c.

From the CHAIRMAN of the Scinde Railway Company, to the Right Honourable the GOVERNOR OF BOMBAY.

SCINDE RAILWAY COMPANY,

2, MOORGATE STREET, LONDON,

MY LORD, *9th February*, 1855.

As the Chairman of the Scinde Railway Company, I have the honour to enclose for your lordship's information the accompanying prospectus of the Company, and on behalf of my colleagues and myself to solicit the favour of your countenance and support for an undertaking calculated to benefit in no ordinary degree a large and important portion of the Presidency under your government.

I feel the less hesitation in addressing you on this occasion, as I have for some time been aware of the great interest which your lordship has taken in furthering the formation of a railroad from Kurrachee to the Indus.

That portion of the capital reserved for this country has been readily subscribed for, and facilities will be given for the reception of subscriptions in India.

I have placed myself in communication with Mr. Frere, the Commissioner in Scinde, with the view to obtain the benefit of his advice and co-operation.

The bill for procuring an act of parliament to incorporate the Company is now under the consideration of Sir Charles Wood and the Chancellor of the Exchequer, and I hope to be able to send you by the next mail a copy with certain amendments, giving increased facilities for the investment of Indian capital in the Scinde Railway Company.

I have the honour to be
&c., &c.,
(*Signed*) W. P. ANDREW.
Chairman of the Directors
Scinde Railway Company.

The Right Honourable
Lord ELPHINSTONE, G.C.H.,
Governor of Bombay,
BOMBAY.

From the Right Honourable the GOVERNOR OF BOMBAY, to the Chairman of the Scinde Railway Company.

BOMBAY,
19*th March,* 1855.

SIR,

I have had the honour of receiving your letter of the 9th ult., together with the Prospectus of the Scinde Railway Company.

It is almost unnecessary that I should assure you that the Company will meet with every assistance and facility from the local Government and from the Commissioner in Scinde, which it is in their power to afford.

I have the honour to be,
Your obedient servant,
(*Signed*) ELPHINSTONE.

W. P. ANDREW, Esq.

TABLE

OF THE

QUANTITY AND VALUE OF TROPICAL PRODUCTIONS IMPORTED INTO ENGLAND.

Statement, made by Mr. Montgomery Martin, in the Court of the East India proprietors, as to the Quantity and Value of Articles Imported into England, the whole of which may be obtained from British India.—Extracted from the third edition of Mr. Andrew's work on Indian Railways, 1848.

		£
1.	Sugar, 4,500,000 cwts., at 20s. per cwt. .	4,500,000
2.	Molasses, 500,000 cwts., at 10s. per cwt. .	250,000
3.	Rum, 5,000,000 gallons, at 1s. per gall. .	250,000
4.	Coffee, 40,000,000 lbs., at 6d. per lb. .	1,000,000
5.	Tea, 40,000,000 lbs., at 1s. per lb. . .	2,000,000
6.	Cocoa, 3,000,000 lbs., at 6d. per lb. . .	75,000
7.	Tobacco, 50,000,000 lbs., at 6d. per lb. .	1,250,000
8.	Cotton, 400,000,000 lbs. at 6d. per lb. .	10,000,000
9.	Indigo, 7,000,000 lbs., at 3s. 6d. per lb..	1,225,000
10.	Saltpetre, 300,000 cwts., at 20s. per cwt.	300,000
11.	Rice, 300,000 cwts., at 10s. per cwt. . .	150,000
12.	Pepper, 7,000,000 lbs., at 4d. per lb. .	125,000
13.	Cinnamon and Cassia, 1,500,000 lbs., at 6s. per lb.	450,000
14.	Ginger, 25,000 cwts., at 20s. per cwt. .	25,000
15.	Spices (general), official value	250,000
16.	Cochineal, 600,000 lbs., at 5s. per lb. .	150,000
17.	Wool, 60,000,000 lbs., at 1s. per lb. . .	3,000,000
18.	Hemp and flax, 2,000,000 cwts., at 20s. per cwt.	2,000,000
19.	Vegetable Oils, 6,000,000 gallons, at 1s. per gallon	300,000
	Carried over	£27,300,000

	Brought forward	£27,300,000
20.	Hides, 400,000 cwts., at 36s. per cwt .	720,000
21.	Skins, untanned or dressed, number,— 4,000,000, at 6d. each	100,000
22.	Linseed, 3,500,000 bushels, at 30s. per quarter	600,000
23.	Tallow, 1,000,000 cwts., at 20s. per cwt.	1,000,000
24.	Dye-woods, &c., official value	500,000
25.	Drugs and Gums, ditto	500,000
26.	Sundries	1,000,000
	Total	£31,720,000

"There is scarcely one important article of tropical produce which is consumed in this country, either as the raw material of our manufactures or as an article of daily use, for the production of which India is not as well, or better, adapted than any other country; while its dense and industrious population would seem to offer an illimitable demand for our manufactures.

"Nor are there opposed to these natural and flattering elements of commerce any fiscal restrictions, to counteract their beneficial results."—*The Economist, Aug.* 28, 1847.

There can be no doubt but that "it is to India, that the chief enterprise of British commerce and civilization should be directed by an intelligent legislature."*

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* Vide third edition Indian Railways and their Probable Results, by an Old Indian Postmaster.

SCINDE.

PRICES CURRENT IN THE DISTRICTS DURING THE WEEK ENDING 25TH AUGUST, 1854.

	Kurrachee Town.	Shahbunder.	Jerruck.	Sehwan.	Mahomed Khan's Tanda.	Meerpoor.	Doaba.	Halla.	Nowshera.	Shikarpoor.	Larkhana.	Mehur.	Left Bank.	Frontier Districts
Wheat	2 1 0	2 3 1	1 15 9	1 10 2	1 14 6	2 0 0	1 8 0	1 8 4	1 8 0	1 9 1	1 9 9	1 5 0	1 6 6	1 14 0
Do. Flour	2 5 0	2 13 0	2 10 8	2 13 7	2 5 0	2 3 4	1 15 0	1 15 0	1 11 0	1 12 0	1 14 0	1 11 0	1 9 0	2 4 0
Jowaree	1 7 0	—	1 13 6	1 6 10	1 8 0	1 5 1	1 6 0	1 8 0	1 3 7	1 3 0	1 6 8	1 4 0	1 2 9	1 10 0
Badgree	1 10 6	1 12 0	1 13 0	1 6 6	1 15 0	1 8 8	1 6 0	1 8 0	1 3 9	1 4 0	1 0 7	1 4 7	1 3 3	1 10 0
Barley	1 9 6	1 4 8	1 8 6	1 5 3	1 6 0	1 4 8	1 2 0	1 8 0	1 7 0	1 4 0	1 2 4	1 1 2	1 4 0	1 12 0
Rice in husk, White	—	1 6 7	1 7 10	1 13 10	1 8 0	—	1 12 0	1 11 0	2 11 11	1 8 8	1 4 2	1 7 2	0 12 0	1 10 0
Do. Red	—	1 4 0	1 6 0	1 9 7	1 4 0	—	1 9 0	1 6 4	1 10 9	1 14 0	1 3 1	1 2 0	1 8 0	1 6 0
Rice	3 6 0	—	2 13 6	4 0 0	2 11 0	4 0 0	2 14 0	2 9 0	1 15 8	2 5 4	2 7 10	2 14 0	2 4 0	3 8 9
Grain	2 4 0	—	2 13 8	1 11 7	2 0 0	1 15 0	1 10 0	1 11 6	1 15 3	1 11 8	1 13 9	1 7 11	1 3 6	2 8 0
Jambha	1 13 6	1 6 2	1 6 2	1 9 0	1 4 0	1 10 0	1 7 0	1 12 0	1 10 2	1 4 0	1 10 8	1 8 6	1 4 0	1 12 0
Moong	1 11 0	1 10 0	1 11 1	1 10 2	1 12 0	1 8 0	1 9 0	2 0 0	1 11 6	1 7 8	1 7 9	1 6 2	1 10 0	2 4 0
Muttar	1 5 0	1 4 8	1 5 10	1 4 0	1 1 0	1 4 0	0 15 0	1 4 0	1 2 4	1 0 0	0 15 1	1 1 0	0 15 9	1 4 0
Cotton	9 12 0	12 0 0	13 12 6	11 0 0	13 0 0	10 8 0	9 8 0	11 8 0	11 0 0	9 8 0	9 6 8	11 8 9	9 0 0	12 0 0
Wool	—	—	9 0 0	10 0 0	14 0 0	7 0 0	7 0 0	13 0 0	13 0 0	9 0 0	9 9 4	9 12 0	7 0 0	10 0 0
Ghee	13 0 0	10 0 0	10 10 8	14 4 0	11 8 0	12 8 0	11 2 0	13 8 0	16 0 0	15 0 0	15 0 3	14 8 0	4 8 0	17 0 0
Indigo	70 0 0	64 0 0	100 0 0	70 0 0	80 0 0	80 0 0	61 5 8	70 0 0	75 0 0	45 0 0	70 8 0	60 10 0	50 0 0	60 0 0
Goor	4 8 0	—	5 0 0	5 0 0	5 0 0	6 0 0	4 2 0	5 4 0	5 0 0	3 6 8	3 7 0	4 3 0	3 2 0	4 4 0
Thill	3 6 0	4 0 0	3 5 4	2 9 7	2 8 0	2 12 0	2 10 0	3 10 0	2 5 2	2 4 0	2 3 7	2 3 0	1 10 0	2 13 0
Surseef	—	—	—	—	—	1 12 0	—	—	—	—	—	..	—	—
Tobacco	—	—	—	—	—	4 8 0	—	—	—	—	—	..	—	—

The above rates are for the Maund of forty seers of eighty tolas to the Seer. 1 maund = 80 lbs.

PRICES CURRENT IN SCINDE.

LIST OF ARTICLES *in the Markets of Shikarpore and Frontier Districts, showing the retail quantities and numbers sold for One Company's Rupee, during the month of September,* 1855.

The weights and prices entered are in the Indian standard and currency.

WEIGHTS —180 Grs. Troy, 1 Tola; 80 Tolas, 1 Seer; 40 Seers, 1 Maund.*

Where the cost of a single article, sold by number, exceeded One Rupee, the fraction of the article corresponding to this sum has been inserted.

		Shikarpoor.			Frontier Dist.		
		Mds	Srs.	Tolas.	Mds.	Srs.	Tolas.
Almonds, in shell	per Rupee.	0	4	50	0	4	53
Ambaree	,,	0	0	0	0	32	0
Beef	,,	0	20	0	0	12	0
Betel Nut	,,	0	5	0	0	3	27
,, Leaf	,,	0	0	0	Sixty-four.		
Bhang	,,	0	8	0	0	5	27
Brass ware, of sorts	,,	0	0	64	0	0	46½
Cardamums	,,	0	0	28	0	0	26
Catha (Catechu)	,,	0	0	0	0	2	13½
Chillies	,,	0	5	40	0	5	27
Chunam, fine	,,	3	0	0	1	25	27
Cinnamon	,,	0	0	64	0	0	70
Cloves	,,	0	2	30	0	1	60½
Cocoa nuts, whole	,,	0	30	0	Twenty-eight.		
,, shelled	,,	0	4	0	0	4	20
Cotton, cleaned	,,	0	4	0	0	3	40
Dates, of sorts	,,	0	20	0	0	15	53½
Eggs	,,	0	100	0	Eighty.		
Firewood	,,	12	0	0	32	27	0
Fowls	,,	0	0	0	Nine.		
Ganja	,,	0	0	0	0	0	16
Garlic	,,	0	25	0	0	17	0
Ghee	,,	0	3	0	0	3	12
Ginger, green	,,	0	0	0	0	0	0
,, dry	,,	0	6	0	0	5	0
GRAIN—							
Bajree	,,	0	35	40	0	35	67
,, Flour	,,	0	24	0	0	28	67
Barley (Country)	,,	0	32	0	0	36	13½
Coolty	,,	0	0	0	0	33	0
Gram	,,	0	30	0	0	29	43½
,, Dall	,,	0	22	0	0	20	0
,, Flour	,,	0	16	0	0	14	27
Jowaree	,,	0	30	0	0	35	13½
Maize	,,	0	0	0	0	23	0
Moong	,,	0	26	0	0	24	53½
,, Dall	,,	0	23	0	0	20	53½
Mussoor	,,	0	34	0	0	26	53½
,, Dall	,,	0	26	0	0	21	53½
Mutt	,,	0	0	0	0	32	0
Ooreed	,,	0	0	0	0	26	0
,, Dall	,,	0	0	0	0	20	27
Peas	,,	1	10	0	1	0	53½

		Shikarpoor.			Frontier Dist.		
		Mds.	Srs	Tolas	Mds	Srs.	Tolas.
Rice, of sorts	,,	0	16	40	0	16	20
,, Flour	,,	0	0	0	0	13	67
Teel Seed	,,	0	16	0	0	17	27
Toor	,,	0	0	0	0	16	0
,, Dall	,,	0	0	0	0	11	0
Wheat, of sorts	,,	3	25	40	0	28	0
,, Flour	,,	0	21	0	0	21	70
Wal (Beans), of sorts	,,	0	0	0	0	0	0
Gum	,,	0	4	60	0	4	60
Gunpowder (Country)	,,	0	3	0	0	2	53½
Hay	,,	0	0	0	8	27	0
Indigo	,,	0	0	64	0	0	53½
Jagree	,,	0	15	0	0	13	53½
Mace	,,	0	1	60	0	0	33
Maithee Seeds	,,	0	27	0	0	22	53½
Milk	,,	0	29	60	0	28	27
Mowra, Spirit	,,	0	1	0	0	0	70
Mutton	,,	0	8	0	0	8	0
Nutmegs	,,	0	0	32	0	0	29
Oil Sweet, of sorts	,,	0	6	40	0	6	47
,, Cocoa nut	,,	0	0	0	0	2	40
,, of Teel	,,	0	5	0	0	4	27
,, Linseed (Country)	,,	0	2	70	0	1	0
,, Castor	,,	0	0	0	0	3	0
Oil Cake	,,	1	12	0	1	20	53½
Onions	,,	2	12	0	2	6	53½
Pepper	,,	0	2	50	0	2	27
Potatoes, round	,,	0	0	0	0	8	0
,, sweet	,,	0	0	0	0	0	0
Raisins, of sorts	,,	0	5	0	0	4	60
Salt, common	,,	3	30	0	3	33	27
Soap (Country)	,,	0	7	0	0	3	53½
Straw, Bajree	,,	0	0	0	100 Bundles.		
,, Barley	,,	11	20	0	4	40	0
,, Rice	,,	0	0	0	0	0	0
,, Wheat	,,	0	11	20	4	0	0
Sugar Candy	,,	0	2	60	0	2	67
,, Soft, fine	,,	0	4	20	0	4	3¼
,, ,, coarse	,,	0	4	40	0	8	13½
Tamarind	,,	0	36	0	0	11	27
Tobacco	,,	0	14	0	0	11	27½
Turmeric	,,	0	5	0	0	5	13½

* 1 seer = 2 lbs.; 1 maund = 80 lbs.; 28 maunds = 1 ton.

Statement of Prices Current in the Chief Stations in the Punjaub and Trans-Indus and Cis-Sutlej Territories, for the month of October, 1855 (*showing the quantities sold for one Company's rupee*).

Names of Articles.	Cis-Sutlej Division.					Trans-Sutlej Division.			Lahore Division.				
	Umbala.	Loodeeana.	Thanesur.	Feerozpoor.	Simla.	Jullundhur.	Hoosharpoor.	Kangra.	Lahore.	Umritsur.	Seealkote	Goordaspoor.	Goujranwala.
*	M S C.	M S C	M S. C	M S. C.	M S C	M S. C.	M S. C.	M S. C.	M S. C.	M S. C	M S. C	M S. C	M S. C
Wheat	1 10 12	1 23 0	0 0 0	1 14 0	0 0 0	1 21 15	1 15 0	0 0 0	1 6 0	0 0 0	1 4 0	0 0 0	1 6 0
Barley	1 30 0	2 12 0	0 0 0	3 0 0	0 0 0	2 12 4	2 0 0	0 0 0	2 5 0	0 0 0	1 28 10	0 0 0	2 2 0
Gram	1 30 0	2 25 0	0 0 0	2 10 0	0 0 0	2 3 5	1 28 0	0 0 0	1 34 0	0 0 0	1 9 2	0 0 0	1 16 0
Bajra	1 5 0	1 30 0	0 0 0	2 10 0	0 0 0	1 10 0	1 10 0	0 0 0	1 6 0	0 0 0	1 10 0	0 0 0	1 10 0
Jowar	1 20 8	1 20 0	0 0 0	2 10 0	0 0 0	2 10 0	0 0 0	0 0 0	1 30 0	0 0 0	1 10 0	0 0 0	2 5 0
Dal, (Oorud) ..	0 34 0	0 38 0	0 0 0	1 0 0	0 0 0	0 31 5	0 32 0	0 0 0	0 33 0	0 0 0	0 28 10	0 0 0	0 31 0
Maize	0 0 0	0 0 0	0 0 0	0 0 0	0 0 0	0 0 0	0 0 0	0 0 0	0 0 0	0 0 0	0 0 0	0 0 0	0 0 0
Moth	0 0 0	0 0 0	0 0 0	0 0 0	0 0 0	0 0 0	0 0 0	0 0 0	0 0 0	0 0 0	0 0 0	0 0 0	0 0 0
Dal, (Moong)..	0 0 0	0 0 0	0 0 0	0 0 0	0 0 0	1 10 0	0 0 0	0 0 0	0 0 0	0 0 0	0 0 0	0 0 0	0 39 0
Rice	0 7 0	0 17 0	0 0 0	0 0 0	0 0 0	1 12 0	0 17 0	0 0 0	0 10 0	0 0 0	0 13 0	0 0 0	0 17 0
Ghee	0 2 4	0 0 0	0 0 0	2 10 0	0 0 0	0 0 0	0 2 17	0 0 0	0 2 14	0 0 0	0 2 8	0 0 0	0 2 11
Goor	0 21 0	0 22 4	0 0 0	0 24 0	0 0 0	0 24 0	0 20 0	0 0 0	0 22 4	0 0 0	0 22 0	0 0 0	0 22 0
Cotton.....	0 6 0	0 0 0	0 0 0	6 0 0	0 0 0	0 5 5	0 5 4	0 0 0	0 4 12	0 0 0	0 5 4	0 0 0	0 0 0
Sugar	0 5 0	0 0 0	0 0 0	4 0 0	0 0 0	0 0 0	0 5 0	0 0 0	0 5 0	0 0 0	0 4 0	0 0 0	0 0 0
Salt	0 12 0	0 13 0	0 0 0	0 14 0	0 0 0	0 13 12	0 13 0	0 0 0	0 15 0	0 0 0	0 14 15	0 0 0	0 15 0
Bhoosa, (White)	5 0 0	0 0 0	0 0 0	0 0 0	0 0 0	4 0 0	4 0 0	0 0 0	4 10 0	0 0 0	3 25 12	0 0 0	3 0 0
Hay..... ...	0 0 0	0 0 0	0 0 0	0 0 0	0 0 0	0 0 0	0 0 0	0 0 0	3 0 0	0 0 0	0 0 0	0 0 0	4 20 0
Wood, (Fuel) ..	4 0 0	0 0 0	0 0 0	0 0 0	0 0 0	3 30 0	3 20 0	0 0 0	4 0 0	0 0 0	3 0 0	0 0 0	3 20 0

Names of Articles.	Jellum Division.				Mooltan Division.			Leia Division.				Peshawur Division.		
	Jelum.	Rawul Pindee	Gobjrat.	Shapoor.	Mooltan.	Jhung.	Futehpoor Googaira.	Leia.	Khangurh.	Dera Ismael Khan.	Dera Gazee Khan.	Peshawur.	Hazara.	Kohat.
*	M S. C.	M S C.	M S. C.	M S. C.	M S. C.	M S. C.	M S. C.	M S. C.	M S. C.	M S. C.	M S. C.	M S C.	M S. C.	M S. C.
Wheat	0 37 12	0 37 12	1 2 0	0 37 4	0 0 0	0 25 0	1 0 0	0 32 11	0 28 0	0 37 2	0 31 4	0 0 0	0 0 0	0 24 0
Barley	1 11 0	1 19 11	1 25 0	1 30 0	0 0 0	1 13 0	1 11 0	1 18 0	1 15 0	1 25 4	1 10 10	0 0 0	0 0 0	1 20 0
Gram	1 3 0	1 2 13	1 12 0	1 19 7	0 0 0	1 12 8	1 26 0	1 7 0	0 34 0	1 21 0	1 9 0	0 0 0	0 0 0	0 34 0
Bajra	1 2 0	1 2 2	1 20 0	1 14 12	0 0 0	0 0 0	0 0 0	1 2 0	0 37 8	1 25 11	1 7 2	0 0 0	0 0 0	0 0 0
Jowar	1 0 0	1 2 5	1 20 0	1 20 0	0 0 0	0 0 0	0 0 0	0 34 0	0 32 0	0 0 0	1 20 0	0 0 0	0 0 0	0 0 0
Dal, (Oorud) ..	0 0 0	0 20 0	0 0 0	0 29 0	0 0 0	0 28 0	0 24 0	0 29 0	0 23 0	0 31 0	0 20 0	0 0 0	0 0 0	0 11 0
Maize	0 0 0	0 0 0	1 18 0	0 0 0	0 0 0	0 0 0	0 0 0	0 0 0	0 0 0	0 0 0	0 0 0	0 0 0	0 0 0	0 0 0
Moth	0 0 0	0 0 0	0 0 0	0 0 0	0 0 0	0 0 0	0 0 0	0 0 0	0 0 0	0 0 0	0 0 0	0 0 0	0 0 0	0 0 0
Dal, (Moong)..	0 0 0	0 0 0	0 30 0	0 0 0	0 0 0	0 0 0	0 25 0	0 0 0	0 0 0	0 0 0	0 0 0	0 0 0	0 0 0	0 26 0
Rice	0 9 0	0 8 0	0 12 4	0 13 4	0 0 0	0 14 8	0 8 0	0 14 0	0 0 0	0 12 8	0 10 0	0 0 0	0 0 0	0 8 0
Ghee	0 2 10	0 0 6	0 2 12	0 3 0	0 0 0	0 3 8	0 3 0	0 3 0	0 2 10	0 2 15	0 2 14	0 0 0	0 0 0	1 12
Goor	0 17 0	0 16 8	0 19 0	0 21 4	0 0 0	0 18 8	0 18 0	0 16 0	0 18 0	0 14 6	0 17 0	0 0 0	0 0 0	5 8
Cotton.....	0 0 0	0 4 2	0 5 0	0 5 0	0 0 0	0 4 14	0 0 0	0 5 0	0 5 0	0 0 0	0 4 12	0 0 0	0 0 0	0 0
Sugar	0 4 0	0 4 0	0 0 0	0 0 0	0 0 0	0 0 0	0 5 0	0 0 0	0 0 0	0 0 0	0 4 1	0 0 0	0 0 0	0 12
Salt	0 16 6	0 15 15	0 16 8	0 18 0	0 0 0	0 15 8	0 13 0	0 15 8	0 14 0	0 15 0	0 14 8	0 0 0	0 0 0	2 0 0
Bhoosa, (White)	4 0 0	4 0 0	4 10 0	4 0 0	0 0 0	5 0 0	6 0 0	4 0 0	4 0 0	5 0 0	2 30 0	0 0 0	0 0 0	6 0 0
Hay..... ...	3 0 0	4 0 0	4 0 0	4 0 0	0 0 0	5 0 0	0 0 0	4 0 0	4 0 0	0 0 0	0 0 0	0 0 0	0 0 0	0 0 0
Wood, (Fuel) ..	4 0 0	5 0 0	4 0 0	8 0 0	0 0 0	10 0 0	11 0 0	0 0 0	10 0 0	5 0 0	3 0 0	0 0 0	0 0 0	3 0 0

* 16 Chattacks = 1 Seer. 40 Seers = 1 Maund, or 80 lb.

Rates of Passage and for Freight by the Steamers on the River Indus.

The Right Honourable the GOVERNOR in Council is pleased to direct the publication, for general information, of the following Revised Regulations for the conveyance of Passengers and Freight by the Steamers on the river Indus :—

OF PASSAGE.

1. All applications for passage at Kurrachee, Kotree, Sukkur, and Mooltan, must be made to the Government freight agents at those stations, and at other places to the master commanding the vessel, who will register the names of all persons applying. It is to be understood, that any applicant may be rejected without cause being assigned; but a report of the objection must be made to the captain of the flotilla.

2. The distance between Kurrachee and Mooltan is assumed to be eight hundred miles, and the distance between the stations, as follows .—

	Miles.
Kurrachee, and the Beacon at the mouth of Keddywarree	100
Beacon and Tatta	60
Tatta and Hydrabad or Kotree	70
Hydrabad and Sehwan	100
Sehwan and Larkhana Bunder	110
Larkhana Bunder and Sukkur	60
Sukkur and Chachur or Mittenkote	160
Chachur and Bukkree	60
Bukkree and Mooltan	80
Total . Miles	800

3. Passengers are designated first and second class.

First class mess at the master's table, and are accommodated abaft.

Second class berth forward, and are not entitled to walk abaft the funnel.

4. First class passengers will be charged the following sums as table money:—

		Per Diem.		
Lady or gentleman	Rs.	4	0	0
Children under 12 years . . .		2	0	0
Do. under 6 years, who do not come come to the public table . . .		1	0	0
Do. under 1 year		Free.		

For the above sums the passengers are provided with a plain substantial table, not including wine, spirits, or beer, which, if provided by the commander, are charged at regulated prices, according to a list exhibited in the dining cabin.

5. Second class passengers may provide their own food; or, if Europeans, can mess with the warrant officers or engineers, on paying Rs. 2 per diem.

6. Christian servants, not providing their own food, will be charged one rupee; Mussulman servants, three annas per diem. Hindoos provide their own food.

7. All passengers who are not unwell are expected to take their meals at the public table.

8. In addition to the table money, first class passengers will be charged the following sums for accommodation, viz.,—a cabin, 4 annas; a saloon berth, 3 annas; and a deck berth, 2 annas per mile; or, for the passage between Kurrachee and Mooltan:—

		Up.	Down (two-thirds)		
Cabin . . .	Rs.	200	133	5	0
Saloon . . .		150	100	0	0
Deck . . .		100	66	11	0

Deck passengers sleep and dress on deck, but have the use of the saloon during the day.

9. Second class passengers pay half an anna per mile; children not in arms, three pies.

10. The charge for passage down river is two-thirds the upward rates.

11. A cabin is not to be appropriated to more than

Two ladies.
One gentleman.
One lady and two children.
Three children.

12. When two ladies occupy one cabin, deck passage for one will be charged, in addition to that for the cabin.

13. Ladies, and children under six years of age, must take a cabin passage.

14. Children, above the age of six years, taking a deck berth, will be charged one anna per mile.

15. Each first class passenger is allowed one servant free; all extra servants are charged as second class, viz., half an anna per mile.

16. Three children occupying a cabin will be allowed one servant free.

17. First class passengers are allowed half-a-ton, or 25 cubic feet of baggage; children, 4 cwt.

18. Second class passengers, one roll of bedding and a box, solid contents not exceeding 5 cubic feet; children, one roll of bedding.

19. Cabin passengers may put all their baggage into their cabins if they please; saloon and deck passengers are allowed to keep one box and bag above. The rest of their baggage will be kept in an appropriate place, to which they will be allowed occasional access.

20. Passage money, and a deposit of Rs. 4 per day for the estimated term of the voyage, must be paid on engag-

ing a passage; and any surplus of table money will be returned, or an additional charge be made by the commander, as the voyage may fall short of, or exceed the time, for which the deposit was calculated. Half the passage-money and half the table-money become forfeited, by persons who relinquish a passage after having engaged it.

21. Cabins will be allotted to ladies and children, in preference to gentlemen.

22. Cabins or saloon berths engaged in Kurrachee or Mooltan, for however short a distance, will be charged two-thirds of the rate between those two places: but if the chance be taken of a cabin or saloon berth being vacant, the charge will only be for the distance it is occupied. Thus, a cabin or saloon berth being retained in Kurrachee to Hydrabad in a vessel proceeding to Mooltan will be charged for 533 miles, but if the chance be taken of one being unengaged, the charge will only be for 230 miles, the estimated distance between Kurrachee and Hydrabad.

OF FREIGHT.

1. All applications for freight must be made by letter to the Government freight agents, or, at places where there is no agent, to the officer in charge of the steamer, describing the goods to be despatched, and the weight or measurement, when tonnage will be assigned according to the order in which the several applications are registered.

2. Goods intended for shipment must be sent to the agent's office between the hours of ten and four (Sundays, Christmas Day, and Good Friday excepted,) accompanied by a note stating the name of the shipper, the number and mark of the package, to whom and where consigned, the cubical measurement, or weight, and value of each package.

3. Goods or packages will not be received on board unless they are addressed to a resident at the station where they are to be delivered from the steamer, and the direction must be distinctly made on something not liable to be destroyed by vermin, and which may not be easily obliterated.

4. Any package with a direction written on a card, or made with ink on a tin box, is liable to be rejected.

5. Goods not applied for by the consignee, on board the boat during her stay at the station where consigned, will be put into a godown, and an additional charge of two annas per package made for rent; and where there is no godown, they will be carried on and charged with additional freight, unless addressed to the freight agent, in which case they will be delivered to him.

6. It must be understood, however, that although all persons are at liberty to consign their goods to the Government freight agent at any station where there is one, the Government is not responsible for such agent, nor for the safety of the goods after delivery to the consignee, or to his order, whether such consignee be the Government agent or any other person.

7. Government will not be responsible for any damage or loss which may occur from accident to the vessel, or other cause not traceable to negligence or mismanagement.

8. Parties who ship goods must do so between daylight and sunset, and have all their goods on board by 2 P. M. the day before the vessel starts. Commanders of steamers will on no account discharge or receive goods after dark.

9. Freight on all packages conveyed up river (excepting treasure) which do not exceed (29) twenty-nine lbs. per cubic foot, will be charged by the cubic foot at the rate

of (2¼) two and a quarter annas per cubic foot for every (100) hundred miles: but those exceeding (29) twenty-nine lbs. per cubic foot will be charged for by the pound weight, at the rate of (5) five annas per maund of (80) eighty pounds for every (100) hundred miles

From Kurrachee.

	Per Cubic Ft.	Per Maund of 80 lbs.
To Beacon . .	Rs. 0 2 3	Rs. 0 5 0
To Tatta . . .	0 3 7	0 8 0
To Hydrabad or Kotree	0 5 2	0 11 6
To Sehwan . .	0 7 8	1 0 6
To Larkhana .	0 9 11	1 6 0
To Sukkur . .	0 11 3	1 9 0
To Chachur or Mittenkote	0 14 10	2 1 0
To Bukkree . .	1 0 2	2 4 0
To Mooltan . .	1 2 0	2 8 0

10. Freight on goods conveyed down river is one-fourth (quarter) of the upward rate.

11. No package, however small, will be conveyed for a less sum than one rupee, and all charges for freight must be paid on the delivery of the goods to the agent, and in cases where there is no agent, to the commander of the vessel, before they are received on board.

Freight on Carriages.

12. On an empty carriage or barouche, landaulet, britzka, palanquin Carriage, or phaeton, for every 100 miles up or down river .	Rs. 10 0 0
On an empty buggy . .	5 0 0
Do. palanquin . .	2 0 0
Do. tonjohn . .	1 8 0

13. Agricultural implements, machinery planks, timber, furniture, and other weighty articles of the kind

carried as deck cargo only, and at the risk of the shippers from damage or wet or other causes from being carried on deck, two-thirds of the present rates.

14. Sheep, dogs, or goats will be conveyed at the rate of one rupee each for every 100 miles up or down river; this is exclusive of the keeper, who will be charged a second class passage, and of food, which the shippers must supply.

Freight on Specie, or Bullion.

15. Specie, or bullion will be conveyed up or down river at the rate of one anna and a half per cent. for every 100 miles, and whenever the distance exceeds the even hundred, freight will be charged for the even hundred next following. Thus, from Kurrachee to Hydrabad is 230 miles, the charge will be made for 300 miles.

16. Freight on copper coin will be charged at the up-river rate of weightable goods, whether conveyed up or down river.

17. Bills of lading, in duplicate, will be granted to shippers of specie, or bullion, which will only be delivered to the party presenting one of them; and should no application be made for the delivery of the treasure during the stay of the vessel at any station, it will be carried on and freight charged for the additional distance it may be conveyed.

18. As it may be expected that the steam vessels will proceed down the river quicker than the Dak, during the period of the inundation, which will prevent bills of lading being received in time if forwarded by post after shipment of the treasure, the following plan may be adopted for ensuring its delivery to a duly authorised person.

19. The individual intending to ship treasure may send an order per post to his correspondent some days previous to the departure of the vessel, the order being

written on half a piece of paper, the other half of which is to be given to the commander, with an order upon it, signed by the shipper, authorising the delivering of the treasure to the person who shall produce the order written on the corresponding half piece which has been forwarded by post.

20. The boats will make the following stoppage at the different stations during daylight, in cases where there may be parties or stores awaiting conveyance :—

At Tatta	Three hours.
At Kotree	Four hours.
At Sehwan	Two hours.
At Larkhana . . .	One hour.
At Sukkur	Four hours.
At Mittenkote . . .	Two hours.
At Bukkree . . .	Two hours.

21 The commanders are instructed never to wait for passengers, either those who merely go ashore at a station, and are proceeding further on, or those who intend to embark there.

22. In cases where the scantiness of the water in any of the rivers may be the means of preventing the steamers from attaining some of the higher stations for delivery at which packages have been received on board, it is to be understood that all goods and packages (treasure excepted) laden on boats so arrested in their progress are, at the expense of Government, conveyed to the stations at which they should have been delivered by the boat, and are free of every additional charge to the shippers or consigners, who, with regard to expense of conveyance, are placed in precisely the same situation they would have been in had the boats been enabled to reach their destination. Should any person, having goods on board any of the boats so arrested in their progress, desire delivery of such goods at any station short of that to which they

were to have been conveyed, they will be entitled to a refund of such proportion of freight paid on such goods as may be in excess of the freight that would have been levied upon such goods, had they originally been shipped for delivery at the station at which they may, under the above circumstances, have been delivered.

23. Treasure laden on a boat whose progress is arrested will be retained on board until the boat is enabled to proceed to her destination, unless the consignees holding the bill of lading of such treasure may require its delivery, giving a full acquittance for the treasure, and receiving such difference of freight as may have been paid in excess of what would have been charged for conveyance of such treasure to the place of its delivery.

24. Except on occasions of public emergency, the Government vessels appointed to maintain the regular communication between Kurrachee and Mooltan shall so far be reserved exclusively for private passengers and merchandize, that such private passengers and merchandize shall invariably have the preference, and thereafter any vacant tonnage which may be left shall be available for Government stores or passengers.

25. Steamers will leave Kurrachee for Mooltan on the 24th, and the latter place for Kurrachee on the 26th of every month.

26. Should the day fixed for the steamers to leave Mooltan and Kurrachee fall on a Sunday, the vessel will be despatched on the previous day.

R. Ethersey, Captain I. N.
Commanding Indus Fotilla.

By order of the Right Honorable the Governor in Council,

T. Maughan, Lieutenant Colonel,
Secretary to Government.

Bombay Castle, 10th, March, 1854.

TRADE ON THE INDUS.

The following letter was addressed to Government by the Commissioner in Scinde, with accompaniment, being abstracts of the registers kept on the river Indus, showing the number and tonnage of boats which passed certain stations during the years 1853-54 and 1854-55 :—

My Lord,

With reference to my letter of the 26th July, 1853, I have the honour to forward abstracts of the registers kept on the river Indus, showing the number and tonnage of the boats which passed certain stations during the two years, 1853-54 and 1854-55.

2. From a comparison of these returns with those which are already before Government, it will be seen that the river trade is steadily increasing.

The total maundage of laden boats registered as passing was—

In 1851-52	64,24,000	Maunds.
„ 1852-53	78,25,000	„
„ 1853-54	81,23,700	„
„ 1854-55	84,08,600	„

which, divided by 5 (the number of points of registry) gives the following as the maundage for the whole distance from Kurrachee to Sukkur :—

In 1851-52	12,84,920	Maunds.
„ 1852-53	15,65,120	„
„ 1853-54	16,24,740	„
„ 1854-55	16,81,720	„

The points which were noted in the memorandum ac-

companying my former letter, as observable in the returns of 1851-52 and 1852-53, are still remarkable in the returns now forwarded, viz., that the river-trade has a tendency to converge at Hydrabad, where the principal lines of east and west traffic strike the river; that a very large portion of the trade between Hydrabad and Kurrachee goes overland; that the proportion of laden to unladen boats is increasing, indicating that the inequality between the upward and downward trade is diminishing; or in other words, that boats more generally find cargoes, both up and down, than they did formerly. There is also a steadily-progressing increase of steamer traffic.

I have the honor to be, &c.,

(Signed) H. B. E. Frere.

Commissioner in Scinde.

24*th July*, 1855.

Resolution of Government:—Copies to be sent to the Chamber of Commerce, Government of India, and Honourable Court.

Return showing the Number of Boats arriving at and departing from the undermentioned Bunders on the Indus during the Years 1853, 1854, *and* 1855.

River Port.		Size of Boats.																					
		Steamers with flat.		Steamers without flat.		Above 1,000 Maunds.		From 800 to 1,000 Maunds.		From 600 to 800 Maunds.		From 400 to 600 Maunds.		From 200 to 400 Maunds.		Less than 200 Maunds.		Total Tonnage.		Laden.		Unladen.	
		Laden.	Unladen.	Laden.	Unladen.	Laden.	Unladen.	Laden.	Unladen.	Laden.	Unladen	Laden.	Unladen.	Laden.	Unladen.	Laden.	Unladen	Laden.	Unladen.	Increase.	Decrease.	Increase.	Decrease.
1		2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23
																		Maunds	Maunds	Maunds	Maunds.	Maunds	Maunds.
Sukkur	1853-54	23	4	26	4	56	14	117	19	380	90	747	199	561	138	1047	170	10,79,400	2,53,400	2,62,600	,,	,,	1,72,100
	1854-55	16	,,	45	8	91	7	118	24	357	88	589	121	641	104	1318	154	11,01,800	1,98,000	22,400	,,	,,	55,400
Sehwan	1853-54	20	10	18	13	176	76	244	88	839	338	1261	524	1131	618	1864	3003	21,56,700	11,47,100	7,52,400	,,	3,65,900	,,
	1854-55	16	2	44	7	203	62	333	120	818	236	1188	297	1014	313	1726	1867	21,66,400	1,70,500	9,700	,,	,,	3,76,600
Kotree and Gidoo Ke Tanda the port of Hyderabad	1853-54	66	6	96	7	192	76	288	124	788	310	1294	379	582	562	1585	1904	20,02,100	9,49,700	,,	4,03,700	,,	6,48,800
	1854-55	41	,,	139	,,	174	73	329	181	727	318	1150	389	1309	469	1463	1555	21,10,900	9,56,500	1,08,800	,,	6,800	,,
Tatta	1853-54	29	3	39	15	132	48	196	33	518	142	774	188	892	221	612	1198	14,00,000	4,62,000	,,	1,46,600	,,	1,75,100
	1854-55	18	1	55	13	153	36	209	68	620	202	913	307	1010	350	932	1707	16,43,100	6,71,400	2,43,100	,,	2,09,400	,,
Delta Ports.																							
Gorabharee and Khetty, on the Oochta Branch	1853-54	6	,,	8	1	79	35	129	42	465	139	892	272	899	274	1312	551	13,75,400	4,46,900	,,	90,000	,,	98,100
	1854-55	7	3	25	20	60	30	115	33	383	96	887	267	1026	361	1278	832	13,16,700	4,54,900	,,	58,700	8,000	,,
Wagoodur on the Garra Creek	1853-54	6	,,	25	1	10	4	21	11	48	20	59	30	42	31	18	10	1,10,100	53,600	,,	76,500	,,	1,08,600
	1854-55	2	,,	21	2	3	,,	9	,,	22	,,	55	1	41	,,	27	1	69,300	600	,,	40,800	,,	53,000
Unnie, on the Kedewaree Branch	1853-54	15	,,	26	2	,,	,,	,,	,,	,,	,,	,,	,,	,,	,,	,,	,,	,,	,,	,,	,,	,,	,,
	1854-55	22	2	34	1	,,	,,	,,	,,	,,	,,	,,	,,	,,	,,	4	,,	400	,,	400	,,	,,	,,
	1853-54	,,	,,	,,	,,	645	253	998	317	3038	1039	5027	1592	4107	1844	6438	6836	81,23,700	33,12,700	10,15,000	7,16,800	3,65,900	12,03,000
	1854-55	,,	,,	,,	,,	684	208	1143	426	2927	940	4782	1382	5041	1597	6753	6116	84,08,600	30,51,900	3,84,400	99,500	2,24,200	4,85,000

(Signed) H. B. E. FRERE, *Commissioner in Scinde.*

Mithunkote, 8th August, 1855

Til, (Sessme.)		Tobacco.		Spices (Cloves, Cardamoms, &c.)			Hemp.		Opium.			Bales of Cloth, (Cotton.)	Hides.	Horns, (Number of.)
M.	S.	M.	S.	M.	S.	C.	M.	S.	M.	S.	C.	No.	No.	No.
850	0	84	0	1,100	30	0	271	20	0	2	0	49	35	0
0	0	4	29	7,596	11	2	21	20	1	24	12	57	400	0
850	0	88	29	8,697	1	2	293	0	1	26	12	106	435	0

(Signed) S. GRAHAM, *Assistant Commissioner.*

THE LAHORE CHRONICLE, *September* 8, 1855.

ABSTRACT QUARTERLY REGISTER OF BOATS AND CARGOES PROCEEDING UP AND DOWN THE INDUS, FOR THE FIRST QUARTER OF 1855-1856.

Mithunkote, 8th August, 1855

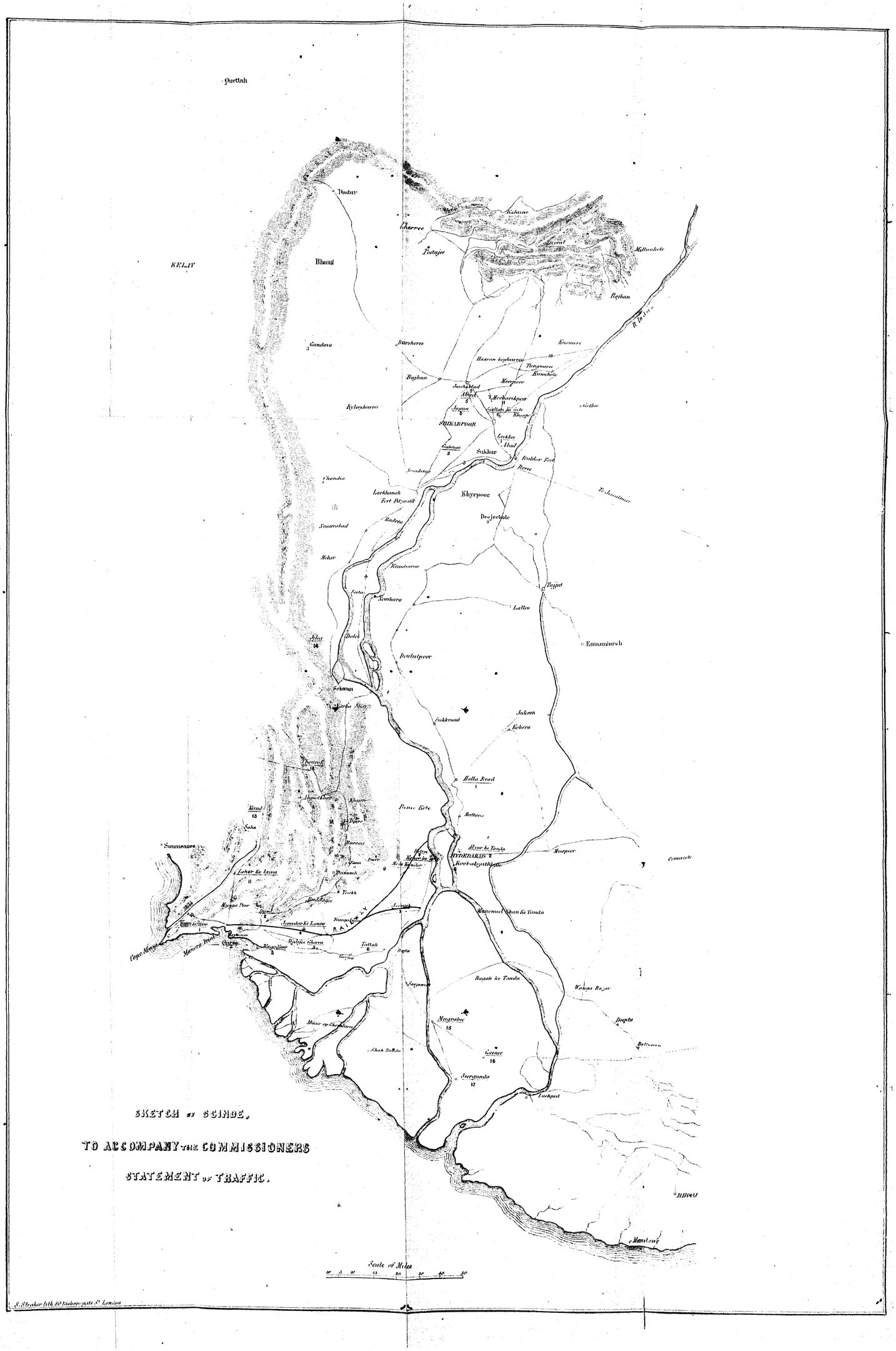
Course of Boats from North to South, or *vice versâ.*	Number of Boats.	Gross weight of Cargo, in Maunds.	Wheat.	Barley.	Gram.	Rice.	Dal, (1 kinds.)	Wool.	Cotton.	Goor.	Shakar.	Cheese.	Indigo.	Muject.	Coconuts.	Ghee.	Oil, (2 kinds.)	Dried Dates.	Almonds.	Raisins.	Salt.	Saltpetre.	Brimstone.	Sajee.	Iron.	Lead.	Pewter.	Lime.	Mustard Seed.	Til, (Sessme.)	Tobacco.	Spices (Cloves, Cardamoms, &c.)	Hemp.	Opium.	Bales of Cloth, (Cotton.)	Hides.	Horns, (Number of.)
		ARTICLES OF MERCHANDIZE.																																			
		*M. S. C.	M S.	M. S.	M. S.	M. S.	M. S.	M. S.	M. S.	M. S.	M. S.	M. S.	M. S.	M. S.	No.	M. S.	M. S.	M. S.	M. S.	M. S.	M. S.	M. S.	M. S	M. S.	M. S.	M. S.	M. S.	M. S.	M. S.	M. S.	M. S.	M. S. C.	M. S.	M. S. C.	No.	No.	No.
From North to South. ..	253	69,214 20 0	6,834 5	437 0	16,306 25	522 0	6,377 0	3,552 35	1,741 1	12,190 0	2,815 10	5,150 20	0 0	696 20	0	122 13	82 20	0 0	43 0	0 0	30 0	4,637 20	8 0	0 0	9 20	4 20	0 0	0 0	5,348 0	850 0	84 0	1,100 30 0	271 20	0 2 0	49	35	0
From South to North. ..	155	33,462 11 14	941 0	118 0	181 0	445 0	2,626 0	14 36	16 20	20 0	5 0	12 0	0 15	0 0	1,26,825	311 36	135 0	238 11	0 0	0 0	0 0	81 20	202 20	414 0	5,877 16	0 0	440 10	13,695 20	0 0	0 0	4 29	7,596 11 2	21 20	1 24 12	57	400	0
Total ..	408	102,616 31 14	7,775 5	555 0	16,489 25	967 0	9,003 0	3,567 30	1,757 21	12,210 0	2,820 10	5,162 20	0 15	696 20	1,26,825	434 9	217 20	238 14	43 0	0 0	30 0	4,719 0	210 20	414 0	5,886 36	4 20	440 10	13,695 20	5,348 0	850 0	88 29	8,697 1 2	293 0	1 26 12	106	435	0

* Maunds—Seers—Chattacks.

(True Copy) J. NICHOLSON, *Offg Commissioner and Superintendent.*

(Signed) S. GRAHAM, *Assistant Commissioner.*

THE LAHORE CHRONICLE, *September* 8, 1855.



SKETCH OF SCINDE,

TO ACCOMPANY THE COMMISSIONERS

STATEMENT OF TRAFFIC.

S. Stephen lith 80 Bishopsgate St. London

From the COMMISSIONER IN SCINDE to the GOVERNOR OF BOMBAY, dated 3rd August, 1855.

MY LORD,

For some years past, advantage has been taken of police stations along frequented lines of road to keep registers of the traffic passing. These returns are, of course, often more or less incomplete; but the error is almost invariably on one side, viz., that of understatement, and is not probably greater, on the long run, in one place than another, so that the returns are by no means unsafe statistical records. The enclosed abstracts of them are therefore submitted to Government, and should they be considered of sufficient interest, similar returns shall be transmitted annually.

The general increase of cart traffic where anything has been done to improve the roads, and the great increase of traffic on the roads cleared and bridged by Major John Jacob, and by the Collector of Shikarpoor and his deputies, especially Lieutenant Ford, are noticeable and very gratifying facts deducible from these returns.

A sketch of the places mentioned in the return is enclosed.

I have, &c.

(Signed) H. B. E. FRERE,
Commissioner in Scinde.

Abstract Statement showing the Traffic passing along the undermentioned Lines of Roads in Scinde, during the years 1852, 1853, *and* 1854.

Kurrachee Collectorate.	Year.	Carts.	Camels.	Horses	Donkeys or Mules.	Horned Cattle.	Sheep or Goats.	Porters with Loads.	Unloaded Foot Passengers, European.	Ditto, Native.	Palkees or Litters	Spring Carriages.	Artillery, Guns or Carriages Platform Carts, &c.	Women.	
1 Kurrachee Bunder Road.	1852	1,14,534	2,24,442	19,084	5,030	49,264	1,547	32,131	*7,998	*6,28,878	2,242	3,796		2	*From September, 1852, all persons passing the Bunder Gate have been registered under the head of passengers. Previously those columns were confined to parties arriving at or leaving Kurrachee by sea. The Vellard was open for traffic in January, 1853; most of the traffic registered in 1852 and 1853 consisted of persons employed in the construction of the work.
	1853	1,53,677	17,565	52,006	5,875	31,936	3,14[illegible]	57,274	18,824	12,17,081	2,992	6,349		2	
	1854	1,30,763	42,145	72,191	5,191	43,037	2,965	53,030	12,840	10,01,742	1,635	9,073		60	
2 Gizree Road.	1852	9,011	1,204	504	78	212		554	93	1,251	110	188			Gizree is one of the outports of Kurrachee, on a creek of the Delta. It is little used, except during the monsoon months, for which alone these returns were kept. The Deputy Collector states that the traffic for the year (1854 had been inadvertently omitted to be registered.
	1853	8,164	442	838	128	330	39	1,063	258	11,162	152	180			
	1854						No	Return							
3 Wagodhur Road.	1852	57	8,146	96	6,940	2,821	2,130	330		1,963					Wagodhur is one of the outports of Kurrachee, on a creek communicating with the river by the Delta channels. It is accessible to a class of boats which cannot reach Gizree. It is little frequented except when the port of Kurrachee is closed to small native craft, so that the traffic on this line fluctuates according to the duration and violence of the monsoon.
	1853	354	9,484	169	9,017	1,822	1,190	230	9	1,671	2				
	1854	166	1,750	424	3,628	4,896	1,531	1,415	613	7,456	5			3	
4 Jemedar Ke Landee.	1852	143	25,916	8,243	6,268	10,152	807	13,023	441	33,152	84	36		6	This is the first stage from Kurrachee on the road to Tatta and the place where two of the hill routes to Kotree branch off. I suspect the returns for 1853 were very carelessly kept.
	1853	318	11,751	10,746	11,663	12,228	3,949	6,986	892	41,793	119	54			
	1854	649	43,941	27,709	28,179	26,817	6,638	27,208	2,074	50,113	110	63		24	
5 Gharra.	1852	67	17,877	11,721	17,998	16,257	23,043	29,857	418	37,423	56	20		12	Gharra. This is the third stage on the road from Kurrachee to Tatta It is also one of the principal roads from the hills into the Delta
	1853	273	52,819	29,027	34,426	75,156	89,629	36,083	281	66,336	68	25			
	1854	330	45,411	17,499	33,443	79,258	63,435	41,737	1,006	50,699	84	49		13	

6 Tattah.	1852	58	11,951	6,354	4,199	7,055	3,526	862	471	31,350	78	3	13		The station is where the Kurrachee enters Tatta.
	1853	227	15,669	5,598	7,161	8,828	3,049	15,446	251	33,489	56	25			
	1854	369	15,302	6,371	5,756	5,744	1,907	14,536	906	31,875	85	31	12		
7 Jerruck.	1852	31	2,478	2,008	3,531	4,268	4,554	883	73	22,399	30	3	51		Jerruck is on the Indus, the direct roa Tatta to Kotree, and one of the hill roads Kurrachee to Kotree passes this station. have been cleared, and the Tatta roa been partially bridged.
	1853	74	3,913	2,978	4,105	2,998	2,429	710	99	23,750	13	24			
	1854	114	10,082	3,283	4,616	4,991	3,543	1,355	205	25,100	55	52	38		
8 Kotree to Kurrachee by Kokur ke Gote, Moree Kundur and Kooba Izzut Khan.	1852						No	Return							These are the three routes from Kotre wards Kurrachee.
	1853		10,190	2,134	2,759	2,183	3,043	823	5	13,425	2	8		974	
	1854	146	34,439	4,717	9,157	6,448	6,284	179	1,376	27,204	39	28	24	3,458	
9 Kotree to Kurrachee by Dhumb.	1852						No	Return							Besides this, considerable traffic passes th Dhumb to Kurrachee from Sehwan to Sh poor, Khyerpore, Mahajunda and the Tan the hills: but it has not been registered, return was taken to ascertain the Kotree for railway purposes. Dhumb is the s stage out of Kurrachee on the direct hill
	1853		4,725	491	997	354	2,162		5	5,940				864	
	1854		6,162	1,324	1,411	4,156	2,002		362	9,086				1,466	
10 Hubb Road.	1852		12 837	578	1,215	584	1,036	11,927		5,239	1	For 11	months	only	This is the principal road to Mekran from rachee. I have little doubt but that the pr sive increase of traffic is greatly attributa the abolition of the frontier duties in 1852.
	1853		15,898	648	1,008	269	833	536		12,299		7	ditto		
	1854		42,790	2,220	2,931	2,914	5,049	150		34,994		11	ditto		
11 Lohar ke Lung Road.	1852		15,935	239	9,242	563	4,054	2,855	2	8,115					This is one of the roads from Kurrac Beila *via* Lus and Kelat. It is in the val the Hubb.
	1853	5	16,929	319	8,627	263	5,993	1,110	13	10,268					
	1854	2	11,059	334	3,541	311	897	764	5	4,881					
12 Thoung Road	1852	5	4,228	78	402	190	831	1,141	2	1,158	1		1		This station is on the principal road fro derabad to Beila in Lus. It is among th to the west of the Indus.
	1853	123	11,584	92	448	325	2,321	2.565	7	1,346	1		1		
	1854	184	7,684	142	472	95	3,466	2,459		1,066					
13 Kund Road.	1852		9,374	318	1,306	195	2,394	1,447		4,069					Kund is on the road to Shah Bilawul territories of the Khan of Kelat. The ret 1854 is for eleven months only.
	1853		17,294	327	3,174	164	6,739	5,290		11,162					
	1854		14.417	264	1,493	82	7,263	3.821		8,930					

Kurrachee Collectorate.	Year.	Carts.	Camels.	Horses.	Donkeys or Mules.	Horned Cattle.	Sheep or Goats.	Porters with Loads.	Unloaded Foot Passengers, European.	Ditto, Native.	Palkees or Litters.	Spring Carriages	Artillery, Guns or Carriages Platform Carts, &c	Women.	
11	1852							No	Return						Traffic not taken in 1852, and for nine month only in 1853. Johee is a town north of Sehwan One of the hill roads between upper and lowe Sinde passes through it, and there are close b one or two small passes into the Beloochi hills.
Johee Road.	1853		5,922	5	501	235	124	152	1	2,658					
	1854		6,532	13	566	257	74	93	339	3,865					
15	1852							No	Return						The return for the year 1853 is for seven months only. Mugrabee is on the road from Tatta to Luckput, Bhooj, &c.
Mugrabee.	1853	19	6,012	3,812	5,758	4 360	1 083	14,231	1	7,117	2				
	1854	52	21,672	25,195	12,436	39,051	5,408	17,193	11	51,826	15	2			
16															
Boot, or	1852							No	Return						This is a bunder near Seer Gunda in the Eastern Delta.
Goonee	1853							Dit	to						
Bunder.	1854	66	6,697	1,040	519	4,435	1,024	96	7	19,132		1			
17	1852							No	Return						
Seer Gunda	1853	7	2,025	217	74	1,629	1,171	11		1,225	August	to December.			This is one of the bunders in the Eastern Delta.
Bunder.	1854	3	577	270	128	537	329	18	2	1,297					
Hyderabad Collectorate.															
1	1852	1	19,292	11,401	5,712	10,382	13,330	21,239	3	50,772	1				Halla is a large town about 30 miles north of Hyderabad on the great north road to Roree. No reason is assigned for the great fluctuation of traffic.
Halla Road.	1853	1	9,995	9,145	8,308	8,191	21,211	15,811		17,569	1	5			
	1854	10	12,809	13,010	25,380	12,716	6,661	23,099		31,863	4			12	
2	1852	2	25 075	11,638	18,418	8,336	19,790	8,136	5	42,101	1	1			Allyar ke Tanda is a large town on the road from Hyderabad to Meerpoor. The Lieutenant of Police states his inability to account for the great and progressive falling off in the traffic.
Allyar ke	1853		19,677	13,257	13,867	9,018	9,890	19,335	3	26,093					
Tanda.	1854	3	11,585	7,036	3,031	4,499	3,076	18,172		22,167	5	1			

SHIKARPOOR COLLECTORATE.															
1 Lukkee.	1852	11,701	21,250	23,559	15,340	25,080	17,644	1,657	480	1,00,373	125	190	513	12,692	This is the principal road between Sukku and Shikarpoor It has been cleared, but only partially bridged.
	1853	15,209	17,944	20,834	13,137	31,669	6,502	974	428	1,27,749	88	99	380	11,166	
	1854	11,899	17,821	11,217	6,904	33,917	4,429	171	324	98,078	51	5	165	17,252	
2 Gaheija.	1852	2,203	8,921	10,113	6,815	5,922	347	7,242	74	35,271	77	11	13	5,004	Gaheija is on the road from Shikarpoor to Larkhana. This road has been cleared and bridged. The return for 1854 comprises only eleven months that for April having been lost it would add considerably to the increase observable in that year.
	1853	1,734	15,158	9,557	7,547	5,645	393	11,437	77	37,249	103	12		6,109	
	1854	1,934	18,546	10,103	8,116	11,727	4,541	6,475	65	37,265	91	3		5,571	
3 Larkhana to Sukkur.	1852	94	3,189	1,687	1,028	548	80	12	5	6,069	2				This road has been cleared, but only partially bridged near Larkhana.
	1853	1,145	7,506	1,274	3,748	3,899	1,505	2,239	28	10,843	2				
	1854	1,422	10,286	4,140	4,205	6,182	5,741	7,358	35	9,123					
4 Larkhana to Sehwan.	1852	5	1,789	683	487	260	25			3,737					The clearance of this road commenced in 1853, and it is now completely bridged as far south as Rookun, fifty miles from Larkhana.
	1853	254	2,038	2,043	2,260	1,158	438	397	62	6,069					
	1854	515	3,529	3,448	4,570	3,118	951	4,449	118	6,312					
5 Abad to Shikarpoor.	1852							No Return.							No return for 1852, nor for the first three months in the year 1853. Abad is on the road from Shikarpoor to Jacobabad. It has been cleared and bridged.
	1853	4,851	7,533	13,907	11,153	14,222	27,183	3,824	30	71,146	12	23		10,571	
	1854	16,394	18,272	18,506	15,064	19,343	23,000	13,385	1	1,62,015	24	51	14	8,119	
6 Sooltan ke Gote.	1852	4,196	13,038	13,148	5,541	6,701	6,568	24,636	116	19,233	47	12	12	4,993	Sooltan ke Gote is on the road from Shikarpoor to Jacobabad. The return for the year 1854 is for seven months only, in consequence of an omission on the part of the persons employed to register
	1853	5,377	57,534	89,735	6,077	10,260	8,856	30,831	122	25,008	18	9		7,184	
	1854	3,335	10,287	7,303	4,292	6,572	3,767	18,703	138	12,492	33	18		4,285	
7 Moobarukpoor to Shikarpoor.	1852							No Return.							No return for 1852, nor January or February in the year 1853. Moobarukpoor is one of the principal towns of the frontier district to the N W of Shikarpoor.
	1853	3,144	34,795	6,805	15,536	22,538	66,516	22,493		64,899				18,025	
	1854	4,557	46,194	6,712	9,235	18,262	64,229	11,361	9	53,693				19,453	

Shikarpoor Collectorate.	Year.	Carts.	Camels.	Horses.	Donkeys or Mules.	Horned Cattle.	Sheep or Goats.	Porters with Loads.	Unloaded Foot Passengers, European.	Ditto, Native.	Palkees or Litters	Spring Carriages.	Artillery, Guns or Carriages, Platform Carts, &c.	Women.	
8 Jaghun.	1852	2,599	8,360	5,430	4,949	9,381	8,355	9,319	53	14,139	1	1		7,170	Jaghun is on the Kafila road from Rojhan to Shikarpoor. The return for the year 1854 is for five months only, the registration for the rest of the year having been omitted.
	1853	3,323	8,489	5,326	5,077	8,369	8,264	9,563	856	10,222				6,075	
	1854	828	4,563	1,496	1,349	1,899	1,739	1,752	30	4,350	6	7		1,333	
9 Jacobabad.	1852							No Return.							No return kept in 1852, nor January or February in the year 1853.
	1853	15,419	81,420	32,418	13,308	1,04,116	57,486	8,966	8	66,949	14	61		13,470	
	1854	27,921	126,958	62,264	51,530	278,347	177,641	31,639		293,628	25	24	14	52,714	
10 Kusmore to Jacobabad.	1852							No Return.							No return for 1852, nor for January or February in the year 1853. This road was cleared by Major Jacob in the season of 1852. Only a very small portion of it has been bridged.
	1853	590	1,559	3,016	4,830	5,459	4,771	761	2	17,441		4		4,690	
	1854	1,111	5,043	3,677	7,702	11,996	14,383	3,467	4	21,108				4,662	
11 Meerpoor to Shikarpoor, passing the bridge over the Beegaree Canal.	1852							No Return.							No return for 1852, nor for January or February in the year 1853. This road was cleared and bridged throughout by Major Jacob in the year 1852-53.
	1853	2,873	10,169	4,158	15,010	17,028	11,484	1,714		25,319				7,479	
	1854	6,939	11,551	7,700	9,626	23,436	27,245	5,469	10	26,803		2		7,577	

(Signed) H. B. E. FRERE, *Commissioner in Scinde.*

Progressive Increase in the Trade of the Province of Scinde by its Sea Face, under British rule.

Years.	Sea Imports.	Sea Exports.	Total.	Per centage of Annual Increase.
1847-48....	Rs.28,78,720	15,47,308	44,26,028	„
48-49....	34,97,157	10,71,339	45,68,496	3 per cent.
49-50....	41,94,141	11,43,783	53,37,924	17 per cent.
1850-51....	42,58,316	19,64,618	62,22,934	17 per cent.
51-52....	48,92,202	24,41,228	73,33,430	18 per cent.
52-53....	53,56,908	37,63,376	91,20,284	23 per cent.

"Aggregate value of the Registered Trade crossing the land frontier" of Scinde during the year 1852-53.

Imports Rs.33,59,888

Exports and re-exports 20,10,775

Being an increase as compared with the previous year, on Imports of.... Rs. 9,77,442, or 41 per cent.

And on Exports of ..... 2,25,357, or 13 per cent.

"General direction of the Trade and its value relative to direction," viz.

	Imports.		Exports.	
	1851-52.	1852-53.	1851-52.	1852-53.
Affghanistan, Beloochistan, and Countries west of the Indus ..	11,88,211	17,64,575	8,80,912	11,08,837
Bhawulpore, Jessulmere, Marvar, and other Foreign States east of the Indus	6,51,372	4,36,639	6,81,964	6,22,656
Punjab, and adjacent British Possessions..	5,42,863	11,58,674	2,22,542	2,79,282
Total	23,82,446	33,59,888	17,85,418	20,10,775

Memorandum.—The statements exhibit the value of the entire frontier trade of the province of Scinde, *with the exception of traffic by the river steamers,* which is assumed at *eight lacs;* viz. *five* lacs *upwards* and *three* lacs *downwards.* This would increase the value of the entire trade of 1852-3. Thus—

Imports	Rs.36,59,888
Exports and re-exports	25,10,775
Total value	Rs.61,70,663

And, as it affects the "*Punjab and British Possessions*," *only,* the following will be the result as regards *that* section of the statements:—

Imports	Rs.14,58,674
Exports	7,79,282
	Rs.22,37,956

The above returns are *exclusive of government stores.*

The increased import of WOOL, 90 per cent., attributed to the establishment of "*Fairs,*" raising considerable expectation of an unlimited supply from thus opening a *Mart* at *Kurrachee.* To this trade the contemplated erection of *cotton screws* will give facilities of the highest importance. Imports from the Punjab are 5,70,665; from Affghanistan, 6,83,155.

Piece Goods.—Native fabrics cannot be expected to maintain their place against *increasing consumption of British manufactures.*

Conditions of Grants of Land for Tea Cultivation.

Revenue Department, 26th Sept., 1855.

Notification.—Grants of land for tea cultivation, in the Kemaon and Gurhwal districts of the Kumaon province, will be made on the following conditions, on application to the Senior Assistant Commissioner of the district.

2nd.—Each grant will be of not less than 200, or more than 2000 acres. More than one grant may be taken by one person or Company, on the applicant's satisfying the local authorities, acting under the usual control in the revenue department, of their possessing sufficient means and capital to undertake an extended cultivation and manufacture of tea.

3rd.—One-fourth of the land in the grant will be given free from assessment, in perpetuity, on fulfilment of the conditions below stated.

4th.—The term of first lease will be for twenty years. For the first four years, the grant will be rent-free: in the fifth year, one anna per acre will be charged on three-fourths, or the assessable portion of the grant; two annas per acre in the 6th year; three annas in the 7th year, and so on, one more anna being added in each year, till, in the last year, the maximum rate is reached, of one rupee per acre.—The full assessment, on a grant of 2000 acres, will thus not exceed 1500 rupees per annum.

5th. The following are the prescribed conditions of clearance:—

At the close of the 5th year from the date of grant, a twentieth part of the assessable area; at the close of the 10th year, one-fifth of the assessable area; at the close of the 15th year, half of the assessable area; and at the close of the last year, three-fourths of the assessable area is to be cleared, and well stocked with tea plants.

6th. In the twenty-first year, on the fulfilment of the above conditions, the proprietary right in the grant, and the right of engagement with Government, shall vest in the grantee, his heirs, executors or assigns under the conditions generally applicable to the owners of estates in Kumaon; and the rate of assessment on the lands in the grant, in whatever manner cultivated, shall never exceed the average rate on grain-crops in lands in the same locality.

7th.—On failure of payment of the prescribed assessment in any year, or of any of the above conditions, (the fact of which failure shall, after local enquiry conducted by the Senior Assistant Commissioner, be finally determined by the Sudder Board of Revenue,) the entire grant shall be liable to resumption, at the discretion of the Government, with exception to the portion of the assessable area which may be *bonâ fide* under tea cultivation, and to a further portion of land, which shall be allowed in perpetuity, free of assessment, to the extent of one-fourth of such cultivated area. The portions, so exempted, will remain in the possession of the grantee, subject to the usual rates and rules of assessment in the district.

8th.—Grantees shall be bound to erect boundary pillars at convenient points round the circuit of a grant, within six months from its date, failing which, such pillars will be put up by the Government officers, and the cost thereof shall be recoverable from the grantee, in the same manner as the regulated rate of assessment.

9th.—No claim to the right and interest in a grant on

any transfer by the original grantee will be recognised as valid, unless on registry of the transferee in the office of the Senior Assistant Commissioner.

10th.—So long as Government establishments for the experimental growth and manufacture of tea shall be maintained in the province, supplies of seeds and plants will be given gratis to grantees, on application to the Superintendent, Botanical Gardens, North Western Provinces, as far as may be in his power.

By order of the Honourable the Lieutenant-Governor, North Western Provinces.

(Signed) W. MUIR,
Secy. to the Govt., N. W. P.

SONMEEANEE: *as it was, and is.*

Information of a trustworthy character regarding Sonmeeanee appeared desirable from the statements which were made sometime ago in the public papers as to the success of the trade opened by the Americans in *domestics* with this place, and the injurious effect that this success was thought likely to produce on the progress of British commerce in that part of the world. Sonmeeanee, properly Soumeeance, in Beloochistan, is a fishing station, with a bad harbour, on the shore of the Arabian Sea, about 50 miles to the west of Kurrachee, latitude 24° 27′, longitude 66° 39′, It consists of about 250 huts built of matting or mud, each adorned with a turret for ventilation, has a population of about 1,000 inhabitants, and is dignified, by English gazetteers, into a small town. Sonmeeanee and the neighbouring territory rejoice in a Iam, or chief, who holds his dusty principality under the Khan of Kelat, the right trusty friend and ally of the British.

The following notes on the port and commerce of Sonmeeanee may be relied upon as conveying the latest and most authentic information, collected on the spot by a late lamented and able uncovenanted civil servant of the East India Company, and who died before their transmission to Government.

The notes which we transcribe convey an important lesson as to what enterprise and energy may accomplish.

"Soumeeanee has gradually sunk in importance since the British occupied Kurrachee. The *first* serious blow it received was in the diversion of the Affghan trade in the time of Sir Charles Napier; this was mainly caused by

the exertions of Khan Mahomed Mingul, the chief of Wudd, and the facilities which presented themselves at Kurrachee in accommodation, and ready freight for goods to Bombay, decided the traders in preferring Kurrachee as their port of export. A *second* blow was inflicted when interportal duties were abolished; as goods arriving in Bombay or any other British port from a British possession were admitted duty free—though this made a difference of but *three per cent.* in favour of Kurrachee over Soumeeanee, it had its effect; and that it was the more felt as the Customs' forms on dutiable goods are strictly carried into operation in Bombay. The *third* and finishing stroke was the abolition of frontier customs in Scinde. Every man now who has produce takes it to Kurrachee, as there he not only finds a good market, but he is better able to invest his money in return goods suited to the people of Lus. To all these must be added the difficulties under which traders labour, where there is no settled government. The Jam's man of business is paid rupees ten per mensem (*Luckee-sir*), he collects the revenue which is mainly derived from the Customs, and he is also the head of the police—if such an establishment can be said to exist. There are a few sepoys, never exceeding four in number, who receive rations but no pay, and to their agency is attributed all the robberies which occur and which have of late, owing to the unsettled state of the country, been very numerous. He has another duty, that of supplying the Jam's sepoys and other retainers with food during their stay in the town, whenever business induces them to visit it. As they have no money and he has no state resources, the merchants are indented on, with a promise of reimbursement, for food for themselves and their horses. The customs levied on imports and also on exports at Soumeeanee is *three per cent.* on value: the

vessels' manifest or the merchants' advices being produced, no other formality is thought of, and there is nothing like an examination to test the correctness of these documents —this is so far to the advantage of commerce.

"According to Lieutenant Pottinger, Soumeeanee was plundered and burned to the ground by the Joasmee pirates in 1808. It was recovering when he visited it in 1811, it then contained 250 huts, and had, for its appearance of poverty, a considerable trade; it must have fluctuated considerably since then. It is not to appearance of one-half the importance it was in 1844. According to the best accounts that can be obtained, the revenue of the town from all sources in 1838 was between Rs.40 and 45,000, it fell to Rs.15,000 in 1844-45, and at the present date the receipts for the year do not exceed Rs.4 or 5,000. The vessels belonging to the port of Soumeeanee are

The Futtay Shaee of	250	Candies.
Sullamut Savoy	175	„
Meerapooree	250	„
Aorsee	150	„
Putton	60	„
Wachera	40	„
Looto	50	„
Sullamut Savoy (2nd) . .	175	„
Ashrafee	175	„
Do. (2nd)	60	„

"All these vessels are sailed under the British flag and possess British registers. There is not much employment for them just now: the ports with which a traffic is kept up are Bombay, Muskat, Mandavie, and Kurrachee. The first seven boats belong to Hemraj, a Hindoo merchant, who has been ruined through his transactions with the Jam, and is now at Kurrachee where he will in all probability settle. The next belongs to Sett Katin, a Kojaha

merchant, the next following to Rungoo, a Banian; the next to Versee, and the last Dingee to Khemchund Bubhoo.

"SOUMEEANEE FISHERY.—There are Rachuns of the largest size and ten or twelve Buttels. The Koolee population amount to about one hundred men and boys of sufficient age to enable their taking a place in the boats—the mode of fishery is precisely that under adoption in Kurrachee. The fins of the sharks are sent to Bombay for the China market, as are also the maws (as they are called) of the seal. The rawus which afford the maws on the coast of Scinde and Kutch, are not found here. The flesh of the shark is salted for the Bombay market, and the smaller fish is consumed in the town, or carried off in a salted state by the inhabitants of the surrounding countries. The fishermen pay the Government ten fish in the every hundred they catch—they have no other direct taxation, and have but one cause of complaint which is that they cannot find sale for all they catch, for which they believe themselves to be far worse off than their brothers of Kurrachee.

"There are now of inhabited houses, and which are here considered permanent—that is,

Built of mud	145
Of Jopras or mat houses	107
	252

"Which, at four persons to a house, will give the number of inhabitants 1,008. There are 100 of uninhabited houses in the town, the owners of which have emigrated, and 106 ruins of tenements, the destruction of which must be attributable to the same cause. All, or nearly all, these people who once inhabited these houses have taken up

their residence in Kurrachee. The present population of Soumeeanee is computed as follows:—

Kojahas	250
Banians	342
Koolees	250
Labourers, dyers, and artificers . .	200
	1,042

"The Jam at times visits the place when his attention is devoted to the wives of his Hindoo subjects, and to the extraction of money from the Banians and other merchants. Since the late disturbance he has drawn in ready money; first a sum of Rs.500 then Rs.300, and but a few days back he sent an order on his kardar for Rs.1,000. This sum the people declined to give, but made a contribution to the extent of between Rs.300 and 400, which has not yet been dispatched, for this he has promised a remission of taxes, and will perhaps grant it.

"Under such circumstances it is not a matter of surprise that the town should be in a ruinous condition, that the revenue should so seriously diminish. Soumeeanee will fall yet lower in condition as Kurrachee gathers strength, the traffic now carried on with Bombay will be superseded by one with Kurrachee and that by land in lieu of by water."

PROCEEDINGS OF A PUBLIC MEETING AT KURACHEE, *on the 4th September*, 1855, for promoting Direct Steam Communication between Kurrachee and Suez.

PURSUANT to notice, a Meeting of the residents of Kurrachee was held at the Collector's, Kutcherry, on Tuesday, the 4th September, at 4 o'clock, p.m., to consider the subject of "Direct Steam Communication between Kurrachee and Suez." Among the company assembled were, H. B. E. Frere, Esq. Commissioner; Brigadier Parr; Colonels Turner, Creagh and Hobson; J. Gibbs, Esq., Assistant Commissioner; M. J. M. Stewart, Assistant Commissioner; Majors Steuart, Grimes and Hogg; Captains Gibbard, Pirie, Marston, Dansey, Ashburner, Dunsterville, Moyle, Tennant, Muter, Evans, Leeds, I.N., Merewether, Pelly, Macdonnell and Gayer; Drs. Rooke, Cameron and Costell; Messrs. Dalzell, Cole, Elander, Maher, Vary, Ingle, Wells, Newnham, Barnett, Woodhouse, Amos, McIver, Meiklejohn, McClumpha, Hewett, M.P. Tuback, Pegler, Nicker, &c., &c., &c.

The Commissioner having been called to the chair, stated that he would preface their proceedings by a brief account of the progress of the question, the consideration of which had brought them together that day.

The idea of a direct communication between Kurrachee and Suez was no new one, it had been mooted by the late Sir C. Napier, very shortly after the conquest of the province, and it would in fact suggest itself to almost any one who considered the physical configuration of this part of the continent of Asia; a glance at the outline map hung up in the room (which was taken from a Parliamentary

Blue Book very recently published), would show the Meeting that from Aden to Bombay the direct distance was 1640 miles, while from Aden to Kurrachee the distance was but 1435 miles, making a saving of 205 miles, but this was during the fair weather; in the south-west monsoon the distance to be run from Bombay to Aden was 2170 miles, which would make a difference in favour of the passage from Kurrachee to Aden of 745 miles, whenever the passage could be made direct; there appeared reason to suppose that the cases would be very rare in which the direct passage along the Arabian coast would be impracticable, and even if a vessel from Kurrachee were obliged to deviate from the straight course, the difference would still be many hundred miles in her favour, as compared with a vessel going from Bombay. The advantages of Bombay as regarded geographical position, were well known, and therefore a knowledge of these facts was sufficient to show the superior geographical position of Kurrachee as the port of communication with Suez, and for all parts of India which were as near, or nearer to Kurrachee than they were to Bombay.

But there were several serious obstacles which had hitherto rendered it impossible to take advantage of this excellent geographical position.

1st. There was the want, or supposed want of a good port at Kurrachee; many now in this room can recollect that when little more than three years ago Mr. Hardy Wells published a pamphlet, to point out that even in its present state the harbour of Kurrachee was an excellent one for ships of considerable burthen, and that it was manifestly capable of very great improvement, his remarks met with almost universal ridicule; this, however, did not deter Mr. Wells from stating what he believed was the truth, and the result has proved he was right. The next step towards

establishing this fact was taken by Colonel Turner; it would be remembered that the bar of Kurrachee Harbour was for a long time supposed to be composed of rock, and numerous plans were devised for removing it by blasting. Colonel Turner instituted a series of very careful experiments by boring, and showed most conclusively that there was not a particle of rock any where on the bar, that the whole was composed to a considerable depth of soft sand; the establishment of this fact of course removed one principal ground of the fear which mariners before had of approaching or touching on the bar.

But the principal share of the credit of practically proving the absence of any danger in entering the port, was due to Lieut. Leeds, the Port Officer, who with great skill and judgment, and on his own responsibility, piloted in ships of considerable burthen, and had practically shown that this might be safely done, even without any aid from steamers. The result was that during the monsoon just closed, four large steamers from Bombay and Aden, and eight sailing vessels of from 300 to 878 tons had come in, and gone out, and with one exception, it had never been found necessary to wait even a single day for any particular tide; and it must be further remembered, that each of these eight sailing vessels was towed in and towed out of the harbour by a steamer (the "Victoria,") which no later than last year was employed in conveying passengers at the most crowded season between Bombay and Suez.

"Facts like these prove beyond a possibility of doubt that there was no difficulty whatever in getting vessels, even of considerable size, into and out of Kurrachee harbour, during the south-west monsoon, the most unfavourable period of the year.

"2nd. A second very serious obstacle was the want of charts of a large portion of the Arabian coast. This coast

had been surveyed by Lieutenant Grieves, I.N., who has had a large share in the surveys of all the coast from the Gulf of Cambay round to Cape Gardafui; but the charts had not been published, and the want of any chart of course added greatly to the hazard of a voyage along the Arabian coast. This want has now been supplied, the charts have been published, and have lately been sent out by the Court of Directors. The consequences of the removal of this obstacle were almost immediately apparent, the want of them had for many years delayed a trial of what is called the north-western passage from Bombay during the south-west monsoon. It had been long ago suggested by Captain Haines, and subsequently by the late Captain James Young and Lieutenant Fergusson, of the Indian Navy, and others, that instead of a long detour to the south, steamers from Bombay should stand to the north-west towards the Arabian coast, and thus make a much shorter passage to Aden. But without charts of the Arabian coast it was dangerous to attempt this passage. No sooner, however, were the charts published than the passage was tried, and has been twice successfully performed, during the late monsoon, by the steamers of the P. and O. Company.

"3rd. A third very serious obstacle was the want of a good communication with the Punjaub. We were charged in Scinde with a tendency to over-estimate the importance of our province; but we must remember that Scinde forms, as it were, but the spout of the funnel, of which the vast province of the Punjaub forms the larger, and by far the more important portion. That Kurrachee is in fact the port of the Punjaub, and that unless we have a good communication with the Punjaub, the best possible port at Kurrachee would be of but comparatively small value. The province of Scinde contains somewhere under two millions of inhabitants, while the late census showed that the

Punjaub territories contained a population of more than thirteen millions. This number, though it may not appear great by the side of the hundred millions of India, will appear more important if we reflect that it is more than half what the population of the United States was in 1850, and nearly half the population of the United Kingdom in the same year. For all these fifteen millions living, cultivating and trading on the banks of the Indus and its tributaries, Kurrachee is the natural port, and it is through Kurrachee that they would naturally communicate with all places beyond sea. Evidently, then, good communication with the Punjaub is of the utmost importance to Kurrachee as a port, and matters seem now in a fair way to make this communication all that could be desired. In the first place good postal communication has been secured, thanks to the exertions of Mr. Coffey and of Mr. Nicker, and those who have assisted them in the work, the postal communication between Kurrachee and Mooltan has been greatly improved. A speed of nine and ten miles in the hour, and sometimes more, including stoppages, has been steadily maintained for the last two years along the whole line of 612 miles, and both in speed and regularity it is now equal to any in India.

The improvement in steamer transit on the Indus has also been as rapid and as great. It is little more than three years since Captain Ethersey, to whom this improvement is mainly due, obtained leave to try the experiment of sending one boat in each month to Mooltan and back, with passengers and merchandize. The experiment made, under every disadvantage, has been most successful. I find that the net receipts of this one steamer, per month, were in—

	Rs.
1852-53	43,291
1853-54	49,277
1854-55	60,554

The quantity of merchandise offered for shipment is often two or three times as much as the steamers can carry, and I am happy to be able to state that the Court of Directors, in compliance with a suggestion of Captain Ethersey's, have ordered out four steamers and four flats for this particular service.

But the greatest improvement in the communication with the Punjaub will be the railway. Mr. Hardy Wells, who projected it, has now got some of his staff of civil engineers among us actually at work. The Bill for incorporating the Company has passed the Imperial Parliament, the capital has been subscribed, and the undertaking may therefore be safely regarded as having passed its embryo stage, and there is now no room for reasonable doubt that we may shortly see the work actually in progress, and before many seasons are over be able to travel from Kurrachee to the Indus, which has always been one of the worst portions of the whole line of communication between Kurrachee and the Punjaub.

Nor is it any chimerical hope that we may, ere long, see this Railway yet further extended. There is one portion in particular, between Umritsir and Mooltan, which would be of the greatest value. There are, I believe, no engineering difficulties whatever on the line; and, starting from Umritsir, with its 130,000 inhabitants, and passing Lahore, with its 80,000, to Mooltan, with its 22,000, it would prove a most important portion of the whole line of communication.

These three great obstacles, the supposed want of a good port at Kurrachee, the want of good charts of the Arabian coast, and the deficiency in good means of communication with the Punjaub, having been removed, or being in course of removal, the time seems now come for taking advantage of the excellent geographical position of Kurrachee, as a port for direct communication with Suez.

I will now briefly state the circumstances which have led to a proposition for establishing such a communication, which will form the more particular subject of consideration for this meeting.

About two years ago, a Mr. Coffey, the Post Master in Scinde, proposed that, in lieu of the present postal contract with the Bombay Steam Navigation Company, to run a steamer three times a month to Bombay; contracts should be invited to run a steamer twice a month, to meet the English mail at Aden. This proposition having been laid before Mr. Riddell, the Director General of post offices, he stated his opinion, that "there can be no question that the opening of a direct steam communication between Egypt, Scinde, and the Punjaub, would greatly benefit, and it would do much to hasten the investment of foreign capital in the two latter countries." He doubted, however, whether under existing circumstances, it would be worth while to open a communication merely so far as *Aden*, where passengers would only have a chance of a berth in an overcrowded steamer, with the risk of detention at a bad and expensive hotel, and the certainty of very high charges for very inferior accommodation, from Aden to Suez. He considered, however, that if the Bombay Steam Navigation Company would undertake to send a steamer, four or five times in the season, the whole distance from Kurrachee to *Suez*, "they would perform a very important service to the European residents in Scinde, the Punjaub, and the upper portion of the north-west provinces, and might fairly claim such a bonus from Government as would ensure a moderate return for the capital expended."

Mr. Riddell estimated that, at the very least, 250 passengers might be expected from the Punjaub and north-west provinces, and an equal number from England and Europe; and that other sources of income, such as native

pilgrims, and freight for overland parcels and packets, might be looked for.

Government forwarded Mr. Riddell's letter, with instructions that I should obtain data on which to form an opinion, whether the periodical despatch from Bombay of a packet steamer for Suez, calling at Kurrachee for mails, passengers and parcels from Scinde and the north-west provinces, would be remunerative to a private company, or such an advantage to the public, that Government could reasonably undertake the expense.

Upon the receipt of this letter, a series of questions was addressed to the various government authorities; and, by the aid of the governments of the Punjaub and north-west provinces, a great mass of information was collected from those provinces, and from Scinde.

The replies to the queries were then forwarded to a committee, composed of Lieut. Leeds, I.N., the port officer (who was well acquainted with the peculiarities of the port, which he had been one of the first to open to square-rigged vessels, and who had been for many years employed on the southern coast of Arabia), Mr. Dalzell, the Deputy Collector of Customs, and Mr. McIver, a mercantile gentleman, established for some years at Kurrachee, who, from their respective positions, were well able to form a judgment of the bearings of the question.

They have drawn up a very able Report, which I purpose requesting Mr. Dalzell to read to the meeting. My reasons for doing so, before submitting it to Government, are, that I feel sure Government would wish to know the opinion of the public on the subject, as well as the views of the able government officers who have been consulted; but more especially because I consider it peculiarly desirable that the statements made should be discussed and sifted. Such discussions always lead to a subject being better understood;

and if there are any incorrect or over-drawn statements, no persons are better able to detect and correct them than the present meeting, composed of gentlemen who are intimately acquainted with all the local bearings of the case. The European inhabitants of Scinde are, for the most part, Government servants, and are very wisely debarred, by the orders of Government, from taking any part, except as shareholders, in a commercial company. Hence, we must depend on capitalists in other quarters, for all the agency required to get up and work such a company; and to such parties at a distance your assistance, but above all, your criticism, on the facts and opinions laid before you, may be most valuable; and I trust therefore, that any discussions which may arise on this Report, will be as full and unrestrained, and above all, as critical as possible. I have only to add, that there is nothing in any of the projects alluded to, which can be construed into an attempt at rivalry with any other part of India. The provinces on the Indus and its tributaries are cut off from India by the Great Desert, and cannot naturally communicate with the sea by any other route than this. Of course, goods do find their way to the Punjaub, through Calcutta and Bombay; but they have to follow round-about and unnatural routes. And if they can be supplied through the direct and natural channel, the benefit to the provinces so supplied will be felt even at Calcutta and Bombay, far more than the loss of any traffic which may leave those ports, to pursue a more direct and cheaper route. It is said, that for every house built in Liverpool, Glasgow, and Bristol, you have one built in London; and I have no doubt that, for every ship we may have in Kurrachee, you will find one additional in the harbours of Bombay and Calcutta. Of the local effects of improved communication with Suez, it would be quite superfluous to speak. Independent of its effect upon commerce, it comes

home to the feelings of every one of us; for there is no one who does not hope at some time to visit England, and who is not interested in the speedy transmission of the overland mails. But the question is, I think, one of national importance. If we look to Europe, we find a large army of 40,000 men fed, and supplied in an enemy's country, at a distance of many thousand miles from their home; and better fed, better clothed, and better supplied than any such army ever was in England itself. And how is it that this army is able to hold its position in the Crimea? Why, in the first instance, it is owing to the indomitable courage of our soldiers and sailors; but in the second, and in no small degree, to the vast and unequalled resources of our English mercantile steam navy. And I firmly believe that every additional steamer we have in India, is an additional security for the stability of our empire, and for the many blessings which I believe that empire secures to India.

Mr. Dalzell then read the Report of the Steam Committee as follows:—

REPORT

From the STEAM COMMITTEE, *composed of the* PORT OFFICER, *the* DEPUTY COLLECTOR OF CUSTOMS, *and* DAN. M'IVER, ESQ.

Kurrachee.

To H. B. E. FRERE, ESQ., *Commissioner in Scinde.*

SIR,—We have the honour to acknowledge your letter, No. 2164, dated 28th ultimo, forwarding a file of correspondence on the subject of a proposal emanating from the Director-General of Post Offices, to run a Government Steamer once a month, as an experiment from Bombay to Suez, touching at Kurrachee and Aden *en route*; and appointing us a Committee to sift, condense,

and where necessary, add to the information which has been collected, with a view, in the first place, to furnish Government and the Director-General with data on which to judge of the practicability of the scheme.

In forming an estimate of the probable success of such a communication, the chief question for consideration that presents itself is, have the internal communications of the country arrived at such a stage of improvement as to justify the expectation that the proposed enterprise would meet with that measure of encouragement necessary to its existence; or, are we still so far behind Calcutta, in respect of our communications, that the facilities and conveniences which that route affords more than counterbalance the advantages, in point of distance, offered by the Indus route; which, as it is the most direct, is naturally the channel of outlet, as well for commerce as for the homeward bound from the Punjaub and north-west provinces; and from Umballa as a centre, even by the circuitous route of Lahore and Mooltan, the distance is 50 miles nearer to Kurrachee than to Calcutta; and by the route of the Sutlej, navigable for steamers of light draft throughout the year from Ferozepore, distant from Umballa 125 miles; Kurrachee is 150 miles nearer Umballa than Umballa is to Calcutta.

Nothwithstanding these natural advantages, it is clear from the correspondence submitted to us, that improved facilities in our internal communications are indispensable, if we would desire to render Kurrachee the point of embarkation to Europe for all passengers from the Punjaub and north-west provinces, who, in choosing a route homeward, were not influenced by personal motives, altogether independent of either the route, the mode of conveyance, of expense, or of time.

We are, nevertheless, of opinion, from the data before us, that, even under existing circumstances, sufficient encouragement would follow the proposed undertaking, to justify Government in at once experimentally incurring the expense.

The opening up of such a communication could hardly fail to prove of the utmost advantage to the interests of the Punjaub, north-west provinces, and Scinde, by encouraging the introduction of foreign capital, so essential to the better development of their resources; and to render Kurrachee the emporium of her own

commerce, by removing one of the greatest impediments to her progress,—the necessity of resorting to a market 500 miles distant. This can only be effected by British agency and capital; and nothing, we think, would tend more to facilitate their introduction, than the proposed steam communication with Suez.

We are especially sanguine that, when it shall become known throughout the Punjaub and north-west provinces, that passengers can embark at Kurrachee for Suez, without the necessity of changing steamers at Aden, many would adopt the route, as well for the saving of time that would be gained, as the expense and inconvenience that would be saved.

From Calcutta to Suez the charge for passage by the P. and O. Company's steamers is Rupees 900, whilst the charge from Bombay to Suez, which should be also the charge from Kurrachee to Suez, is only Rupees 650. By adopting the Kurrachee route then, a saving of £25 would be effected, besides a proportionate saving for children and servants, and the sea voyage lessened by eight or nine days; both material considerations, which we think would go far to outweigh the greater facilities of the Calcutta land route.

If, under present circumstances, we find that from 60 to 80 travellers annually leave the Punjaub and north-west provinces to proceed homewards *via* Bombay; involving expense of passage thither; hotel charges at both places, and change of steamers at Aden, and possible detention there; it is surely not unreasonable to expect that, with the removal of these disadvantages by a steamer running direct from Kurrachee to Suez, that number would be considerably increased, even in the existing state of our inland communications; and when these shall have been improved by the completion of the Railway about to be constructed between Kurrachee and Hydrabad,—a greater number and better description of steamers on the Indus—two we believe are now on the way from England—the road from Mooltan to Lahore metalled, which is, we believe, about to be undertaken, and a steamer on the Sutlej to Ferozepore, long in contemplation, we cannot see why any other than the Indus route should be adopted by all travellers from Peshawur to the gates of Delhi.

From the returns of the authorities in the Punjaub and north-west provinces, which are not quite complete, we find, that the

probable number of passengers who would avail themselves of the proposed route to Europe, would be monthly as follows:—

1st Class Passengers	from	12 to	13
2nd ditto	ditto	8 to	10
Children		10 to	12
European Servants . .		2 to	3
Native ditto . .		7 to	8

and that, with improved communications, these numbers might probably be doubled.

With these results before us, we are of opinion that the proposed undertaking would be successful; and, as many of the improvements and facilities which have been suggested, as the sure means of enlarging these results, are, some in course of progress, and others in contemplation, we coincide with the generally expressed opinion of the aforesaid authorities that, when these shall have been carried out, Kurrachee will become the point of embarkation to Egypt, not only for all passengers from the Punjaub, north-west provinces and Scinde; but, were the route to be rendered the shortest practically as it is physically, for mails and parcels also.

We have deemed it desirable to make a few extracts from the correspondence of the authorities in the Punjaub, the north-west provinces and Scinde. These will be found in the Appendix (A) to this letter,—they express the sentiments generally of all to whom the question of the proposed steam communication had been submitted.

We are not aware upon what data their estimate of passengers has been formed; but we think it will be interesting and useful to enquire,—what are the resources of the Punjaub, north-west provinces and Scinde, which, under the improved facilities of communication suggested, are calculated to feed and maintain independent steam communication between Kurrachee and Suez?

The military force of these provinces, going no further east than Umballa, numbers upwards of 70,000 men, more than 15,000 of which are Europeans. This is independent of officers, which, allowing for absentees, cannot fall short of 2000. Supposing every fourth officer to be a married man, and two the average number of children to each; we should then have 2500 adults and 1000 children, add to these the covenanted and un-

covenanted civil list, strictly Europeans, say 400; and an equal number of private residents, out of a mixed European and Anglo-Indian population of about 1000, scattered throughout the provinces, who may be supposed to be bound to England by the ties of home and country, and that these also are married-men, and have children in the proportion given above; the total European population who, it may be conceded, would at some period or other revisit their native land, probably all as first class passengers, would be 3,500 adults, and 1,400 children. This is independent of second class passengers, who might probably number 500 more.

Assuming that each adult, on an average, revisited Europe once in every eight years (and we believe this will be found an under-estimate), and that every child were to be sent home on attaining the age of five years; the number of passengers who might be expected monthly, to take the route to Europe *viâ* Kurrachee, under improved communications, would stand thus:—

1st Class Passengers	36	
2nd ditto . . .	5	
Children	23	
European Servants	4	probably
Native ditto	10	do.

The monthly receipts from these sources, according to the Bombay rate of passage money, deducting five children as of under age, and consequently free, would amount to rupees 33,900.

Were even half this sum to be realized monthly from passengers, we think it would hold out sufficient encouragement to any company to undertake the proposed line. The Austrian Lloyd's Company might, with advantage, connect it with their Mediterranean line of steamers; and that it would eventually become more than remunerative, we hardly entertain a doubt.

The large supplies of overland goods which the large force we have alluded to must annually consume, would, doubtless, form a considerable item in the receipts of the proposed undertaking. We have no means of forming an estimate of the probable consumption of such goods; but some idea of their extent may be formed from a statement of Major Jacob, the Political Superintendent of the Upper Scinde frontier, and Commandant of the Scinde Irregular Horse; that about fifty camel loads, or 24,000 lbs., is about the average annual supply of Europe goods required by the

regiments he commands; and which, were the proposed steam communication established, could be forwarded to him by that opportunity.

If then, this be the annual consumption of overland-borne goods of two native regiments, 1,600 strong; what must be the consumption of an army of 70,000, of which above 15,000 are Europeans?

Hitherto, overland goods for the Punjaub and north-west provinces have, for the most part, taken the Calcutta route, owing in a great measure to the suspension, during the monsoon, of steam communication between Bombay and Kurrachee, as well as to the inadequacy of the river steamers on the Indus, set aside by Government for the public convenience to supply the increasing demand for freight. For, notwithstanding the many drawbacks with which our commerce is surrounded, the trade of the province has, within the last five years, increased seventy-three per cent; from which goods for up-country despatch have frequently lain in the agents' hands for two, and even three, months after freight had been paid, waiting an opportunity to ship them.

But the chief of these impediments to our progress would cease with the introduction of the proposed steam communication with Suez, which would assuredly divert to the more legitimate channel of the Indus a large portion of the overland traffic, which now finds its way into the Punjaub and north-west provinces by the circuitous route of Calcutta

On the above, and kindred subjects, we have a letter before us from a respectable house of agency in Bombay, which will be found in Appendix (B)

We might, of our own personal knowledge, multiply instances of delay and disappointment such as are therein represented; but those detailed in the letter referred to will suffice to show much we stand in need of improvement in our river communications; and how absolutely necessary it is for the interests of commerce and the public, that the communication between Bombay and Kurrachee should be uninterrupted throughout the year.

In discussing the advantages of the proposed steam communication, we would not overlook the fact of Kurrachee being more than 200 miles nearer Suez than Bombay is to Suez; and that, whilst the Bombay steamers have to contend with the difficulty of the monsoon, the Kurrachee steamer, as she would be able to

run for a considerable distance out of its influence, would have comparatively less monsoon to struggle against; so that, independent of the shorter distance, she could make the passage to Suez, during the monsoon season, in less time than the Bombay steamer could, and with undeniably greater comfort to passengers. On this subject, an interesting memoranda will be found in Appendix (C).

Neither should we omit to notice a source of considerable profit that would probably arise from the conveyance of Mahomedan pilgrims to and from the holy shrines in the Red Sea.

We know that thousands of pilgrims annually resort thither from the Persian Gulf; some travelling across Arabia, others in native craft to Bombay, and thence by boat and steamers to Aden and Suez.

Were a company to take up the Kurrachee and Suez line, it might be so arranged, either that the Suez steamers should touch at Muscat and embark pilgrims thence, which would not perhaps entail more than a day's delay; or a branch steamer might ply between the Persian Gulf and Kurrachee, as a feeder of the Suez steamer; and there is a considerable traffic in merchandize carried on between the ports in the Persian Gulf, Muscat, and Kurrachee. This steamer could also carry the Persian Gulf mail; and, viewing the present aspect of the political horizon, woult it not be a matter of the highest importance to have a regular communication with the Gulf, upon which we could always depend?

To be the nearest point from Europe of all our Indian possessions, is important in many points of view. And when the electric wire shall have connected Kurrachee with the Punjaub (as sooner or later it must do), and the proposed communication established, the satisfaction will be ours, of being the first to disseminate the political and commercial intelligence of Europe to the most distant parts of our Indian possessions.

Before opening the proposed communication we would suggest, that three months' notice be given to the public in the most prominent possible manner. That a day be fixed, and adhered to, when the steamer will leave Bombay and Kurrachee; and, to avoid the change of steamers at Aden, some Bombay passengers would probably prefer taking the Kurrachee route. That the nature and extent of accommodation and amount of passage money,

which should be the same as the charge from Bombay to Suez, be also publicly announced; that the communication on the Indus be twice a month up and down; and if a steamer were available once a month to and from Ferezopore, so arranged as to meet the Mooltan steamer at Sukkur, we have no doubt it would be greatly availed of by passengers, as well as for merchandize.

We have the honor to be &c., &c.,

(Signed) ROWLEY W. LEEDS, Lt. I.N.,
Port Officer.

P. M. DALZELL,
Depy. Collector Customs.

DAN. MCIVER.

Kurrachee, 3rd August, 1855.

APPENDIX A.

The CHIEF COMMISSIONER of the Punjaub is of opinion that the proposed scheme would prove successful.

G. C. BARNES, Esq., Commissioner, Cis-Sutlej, states:—

Before Kurrachee can compete with the Calcutta route, there must be a good metalled road to Mooltan. There must be better steamers from Mooltan to Kurrachee, and there should be a railroad or good metalled road between Tatta and Kurrachee. The Bungalows must be increased in number and in conveniencies, and the hotel at Kurrachee must provide superior accommodation. So soon as these impediments on the route are removed, the stream of passengers and traffic will naturally follow the direct route; and so long as the improvement is delayed, Calcutta will be preferred. At present, the Calcutta route is so much easier, that only a few passengers venture down the Indus from the Cis-Sutlej States; whereas, if the facilities of communication were placed on a level with the route to Calcutta, all passengers and letters from Peshawur to Kurnal would travel down by Mooltan to Kurrachee.

The Indus is one of the noblest streams of Hindostan. A

steamer might come up as far as Ferozepore on the Sutlej. The land route, *via* Mooltan, might be made as good as the trunk road. There is no doubt that, if a proper fleet of steamers were kept on the river (Indus), and the road between Lahore and Mooltan metalled, all the passengers from the Punjaub would gladly go to Kurrachee and take their passage in the Bombay steamer that is to go direct to Suez.

M. P. EDGEWORTH, Esq., Commissioner, Trans-Sutlej, says :—

The most important query is, regarding the improvements in the communication with Kurrachee. This subject divides itself into two parts : that between the upper stations and Mooltan, and from Mooltan to Kurrachee.

At present, the only communication is by an unmetalled road, branching from near Googaira to Ferozepore and Lahore respectively ; and the only means of travelling on it are—1st, marching readily accomplished by the aid of travellers' rooms in the Serais, without tents—2nd, by mail or express cart, a mode of conveyance well suited for strong persons but quite inapplicable to invalids —3rd, Palki Garri, lately established, involving great cruelty to the horses on the heavy roads—4th, Palki dak, almost impracticable, as there are no regular bearers along the road.

To improve existing modes of conveyance, some simple improvements, capable of immediate adoption, may be proposed, light-covered two-wheeled cars, or a Hansom cab, might be very advantageously introduced, high wheels being the main point to be insisted on for the unmetalled road. A conveyance of this kind would be possible for a lady to travel in.

The post office has lately established a bullock train on the road ; but to render it efficient, it will be necessary to metal the heaviest portions of the road.

The several rivers afford a commodious way of travelling to Mooltan during the flood season, from May to October ; and the long talked of introduction of steamers up the Jhelum is an indispensable part of the improvement to communication.

But the main and only permanent improvement will be, the formation of a railway from either Umritsir or Lahore to Mooltan.

With regard to the communication below Mooltan, the main

point is, increased accommodation for travellers and greater comfort in the boats, which are at present peculiarly ill-suited for the purpose.

The proposed Scinde Railway will do almost all that is required for the lower communication.

For the conveyance of goods, the present steam accommodation is utterly insufficient.

In fine, I may express my fervent hope, that the proposed measure may be carried out, as I am convinced it will be one of very great importance to the improvement of these provinces.

ED. THORNTON, Esq., Commissioner, Jhelum Division, states :—

Of the several questions put by Mr. Frere, the only one I am able to reply to is the second. Upon this point, my opinion is, that a railroad from Kurrachee to the Punjaub, and steamers from Mooltan upwards, are required, and should be provided as soon as possible.

Major J. E. HOLLINGS, Deputy Commissioner, Shahpore, says :—

Every one who writes regularly to Europe would take advantage of the shortest route, which that by Kurrachee would certainly be, when the dak arrangements and roads in the Punjaub and Scinde become, as they soon will be, as good as any in India.

I am convinced that, in less than six months after the first steamer has gone from Kurrachee to Aden, it will be found that the passengers and freight will be more than sufficient to justify a direct communication from Kurrachee, which will make Scinde and the Punjaub independent of Bombay.

G. PATAN, Esq., Post Master General, north-west provinces, states :—

It appears to me, that the post masters have rather under estimated the number of passengers who would proceed by the steamer from Kurrachee.

A truck and carriage dak, as well as a bullock train, being now established between Lahore and Mooltan, I see little reason for travellers, to and from the Punjaub and Europe, taking any other route than that *via* Kurrachee

So soon as the road from Umballa to Lahore is metalled, and a carriage dak is established, travellers from Simla and adjacent hill stations, including Umballa, Loodianah, and Ferozepore, may be expected to prefer the route to Europe *via* Kurrachee, to that *via* Calcutta.

It seems advisable, and I have already recommended, that the Scinde Camel train should be amalgamated with the bullock train between Mooltan and Lahore, so that the transmission of light packages may be facilitated to and from the Punjaub.

The Post Master of Mooltan, if appointed steam agent there, and also agent for the Scinde camel train, would tend to induce the public of the Punjaub to have all light goods to and from Europe conveyed *via* Kurrachee.

The Chief Commissioner of Lahore, in reply to the question of what additional means and appliances appear desirable to facilitate the communication between Lahore and Kurrachee, states :—

A railroad to Mooltan, and if the difficulties which attend the navigation between that city and Kurrachee be insuperable, a good metalled road along the course of the Indus is wanted.

If these facilities existed, an immense increase of traffic and travelling would result from the Punjaub to Bombay, *via* Mooltan and Kurrachee.

K. McIver, Esq., merchant, of Mooltan, states, in reply to the question above :—

Additional steamers to keep up the communication three or four times, and with more suitable accommodation for passengers than those running at present afford.

As to the number and class, I cannot speak with any degree of certainty, but I have little doubt that the number would greatly increase; as not only expense, but so much time and distance would be saved, especially to residents in the north-west provinces and the Punjaub, who would take this route in preference to that *via* Calcutta and Bombay.

Lieut. F. W. Hopkins, I.N., freight agent, Mooltan, states also in answer to the questions above :—

That the steamer conveying passengers be fitted up with at

least six cabins, and larger than in the steamers *Chenaub* or *Jhelum*, now on the Mooltan line; to be higher between decks than the two vessels mentioned, and to have 80 horse power; not to tow or flat a cargo boat; the steamer to leave Mooltan in time to allow of passengers being at Kurrachee three or four days previous to the date of the steamer leaving for Suez, which would enable sick officers to appear before the medical board, that they might be allowed to proceed on at once.

The Deputy Commissioner of Jhung—

Would suggest a railway to Mooltan. Thinks the traffic in goods would be indefinitely increased; but does not think that it would affect passengers from his division more than 5 per cent.

Major John Jacob, Political Superintendent, Upper Scinde frontier, states:—

That the completion of the great road through Scinde, from the frontier to the sea, would facilitate the communication.

All supplies whatever for the Scinde Irregular Horse from England could be conveyed by the proposed communication, if the steamers would bring them. These supplies are considerable, amounting to about fifty camel loads per annum.

APPENDIX B.

The importance of a regular steam communication between Bombay and Kurrachee during the monsoon season, and the securing thereby an uninterrupted transit for goods to all parts of Upper Scinde and the Punjaub, cannot, in a business point of view, to ourselves and our constituents in those parts, be easily overrated.

At present, the entire suspension of steam communication, in as far as regards the traffic for goods from the end of May till September, owing to the vessels of the Bombay Steam Navigation Company ceasing to ply during this period, virtually closes Scinde as a route to the Punjaub for these important months of the year

The consequence of this is, that we have packages for Scinde

and the Punjaub, many of which contain goods received from London overland, to direct order, in our possession for nearly three months, before an opportunity offers for their transmission.

Such delay, of course, neutralizes in a great measure all the advantages which constituents should derive from the overland route, to avail of which they incur great expense; for, when a package, in the circumstances above mentioned, takes five months in the transit from London to Mooltan, when, with certain and regular steam communication between Bombay and Kurrachee, less than half that time would suffice, it is very obvious in such cases, that constituents incur all this extra cost of the overland without reaping any of its benefits.

Our correspondents, Messrs. Smith, Elder and Co., of London, who send a large number of packages for the Punjaub by each overland steamer, during the months of May, June, and July, despatch the greater portion of these direct to Calcutta, that there may be no delay with the packages while *en route* to their ultimate destination. The whole of these packages would, in other circumstances, be received at Bombay, for despatch *via* Kurrachee, as the most direct and least expensive route to the Punjaub, were the communication regular and certain all the year round.

During the monsoon season of the last two years, steamers were occasionally despatched by Government to Kurrachee, which to a certain extent were, no doubt, a public benefit, especially in this respect, in having demonstrated that there was no real difficulty in keeping the communication open during the monsoon, more than at any other season, with suitable steamers. In other respects, the advantages that might have been derived from these trips were not realized for two reasons. First, the uncertainty as to their despatch at all; and Secondly, their not receiving cargo for transmission on payment of a stipulated rate of freight, or on any condition whatever. When Government steamers are despatched to Kurrachee, the only means of sending packages by them, is through the medium of the post office, Bhangy—a method of communication only available for small packages, and quite inadequate to the public requirements; while otherwise, practically, it becomes almost prohibitory, from enormous cost of transit.

On the announcement of the despatch of a Government steamer,

we are necessitated to avail of the post office steam Bhangy, for the transmission of such packages as can be forwarded according to the post office regulations, in many instances opening large packages, and having them repacked in such a manner as will permit of their being forwarded by this, the only means of transmission open to us.

The cost, however, of sending packages of any size in this manner beyond Kurrachee is so great, that constituents, with much reason, complain of it. The following is an extract from a letter just received from a constituent in Upper Scinde, to whom we have occasion to make numerous despatches "Send me no more packages by Bhangy Dak, the charges being about tenfold the articles so transmitted." And this is only a specimen of many complaints of a similar character.

There is, however, one most serious drawback to the many advantages of Scinde as a highway to the Punjaub; and until it is remedied, or put on a vastly improved footing to what pertains at present, must preclude this route from possessing that value and importance to residents in the Punjaub, and being of that benefit to the province itself which its natural advantages seem to indicate;—we refer to the very great delay that so commonly occurs in the transmission of packages by the river steamers from Kurrachee to Mooltan.

This is a matter that has been long a source of no little vexation and annoyance to ourselves and our constituents. Complaints pour in with most unpleasant frequency upon us, from correspondents at the various stations in the Punjaub, with reference to these delays; and it is not a little provoking, that representations of this kind should come before us so often, while we are so utterly unable to find any remedy for them. We may cite one or two instances which will serve as illustration of the delays that cause so much dissatisfaction.

On the 16th January last, we despatched to Kurrachee, for further transmission, a case, to the address of Major Nicholson, Deputy Commissioner, Bunnoo, and another to the same address by the first steamer hence in February.

Instructions were given to our agent at Kurrachee, on each occasion, that the packages should be forwarded by the first opportunity, and we of course duly advised Major Nicholson to

this effect. To our astonishment and regret, we received a letter a short time since from the Major, dated 1st ult., in which he informs us, that at the date he wrote, neither of these packages had come to hand; and on referring to our agent, at Kurrachee, for explanation, we learn that they were not despatched from that place till the end of April.

A large package, containing a piano, was forwarded by us in October last, by steamer to Kurrachee, for transmission to an officer at Sealkote, who incurring the expense of having the package sent from Bombay, by steamer, to insure, if possible, its receipt by Christmas. Yet it was not despatched from Kurrachee till the 24th February, having thus lain there for a longer period than it took to bring it from London to Bombay, by a long sea voyage round the Cape.

The explanation given by our agent, in reference to the above and similar cases, is invariably to the effect that the packages are detained in the Godowns of the agent of the river steamers, after freight has been paid upon them, where they remain for weeks and months, before they are despatched to Mooltan, in consequence of the means of transit being inadequate for the traffic which offers for the steamers.

The packages of a small size, which we have been in the habit of forwarding under cover to the Postmaster Kurrachee, for further transmission by the camel train, have been uniformly despatched with promptitude and regularity.

We have evidence before us almost daily in the usual course of business, of a rapidly increasing connection between this part of India and the Punjaub, notwithstanding all existing drawbacks, and in our humble opinion little else is required, besides a regular steam communication between Bombay and Kurrachee, and an improved means of transit in Scinde to make this the principal route for every description of traffic between Europe and the Punjaub. As regards these requirements, and with reference to Scinde, with a camel train for goods already established, and a railway in progress, there seems only a better management of the river steamers wanting to make it in a very short time all that can be desired; and with respect to a regular steam communication between Bombay and Kurrachee throughout the year, when the subject comes before the Government for its earnest

consideration, the evidence of its necessity and desirableness, must, we humbly think, become so apparent, that we may confidently hope the present monsoon will be the last in which the existing arrangements shall be permitted to remain.

APPENDIX C.

1.—The distance a steamer has to travel from Bombay to Aden, in the south-west monsoon, is 1950 miles. This is what is called making the southern passage, going down to about 8° N., which is short as steamers have as yet been able to cut it.

2.—The direct distance from Bombay to Aden is 1640 miles S., 77 W.

Do. do. from Kurrachee to Aden 1435 miles S., 60 W.

Do. do. from Point de Galle to Aden, 2121 miles N., 79 W.

3.—The distance a steamer would have to go out of her course, if she had to call at Muscat, when running from Kurrachee to Aden, would be 240 miles.

4.—The currents set on the Arabian coast with the wind generally. There are exceptions now and then, but the rule is that in the S.W. monsoon the currents are strong to the N.E., and in the N.E. monsoon to the S.W.

5.—Regarding steamers running from this to Aden in the south-west monsoon, I do not think that they could go *direct*. There would be times when they might do so, but it could not be reckoned on. The coast of Arabia, from Ras-el-Had for 700 miles in the direction of Aden, would be a dangerous part for a steamer passing. The wind and sea comes a good deal from the southward, and so sets nearly into the coast. Therefore, were an accident to happen to the machinery on this boisterous part, it would be doubtful if she could clear the land, and the water is so deep close in that a vessel cannot anchor. The way to make the south-west passage from here to Aden would be to stand on direct as long as you could make good way, and then go down south on the starboard tack until you get into 8° N. latitude; then go about, and you would be making a far better passage than the steamers from Bombay do, because you would *avoid* 180 *miles of*

the monsoon, and when it becomes necessary to stand to the southward, you would most probably be 500 *miles to windward* (or to the westward) of Bombay. This passage would always be certain, and would be accomplished in eleven days on the average, with the steamers that the H. E. I. Company possess at present.

(Signed) R. W. LEEDS, Lieut. I.N., Port Officer.

True Copies.

(Signed) R. W. LEEDS, Port Officer.
P. M. DALZELL, Deputy Collector of Customs.
D. McIVER.

Brigadier Parr, Commanding at Kurrachee (in the absence of Brigadier General Wilson, K.H., Commanding the Scinde Division of the Army, who was prevented attending through illness), then rose to move the 1st resolution:—

He stated that the excellent report they had just heard read, joined with the Chairman's opening address, had left him but little to say on the subject, He might, however, be allowed, as a military man, to look at the question principally in a military point of view, and in so doing he could not but be struck by the fact, that if the facilities for rapid communication with Suez and Mooltan, which were glanced at in the report, and which the statements they had heard showed to be strictly within the limits of what was possible, and he hoped practical, at no distant date it would positively take less time to move a brigade from Southampton to the Punjaub than it would at present take to move the Kurrachee Brigade from this camp to Mooltan. In other words you might have Southampton, instead of Kurrachee, the base of your operations for any campaigns in the Punjaub or any countries beyond it. This facility appeared to him, as a military man, to afford advantages so enormous, that he was sure the meeting would excuse his dilating on the other aspects of the scheme, and he would content himself with reading the resolution placed in his hands.

"That this meeting having heard the report just read, and recognising the truth of such facts therein stated as the public

here has the means of knowing, generally concurs in the conclusions at which the Committee have arrived." [Carried unanimously.]

This resolution was seconded by Major Stewart, Acting Collector and Magistrate of Kurrachee.

Lieutenant-Colonel Turner, Superintending Engineer, Scinde Division, in rising to move the second resolution—

Stated that he participated with his friend, Brigadier Parr, in the feeling that it was difficult to add any thing of importance to the very complete and detailed statements they had already listened to. It appeared to him that the success of any endeavours to carry out any scheme of steam communication between Kurrachee and Suez, must depend upon two considerations.

1st.—Does any physical difficulty exist?

2nd.—Is the scheme one which will be commercially profitable?

With regard to the first he considered it had been conclusively proved that there was no physical difficulty whatever to prevent steamers running regularly between this and Suez. The opinion of Lieutenant Leeds on this point appeared to him conclusive. It has been practically shown that the *Victoria*, which had but just been taken off the Suez and Bombay line, had been stationed at Kurrachee during the whole monsoon, and had never on any day found the slighest difficulty in entering or leaving the harbour, and for the rest of the voyage it was clear no physical difficulty existed.

With regard to the second point, whether the scheme would be commercially profitable or not, he would state his opinion that the case contained in the report was far more favourable than he had imagined could be made out. When he first read the report a few days ago, very carefully, he examined it well, and came to the conclusion that it was not only a very favourable but a very fair and reasonable statement. It is clear, however, that to ensure the success of such a scheme, it is very requisite that we should have between Kurrachee and Mooltan—1st, an improvement of the communication between Kurrachee and the river. This would be effected by the railway, which we hope soon to see in progress. 2ndly, we must have an improvement of the com-

munication on the river, and 3rdly, we must have an improvement of the communication between Mooltan and Lahore. These seemed to him the only requisites to insure the success of such a scheme as had been proposed; and he thought it would be right in recommending the scheme to Government, that these points should be brought prominently to their notice.

Colonel TURNER concluded by moving the second resolution, viz.:—

"That the Chairman be requested to convey to Government a respectful expression of the hope entertained by this Meeting, that any well-devised scheme for establishing direct communication with Suez will receive the favourable consideration and active support of Government." [Carried unanimously.]

This resolution was seconded by Captain DUNSTERVILLE, Judicial Deputy Magistrate.

Mr. GIBBS, Assistant Commissioner, in moving the third resolution, viz.:—

"That it is the opinion of this Meeting that the *interruption of steam communication between this* port and Bombay, during the south-west monsoon, is a very serious obstruction to the increasing traffic between Bombay, Scinde and the Punjaub, and that the absence of any physical difficulty having been conclusively shown by the experience of two seasons, this meeting trusts that Government will, in any renewal of the present postal contract, provide for keeping open the communication at least twice in the month, during the south-west monsoon," spoke as follows:—

When I came into the room, I intended merely to lay before this meeting some plans of steamers suited to the proposed line, and give a few observations on the expense of working them, founded on some information kindly furnished me by a gentleman well known in Western India for his energy, and the successful result of every speculation he has been engaged on.

When the subject of direct steam communication between this port and Aden or Suez was first proposed, I wrote to the gentleman I just now alluded to, and asked him for any information he might be able to give me on the subject, and he after a little

delay most kindly furnished me with the plans I now produce, together with the memorandum, the abstract of which I will now give. The plan of the steamer is that of the second of three descriptions, considered by the well-known firm of Messrs. Scott Russell, the orginators of the wave-line theory, to be well suited for the proposed work.

The three descriptions are of screw-vessels.

No. 1—of 700 tons, 160 horse-power, consuming 10 to 15 cwt. of coal per hour, with a rate in fair weather of 10 knots; length, 190 feet; beam, 28 feet; depth, 18 feet; cost, £23,100.

No, 2—of 800 tons, 200 horse-power, consuming 15 to 20 cwt. coal, with a speed of 11 to 12 knots; 22 feet longer than No. 1; cost £28,000.

No. 3—of 900 tons, 200 horse-power, consumption the same as No. 2, with a speed of 12 to 13 knots; 13 feet longer than No. 2, cost £32,400

From a sketch estimate, imperfect I dare say, it would appear that the working of the second of the above vessels would cost, including coal, when at an average 25 rupees per ton, about 30,000 rupees for two months, during which period three voyages might be accomplished, that is, either between Kurrachee and Suez and one return trip, or *vice versâ*, one trip to Suez and two returns, making three voyages there and back in four months, at the cost of 60,000 rupees. The length of time which the voyage to Suez would take would be fourteen days, including one day's detention at Aden. The vessels would carry coal sufficient to prevent coaling at Suez being necessary. The depots, therefore, would be at this port and Aden only.

The fittings up of the vessel are, I believe, of the best description; and the plans have been prepared, after mature consideration as to the requirements of the climate, &c. The accommodation shown is for 50 first-class and 10 second-class passengers. The prices include everything but plate, linen, &c. Two vessels could be delivered in eight months ready for sea, and the engines of Messrs. Scott Russell are constructed so as to be as economical as possible in their consumption of coal. With these observations I will lay the plans, &c., on the table, and move the resolution entrusted to my charge.

Mr. H. Wells, Resident Engineer to the Scinde Railway Company, in seconding the above resolution, said :—

Mr. Chairman and Gentlemen.—I rise to second the resolution proposed by Mr. Gibbs. It is my honest belief that the first great public work that should be constructed in this province is a railway right through it. Of the necessity for this there can be no doubt, when you remember the words of the able report you have heard read; and let me refer to some of the opinions therein expressed, not opinions by persons like myself interested in the Scinde railway and its future extension, but the opinions of the officers of the Government. I find Mr. Thornton, Commissioner, Jhelum Division, says :—

"Upon this point my opinion is, that a railroad from Kurrachee to the Punjaub should be provided as soon as possible."

I find the Commissioner of Lahore recommending, in reply to a question as to what additional means and appliances appear desirable to facilitate the communication between Lahore and Kurrachee :—

"A railroad from Kurrachee to Mooltan."

The Deputy Commissioner of Jhung "would suggest a railroad to Mooltan."

But that is not sufficient, we must go beyond Mooltan. And here is my authority for saying so. I find Mr. Edgeworth, Commissioner Trans-Sutlej, stating :—

"*But the main and only permanent improvement will be the formation of a railroad from either Umritsir or Lahore to Mooltan.*"

It is within my knowledge that a petition has been presented to the Commissioner, praying the Court of Directors to extend the line of railway to the important city of Hyderabad. This petition, I believe, was signed by every European in that place, and most of the principal natives. I believe, on still more important public grounds, the Government will support the extension of the Scinde Railway. We have been addressed today by the gallant Brigadier commanding at this station, and he has told us of the value of quick locomotion for carrying on military operations. Sir, every one present knows when we have an opinion from that distinguished officer, we have the opinion

of a practical soldier. (Loud cheers) The Government of India above all pride themselves upon the perfection of their military arrangements, and it is owing to the belief that there is a disposition on the part of those in authority to press forward works likely to lead to great results, that I have come here to-day to ask you to have confidence in the great public company I have the honour to represent.

I now come to another subject, one most intimately connected with direct steam communication between this port and Suez. I mean the improvement of the Harbour of Kurrachee. There are very few parts of the world I have not visited, and I have observed that at all ports where improvements had been carried out, that they have led to the natural and gradual increase of the trade of those ports, and I will adduce an instance to bear out what I say. There is Batavia, the capital of Java, the result of continued improvements has been that, while in 1826, the value of exports was 11,000,000 florins, in 1836 it was 38,000,000, and in 1846 it was 53,000,000.

Having given many other illustrations, Mr. WELLS continued:—

I now proceed to the resolution I have seconded, and I think it incumbent on us to represent the advantages which will follow uninterrupted steam communication between this port and Bombay, the stoppage of which is so seriously complained of by mercantile men in the Presidency. One firm writes:—

"At present the entire suspension of steam communication in as far as regards the traffic for goods from the end of May till September, owing to the vessels of the Bombay Steam Company ceasing to ply during this period, virtually closes Scinde as a route to the Punjaub for these important months of the year."

This is beyond a doubt a great drawback to trade, and so long as it is our fate to be dependant for our supplies upon the capitalists of Bombay, we keep open the communication throughout the year. I cannot help, upon an occasion like this, asking you to remember the state in which we received our mails during this monsoon. We never get thoroughly angry in Scinde, but our patience was certainly tried, and we have some reason I think to complain, when we know that the steamer that might have

been employed was either laying idle in Bombay, or being used as a pleasure yacht to dodge in and out of the Bombay harbour. There is another matter that I should certainly like to mention, and I know some present will sympathize with my remarks. I allude to the benefit the plying steamers will be to persons suffering from illness, and this does materially concern the Government. We may have direct steam communication between this place and Suez (and I will speak on that subject presently), but officers are suddenly ordered to Bombay and Poona, and to such steamers will be a convenience; and I do hope the Government will confer on us this boon, considering that we are trying to do something for ourselves.

Gentlemen, I now come to the principal object of this meeting, that of promoting, as much as we can, direct steam communication between this port and Suez. I heartily concur in that proposition, and I am happy to be able to inform you, that those whose confidence I highly value know that I have in my possession facts connected with it, which enables me to tell you that the prospect of our getting direct steamers between Kurrachee and Suez looms brightly in the distance. I believe, gentlemen, this agitation will have another effect, it will attract attention to another route—I mean up the Persian Gulf. We all remember the able articles contained in the *Times*, in reference to direct communication between London and Calcutta, and I find the subject again brought forward by the *Morning Chronicle*, in the following article :—

"The Indian government contributes £70,000 a year towards the charges of an extended communication with India and China, and the intercourse with England, by way of Egypt, is now regular and rapid. The prejudices, and even the Imperial considerations, which favoured the old circuitous communication by way of the Cape of Good Hope, have given way before the irresistible desire for rapid locomotion and intercourse with all parts of the world. This influence is still exerting itself with full force. As soon as the war with Russia is over, and Turkey becomes settled down into a state of peace, and is gradually brought within the range of European enterprise, improvements and civilisation, we are satisfied that the desire to secure the shortest route to India will be revived in full force, and that eventually we shall penetrate

through Asia Minor to the Persian Gulf," "and make that mighty river, the Euphrates, once more, as in ancient times, a highway to the commerce of the East. If any one had predicted, three years ago, that an English railway would be constructed from Balaklava to Sebastopol, the notion would have been quite derided. It is, indeed, far more probable that this generation will not pass away before a railway is perfected, so as to unite the Euphrates at some accessible point with the Mediterranean, and thereby shorten and render still more easy the overland communication with the East through the Persian Gulf."

I believe the Persian Gulf is destined to become the highway from Kurrachee to London, and that at no very distant date."

Sir, I have now brought to a conclusion the observations I have considered it my duty to make. I have endeavoured to show that the Scinde railway should be extended without delay; I have shown the advantage of improving the harbour of Kurrachee; I have seconded a resolution to keep up uninterruptedly our communication with Bombay, and I have told you that I am working for the accomplishment of the object of this meeting. Gentlemen, there is one other great public work that I must not omit to mention, it is that which is to give a shock to superstition, that which is to overthrow barbarism, and that which seems destined to link the whole world together as one united family —the electric telegraph. (Loud cheers.)

Mr. W. Meiklejohn, as representative for the mercantile firm of Messrs. Treacher & Co., in supporting this resolution—

Made some exceedingly practical observations on the inconvenience and loss which the merchants and community suffered from the suspension of communication between Kurrachee and Bombay during the monsoon. He showed, that large supplies of goods for the Scinde market usually arrived at the presidency at the beginning of the wet season; and, from the want of transit to this port, they were detained during the monsoon in Bombay, and deteriorated very much in value, if not wholly destroyed, from the damp climate of that place in those months. The consequence of this was, that these goods had to be sent to another market, and

the public in Scinde suffered, by having to pay an enhanced price for many articles which they were necessitated to purchase, often an inferior quality.

He believed that the trading community of this place would warmly support any movement that might be made for increasing the means of communication; and he was clearly of opinion, from his lengthened experience of this province, that the project which had been laid before the meeting would realize the most sanguine expectations that had been entertained regarding it.

Mr. McIver then rose and proposed the 4th Resolution, viz.:—

That this meeting learns with great satisfaction, that measures are being taken to increase the number of steamers on the river Indus, and would express the conviction of the meeting that such increase in the means of communication by river steamers is essentially necessary to the full development of commerce with the Punjaub. [Carried unanimously]

Mr. M. J. M. Stewart, Assistant Commissioner, in seconding the above resolution, offered the following observations:—

Gentlemen,—The resolution which I have been asked to second expresses the satisfaction of the meeting, that measures are being taken to increase the number of steamers on the Indus, and the conviction in which I hope all present unite, that such increase is necessary for the full development of the river traffic. No doubt the railway from Kurrachee to Mooltan will answer for troops, passengers, and light goods; but for the conveyance of heavy goods, the Indus must always be the great highway. Permit me here to read a passage in the *Friend of India*, received this morning, which needs no further comment. "The same journal (*Hurkaru*) reports, that so great is now the demand for steam freight to the upper provinces, that the river navigation companies have not the means of satisfying it. Their warehouses are glutted, and shippers offer two and four annas a foot additional for space. The Indian General Steam Navigation Company intends to put two new steamers on the river, and its rival, two new cargo boats. Both companies are prospering, and there

seems little doubt that the internal navigation has at last become a profitable speculation in private hands. The returns, which the chairman has read, of the net receipts to Government for the last three years from the Mooltan steamers, show what a field is open for a private company, worked with the energy and economy which are unattainable by a government. That the river traffic is increasing to a great extent, notwithstanding the establishment of the camel train and improvement of roads, is shown by the following abstracts of the returns of boats passing up and down river. These returns were kept at Sukkur, Hydrabad and Tatta, and the average of the three places shows the aggregate tonnage of the boats passing both ways—

	mds.		mds.
In 1851 52 laden . .	12,65,000	Unladen . .	8,29,300
1854-55 „ . .	16,18,600	„ . .	6,08,600

Showing an increase in three years of 3,43,600 maunds, or about 25 per cent; and while in 1851-52 the proportion of laden boats to unladen was as three to two, it is now nearly three to one, from which it is evident, that boats find cargoes now with great facility, and that the traffic is falling into regular and recognised channels.

I consider that the improvement and extension of the river steam flotilla is one among the most important measures, to ensure the development of the commerce of northern India.

A vote of thanks having been tendered to the Chairman, the meeting was dissolved.

Memoir *on the Euphrates Valley Route to India. By W. P. Andrew.*

The proposition is to connect the Mediterranean and the Persian Gulf by a railway from the ancient port of Seleucia by Antioch and Aleppo, to Ja'ber Castle on the Euphrates, of eighty miles in length, and afterwards from thence by Hit, and other towns, to Bagdad, and on to Kurnah, at the confluence of the Euphrates and Tigris, or Bussorah, at the head of the Persian Gulf. Thence by steamers; communication will be established with all parts of India.

The country through which it is proposed to carry the railway, was by command of his majesty William IV. examined and surveyed, with the view to the introduction of improved means of transit by that distinguished officer, Major-General Chesney, R.A., F.R.S., who reports that there are no serious difficulties to contend with; and subsequent scientific investigations under Captain Lynch, C.B., and Commander Campbell, both of the Indian Navy, have confirmed the accuracy of General Chesney's opinion.

The talented and lamented Dr. James Bowen Thompson was so strongly impressed with the greatness of the objects contemplated by General Chesney's mission, that he spent many years in the East collecting data to prove the practicability and importance of the Euphrates Valley Route to India.

Dr. Thompson having obtained for the project the favourable consideration of her Majesty's government, the Sublime Porte and the British Ambassador at Constantinople, died lately at that capital while pressing its claims upon the attention of the British and Turkish cabinets.

It is only proposed at present to execute the first

section, about eighty miles of railroad, from the ancient port of Seleucia in the Mediterranean, to Ja'ber Castle on the Euphrates; below which point, the navigation of the river is permanently open for steamers of light draught and the boats of the country for 715 miles to Bussorah, at the head of the Persian Gulf.

Mr. Laird has undertaken to furnish steamers to navigate the Euphrates, capable of carrying a large amount of merchandize and passengers, at a speed of twelve knots an hour when loaded, and with a draft of two feet.

A steam route being thus established between the Mediterranean Sea and the Persian Gulf, the shortest and most rapid means of communication between the capitals and emporia of the West and East would be at once open for political and commercial purposes. It being intended to co-operate with the river and make it available for commerce, by removing natural obstructions, and introducing steamers of improved construction, and to supersede it by the railway *only* when circumstances appear to demand it, the future sections of the Line will be gradually carried down the valley of the Euphrates, from the right bank opposite Ja'ber Castle to Phumsah, the ancient Thapascus. Crossing into Mesopotomia at this suitable place, the railway will be carried along the valley by Anah and Hit to the environs of Bagdad; and thence by Babylon and Hillah to the confluence of the Euphrates and Tigris at Kurnah, where there is sufficient depth of water for the largest steamers; or to Bussorah, thirty-seven miles nearer the head of the Persian Gulf, where an extensive trade is already established, and where there is ample accommodation for square-rigged ships of large burden.

The grand impediment to the improvement of the Sultan's dominions is the want of the means of intercommunication, and no line would promote more effec-

tually their good government and prosperity than that which would lay open to the energy and capital of the emigrant and merchant of the West the expansive and fertile plains of the Tigris and the Euphrates.

To England, the possession of an alternative short route to India is of inestimable value, and more especially when the actual lineal distance will be reduced by about a thousand miles, and where rich fields are offered to the genius of her statesmen, and the enterprise of her merchants, by giving back to commerce, through the civilizing influence of steam, "countries, the cradle of the human race, and the theatre of the most important events in the Jewish, Pagan and early Christian histories." *

The traffic by the existing route of the Red Sea must always be confined to steam navigation, being impeded by rocky islands, coral reefs and the nature of the prevailing winds, whereas in the Persian Gulf, there are no physical obstructions whatever to its free navigation.

"The substitution of land carriage for water carriage, or rather, the substitution of overland cuts for long sea circuits," is, as *The Times* stated in a leading article some little time ago, "the one simple principle of the present undertaking."

The importance of the Euphrates as a second and more expeditious route to our Indian possessions is daily forcing itself upon the public mind, and as the whole of Northern India and Central Asia; from the banks of the Oxus to the gates of Delhi, will shortly have an outlet to the sea by the Scinde Railway from Kurrachee to Hydrabad, and along the valley of the Indus, such a route would seem to become imperative.

"The sea stages of the present route to India," according

* Expedition to the Euphrates and Tigris, by Major-General Chesney, R A., D.C.L., F.R.S., F.R.G.S.

to *The Times,* in the leading article before referred to, "exclusive of the trip across the Channel, are two: one from Marseilles or Trieste to Alexandria; and the other from Suez to (Kurrachee) Bombay, or Calcutta. These stages constitute by far the longest part of the journey, being 5,075 miles performed by steamers; from which an average speed of some ten miles an hour is all that can be expected. The longer again of these two stages is that from Suez to Hindostan, as it includes a circuit round two sides of the triangular territory of Arabia. The first object, therefore, is to get rid of the detour by Aden; and this is to be done by carrying the passengers to the mouths of the Orontes, instead of the mouths of the Nile, and forwarding them across the Turkish territory to Bussorah, at the head of the Persian Gulf. The railroad required for this purpose would run along the Euphrates Valley, and its length would not exceed 900 miles;* whereas, its completion would reduce the distance from London to Calcutta by more than *one-half,*—by twenty days, in fact, out of thirty-nine! This project, it is conceived, could be accomplished in five years' time; and the route would then lie through Ostend, Trieste, by the Mediterranean Sea, to the Orontes, thence to Bussorah, and by the Persian Gulf to Bombay (or rather to Kurrachee), where it would meet the Indian railroads now actually commenced, and by that time completed to Calcutta (and north-west Provinces). We have thus got rid of the Red Sea circuit, and substituted a land route for 900 miles of the distance. There remains now the straight run from Bussorah to Bombay (or Kurrachee), and the circuitous reach from Trieste to the Orontes, to be commuted for the facilities of direct railway transit by land."

* From sea to sea by railway, according to Gen. Chesney, 660 miles.

With reference to the above, a letter from Pesth, in a recent number of the *Augsburg Gazette*, says:—"A company of rich landowners of Hungary proposes to prolong the railway from Vienna to Raab as far as Belgrade, in Servia, and has already made the necessary applications on the subject to the authorities. An Anglo-French company has undertaken, on the other hand, to construct a line from Constantinople to Belgrade, and has engaged for it 120 French workmen, who, with their families, are to take up their residence in Roumelia. This double line will place the capital of the Ottoman Empire in direct communication with Austria, Germany, and all Europe. The works are to be commenced simultaneously at the two extremities, Raab and Constantinople.

By the arrangements now proposed, India would be reached in fifteen days, or about *half* the time now occupied, viz.—

	Miles.	Days.	Hours.
London to Trieste by rail, and from thence by steamer to Seleucia . .		8	6
Seleucia to Ja'ber Castle by railway .	80		3
Ja'ber Castle to Bussorah by steamer .	935	3	3
Bussorah to Kurrachee by steamer . .	940	3	0
		14	12

The advantages of the port of Seleucia were placed before Government by Captain, now Major General Chesney, in 1832, (see pp. 63 and 64 of Euphrates Reports), and were subsequently advocated by that competent authority, Captain Allen, R.N. According to the latter officer it is capable of being made one of the finest harbours in the world. Both these officers considered that from £20,000 to £30,000 would be sufficient to clear out the greater part of the ancient basin, and repair the massive

works of the Romans, many portions of which require merely to be relieved from the mud deposited upon them. The importance of Seleucia will become apparent, when it is borne in mind, that there is no other port for commerce along the whole coast of Syria better than the open roadstead of Beyrout, or the pestilental harbour of Alexandretta. Seleucia is not only capable of being made a most efficient port, but, by a small additional outlay, the existing great Mole might be extended so as to form a harbour of refuge, large enough to protect at one time the entire mercantile navy of England.

Antioch is eighteen miles from Seleucia, and stands in the Valley of the Orontes, which here forms a fertile plain. From the beauty of the scenery, the abundance and the cheapness of the necessaries of life, and the salubrity of the climate, arrangements are in contemplation for Sanataria and other establishments, for the benefit of invalids, especially Indian officers and their families.

Aleppo is forty-two miles from Antioch, contains a population of about 90,000, is one of the most opulent and best built cities in Syria, and the chief emporium for the trade of the country.

Ja'ber Castle, thirty-nine* miles distant from Aleppo, is on the Euphrates, and offers every facility for the construction of docks.

"The Euphrates gives a water communication with Syria, Asia Minor, and Asia Major, (their central parts,) also the South of Persia and Kurdistan."

"The Pachalic of Bagdad produces (and the greater part along the Euphrates), wheat, barley, Indian corn, rice, millet, honey, dates in great quantity, and other fruits, wine (from Kerkook and the banks of the Tigris,) cotton, some silk, tobacco, gall-nuts, and wool in great quantity,

* By railway, the entire distance from Seleucia to Ja'ber Castle is estimated at 80 miles.

from the different Arab tribes, each of which has extensive flocks; also ambergris, sal ammoniac, leather, buffalo hides, oil of naphtha, bitumen, salt petre, salt, borax, and glass, made at Bagdad; where are manufactured coarse coloured cottons, and fine handkerchiefs of silk and cotton for the Arabs.

"Bagdad was the centre of a considerable caravan commerce previous to the late disturbances, when it sent annually even as far as Erzeroum, 2,000 mule loads of pearls, silk, cotton, stuffs, shawls, coffee, gall-nuts, indigo, &c., and still more to Mosul, Diarbekir, Orfa, &c., and to Aleppo even at this moment, from 3 to 6,000 animals yearly; but 80 years ago, this number was said to be 50,000.

"Bagdad from its matchless situation, would, with the slightest fostering care, become a grand centre of English, Arab, Persian and Eastern commerce; and nothing is wanting to distribute it widely, and increase it greatly but the establishment of steam.

"The imports to Bagdad are from the Persian Gulf: pearls and fish.

"From Persia, Silk, woollens (coarse), saffron, sulphur, nitre, dried fruits, shawls of Cashmere, Kerman and Yesd: stuffs, cotton, gum-rahabat, fur skins, tobacco and pipe sticks.

"From India: Muslins, porcelain, indigo from Bengal, Guzerat, and Lahore; cottons, pepper, spices, cinnamon, nutmegs, Java and other sugars; musk, cardamoms, cotton and silk from the coast of Coromandel, aloes, camphor, &c.

"From Turkey: Soap, cotton, linen, silks, embroidered stuffs, opium, and copper, about 450 tons annually.

"From Arabia: Incense, myrrh, galbanum, resins, gums and other precious drugs, also Mocha coffee, in

quantity across the Peninsula, to go on to Constantinople and elsewhere.

"FROM EUROPE, EGYPT, &c.: (A part across the Desert from Damascus, but chiefly by way of Aleppo.) Bagdad receives cotton twist, grey cloths, and prints, grey-calicos, long-cloths, Greek-stripes, power loom sheetings, jaconets, cotton handkerchiefs, (all English,) fine French or German cloths; cutlery, lead, tin, and St. Domingo coffee, also indigo and cochineal, velvets, satins, taffetas, mercury and drugs.

"The chief outlets from Bagdad as a depot are to Constantinople:—Cashmere shawls, aloes, ambergris, musk, pearls, coffee, tobacco, spices, pipe sticks, and Indian muslins.

"TO SYRIA AND ANATOLIA: Are forwarded silk, tobacco, shawls, gall nuts, coffee, stuffs, and drugs.

"TO PERSIA: Diamonds, rubies, emeralds, pearls, European stuffs, brought over the desert from Aleppo and Damascus: also Aleppo cloths, coral, paper, jewellery, cochineal and indigo.

"TO ARABIA AND INDIA: Silver, gold, copper, dates, horses, and oil of naphtha for painting.

"Thus it appears that imports continue to a considerable extent notwithstanding all the difficulties and distance by which they are transported with caravans, and as there are pretty ample returns, it is evident that if ever the noble stream should be used instead of a caravan transport, there will be an increase and consumption proportionate to the comparative cheapness of the supplies, and the great facilities offered for placing depots, by water, at every convenient spot: this done, a few years will most likely see the Arab's wants increased to something like those of other people; and in making larger purchases, they will discover how to reimburse the expense, by cultivating cotton, grain, wool, &c., more extensively than they now do."

"It is worthy of the consideration of government, whether the proposed attempt should not be made, not only with a view to Mesopotamia chiefly, but the trade of Persia, now carried from Bushire to Erzeroum, more than 2,000 miles; whereas by attending to Erzeroum as one great centre, dependent on Trebizond and the inlets of the Euphrates and Karoon, we shall increase it prodigiously; and command the profits, which if neglected will flow into the coffers at Tiflis: where they are building extensive manufactories expressly to force goods into Persia, and attract its trade towards Russia."

"With this Power and her persevering endeavours to grasp at commerce, we can also compete, as regards Persia, by another line, viz., that of the Indus." *

The official returns of the existing commerce of Mesopotamia demonstrate that there is a prodigious and most promising field for investment. In the statistics of the ancient and modern commerce of these countries, contained in the second volume of General Chesney's work on the Euphrates Expedition, will be found ample materials for the satisfaction of our merchants, as to a certain, rapid and extensive increase of trade.†

The trade of Turkey-in-Europe, Asia Minor, Mesopotamia, and all along the proposed line to Bussorah, is of great importance, and only requires a ready means of transit for its rapid development. The success of the English and Austrian Steam Companies on the line between Constantinople, Smyrna, and the coast of Syria and Egypt, is a strong proof that the resources of these countries merely require an outlet. The Mahommedans

* Report of Captain Chesney in 1832, addressed to Sir Stratford Canning, G.C.B., Ambassador at Constantinople.

† Pp. 674—686 Vol. II. of the Expedition to Euphrates and Tigris by General Chesney.

are now quite alive to the importance of rapid locomotion —be it by railway or steamers. The tedious mode of transit by caravan is nearly at an end, whenever a quick mode of transport is available. *

It is computed that 100,000 pilgrims pass yearly along the route of the Euphrates or Tigris to visit Bagdad and other Holy Cities.

The comparison of the imports and exports of the ancient trade, with these countries, is very striking, and the more modern statistics of our trading with the East during, and subsequent to, the existence of the Levant Company, are equally important, and should be sufficient to satisfy us as to the value of the great field open to our commercial enterprise.

These countries are rich in minerals, but have as yet been only partially explored with a view to their development.

The importance of this line will be still more apparent, when it is estimated in conjunction with the commercial advantages to be derived from the four great rivers of Western Asia. "The elevated plateau which extends from the base of Mount Ararat into Northern Armenia, Khurdistan and part of Asia Minor, contains the sources of four noble rivers, having their estuaries in three different seas; and thus from Armenia as from the centre of a great continent, giving an easy communication to the nations of Europe and Asia." A reference to General Chesney's map will show, "that by following the Kizil Irmak through Asia Minor, we reach the Black Sea, from whence there are inlets to Russia, Austria, Turkey, &c. In the same way, the Aras, by terminating in the Caspian, opens several routes towards Great Tartary, as well as towards the rest of Central Asia and China: while the Tigris and

* M.S. Notes of Lectures delivered before the Imperial Academy of Vienna, by Dr. J. B. Thompson.

Euphrates, with their numerous ramifications, afford abundant means of communicating with Persia, India, Arabia and the Continent of Africa," * and offer channels for a very extended consumption of British manufactures.

This enterprise possesses in the opinion of those personally acquainted with the country and its resources all the elements of a highly remunerative character.

1st.—From the country presenting great facilities for the construction of a railway, being a succession of extensive plains traversed by low hills, between Antioch and Aleppo, and from Aleppo to Ja'ber Castle, a distance of 39 miles, a perfect level.

2nd.—From the neighbouring mines of Marash, having supplied iron in abundance to the Euphrates expedition, they would provide all required for the railway; an inexhaustible supply of timber of the finest quality for building purposes, sleepers, &c., being obtainable from the forests near the old Port (Seleucia) and Scanderoon: and from there being also large quarries of stone on different parts of the line, with an abundant supply of bitumen, timber, and coal for fuel.

3rd.—From the first section of the line being of moderate length, and complete in itself, having a port in the Mediterranean at one end, and a terminus on the Euphrates at the other, below which the navigation is permanently open.

4th.—From the line from Seleucia to Ja'ber Castle, forming of necessity the most important portion of any system of improved transit, which shall follow the course of the valley of the Euphrates, or the plains of the Tigris.

5th.—From the clearly proved statistical returns of the former trade and commerce of the country, its vast natural resources and manufactures, and the extensive transit

* Vol. I. of Expedition to the Euphrates and Tigris.

trade which was formerly carried on between China, India, Persia, Armenia, and Arabia with Europe, and especially with Great Britain, which has been greatly diminished by the policy of Russia, but which would speedily be revived, and from the conviction that the commerce of Great Britain with Central Asia, China, &c., instead of seeking, as at present, a costly and circuitous route by the Volga and the Caspian, would return to its natural and most ancient channel.

From the paramount and acknowledged importance of this route to the good government and prosperity of the Sultan's Asiatic dominions, those more immediately interested have every hope, from the negotiations now pending, of obtaining from the Sublime Porte such terms as will enable them to raise the necessary capital; and, from the obvious political and commercial importance of this, the most direct route to our Indian possessions, they have reason to believe that they will receive from Her Majesty's Government that countenance and co-operation, which is essential to the carrying out, with success, a means of communication which would diminish, by many hundred miles, the distance between this country and its empire in the East.

NOTE.—A great gap in the Austrian railroad system is about to be filled up. On the 8th inst. the Austrian emperor granted to Ernest Merk, his consul at Hamburg, and to H. D. Linheim, merchant, a privilege to construct a railroad from Vienna to Linz, and thence to the Bavarian frontier near Salzburg, on the one side, and to the Bavarian frontier near Passau on the other. The railroad, which is as important for Bavaria and Southern Germany as it is for Austria, will bear the name of "the Empress Elizabeth Railroad" The length of the railroad, from Vienna to Salzburg, is 43 German miles (about 212 English), and from Linz to Passau 12 German miles (59 English) The period granted for the construction of the whole railroad is five years. The plans for the line from Vienna to Salzburg are almost completed. The State, which makes the grant for 90 years, guarantees 5 2-10 per cent. for interest and amortization of the shares. The grantees intend to form a joint stock company with a capital of 65,000,000 florins; and it is probable that the Austrian Credit Bank will be concerned in the undertaking. The Vienna Salzburg Railroad will, of course, be continued to Munich, and an uninterrupted railway communication will be opened between the Atlantic and the Adriatic, and travellers will hardly be more than 36 hours on the road between Vienna and Paris. The new railroad will, however, be of infinitely more importance to the mercantile than to the travelling world, and this is why far more attention is paid by foreigners to this than to any other Austrian railroad. *It is foreseen that the great mercantile road between Paris and Vienna must soon extend to the coasts of the Black Sea and to the capital of the east (Constantinople). A most careful calculation shows that there is a movement of 2,000,000 travellers and 16,000,000 cwt. of goods in the valley of the Danube in the course of the year, and a total receipt of 8,500,000 florins. This revenue alone would give a clear dividend of 8½ per cent. on the capital, after all expenses had been deducted.*

[Since the preceding Memoir was in type, the following interesting letter, regarding the existing traffic between the Mediterranean and Euphrates, has been received.]

From JOHN KENNEDY, ESQ., ALEPPO to W. P. ANDREW, Esq.

Aleppo, 12*th February*, 1856.

DEAR SIR,

I have the pleasure to acknowledge the receipt of your esteemed letter of the 10th ult., to hand on the 5th inst., the contents of which I duly note.

I have not yet quite finished the account of the trade and navigation of the North of Syria, as I am obliged to collect the information from my correspondents in different places, there being no regular accounts kept by the Custom House or any other Government authority. I have now, however, managed to collect nearly all the necessary details, which I am now engaged in arranging. And as I expect to leave this for England in ten or twelve days hence, I will have much pleasure in handing you over all the papers on my arrival in London, which I expect will be about the end of March.

I feel the greatest interest in the success of the scheme for opening up the Euphrates Valley, which will be of immense importance to this country, and cannot fail to be remunerative, as the trade of the North of Syria is increasing rapidly; and what it may amount to with regular and cheap communication with the coast is hardly possible to be calculated, as the Railway will pass through a large extent of country with as rich a soil as is to be found in any part of the globe, and now lying utterly waste for want of any means of disposing of the produce.

The enclosed paper will show you an approximate calculation of the trade of Alexandretta during the past year, and enable you to form some idea of what might be the amount of business done, were the resources of the country properly drawn out by means of easy communication. At present there are no roads adapted to wheel carriages whatever in this country, and the only means of transporting goods is by camels.

Expecting the pleasure of seeing you soon in London,

I remain,

&c., &c.,

(Signed) JOHN KENNEDY.

Note of goods imported into Alexandretta from the United Kingdom during the year 1855, *in* 55 *vessels.*

20,480	Bales, Manufactures,	per bale,	£20	0=	£409,600	0
878	Barrels, Sugar,	per barrel,	5	0=	4,390	0
534	Bags, Coffee,	per bag,	4	10=	2,403	0
325	,, Pepper and Pimento,	per bag,	3	10=	1,137	10
97	Cases, Cochineal,	per case,	30	0=	2,910	0
48	,, Indigo,	per case,	100	0=	4,800	0
1,231	Barrels, Drysalteries,	per barrel,	3	0=	3,693	0
5,252	Packages, Sundries,		3	0=	15,756	0
					£444,689	10

The above is a correct list of imports from the United Kingdom. I have no means of ascertaining the French, Italian, and coasting trade, but calculate from the best information I can get, that the trade with England, in imports, is fully one-third of the whole. This will make the value of imports last year to exceed one and a quarter million pounds sterling.

Approximative note of goods exported from Alexandretta in 1855.

120,000	Quarters,	Wheat,	£2	0=	£240,000
50,000	,,	Barley,	1	5=	62,500
25,000	,,	Millet,	1	5=	31,250
5,000	Tons,	Sesame Seed,	12	0=	60,000
750	,,	Galls,	70	0=	52,500
1,000	,,	Cotton,	30	0=	30,000
2,000	,,	Wool,	40	0=	80,000
		Flour,			150,000
Allow for Madder Root, Scammony, Yellow Berries, Gums, Boxwood, &c.					100,000
					£806,250
Allow for Coasting Trade					233,750
					£1,040,000

Say, total value of exports, one million pounds sterling, perhaps rather more, as I have calculated some items perhaps less than actually exported.

Large amounts of specie are also exported in groups, and no allowance is made above for cocoons, reeled silk, and olive oil, which are exported largely.

There are still some of the articles named on the previous page about which I have not yet procured reliable information. These rough notes may give some idea of the trade; and tables as correct as possible will be made out for the years 1852, 53, 54, and 55.

(Signed) JOHN KENNEDY.

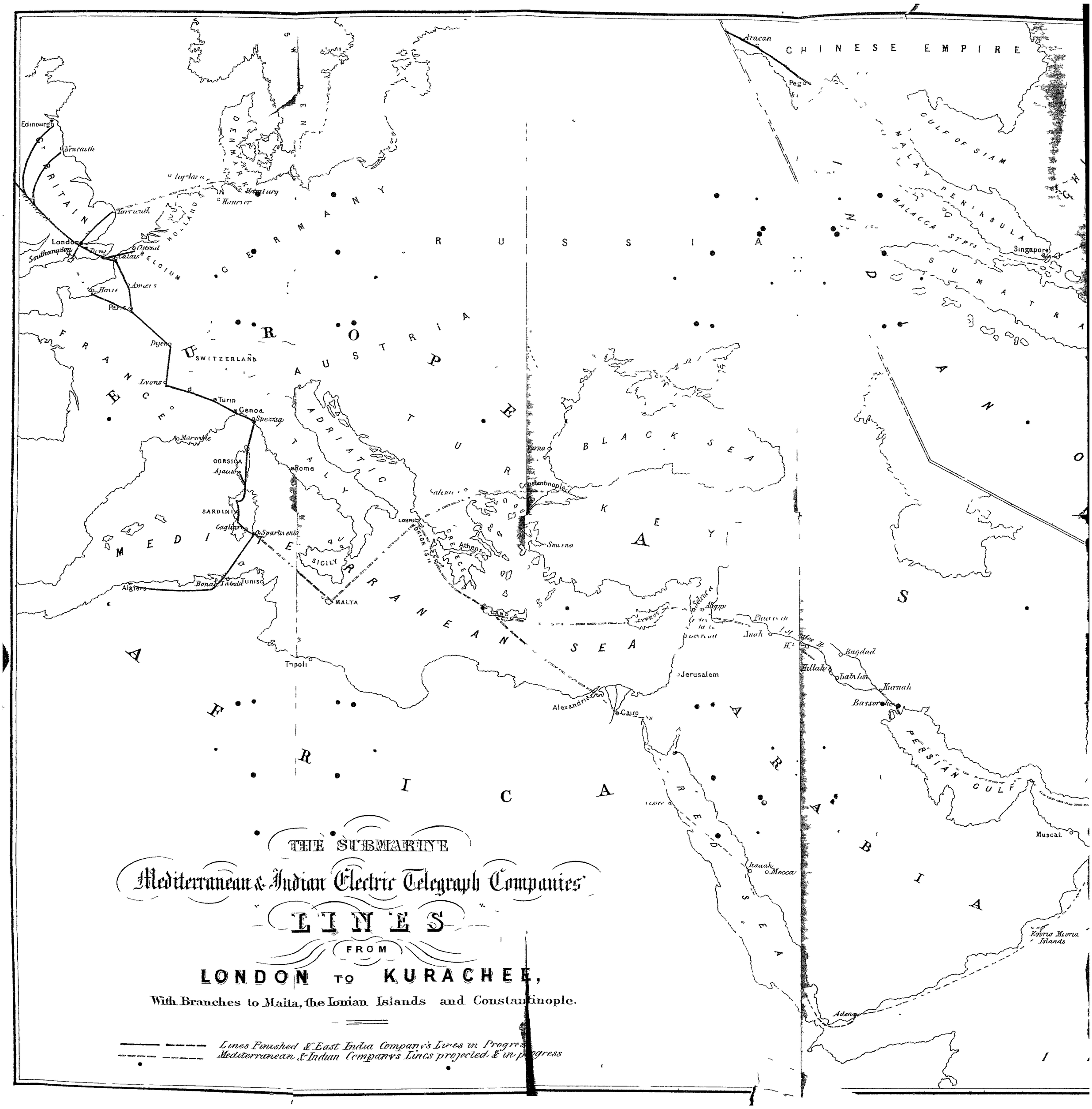
PS.—Mr. Kennedy states in another letter of recent date that:—"I bought some two or three months ago, a quantity of wheat in a district two or three days' journey to the interior of Aleppo for which I paid equal to 9s. a quarter, and carriage to the coast *alone* cost me upwards of 17s. 6d a quarter. This item of expense being nearly double the first cost."

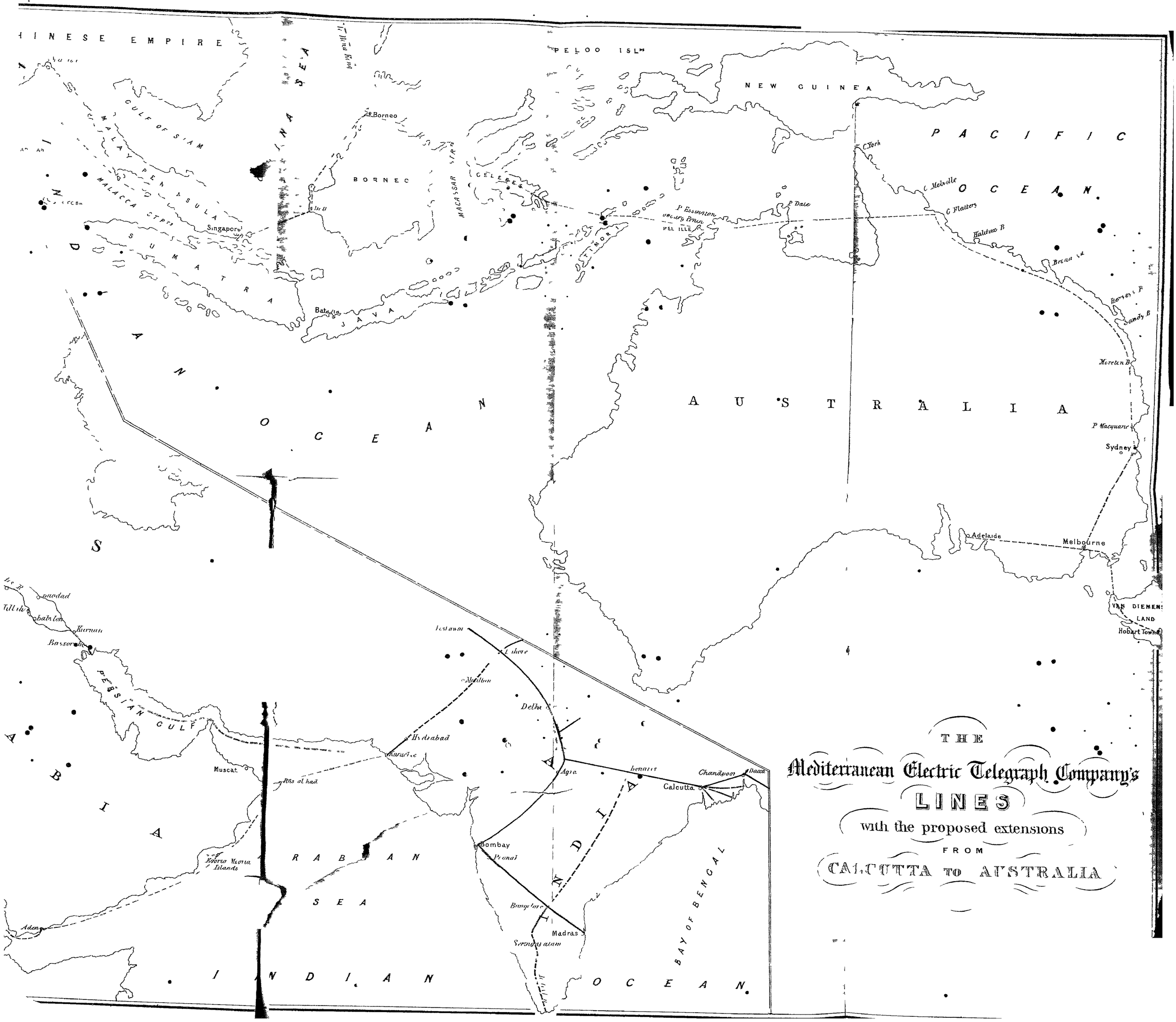
A Correspondent has supplied to the Author the following:—

Approximate estimate of the Population, Yearly Traffic, &c. for the Euphrates Valley Railway.

Names of Places.	Population.	Imports.	Exports.	Remarks.
		Tons of Merchandise.		
Antioch	27,000	15,000	8,000	A passing trade.
Danah	2,000	14,000	14,000	" "
Aleppo.....	85,000	34,000	20,000	
Gibbool	1,500	.. .	. ..	
Orfah	15,000	20,000	18,000	To which place the route as far as Bales would be open *i. e.* within 25 miles of Orfah.
Dair.....	7,000	15,000	12,000	Caravans from Syria and Damascus pass through this place on route to Baghdad and Persia.
Anah	2,000	500	. .	
Hit	3,000	300	700	
Kathemain	8,000	8,000	....	This city is sacred to the Persians and Sheah inhabitants of Baghdad, who daily visit it to the number of about 3,000.
Baghdad	87,000	15,000	7,000	There is a large tobacco trade through Baghdad between Persia and Syria, about 1,000 tons annually.
Hillah Babylon, &c.	4,000	1,500	400	
Kerbelah	7,000	1,800	....	A sacred city of the Sheah Mohammedans, visited, as well as Meshed Ali, by upwards of 100,000 pilgrims who would proceed by rail to Syria for the Hadj, should such a route be available.
Meshed Ali	12,000	1,800	....	
Kiffil	3,000	200	....	The supposed tomb of Ezekiel, and a place of pilgrimage for the Jews.
Semawah.....	12,000	....	....	
Suk-i-Shukh	8,000	3,000	2,000	A very large trade is carried on between this place and Central Arabia. Two caravans, about 2,000 camels each, leave it annually.
Zobair	7,000	1,000	700	
Bussorah	12,000	25,000	18,000	Besides the traffic from India through Bussorah, upwards of 35,000 pilgrims pass through annually for Meshed Ali.
Quait	9,000	25,000	18,000	

The charge for merchandise down the river from Baghdad is about £1 0 0 per ton, measurement or dead weight.
" " up " to Baghdad " 3 0 0 " "
Goods are carried by camels at, it may be taken, for every 100 miles 1 10 0 " weight.
" " Mules " " 2 0 0 "


THE SUBMARINE
Mediterranean & Indian Electric Telegraph Companies'
LINES
FROM
LONDON TO KURACHEE,
With Branches to Malta, the Ionian Islands and Constantinople.
Lines Finished & East India Company's Lines in Progress
Mediterranean & Indian Company's Lines projected & in progress
CHINESE EMPIRE
Aracan
Pegu
GULF OF SIAM
MALAY PENINSULA
MALACCA STPTS
Singapore
SUMATRA
INDIAN OCEAN
GERMANY
RUSSIA
AUSTRIA
TURKEY
BLACK SEA
KAY
SWEDEN
DENMARK
Hamburg
Hanover
HOLLAND
BELGIUM
Ostend
Calais
Dover
Southampton
London
Newcastle
Edinburgh
BRITAIN
Yarmouth
Havre
Amiens
Paris
Dijon
SWITZERLAND
Lyons
Turin
Genoa
Spezzia
Marseille
FRANCE
CORSICA
Ajaccio
Rome
ITALY
ADRIATIC
SARDINIA
Cagliari
Spartivento
SICILY
MALTA
Algiers
Bona
Tabarka
Tunis
Tripoli
MEDITERRANEAN SEA
CORFU
IONIAN IS.
GREECE
Athens
Constantinople
Smyrna
Varna
CYPRUS
Alexandria
Cairo
Jerusalem
Aleppo
Anah
Bagdad
Hillah
Babylon
Kurnah
Bassorah
PERSIAN GULF
Muscat
RED SEA
Jeddah
Mecca
ARABIA
Kooria Mooria Islands
Aden
AFRICA


THE
Mediterranean Electric Telegraph Company's
LINES
with the proposed extensions
FROM
CALCUTTA TO AUSTRALIA
CHINESE EMPIRE
GULF OF SIAM
MALAYA PENINSULA
MALACCA STRS
Singapore
SUMATRA
BORNEO
Borneo
MACASSAR STRS
CELEBES
JAVA
Batavia
PELOO ISLS
NEW GUINEA
P Essington
P Dale
PACIFIC
OCEAN
C York
C Melville
C Flattery
Halifax B
Brisbane
Hervey B
Sandy B
Moreton B
P Macquarie
Sydney
Adelaide
Melbourne
VAN DIEMENS LAND
Hobart Town
AUSTRALIA
INDIAN OCEAN
Bassora
Kurrum
PERSIAN GULF
Muscat
Ras al had
Kooria Mooria Islands
Aden
ARABIAN SEA
Hyderabad
Karachee
Delhi
Agra
Benares
Calcutta
Chandpoor
Dacca
Bombay
Poonah
Bangalore
Madras
Seringapatam
INDIA
BAY OF BENGAL
INDIAN OCEAN

THE

MEDITERRANEAN & INDIAN
ELECTRIC TELEGRAPH COMPANY.

ESTABLISHED IN 1853.

For completing an Electric Telegraph communication from England to India, viâ France, Sardinia, and the Mediterranean (crossing the Isthmus of Suez), with a Branch from Malta to the Ionian Islands and Constantinople, under the support and encouragement of the Allied Powers.

CAPITAL of the Lines Completed, £300,000,

IN 30,000 SHARES OF £10 EACH, PAYABLE TO BEARER.

CONCESSIONS, WITH EXCLUSIVE PRIVILEGES, FOR FIFTY YEARS.

A Minimum Interest, at the rate of 5 per cent. per Annum, guaranteed for the same period by the French and Sardinian Governments.

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HIS EXCELLENCY COMM. P. PALEOCAPA, Minister of Public Works.
HIS EXCELLENCY GENERAL DA BORMIDA, late Minister of Foreign Affairs.
HIS EXCELLENCY THE DUKE DE GRAMMONT, Envoy Extraordinary and Minister Plenipotentiary from the Emperor of the French.
HIS EXCELLENCY SIR JAMES HUDSON, K.C.B., Envoy Extraordinary and Minister Plenipotentiary of Great Britain.
HIS EXCELLENCY THE MARQUIS MASSIMO D'AZEGLIO.

Gerant—JOHN W. BRETT.

Offices: IN LONDON—117, BISHOPSGATE STREET WITHIN.
IN PARIS—83, RUE RICHELIEU.

J. W. DE LA MORE, *Secretary.* JAMES POWER, *Secretary.*

IN TURIN—BANK OF MESSRS PAVIA, TRAVI, & CO (J PAVIA)

The telegraph lines completed extend nearly 800 miles across the Mediterranean, opening at present *viâ France*, about 1800 miles of the direct line of communication between England and India.

The extension to India from this point, *viâ Malta and Alexandria* (passing the Isthmus of Suez) and the Red Sea to India, it is calculated might be completed within two years; and the branch, *viâ Malta*, to Corfu, to unite the line with Constantinople, now being established in this direction, under the auspices of the French Government,) may be completed in a few months from this date.

REPORT

To the Shareholders of the Mediterranean Company.

GENTLEMEN,

It is with the liveliest satisfaction that I do myself the honour to inform you, that the French Government has, in the most liberal manner, given us an additional grant of £1800 per annum, thereby raising the minimum guaranteed interest of the whole capital (£300,000) to 5 per cent.

It is unnecessary for me to say that so important a boon, which has no precedent, has not been obtained without exertion on my part. But these exertions have been cheerfully given, in return for the confidence which you have been pleased to repose in me.

I have also much pleasure in laying before you the present position of our works. Our lines have been in active and successful operation to Cagliari, above 600 miles across the Mediterranean since the 15th April last, and the messages transmitted have already far exceeded the number originally anticipated. The remaining portion of our present lines will be completed within a few weeks,

as the third cable, 162 miles in length, is now on board the "Result," at Greenwich, and will leave this country in a few days.

This important complement of our line will unite the southernmost point of Sardinia with Algiers, when the guarantee of 5 per cent. interest from the French Government will come into force, as is already the case with the Sardinian 5 per cent.

It is well known, that when this line was originally projected, it was announced as the commencement of a continuous line of telegraphic communication from London (*viâ* Malta and Alexandria) to India and Australia, and there is no doubt, that the grandeur of the objects then contemplated, and their public utility, mainly acquired for it the support which has ensured its success.

The Mediterranean cable is the largest and strongest which has yet been laid down. It consists of six electric wires throughout, weighing eight tons per mile, or over 2,000 tons. The land lines also contain six distinct wires throughout the Islands; two wires will secure to the French and Sardinian Governments a telegraphic communication with their respective dependencies, and the remaining wires will be ample for all the telegraphic communication of the English Government, the East India Company, and the public.

It is most gratifying to me to be able to state, that I have been recently assured in the strongest manner by the French and Sardinian Governments, that they are ready to unite with the English Government in affording us every assistance and support in realising to the full extent, the important enterprise originally contemplated, and from which profits far exceeding the joint Government guarantee may be reasonably expected.

But when we bear in mind the gracious and continuous

patronage we have received from H. M. the Emperor of the French, from the first commencement of the submarine telegraph, and the liberality of the French and Sardinian Governments, it is surely not presumptuous or unreasonable to ask for similar terms from the Government of this great empire, and from the Honorable East India Company, in order that this country may have the benefit of telegraphic communication with India, and eventually with the important and distant colony of Australia.

The completion already of 3,000 miles of telegraph throughout the Continent of India ready to unite in communication with our line, and the unparalleled expansion of trade in Australia consequent upon the discovery of the gold fields, seem to furnish irresistible arguments on commercial grounds for completing the intermediate portions of the chain, and as a question of first rate political interest, it is enough to remark, that if the English Government had possessed last year a submarine telegraph to Malta, more money would have been saved to this country than it would cost to construct the whole of the proposed lines.

Whilst engaged in the construction of the Mediterranean Electric Telegraph, I have repeatedly offered to the British Government to carry out this line to Malta on equitable terms, but although I have invariably received from the different ministers, to whom such proposals were submitted, the most kind and courteous consideration, the financial assistance so essential to a project of such manifest public utility, has not yet been granted.

Having been the first in the field, with a similar offer to the late lamented Sir Robert Peel, so far back as the year 1845, and having now completed a very important section of the East Indian Line, I believe it will be generally allowed that I am entitled to a preference from the English Government, and East India Company, and it will be my

endeavour to carry out the project in a substantial and permanent manner which cannot fail to add largely to the profits of the Mediterranean Telegraph Company, and be satisfactory to the several Governments.

Owing to the exclusive privileges which we already possess for a period of fifty years, no other line to Malta, the Ionian Islands, Egypt and India, can be constructed, which offers the same advantages and security to this country as the Mediterranean line. The development of this line will be exclusively under the protection and on the territories of the Western Powers, and totally independent of Austria, Naples, and the Austro-Italian Duchies.

The intimate Alliance subsisting between England, France and Sardinia, will give great facilities for all traffic over those portions of the chain which belong to the respective nations, and by skilful arrangements, for which I have paved the way, an unbroken Telegraphic communication may be secured from London to Calcutta.

Having now obtained a vantage ground, which naturally forms the basis of extended operations interesting and valuable to the whole commercial world, the time has come for proposing to you the conversion of our "Société en commandite," either into a "Société anonyme," or a Company under the new Act of Parliament, with the view of enlarging and perfecting the constitution of our Company.

Advantage can be taken of this operation to define the mode of issuing stock for the construction of the extension lines upon such terms, and with such privileges, as may result from the negociations now pending. Express provision will of course be made that no existing right or privilege now possessed by the Shareholders shall be compromised in the slightest degree by any participation which may, from time to time, be offered to them in any new advantages or concessions which I may be able to obtain.

At the approaching General Meeting to be held in Paris, formal resolutions for this purpose will be submitted to you, and in carrying out the arrangements, I have the satisfaction of knowing that I shall receive the enlightened counsel and assistance of the "Conseil de Surveillance."

In conclusion, Gentlemen, I will only remark, that when you subscribed your Capital of £300,000 you were assured of interest at the rate of 4 fr. 40 ct. per cent. per annum. The expense of laying down the cable has been much increased by the derangement in trade, manufacture and shipping, consequent upon the war, but your Capital remains fixed at the original sum, whilst your guaranteed interest has been raised to 5 per cent. per annum.

In the interval, many circumstances have occurred to render more imperative, and to hasten on the communication with the Eastern World, and this, once accomplished, by our united efforts, it is obvious that the dividends upon your stock will rise to a much higher figure.

I have the honour to remain,

GENTLEMEN,

Your obedient Servant,

JOHN W. BRETT,

Gérant.

25*th July*, 1855.

THE SCINDE RAILWAY

COMPANY.

Offices: Gresham House, Old Broad Street, City.

BOARD OF DIRECTORS.

Chairman.

W. P. ANDREW, Esq. (26, Montague Square.)

Ex Officio Director.

SIR JAMES C. MELVILL, K.C.B.

SIR HERBERT MADDOCK, M.P., late Deputy Governor, Bengal.
J. EDMUND ANDERDON, Esq., Director of the Bank of London.
FRANCIS HORSLEY ROBINSON, Esq., late Senior Member, Board of Revenue, North-west Provinces.
THOMAS WILLIAMS, Esq., Grove End Road, Regent's Park.

Auditors.

ALEXANDER MACKENZIE, Esq. Director of the Oriental Bank Corporation.

HARRY BORRADAILE, Esq., Late Bombay Civil Service.

Engineer.

T. A. YARROW, Esq.

Bankers.

Messrs. SMITH, PAYNE, and SMITHS.

Solicitors.

Messrs. MARTEN, THOMAS and HOLLAMS.

Secretary.

THOMAS BURNELL, Esq.

REPORT OF THE DIRECTORS of the SCINDE RAILWAY COMPANY to the Proprietors, submitted at the First Annual General Meeting, held on the 18th day of February, 1856, at the Offices of the Company, Gresham House, Old Broad Street, City.

THE Directors have much satisfaction in meeting their shareholders for the first time, and congratulate them upon the position the Company has attained in so short a period after its formation.

In the early part of last year, the capital was promptly subscribed for, and in June, a provisional agreement was entered into with the Honourable East India Company, by which 5 per cent. was to be guaranteed on £500,000 of capital, on condition that 25 per cent. of that amount was paid into the treasury of the East India Company, within two months after the passing of the Bill for Incorporating the Company, and another payment of a similar amount within two months after the first payment.

The Directors feel highly gratified in being able to report to the proprietors, that the whole of the preliminary expenses, including parliamentary charges, for obtaining the Act of Parliament for the Incorporation of the Company and all law expenses, including the deed of settlement, up to 31st December last, amount to the sum of £3,244 0s. 5d.

The charges for the establishment in India have not yet been received, and consequently are not included in the financial statement, but the Directors hope to be able to

bring them before the proprietors at the next half-yearly meeting.

On the 2nd July, the Bill for Incorporating the Company, received the royal assent.

On the 31st of May, the sum of £128,945 10s. was paid into the treasury of the East India Company, on the 30th June £46,234 16s., and on the 31st July £72,058 4s., amounting to £247,238 10s., being nearly 50 per cent. of the guaranteed capital, and £122,238 10s. in excess of the first instalment.

Subsequently £18,376 was paid into the treasury of the East India Company, making the total amount to the credit of the Company to this date £265,614 10s., upon which 5 per cent. accrues, and warrants have been issued for the interest due December 1855.

The contract was duly executed between the East India Company and this Company on the 4th January last, under the terms of which, interest at the rate of 5 per cent. per annum on the capital, is payable half yearly in the months of January and July.

The Directors have secured the services of gentlemen of experience and ability, to fill the important offices in India, of agent and resident engineer; both gentlemen are now in Scinde, and they are aided by a competent staff of engineers and other assistants.

The line from Kurrachee to Hydrabad having been surveyed and reported upon by order of the Bombay Government, by the late Lieutenant Chapman, an able engineer officer, and approved of by Lieutenant-Colonel Turner, the Superintending Engineer of the Province and other authorities, the Directors expect shortly to hear that the exact course of the line has been finally settled. From the unusually favourable nature of the country to be traversed, it being a series of firm, hard, and level plains,

little exposed to inundation, the Directors anticipate a rapid progress and early completion of this the most important portion of the line of communication along the Valley of the Indus.

Materials for permanent way for thirty miles of railway have been contracted for, a large portion of which is now in course of shipment.

As the success of the railway would be greatly affected by the capability of the Port of Kurrachee at its lower extremity, and by the existence of an efficient agency on the Indus for the conveyance of passengers and goods to and from the railway, these two points may be briefly glanced at.

Mr. M'Leod the late Deputy Collector of Customs at Kurrachee in October, 1853, stated "that the commerce of the port has been progressing during the past few years at the rate of 20 per cent. per annum, and there is every reason to expect a continuance of the progressive ratio." "These prospects of the Scinde trade, lead me to believe that by the time a railway shall be laid down and be prepared for action, our commerce will have doubled its present value, and the passenger traffic be ten times as much as it is at present."—and it is satisfactory to add that the existing state of the trade of Kurrachee is in accordance with these statements and views.

That distinguished gentleman Mr. Frere, now at the head of the Government of Scinde, remarked (while presiding at a public meeting at Kurrachee in September last, for promoting direct steam communication between Kurrachee and Suez,) that "Colonel Turner (the Superintending Engineer of the Province,) instituted a series of very careful experiments by boring, and showed most conclusively that there was not a particle of rock anywhere on the bar, that the whole was composed to a considerable depth of

soft sand; the establishment of this fact of course removed one principal ground of the fear which mariners before had of approaching or touching on the bar.

"But the principal share of the credit of practically proving the absence of any danger in entering the port, was due to Lieutenant Leeds the port officer, who with great skill and judgment, and on his own responsibility, piloted in ships of considerable burden; and had practically shown that this might be safely done even without any aid from steamers. The result was, that during the monsoon just closed, four large steamers from Bombay and Aden, and eight sailing vessels of from 300 to 878 tons had come in and gone out, and with one exception, it had never been found necessary to wait even a single day for any particular tide.

"*Facts like these prove beyond a possibility of doubt that there was no difficulty whatever in getting vessels even of considerable size into and out of Kurrachee Harbour, during the south-west monsoon, the most unfavourable period of the year.*"

For the last three years there has been a regular communication established between Kurrachee and Mooltan, a distance of 800 miles, by government steamers: and to meet in some degree the increasing traffic, four boats, with accommodation flats, are being constructed in this country, by order of the East India Company to be added to the existing steam flotilla on the Indus.

The importance of the route by the Indus is becoming more and more apparent for the conveyance of passengers, troops, goods produce, and government stores.

The military supplies for the Punjaub, which were formerly sent from Calcutta by the valley of the Ganges, are now sent from Bombay by the valley of the Indus. This year 15,000 hogsheads of porter and ale for the troops in

the Punjaub and neighbouring territory are being sent by the government to Kurrachee for transmission by the Indus.

Appended to this report is a statement of accounts from the formation of the Company to the 31st December last, which, along with the books of the Company, have been duly submitted for audit to the auditors of the Company, and have been also examined by the Accountants' Department of the East India Company.

In accordance with the provisions of the deed of settlement, the following Directors retire from office at this meeting.

W. P. ANDREW, Esq., and
THOMAS WILLIAMS, Esq.

These gentlemen being eligible for re-election, offer themselves accordingly.

W. P. ANDREW, *Chairman.*

SCINDE RAILWAY COMPANY.

Dr. *Account of Receipts and Disbursements from the formation of the Company, to 31st December, 1855.* Cr.

Receipts.	£	s.	d.
To Amount received on Shares to 31st December, 1855	257,114	10	0
„ Amount received for Transfer fees	34	10	0
„ Interest on overdue Calls	8	10	11
	£257,157	10	11

Disbursements.	£	s.	d.
By Preliminary Expenses, from the formation of the Company, to March 25, 1855	2,068	18	9
„ Establishment charges, including Stationery, Advertising, Rent, Allowance to Directors, Furniture, Salaries, Office Expenses, &c.	1,900	11	8
„ Engineering and Surveying Expenses	689	16	2
„ Stationery for India	199	6	10
„ Freight, &c., of Stationery, &c., to India	59	2	0
„ Insurance	14	9	8
„ Passengers	470	0	0
„ Salary (India on account)	100	0	0
	£5,502	5	1
„ Balance in hand, with bankers & petty cash £2,674 13 11			
With the Honourable East India Company 248,980 11 11			
	251,655	5	10
	£257,157	10	11

We hereby certify that we have examined the Accounts of which the above is a summary, and we declare the same correct.

(*Signed*) FRANCIS HORSLEY ROBINSON, THOMAS WILLIAMS, } *Directors.*
W. P. ANDREW, *Chairman.*

ALEXANDER MACKENZIE, H. BORRADAILE, } *Auditors.*

London, 11th February, 1856.

PROCEEDINGS OF THE FIRST ANNUAL GENERAL MEETING OF THE SHAREHOLDERS, held February 18th, 1856.

The first annual general meeting of the Scinde Railway Company was held on Monday, the 18th of February, at their offices, Gresham House, Old Broad-street, in the City of London; W. P. ANDREW, Esq., Chairman of the Board of Directors, presiding.

Mr. BURNELL (the secretary), having read the advertisement convening the meeting, the seal of the company, was affixed by the chairman to the register of shareholders.

The report of the directors, which had already been circulated amongst the proprietors, was taken as read.

The CHAIRMAN then said—I will, if you will allow me, make a few remarks; and, in the first place, I beg leave to observe, in reference to the expenditure which has been incurred in the prosecution of our undertaking, that although our actual expenditure has been small, yet that all our liabilities are not included in the amount. I think it just to state this, because we have a large staff in India, and of course, we are not able to include current liabilities. I should also state, that the law charges are not included in the balance-sheet, but the total amount to the 31st December is ascertained. I have scarcely ever seen a lawyer's bill without a feeling of indignation; but I cannot say we have any reason to complain in this particular instance, inasmuch as the whole of the account, including all the fees, the Act of Incorporation, the Deed of Settlement, and other

charges, does not exceed £1,200 [hear, hear.] I consider this so honourable to your legal advisers, that I should be disposed to say something more on this subject, but that I am anxious to spare the blushes of a learned gentleman who is present at this meeting [hear, hear.] But though our expenditure has been limited, yet at the same time, I beg to assure you that we have been far from idle, and, consequently, that your liabilities have increased in proportion to our activity. At the present moment we have, in course of shipment, a large quantity of permanent way material, all of which we have been enabled to contract for at very fair and reasonable prices.

The Directors have alluded in their report to the capabilities of the port and harbour of Kurrachee, but as the port does not form a part of the undertaking in which we are engaged the paragraph regarding it in the report was a short one. But the fact is, that the successful prosecution of the railway, and the prospects of its future usefulness to the country and profit to the shareholders, are so intimately dependent upon the development of the capabilities of the port, that I think it highly desirable that some additional information should be laid before you. I should apologise for these remarks, but the subject is one so interesting to us, and upon which it is so desirable that the mercantile interest should be fully informed, that I am sure you will excuse me for laying before you some facts connected with the port [hear, hear]. During the most unfavourable period of the south-western monsoons—I have now before me a statement of Mr. Bartle Frere, the distinguished Commissioner of the province, which shows that—during the months of June, July, and August, 1853, and in the following year, many vessels, some of them of 800 tons burthen, and drawing 16½ feet of water, entered and left the port without any accident or impediment whatever

[hear, hear]. Another objection which has been raised against the port was, that there is a bar at the entrance of the harbour. I don't know whether those who make the objection are acquainted with the fact, that Lieutenant-Colonel Turner, the Superintending Engineer of Scinde, has made a report upon the bar, that it consists of soft sand, and that the action of the water, caused by the increasing traffic of the harbour, is gradually effecting a diminution of the obstruction. At the same time it ought to be publicly known, that the East India Company has sent out two steam dredging machines for the purpose of cleansing and improving the harbour, and no doubt is entertained by professional men, that twenty feet of water will be permanently secured [hear, hear]. I should also draw attention to the fact, that the harbour is what is called land-locked, and is well marked and defined at one extremity by a bold headland, known as Munora Point. As I before remarked, I think these facts are of so much interest, that they ought to be generally known amongst the merchants of this country [hear, hear].

Having said so much about the port of Kurrachee, I will proceed, with your permission, to make a few observations in reference to the railway undertaking which we have in hand. The credit of this design is due to Mr. H. B. E. Frere, the Commissioner of Scinde, whose zeal on this and all other subjects connected with the improvement of the province under his government is well-known. The preliminary survey of the line was made by order of the Bombay Government by the late Lieutenant W. Chapman, a very able officer of the Bombay Engineers, who, having collected much valuable information contained in the report I hold in my hand, had his promising career cut short while engaged in prosecuting this design, and I was invited by the authorities to carry it out. It was taken up by my col-

leagues and myself energetically, and as an undertaking to the success of which we attached the utmost importance.

We look upon the construction of the present line, not simply as a line from Kurrachee to Hydrabad, but as the first link in the chain ultimately destined to open up the Punjaub and Central Asia, by relieving commerce of the dangerous intricacies of the Delta, and otherwise extending gradually improved means of communication. At the present time, I have returns showing that such is the danger attending the navigation, that in descending the river, one or two boats are lost out of seven. But it is not the navigation of the Delta alone which is detrimental to commerce, as the class of boats which are useful for one part of the navigation, are totally unfit for another. Thus, those boats which are fitted for the navigation of the Upper Indus are totally useless to thread the narrow windings of the Delta, and these again are entirely unsuited for sea navigation, being unable to face the ocean swell from want of depth. The idea which we entertain of the best means of giving facilities of improved transit to the districts of the Punjaub and Upper India is, to provide steam navigation where the river is economically available, and to complete the communication by the laying down of lines of railway. The Scinde Railway is the first link in the great chain of communication between the only harbour on the north-western coast of India and the Punjaub and neighbouring territories. We now propose to carry our line to Hydrabad, which is near the point on the Indus at which deep water navigation may be said to commence, and when the navigation again becomes defective, we may use the railway again.

I desire, in short, to bring practically into operation the system of railway communication in India, which I advocated in 1846, in reference to the construction of railways

in another part of the Indian Empire,—the Bengal presidency —namely, to make use of the navigation of rivers where practicable, and as it were, to supplement, where water transit becomes defective, the grand natural highways which Providence has made for the use of man by the assistance of the railway [hear]. Great objections have been raised in this country to this mode, inasmuch as according to the ideas of those accustomed to our rapid mode of travelling in Europe, it appears a waste of time and labour, in a journey of something like 1,000 miles, to subject goods to so many operations of transhipment. But it should be borne in mind that in England we are accustomed to travel at the rate of 300 and 400 miles a day, whereas, in India, we think ourselves fortunate if we can accomplish ten or twelve miles, either by land or water conveyance. In fact, the argument based on the value of labour and time, as we estimate them in this country, falls to the ground. When the natives of India begin to appreciate the value of time and labour, as we do, then, no doubt there will be demand for the laying down of trunk lines, and the question of capital outlay will not enter so largely into the calculation as it does at present [hear, hear].

I have alluded to the undertaking in hand, more particularly in reference to India. I will now direct your attention to the position of the port of Kurrachee, as a European port. It is the nearest port to Aden by 200 miles, and during the south-western monsoon it is really 700 miles nearer than Bombay is to Aden.

This position will confer upon it an incalculable value when the short route to India shall be accomplished by the valley of the Euphrates, and so by the valley of the Indus, the distance between Europe, the Punjaub and Upper India will be shortened by more than 1,000 miles [hear, hear]. And in the ultimate accomplishment of this, the dream of the statesman and the philosopher, no

doubt can be entertained, for the obstacles which oppose it are not physical, but the result of political causes.

It will be satisfactory to the meeting to learn that the East India Company have put on two steamers between Kurrachée and Aden and Suez, with a view of ascertaining, in some measure, the public demand for the opening up of that route, and in the results of the experiment, I need scarcely say that the greatest interest is felt by this company. I have to apologise for detaining you at such length, and have now the honour to move the adoption of the report and accounts.

Sir HERBERT MADDOCK seconded the resolution, and in doing so expressed his confidence that the preliminaries having been overcome, there was every reason to anticipate an early completion of their line [hear, hear]. As the chairman had stated, the Scinde Railway was but a short link in the chain of communication between the coast and Upper India. It was but a railway 110 miles in length, and it might appear to those unacquainted with the subject, that this was but a small contribution to the accomplishment of the through communication, but he would remind, them, that, at the distance of 110 miles, they arrived at a noble river, as capable of navigation as the rivers of America; and they would observe, that the course of that river opened up a communication with a population of thirty-two millions in the Punjaub and Central Asia.

But, not only at the remote end of their line had they a population larger than that of the United Kingdom, but throughout their whole course there was an established traffic, of inestimable value, which must be highly remunerative to a trunk line of 110 miles in length.

Their Chairman had alluded to the possible carrying out of a system of railway communication throughout; and he, for his own part, would confess that he should not be surprised at the speedy accomplishment by the Scinde

Railway Company of a railway projected from Lahore and Umritsir to Hydrabad [hear, hear].

As to the capabilities of the port of Kurrachee, he would take that opportunity of confirming the remarks of the Chairman. It had been proved that, during the monsoons, there was plenty of water for vessels of from 700 to 800 tons burthen. The bar of soft sand would be cut away by the operations which were being conducted by the East India Company; and he had no hesitation in stating his convictions, that, with the improvements in progress, the port of Kurrachee would become even more accessible than the port at Calcutta [hear, hear].

In answer to questions,

The CHAIRMAN stated that the strictest regularity had been observed in all the transactions of the Company, that the two instalments constituting the required 50 per cent. of the guaranteed capital had been paid into the treasury of the East India House before they were due, and the contract with the Honourable East India Company, was on the table, open to the inspection of the proprietors.

A PROPRIETOR wished to know, in how short a time it was likely that the line would be completed?

The CHAIRMAN said, he thought about a couple of years; but, as Mr. Yarrow, the Engineer of the Company was present, he should prefer that an explanation should be given by that gentleman.

Mr. YARROW said, the line might be completed to Hydrabad within three years from the actual commencement of operations. He would take the opportunity of stating, for the information of the proprietors that the details connected with the rolling stock of this and all the Indian railways had been settled in a conference between Mr. Stephenson, Mr. Rendel, Colonel Kennedy and himself, and thus perfect uniformity would be ensured.

A PROPRIETOR said, he would venture to suggest that it would be very desirable for the Directors to keep in view the closing of the capital account. He mentioned this, since an extension had been spoken of.

The CHAIRMAN said, he should be very glad indeed to close the capital account. It would, no doubt, be a very profitable operation [a laugh]. That was a matter which must be submitted to the proprietors before any step could be taken.

Another PROPRIETOR wished to know if an option would be given to proprietors desirous of paying up their calls in advance.

The CHAIRMAN said, so soon as there was any prospect of the Company wanting more money, arrangements would be made to meet the convenience of the general body of shareholders. It was scarcely possible to state precisely when another call would be required.

A PROPRIETOR said, he should be glad to hear the views of the Directors on the subject of fuel for locomotives; whether they proposed to use coal or coke.

The CHAIRMAN said, he believed at present it was in contemplation to use wood; but his friend on his left, Sir Herbert Maddock, had assured them that before the line would be ready for working there would be an ample means of supply of coal from Bengal.

Sir HERBERT MADDOCK said, he was interested in some collieries in the Presidency of Bengal which produced excellent coal for cokeing. There was, as of course was well known, an excellent variety of coal in that Presidency, but not all producing good coke. Experiments were now, however, in active progress, and he had no doubt whatever, from the reports which he had received, that a supply would be obtained of a very superior quality. The colliery to which he referred was in the Raneegunge district.

The CHAIRMAN then put the resolution for the adoption of the report and accounts, which was carried unanimously.

The CHAIRMAN submitted a resolution for reducing the Directors of the Company from ten to five. In the Act authorising the incorporation of the Company, the number of Directors was ten, but in obedience to a suggestion in which they concurred, it was proposed that the number should be reduced to five, of which three should form a quorum. He said the suggestion came from an authority to which they must all bow (a laugh); and, in short, he believed they had very little choice in the matter.

Sir HERBERT MADDOCK seconded the resolution.

The resolution was then put and carried.

SIR HERBERT MADDOCK then proposed the re-election, as Directors, of the Chairman and of Mr. Williams. In doing so, he took occasion to observe that Mr. Andrew might be regarded as the father of the present system of railways now established in India (hear, hear). By his contributions to the public press in this country, as well as by the pamphlets which he had published, in connection with the subject, he had enforced the adoption of a judicious and comprehensive plan of railways in India. It was well known, that he was the original promoter of the proposed line from Allahabad to Delhi; and in the pamphlets which he published in connection with that undertaking, he elucidated the grand principles which had subsequently been adopted, according to his recommendation, in carrying the East India Railway to Rajhmahal. The idea of Mr. Andrew was, that the two sections of line should be carried from Calcutta to Rajhmahal, and from Allahabad to Delhi, with steamers of improved construction between Rajhmahal and Allahabad. His great services were fully appreciated beyond the limits of his own proprietary, and to them he was quite sure that the admirable

manner in which their affairs had been brought up to their present position, the raising of their capital at a critical time, together with the general judicious management of their affairs, were facts too well appreciated by the proprietors to render it necessary for him to say more, in introducing the name of Mr. Andrew for re-election (hear, hear). Mr. Williams was also well known as a director of the Great Western Railway Company, and as an able and honourable gentleman; and he had much pleasure in proposing his name in company with that of his friend Mr. Andrew.

The motion was seconded by Mr. Francis Horsley Robinson (who concurred entirely in the observations of Sir Herbert Maddock) and carried unanimously.

The Chairman returned thanks on behalf of Mr. Williams and himself for the confidence thus expressed by the proprietors and for the handsome terms in which his services were alluded to.

Messrs. Mackenzie and Borradaile were then elected auditors, the chairman observing that the character and position of both these gentlemen rendered any observation unnecessary.

Upon the motion of Mr. T. W. Ramsay, a vote of thanks was carried by acclamation to the Chairman and Directors, for the energy and economy they have evinced, and their general attention to the interests of the proprietors, and a further special vote to Mr. Andrew, for his courteous and able conduct in the chair.

Mr. Andrew acknowledged the compliment.

Mr. Nicholson said, before the proprietors separated, he was anxious to make a few observations, in reference to a subject which had been brought before their notice that day, in connection with the undertaking they had in hand. He should not have obtruded upon the business of the meet-

ing; but that having been disposed of, he desired to say a few words—in the first place, because he was a shareholder; and, in the second place, as a proprietor, having the very greatest confidence in the future success of the undertaking. He believed there was the prospect of very considerable profit—second, of course, only to one [a laugh.] No doubt, the traffic of the Indus, with the population of thirty-two millions—whilst we had but thirty millions in the United Kingdom—was a large source from which the traffic of a terminal line, of only 110 miles in length, could be derived. Therefore the undertaking was likely to pay. But he thought the question of fuel for their engines was a subject of no inconsiderable importance. No doubt, at Bombay, the supply of wood now was cheaper than of coal or coke. And he believed that experiments had been successfully tried upon a mixed fuel of coal, wood, and coke. He was glad to hear that the coal in the Damooda Valley had been satisfactorily tested; but all coal was not good for cokeing, and perhaps when the experiments have been sufficiently carried out, they might find, at a greater depth, a good cokeing coal; that is to say, a good coke for locomotive purposes. He (Mr. Nicholson) had also obtained a good coal from the neighbourhood of the Nerbudda river, to which they were aware it was the intention of the Great Indian Peninsula Railway Company to extend their operations as soon as practicable; and, from the experiments which had been made upon the coal, his opinion was, that the fuel for the locomotives of the Scinde Railway would probably be furnished by the collieries of the Nerbudda at an earlier period than from the mineral district of the Raneegunge.

The business of the meeting being completed, the proprietors separated.

REMARKS OF THE PRESS

ON

WORKS ON INDIAN RAILWAYS,

BY

W. P. ANDREW, Esq.

Indian Railways, and their probable Results. By an Old Indian Postmaster. (Second Edition, 1846.) Third Edition. T. C. Newby: Pelham Richardson, Cornhill. 1848.

From "ALLEN'S 'INDIAN MAIL,'" *August* 13*th*, 1846.

"In regard to the great line to connect the seat of government with the extreme north-west, the author's opinions are peculiar.

"He would construct the northern part of the line before the southern, arguing that the Ganges, as far as it is navigable, supplies the means of communication; and that it is where this accommodation ceases, that a railroad is more especially wanted."

From "THE TIMES," *City Article, 22nd October*, 1846.

"It (Indian Railways) contains a great quantity of information."

From "THE TIMES," *City Article, 19th November*, 1851.

"The line (in Bengal) seems to have been adopted, which was originally recommended by Mr. W. P. Andrew."

From the "MORNING HERALD," *Leading Article, November* 14*th*, 1846.

"We have little doubt that the preference given to the Mirzapore Line by the Railway Commissioners, will be confirmed by the Supreme Government and the Court of Directors; for we can scarcely imagine that those bodies will participate in the 'Old Postmaster's' weakness in favour of the intermediate river trip from Rajmahal to Allahabad, on the

way from the Presidency to the north-west frontier."

From the "MORNING HERALD," *September 11th*, 1852, *City Article.*

"Mr. Andrew is well known as the author of a valuable work published some years since by Mr. Pelham Richardson, under the *nom de guerre* of an 'Old Indian Postmaster,' by which public and official notice was mainly, if not first, directed to the great subject of railway communications in India, and its immense import, not alone to the accelerated development of the prodigious resources of that vast empire, but to its safety and conservation."

From "THE ECONOMIST," 26*th February*, 1848.

"Our author is for trusting the formation of the roads with some judicious guidance, to private speculation. He makes the following statement, illustrating the folly of government undertaking such examples, by the case of Philadelphia:—

PRIVATE OR PUBLIC MANAGEMENT.

"'Three propositions suggest themselves as to the policy to be adopted, and agencies to be employed, in the formation of railways in a new country.

"'1st. That they be, with certain restrictions and provisions, left to unfettered and unaided private enterprise, as has been hitherto the case in this country.

"'2nd. That the government itself should project and define a great and comprehensive system, as well as execute and work the lines most apparently conducive to the common weal, as in Belgium.

"'3rd. That the government should grant concessions or leases of various sections, or particular projects, to private companies, on such terms as might be mutually advantageous; the latter to have the execution of the works, and the management of the traffic of the lines, under the direct supervision and control of officers appointed by the government, as has been practised in France, and more recently in Belgium.

"'Judging from the confusion which has arisen in this country, by giving the reins to speculative enterprise, the crude and angular manner in which railways were commenced in France, and the harmonious and beneficent manner in which the Belgium system has resulted, there appears to be little doubt but that it is the most effective and rapid mode of introducing railways into a country.

"'We would, however, from financial considerations, deviate so far from this example, as to give, after defining the line, the concession to a private Company; for Belgium had to borrow money at five per cent, to make railroads, which did not,

all very lately, yield more than two and a-half per cent. And Pennsylvania, which in 1824 was bitten with the improvement mania, 'believed, and truly, that a system of inland communication by means of canals and railroads, would tend to increase her prosperity. She believed that the annual income of these public works would not only pay the interest on the first cost, but would leave a liberal overplus for public purposes. What was the result?

"'The state, after having spent millions, wisely gave away the works in an unfinished condition to companies of private individuals, on condition that they would finish them. In addition to this the favouritism and peculation inseparable from Government patronage and expenditure served to swell the costs of these works to a most disastrous extent. The consequence was that in 1841 or 1842 the state was forty millions in debt.

"'State lines can neither be worked with the same economy, nor can they have imparted to them that impulse which the spirit of private enterprise alone can give.

"To follow our author through all his calculations, would be to transcribe a large part of his book; and we shall only say, that he is of opinion that by eschewing the ornamental, and improving on the American system, we might effect an extensive railway developement in India, at a much less cost, and better adapted to the rough work it would be subjected to, than of transporting a 'Birmingham,' or a 'Great Western,' with all its grandeur and complicated arrangement, into Hindostan. In that there is much wisdom.

"In his book altogether, there is much information, and whoever is interested in the subject of railways in India should consult it."

From "THE ECONOMIST," *December* 13*th*, 1851.

"We see with some satisfaction, that the views propounded as to forming railways in India, by Mr. W. P. Andrew, under the cognomen of an 'Old Indian Postmaster,' and which were long ago recommended in our journal, find favour in India, and are likely to be adopted."

From the "OBSERVER," *February* 13*th*, 1848.

"The third edition of a work on Railways is a fact in literature, almost unprecedented, and one which speaks trumpet-tongued for the value of the publication.

"The Old Indian Postmaster has added an immense mass of information to this edition of his book; which, now that it may be said to be as complete as human hands can make it, is of inestimable account, in reference to the great subject of Indian Railways. The author devotes some space at the commencement of the work to defend his opinions; but that they needed no

defence, is proved by the exhaustion of two editions of his work.

"Their truth is the best defence they can have; and that is so obvious that 'those who run may read.' In fact there has not been such a valuable contribution to the civilization of India, as this work on Indian Railways, since the era of its absorption into the dominions of her Majesty. Every one interested in Indian railways will, of course, possess it; while every general reader should, as a matter of information, make himself master of its contents."

From the "OBSERVER," *November 23rd*, 1851. *Indian Railways.*

"It is not a little remarkable, on reviewing the past and present position of Indian railways, to perceive that the views of a private individual have prevailed against, and finally overthrown, the plans of the Indian Railway Commission, (composed of a civil engineer, sent at a great expense from this country, aided by two talented officers of the Hon. East India Company's engineers,) approved of by the governor-general, the India House, and Cannon-row authorities, and applauded by the press. When we had occasion to review Mr. W. P. Andrew's various publications on Indian railways, as they issued from the press, we were amongst the first to call public attention to the originality and soundness of the views communicated, and it now appears that the result will prove a signal vindication of the correctness of those impressions.

"Indeed, the Railway Companies in Bengal and Bombay that have obtained concessions are carrying out the views of 'the Old Indian Postmaster' to the letter, so far as the limited capital at their disposal will allow them; and it may be predicted that whenever a concession is given for a railway in Madras, it will be for the line the writer so strongly advocated, viz., to Arcot, the only short line in India which, in his opinion, would prove commercially remunerative."

"Of the Railway Commission, Mr. Andrew in 1846, wrote thus:—'It might have been hoped that the Railway Commissioners would have cleared the way to a satisfactory decision on this subject (the introduction of the railway system into India), with an authority derivable from the soundness of the views enunciated, the variety of new and interesting data, the prestige of office, and acknowledged ability. But their report, beyond giving an official sanction to railroads in general, sheds no new light on the question at issue. Instructed to suggest some feasible line of moderate compass, the principal portion of their report is devoted to recommending the adoption of a railroad of four hundred and fifty miles in length, through the most difficult, most unproductive, and most desolate portion of a country, elsewhere easy, fertile, and densely peopled.

"'That plan of commencing improved transit, which would only supersede the river navigation where it was most defective, and co-operate with it where it was always available, *i.e.*, a railroad from Calcutta to deep water in the Ganges at Rajmahal is clearly the one that should be adopted; from this point river steamers to Allahabad, at the confluence of the Jumna and Ganges, where deep water ceases, and a railroad from Allahabad to Delhi and the Sutlej.'

"The arrival of the last mail from India brought the following information on the subject:—'The Howrah terminus indicated by Mr. Andrew, to save bridging the Hooghly, had been adopted, and a section of the line as far as Pandooah is either in progress or under contract. The Railway Company have advertised for contracts for a further section, viz., from Pandooah to Raneegunge.

"There cannot now be a reasonable doubt that the line will be carried ultimately to Rajmahal.'

"Had the plans of the Railway

Commissioners' been adhered to, the East India Railway Company would now be bridging the Hooghly, with its banks ever trembling or in locomotion, or building a bridge over the Soane as great in all its dimensions as the Blackwall Railway, after searching diligently for its foundations 'below an unknown depth of sand.

"The Government and people of India are therefore indebted to the 'Old Indian Postmaster,' who has thus saved them from prosecuting a design that could only have led to disastrous and humiliating results, which would have been felt both in India and this country."

From the "INDIAN NEWS," *February 22nd*, 1848.

"The best testimony of the soundness of the 'Old Postmaster's' views is, that, in the settlement of Indian Railways, as far as it has recently taken place, not a few of his opinions have been followed by those in authority. We know of no work on the subject which can be compared with it whether as regards the local knowledge possessed by the writer—the judicious application of that knowledge, or as an exposition of the advantages which must result from improved modes of transit in the East, both to native industry and the requirements of British commerce."

From the "INDIAN NEWS," *22nd May*, 1850.

"The sum guaranteed, viz., £1,000,000 is not sufficient for the construction of a line that will yield any return. The line from Calcutta to Mirzapore, the proposed terminus of the East Indian line is 450 miles, the estimated cost of which is £16,000 per mile, *i.e.*, 7,000,000.

"Besides, it is a fact which cannot be refuted, that a line commencing at Calcutta must debouche on the Ganges, before any benefit can accrue, either to the Government, the commerce of India, or to the people.

"These facts, as clear as they are indisputable, were promulgated four years ago, in a work on Indian Railways, by Mr. Andrew, and reiterated in a letter addressed by him to Sir J. Law Lushington, in 1848. Subsequent experience proves their correctness."

From the "MORNING CHRONICLE," *May 21st*, 1850.

"The opinion in Calcutta appears to be, that it is useless to attempt any experiment unless a capital of £2,000,000 is subscribed, as no railway in Lower India can possibly be made to pay that does not debouche on the Ganges. The rail must be carried, in the first place, to Rajmahal, which is 200 miles from Calcutta. This was clearly explained by Mr. W. P. Andrew five years ago in his work on Indian railways; and the opinions of the old postmaster appear now to be fully confirmed by the experience of those on the spot."

From the "MORNING CHRONICLE," *November 20th*, 1851.

"Indian railways.—We have more than once predicted that the views propounded, several years ago, by Mr. W. P. Andrew, would be those that the Indian authorities would finally adopt, in preference to the plan recommended by the Indian Railway Commission. Mr. Andrew's project was to connect Calcutta (or, rather, Howrah) on the opposite bank of the Hooghley, with the main Ganges at Rajmahal, the lowest practical point.

"This railway would be about 200 miles in length, and would save, for eight months in the year, 530 miles of dangerous and difficult navigation through the Soonderbunds.

"The plan of the Railway Commission was to connect Calcutta with Mirzapore, on the main Ganges.

This would be 450 miles of railway through a difficult country, and debouching on the Ganges at a point where the commerce was neither so great nor so impeded as lower down. By recent accounts from India, we observe that the Howrah terminus, indicated by Mr. Andrew to save bridging the Hooghly, had been adopted, and that section of the line as far as Padooah, was either in progress, or under contract; and by the last mail, we observe that the railway company have advertized for contracts for a further section, viz., from Pandooah to Raneegunge. There cannot now be a reasonable doubt but that the line will be carried ultimately to Rajmahal."

From the "BRITANNIA," *December 13th*, 1851.

"It is announced, we see, by the 'Friend of India,' received by the last mail, 'That the Court of Directors had decided for the adoption of the line proposed by Major Kennedy from the collieries to Rajmahal, and thence up the valley of the Ganges,' which is exactly the scheme originally propounded and advocated by the 'old Indian postmaster,' Mr. W. P. Andrew) in 1846, some two or three years before Major Kennedy went to India, and to whom exclusively the merit is due of having pointed out the erroneous views of the East Indian Railway Company, and adopted by the India Government Railway Commission. Had the authorities acted upon Mr. Andrew's views, a large and useless expenditure of time and money would have been saved; and it is admitted on all hands, that this gentleman 'has saved railway enterprise in India from a great and lamentable failure,' which would have reduced India to a state of more hopeless apathy and irretrievable desolation than ever; famine and pestilence would have resumed their periodic reign, the happiness and prosperity of the people would have been retarded for ages, and England's independence of America for the supply of raw material for the greatest of her staple manufactures, been more remote than ever."

Is India to have Railways? Or, Fallacies of an East Indian Merchant Exposed in a Letter to Lieut.-General Sir J. L. LUSHINGTON, G.C.B., *Chairman of the Hon East India Company, by* An East India Officer. W. H. Allen and Co., Leadenhall Street, 1848.

From the "OBSERVER," *November 17th*, 1848.

"This is a bold and able exposure of the system of Indian Railways, as proposed to the public in this country, and an unanswerable vindication of the good faith of the India House authorities.

"The writer is a man evidently well versed on his subject, which he treats in a manner that exhausts the whole question, and leaves nothing to be desired.

"The India Company owe him much as a volunteer champion in a matter wherein their integrity was more than suspected: he has certainly carried them through triumphantly. This pamphlet will be perused with deep interest.

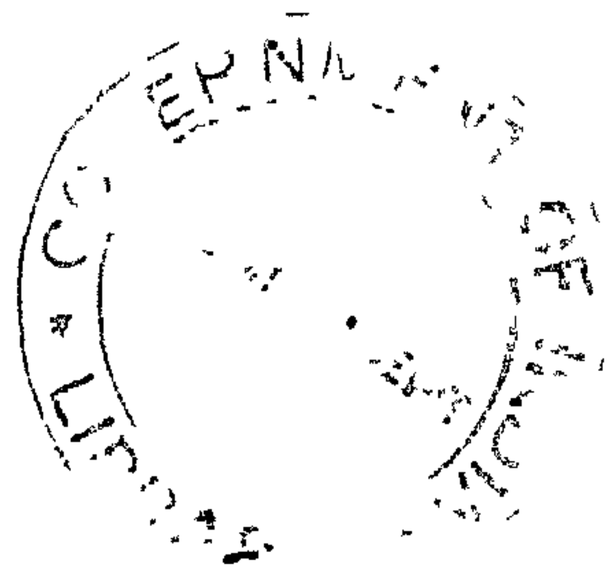
From "ALLEN'S INDIAN MAIL," *January 5th*, 1849.

"This pamphlet, which is a most unmerciful exposure of the proceedings of the Directors of the East India Railway Company, inflicts a lacerating castigation upon their advocate, 'An East India Merchant,' whose 'Letter to Lord John Russell,' noticed in the 'Mail' of Nov. 2nd, the 'East India Officer' considers as 'the semi-official manifesto' of the East Indian Railway Company,

on behalf of the Directors and employés.

"It is lamentable to find that an undertaking, which, under proper management, might have been made one of the pioneers of great local improvement in India, has been so misconducted; and the public owe thanks to the "East India Officer" who has exposed the real causes of so miserable a failure."

Railways in Bengal: being the Substance of a Report addressed to Sir A. GALLOWAY, K.C.B, *by* W. P. ANDREW, Esq.

From the "COLONIAL AND ASIATIC REVIEW," *July* 18[illegible].

"The following paper (Railways in Bengal,) giving, in a condensed form, the published opinions of the writer, was, at the request of the late Sir A. Galloway, K.C.B., submitted to him when Chairman of the East India Company in 1849, and forwarded by him to the Board of Control, who considered it sufficiently important to retain possession of the original. The East India Railway Company being about to apply for additional capital, to enable it to carry out the views contained in this report, in place of those propounded by its own promoters and founders, and recommended by the Indian Railway Commissioners, the document comes before the public at this moment invested with additional interest and authority."