THE GATES OF THE EAST

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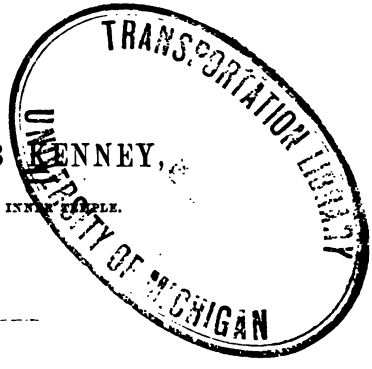
TEN CHAPTERS

ON THE

ISTHMUS OF SUEZ CANAL.



BY

CHARLES LAMB KENNEY,

BARRISTER-AT-LAW OF THE INNER TEMPLE.

LONDON:
PUBLISHED BY WARD AND LOCK, 158, FLEET STREET.

1857.

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CHAPTER I.

THE OVERLAND ROUTE.

THANKS to Mr. Thackeray, everybody is familiar with the main features of one of those long voyages to or from India which were the rule about thirty or forty years ago. We all have followed Joss and Major Dobbin on their voyage home in that glorious sailing ship, the "Ramchunder." Persons proceeding to India, or returning from thence, rented a cabin in those dear, lumbering, easy-going Indiamen, as they would a house or a villa, for the better part of, if not for the whole of a twelvemonth. The ship called and took provisions and water at Cape Town and St. Helena, and half a-dozen other harbours and islands on the long run round the enormous continent of Africa. The passengers, dining for months together at the same table, and passing and re-passing one another in their daily walks on the deck, became either fast friends or bitter enemies. Indifference was out of the question among persons who were compelled to herd together on so long a voyage. People in England who had friends in India believed they kept up an intercourse with them if they heard from them once a-year, and even that correspondence, meagre as it was, drooped and decayed; for a letter written in September of the one year was answered possibly by October in the year following, when the thoughts,

the feelings, and the circumstances of the writers were altered, if not forgotten, even by themselves. The news of Indian battles reached the Government at home, and the friends of those engaged, at a time when the success which was the cause of national rejoicing had possibly been followed by a reverse or two, and hot and scalding tears fell on the list of killed in a *Gazette* when the heroes who were so lamented had for many months been resting in their graves —when brushwood and jungle had sprung up from the ashes of the men whose loss was lamented, and whose virtues were commemorated on a new marble tablet, bright with gilding and polish, in the parish church. Events in India were fairly beyond the control of those who pretended to govern at home. Our Indian Empire, a comparatively small and uncertain tenure, might be lost and won long before the ship which carried the intelligence had sighted the coasts of Europe. What was news in England had become historic matter in India. Commerce, too, was subjected to all the thousand vicissitudes of time and distance. He must be a bold and rich man who would set up as an Indian merchant. No advices from the Indian markets could reach the London houses under five or six months after the date of the letter, and in case of accident, even a longer time elapsed. Speculations with Indian produce—exportations of goods for India, were a wild and dangerous game. Enormous fortunes were made, but enormous fortunes also were lost, when each man, as it were, staked his money in the dark; when extraordinary powers of foresight and combination might do a little, and all the rest was done by accident. As a matter of course, commercial transactions with India were limited. The European population was very small—the native Indians under British rule were but new subjects, whom no frequency of intercourse with Europeans had made familiar with European neces-

saries and luxuries. Trade with India was confined to a few harbour towns and strips of territory along the coast, or on the banks of the rivers nearest the sea. In all other respects our Indian possessions might exist for the sake of revenue; but they supplied few materials for, and formed no feature in the commerce of our country. For all purposes of Government, trade, and familiar intercourse, India was too far off to be really important. The length of the voyage, the impossibility of quick and safe communication between England and India, was painfully felt at home; it was still more painfully felt by the European Indians themselves. But there was no way that any one could see of remedying this evil. Steam-ships, indeed, were introduced into the coasting-trade of the European nations, but steamers, it was understood, were available only for short voyages. It was the time when the few who believed that steamers would eventually run between Liverpool and New York, were silenced in their timid avowal of such belief, by the impatient shrug and contemptuous smiles of practical men. Steamers to India or even to the Cape were quite out of the question. Even the boldest and wildest visionaries, if they had such hopes of centuries to come, dared not avow them. The state of things I refer to must be fresh in the memory of all men who have lived more than forty years, and who at this day see hundreds of schemes realized and in practical and flourishing execution of which their seniors told them, in their time, that they were utterly absurd, visionary, ridiculous, and bordering on madness.

To tell the whole truth: painful as the length of way between England and India was felt in the latter country, and painfully as it might affect individuals at home, there were few men in England who troubled themselves about the means of shortening the distance, and lessening the period which travellers and despatches had to be on their

way. The British possessions in India were important, but they were insignificant compared to what they are at present. Governments of the day were of opinion that our power was fairly established. They most wisely and humanely repudiated the idea of further conquest. All Governments do. Besides, our Indian possessions bounded the East for us. Beyond those limits all was darkness and barbarism—impenetrable to the trader, and explored only now and then by a cunning "political," or a venturesome missionary. No trading ships had any business to go farther than the Bay of Bengal. Borneo was known only to geographers. China was hermetically closed against all Europeans excepting the Dutch. Japan was never thought of. The vast continent of Australia unexplored, and, in fact, undiscovered, served only as a penal settlement for the worst of criminals. The British possessions in India were a strong inducement to desire a shorter and quicker route than the long sail round the Cape of Good Hope; but the inducement was not near so strong then as it is now, when the whole of Hindostan, with its 150,000,000 of subjects and tributaries; when China, with its 350,000,000 of inhabitants; when Ceylon and the islands of the Indian Archipelago; when Australia with its European population, collected there within the memory even of schoolboys, offers a daily-widening field to British enterprise. At present, such a state of things as was quietly and even cheerfully aquiesced in forty years ago would be insufferable. But it must be owned, that the East would not be to us what it is now, had that state of things been permitted to continue.

It was not an easy matter to effect an alteration. As early as 1823, certain members of the Government of Bombay bethought themselves that the route round Africa was not of necessity the only route by which travellers and couriers might proceed to England; that the run from Bombay to

Aden at the point where the Red Sea opens into the Indian Ocean was hardly one-fourth of the length of the run from Bombay to the Cape; that the Red Sea, though long, and reputed to be dangerous by Fathers of the Church and Mussulman pilgrims bound to Mecca, was, after all, neither so tedious nor so dangerous as the passage round the Cape, which Cape the Dutch—good sailors too—nicknamed Cape Terrible. They further bethought themselves that a ship carrying mails and passengers might discharge its burden at Suez; that the courier and passengers might, without difficulty or danger, cross the desert which separates the Red Sea at Suez from the Mediterranean at Alexandria; and that another ship waiting in the latter port might receive them on board, and carry them to Malta, and thence to England. The Bombay Government proposed all this to the Home Government, stating, at the same time, that experiments had been made, and that the whole voyage might be performed in thirty-five days. The proposal was rejected. Revived in 1826, it was not a whit better received. The Overland Route by which passengers and despatches reach us from India at the present time, and which has just now, by a new Government contract, been officially pronounced the shortest and most expeditious route between England and Australia, was, in 1823 and 1826, proposed to the Government of the day, and each time the proposal was rejected, if not with contempt, at least with compassion.

No doubt the Government of the day acted from conscientious motives. No doubt they consulted not only what they considered their own convenience, but also what they considered the general welfare. Most assuredly did they take the opinion of men of vast experience and high scientific attainments. And when the plan had been rejected by Government, the Government organs and the Government speakers told the world the reasons why. The plan was

utterly visionary. It had no practical features. It was made irrespective of existing circumstances. No ship could pass the Straits of Babelmandeb. Ships might be windbound in the Red Sea for months and months. Instead of being shorter than the voyage round Africa, the run from Bombay to Suez would be as long as the run from Bombay to England. And how could couriers be expected to cross from Suez to Alexandria? Were there no wild Bedouin tribes in the desert, sword in hand, watching for Cabinet messengers, that they might devour them? And the travellers? Where were they to come from? What men would be mad enough to venture upon a journey across a desert wild—when, according to all authorities, old and new, travellers in a desert never come out of it, but always die of thirst. But suppose the travellers did not die of thirst, was not Egypt the home of the plague? Would not the travellers to a man die of that dreadful distemper? And if by a miracle some of them survived, where were they to go? What country could receive their tainted bodies—what purification would avail to cleanse those missionaries of pestilence?

We can afford to smile at all this. But the first advocates of the Overland Route found it no laughing matter. Lieutenant Waghorn, whose name is indissolubly connected with the present highway to India, undertook, in 1829, at his own risk and expense, to carry despatches from England to India, through Egypt and the Red Sea. He did carry those despatches; and he carried them at his own risk and expense, for the purpose of convincing the most incredulous—that is to say, the experienced advisers of the Government of the day—of the practicability of the Overland Route. His journeys were successful, and the importance of the new road to India was acknowledged by all, and urged upon the attention of Government by the great London journals. In 1834, a Parliamentary Commission was appointed to inquire

into the subject, and the report of this commission condemned the plan. Another inquiry took place in 1837; the report was more favourable, but still several years had to elapse, and Mr. Waghorn had to make the same journey over and over again before the prejudices against his new and unheard-of attempt were effectually conquered. Then, indeed, the Overland Route became an established institution. Mr. Waghorn died shortly afterwards. I believe he died insolvent. I do not recollect all the circumstances, but have a dim recollection that, having preferred his country's interests to his own, and devoted all his time, and means, and energies to the great purpose of making the advantage of the Overland Route intelligible to the meanest understanding, his name appeared in a portion of the *Gazette*, into which he might have got it by easier, and to him, cheaper means. It appears also, that the country made a provision for his family, by bestowing upon them a small pension.* All these are matters which few care to know now that every one is as wise as Mr. Waghorn; but let those who fancy they are practical merely because they are sceptical, ponder on the fact that it took twenty years and two parliamentary committees to convince men of their own stamp of the practicability of the Overland Route to India and Australia.

* The aged mother of Lieutenant Waghorn has just received an official communication, informing her that Her Majesty the Queen had granted her a pension of £50 per annum.—*London Weekly Papers, November* 16, 1856.

CHAPTER II.

A SHIP ROUTE TO INDIA, *via* EGYPT.

PASSENGERS, letters, and parcels, it need hardly be said, go overland to India *viâ* Egypt; that is to say, they embark or are embarked at Southampton or Marseilles, call at Malta, and land at Alexandria. They cross from thence to Suez, partly by railway and partly in waggons, and embark at Suez in a steamer which is waiting for them, and which carries them up the Red Sea, and out into the Indian Ocean. In this manner do merchants send or receive letters, specie, samples, and small parcels of goods, rich and rare, or of sufficient value to bear the heavy charges of transport per mail steamer. In this manner do the Government send despatches and officers, whose mission brooks no delay. In the late war the capabilities of the Overland Route were first tested in the transport of troops. Two cavalry regiments from India were sent *viâ* Egypt to the Crimea. But, in ordinary cases, the heavy imports and exports to and from India proceed on the old route round Africa, and troops, and ordnance, and commissariat stores are sent the same way. Of course, the Overland Route has a decided beneficial effect upon the intercourse between the East and Europe for letters, remittances, and samples; instructions and orders go in anticipation of the heavy stores sent by sea, and provide for

their coming. The beneficial effects of the Overland Route in politics are shown by the history of British India; its advance in wealth and civilization during the last twelve or thirteen years. In commerce, the returns of British shipping from 1850 to 1855, show an annual increase of 100,000 tons for the Indian and Australian trade; while the total of tonnage employed in this trade by all the European countries amounted last year to considerably above 3,000,000 tons transported in sailing vessels on the route round Africa.

Ever since the successful establishment of the Overland Route, a desire has been manifested in many quarters to contrive by some means to divert the current of trade and navigation from the route round Africa, not only because it is long and dilatory, but also because it is dangerous. The dangers of this route indeed have become traditional, and their admission instinctive, even in the mouths of its professed admirers. "*Hundreds of our best ships and of our bravest seamen have perished on that inhospitable shore,*" writes an uncompromising advocate of the Cape Route.* The perils of the stormy Cape have given rise to the legend of the Flying Dutchman, a spectral ship, with a crew of phantoms riding the storm in those latitudes, and visible to mariners only on the eve of shipwreck. It is fully understood that nothing short of absolute necessity can reconcile any one to the Cape Route. In the present state of steam navigation, it is, and very likely will be for a long time, impracticable for steamers employed in the carrying trade, for its coaling stations, if any, are few and far between. With sailing ships its duration is most uncertain, and, in case of accidents or foul weather, its dangers are considerable. Colossal steamers, capable of carrying coal for the enormous distances to be traversed, and still suffi-

* *Edinburgh Review* for January, 1856.

ciently roomy for the accommodation of passengers and the reception of goods on freight, are now building for the Cape route. These steamers, I confidently believe, will accomplish the end proposed; but they will at best take a small share of the enormous amount of tonnage which is to be carried between this country and the East. They promise celerity and certainty, and what they promise no doubt they will be able to perform. But as the advantages they offer are great, so the freights they must charge will be high; and in the carrying trade to India, Australia, and China, these steamers will but compete with the present Overland Route, on which the charges for goods and passengers are necessarily high, thus facilitating only the conveyance of wealthy travellers, and of small parcels of valuable goods. These leviathan steamers, good and useful in their way, still leave a vast deal undone. Before they were thought of—or, at most, when the possibility of their construction and their chances of commercial success were still a fertile theme for the cheap wisdom and ponderous facetiousness of those practical men who condemn all plans not actually in operation—it was felt, and acutely felt, that a shorter, cheaper, and a safer route to India and the East was wanting for sailing ships and steamers, large and small, to develop still further the resources of the East and the manufacturing and trading capabilities of this country. A number of schemes were started for making the track of the present Overland Route available for all trading vessels. Captain Allen, R.N., conceived the gigantic project of flooding a portion of Syria, by letting the waters of the Red Sea and the Mediterranean in upon the lower level of the Dead Sea and the Sea of Galilee. What he proposed was the converting part of a continent into an ocean. Another scheme proposes to dig a canal which should cross the Nile, and as the level of the Nile is higher than that of the Red Sea and

the Mediterranean, it has been proposed to obtain the necessary elevation by means of twelve gigantic locks. It is needless to enter into the details of these schemes, or state why they were considered impracticable. That such plans were conceived by men of science, thought, and experience, and that advocates and supporters for them were found among the public, proves that the want of a direct Sea Route to the East has been deeply and painfully felt, and that for the attainment of this object, no sacrifices were considered too great. Indeed, there is no saying whether these works, difficult and expensive as they are, would not have been executed in some future period, when, emboldened by past successes, the public mind should have become familiar with gigantic undertakings. But, fortunately, there is no need to wait for the development of thought and action, for a plan has been proposed, the execution of which is fully within the limits of our scientific and commercial range of vision; a plan which, according to the evidence of persons most competent to form a judgment, can be carried out within a reasonable time, and at an expense which has frequently been equalled, and, in some cases, exceeded in the construction of lines of railway. This plan is to join the Mediterranean and the Red Sea at the point where the narrowest strip of land interposes between them—to carry a Ship Canal in a straight line across the Isthmus of Suez.

CHAPTER III.

THE ISTHMUS OF SUEZ.

THE Isthmus of Suez, as the majority of my readers know, is a tongue of land which joins the two continents of Africa and Asia, and which separates the Mediterranean from the Red Sea. Its breadth between the two seas is ninety miles. The two extreme points of this Isthmus, to the south and north, are the Gulf of Suez and the Gulf of Pelusium.

The Isthmus from Pelusium to Suez forms a longitudinal depression—the result of the infusation of two plains, which slope by an imperceptible inclination; the one from Egypt, the other from the first spurs of the Asiatic mountains. The configuration of the soil shows, that in the early ages of the world, the two seas were united, and even now a considerable portion of the soil of the Isthmus is below the level of the two seas. There are three of these low places or basins—the Bitter Lakes, Lake Timshah, and Lake Menzaleh.

The basin of the Bitter Lakes, near Suez, extends over an area of 395 million square yards, and is altogether dry. Lake Timshah, midway between the two seas, forms, as it were, the centre of the Isthmus. Its basin, nearly 5,000 acres in extent, presents a magnificent development. At a very small cost it might serve the navies of all the world as a large and safe inland harbour, with all the establishments

required by this gigantic destination. On the west of this lake opens a long ravine, running from east to west. This ravine, which has the Arabian name of Wadee Tumilat, is the famous Land of Goshen, of Scripture history.

On the north of the Isthmus, Lake Menzaleh is separated from the Mediterranean only by a narrow strip of land, which the waves overleap whenever the weather is rough. It communicates with the sea by means of the opening, or Bogazh of Gemileh, whose low-water depth is about three feet, while its breadth is 1,263 feet. In the east, Lake Menzaleh touches the plains of Pelusium—a low tract of land, covered with mould by the Nile during the great inundations, and by the sea during stormy weather. In the midst of this sandy plain, about 9,000 feet from the sea, are the ruins of ancient Pelusium.

The whole extent of the Isthmus has been carefully surveyed, and it has been found that the ground, with the exception of the basins of the lakes, has a sub-elevation, varying from five to eight feet above the level of the two seas. Two points only make an exception—the Serapeum and El Guisr.

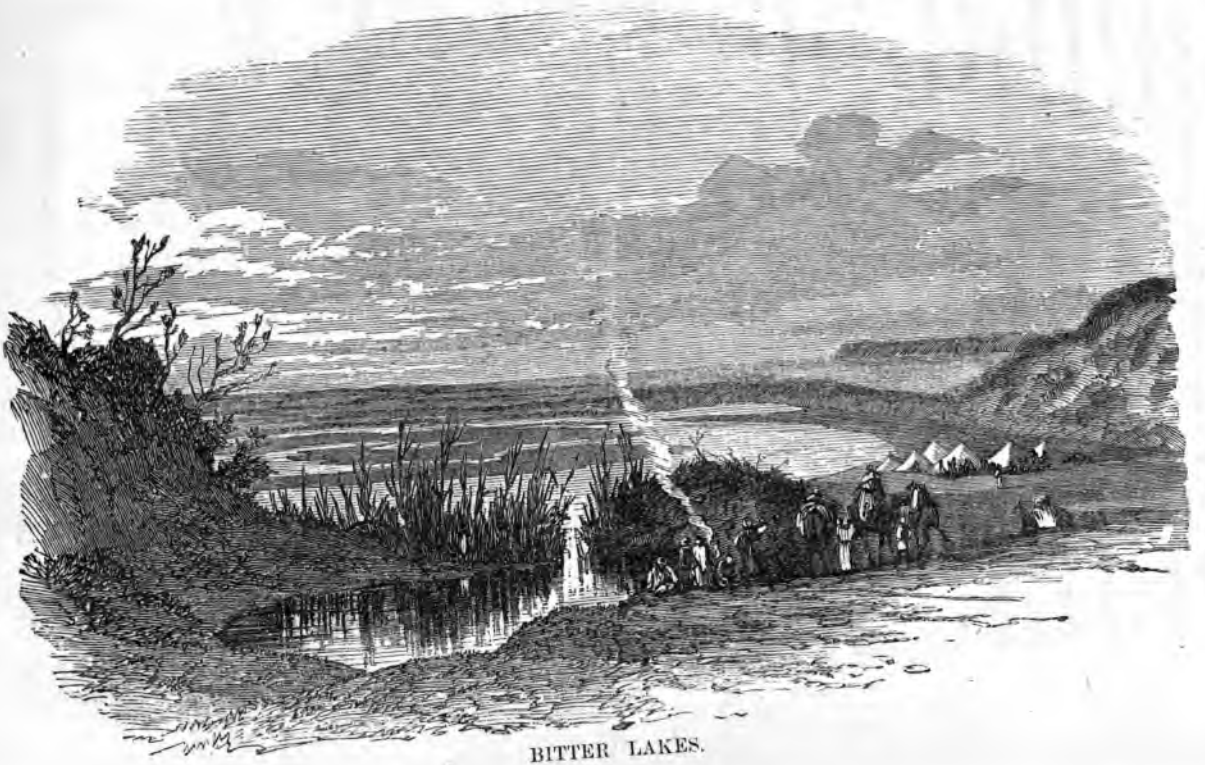
The Serapeum—thus named from the ruins of a monument—rises at its highest point to forty-eight feet above the level of the seas. Its medium height is thirty feet. The plateau of El Guisr is the highest point of the Isthmus; its medium height is forty-five feet.

No undertaking can be attended with smaller difficulties than the cutting a canal through a tract of land, a great portion of which is already below the level of the sea, while, of the soil above that level, the medium height is from five to eight feet, and where two inconsiderable ridges, like those of the Serapeum and El Guisr, can be said to form the only obstacles—obstacles which, as every engineer knows, have been surmounted a hundred times in the construction

of railways. To this it must be added, that the whole of the soil of the Isthmus is admirably adapted for the labours of canalisation. Most careful borings have been made on all points, and every where, down to fifty feet below the level of the sea, the borings have furnished the same results—sand, gravel, sulphate of lime, sand again more or less stratified, clay mixed with various substances, and finally plastic clay: such were the strata turned up. In not one single instance did the borer touch upon solid blocks of stone and rock.

In our century the proposal has first been made for a direct junction of the two seas. But the attainment of the object itself, by a different mode of action, was always considered desirable. The junction of the Mediterranean with the Red Sea by a navigable canal has occupied all the great men who both reigned in, or conquered Egypt. A canal communicating with the Nile existed in ancient times; first, for a period of one hundred years, down to about the middle of the ninth century before the Hegira; secondly, for a period of four hundred and fifty years from the reign of the six first successors of Alexander, down to about the fourth century before the Hegira; and thirdly and lastly, for a period of one hundred and thirty years after the Arabian conquest. Napoleon projected a canal across the Isthmus of Suez, and predicted that the execution of this great work would promote the prosperity and ensure the safety of the Turkish empire.

The harbour of Suez, even in its present state, neglected because little used, can contain five hundred vessels of the largest size. This harbour has a depth of from sixteen to forty feet in a bottom of soft clay. Deep and safe openings, large enough for all purposes, allow vessels to enter and stand out in all weathers. The wind prevailing at all seasons is from the NN.W., and this wind is never dangerous.



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CHAPTER IV.

MONS. DE LESSEPS AND HIS LABOURS.

THE project of a direct Ship Canal across the Isthmus from Pelusium to Suez was conceived by M. Ferdinand de Lesseps, and has under his care been matured and elaborated, and finally submitted to the public of all countries of Europe. In October, 1854, M. de Lesseps left France for Egypt, in consequence of an invitation he had received from the new Viceroy, Mohammed Said, who for twenty years had been M. de Lesseps' firm and fast friend. In the course of a journey across the Lybian desert, from Alexandria to Cairo, which the two friends made together, the question of cutting through the Isthmus of Suez was first mentioned between them. The Prince requested M. de Lesseps to draw up a Memorial on the subject, and as his ideas met with the approbation of Mohammed Said, the latter issued to the Consuls-General of foreign powers, a firman, destined to receive the sanction of the Sultan, granting to a company, composed of the capitalists of all nations, without distinction, the right to construct a canal between the two seas. At the same time, the Viceroy ordered his two French engineers, Messrs. Linant Bey and Mougel Bey, to accompany M. de Lesseps in an exploring expedition to the Isthmus of Suez, and to complete,

by a fresh examination of the ground, the investigations they had already made.

This expedition was made in December, 1854, and in January, 1855. Its result—the report of the two engineers—was most favourable to the scheme.

The next step of M. de Lesseps was to proceed to Constantinople, where he ascertained that the Sultan was favourable to the scheme. The result of this journey was a letter addressed by the Grand Vizier to the Viceroy of Egypt, and in this letter the plan of a Ship Canal from Pelusium to Suez was described as "a work of the most useful and interesting character." While at Constantinople, M. de Lesseps addressed to Lord de Redcliffe a letter, expatiating on the political features of the project, and the interest which England, of all other countries, has in the creation of a direct ship route to India and Australia. It does not, however, appear that our ambassador at Constantinople evinced any interest for, or sympathy with, the scheme. On the contrary, there is reason to presume that Lord de Redcliffe opposed M. de Lesseps' views; for the Sultan, though favourable to the plan, has not yet given his formal sanction to the canalisation of the Isthmus. This sanction, be it understood, has been sought by the Viceroy, out of deference to his suzerain, and not from the obligations of any terms in the treaties defining the powers of the hereditary rulers of Egypt.

In the summer of 1855, M. de Lesseps came to England for the purpose of giving our leading politicians such information on the subject of his scheme as they might desire, and this information he subsequently published in a pamphlet, with remarks and illustrations calculated to bring the whole subject at once before the public at large.*

* "The Isthmus of Suez Question." By M. Ferdinand de Lesseps, Minister Plenipotentiary. London: Longmans and Co.

It was the desire of the Viceroy of Egypt that the accuracy of the statement of his own engineers should be examined and tested on the spot, by a Commission composed of eminent engineers from all European countries. Thanks to the exertions of M. de Lesseps, this Commission assembled, and proceeded to Egypt in the early part of last winter. It consisted of Messrs. Rendel and M'Clean, for England; M. de Negrelli, Inspector-General of Railways, for Austria; M. Paleocapa, Minister of Public Works, for Sardinia; M. Conrad, Engineer-in-Chief of the Water Staat, for Holland; M. Lentze, for Prussia; M. Renaud, Inspector-General and Member of the Council of *Ponts et Chaussées*, and M. Lieussou, Hydrographer and Engineer to the Imperial Navy, for France; and M. Montesinos, Director-General of Public Works, for Spain. The department of nautical science was represented by Captain Harris, of the East India Company's Service, and by Rear-Admiral de Genouilly and Captain Jaurès, of the Imperial French Navy.

This Commission of Engineers, the competency of which is superior to all doubt, arrived in Alexandria on the 18th of November, 1855, and at once proceeded to examine all points connected with the proposed undertaking. Its labours were terminated on the 3rd of January, and resulted in a full confirmation of the preliminary report of the Viceroy's engineers, for the Commissioners stated "that the direct canal between Pelusium and Suez was the only solution of the problem, and that there existed no other practical method of joining the Red Sea with the Mediterranean; that the execution of this maritime canal was easy, and its success certain; and that the two harbours required to be constructed at Suez and Pelusium presented no difficulties but such as were of an ordinary character."

The question from an engineering point of view having been fully solved, the Viceroy of Egypt granted M. de

Lesseps a second charter, declaring the burthens, obligations, and services to which the proprietors of the Suez Cana will be subjected, the concessions, immunities, and advantages to which they will be entitled, and the facilities which will be accorded to them.

The text of this important document is embodied in a second pamphlet which M. de Lesseps published a few months ago, and to which I beg to refer the more earnest and pains-taking portion of my readers.* For the purpose of general information the following abstract will be sufficient:—

The works to be executed are: 1. A canal, navigable by large vessels between Suez and Pelusium. 2. A canal of irrigation, adapted to the river traffic of the Nile, and connecting that river with the Suez Canal. 3. Two branches for irrigation and supply striking out of the preceding canal, in the directions, respectively, of Suez and Pelusium. These works shall be completed within six years, and four-fifths of the workmen employed shall be Egyptians. Lake Timshah shall be converted into an inland harbour, fit for vessels of the highest tonnage. A harbour of refuge shall be constructed at the entrance of the maritime canal into the Gulf of Pelusium, and the necessary improvements shall be made in the port and roadstead of Suez. The Egyptian Government shall have a claim of fifteen per cent. on the net profits of every year.

In return, the Egyptian Government makes the following concessions:—1. A free grant of all lands, not the property of individuals, which may be found necessary for the purpose of the works, and the use and enjoyment of all uncultivated lands which shall have been cultivated at the care

* "Facts and Figures relative to the Isthmus of Suez Canal." Edited by M. Ferdinand de Lesseps, Minister Plenipotentiary. London: Effingham Wilson,

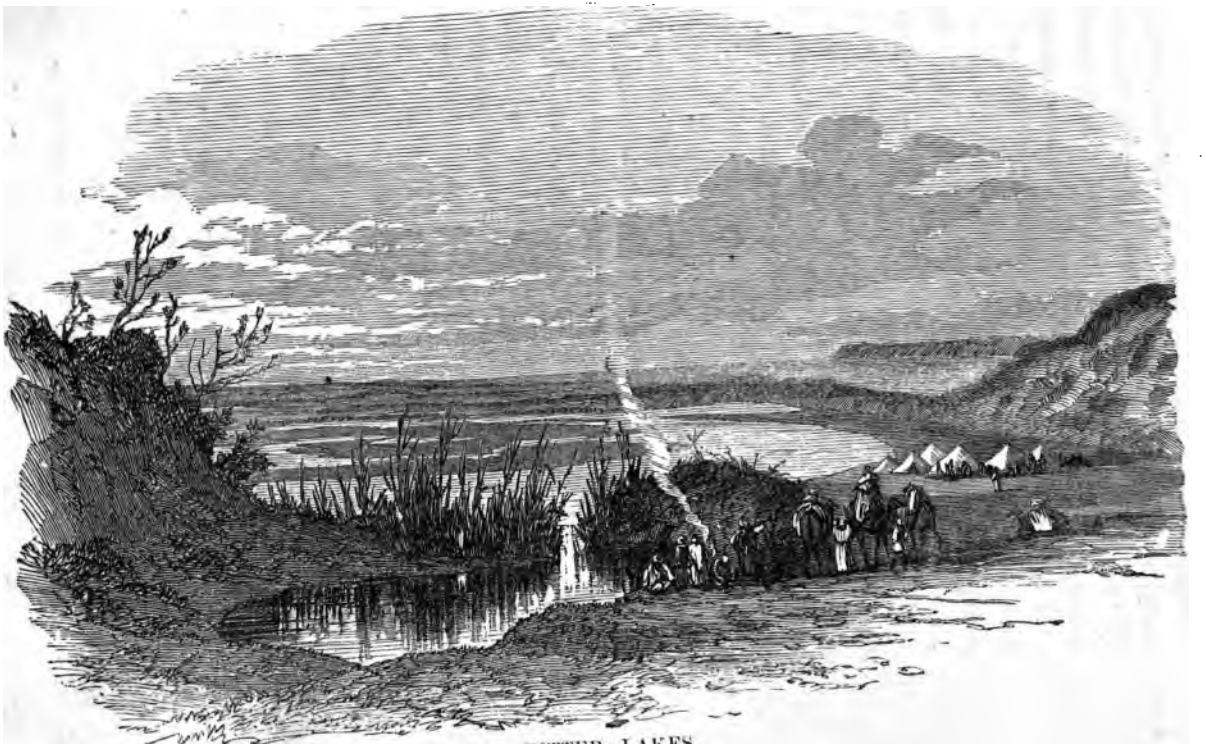
and expense of the canal proprietors. 2. The privilege of drawing from the mines and quarries of the State, free of charge, all necessary materials for the construction and maintenance of the works and buildings of the undertaking. 3. Free importation of the machinery, &c., to be used in the construction of the works, or working the undertaking.

It is further provided by the charter, that the canal from Suez to Pelusium shall always remain open as a neutral passage to every merchant ship—that for the right of passage through the canal, the maximum toll shall be ten francs per ton on ships, and per head on passengers, and that the provisions of this charter shall be in force for ninety-nine years after the opening of the Suez Canal.

The Viceroy of Egypt has also made a subscription of 32,000,000 francs, or £1,200,000 towards the expense of the undertaking, and he has promised to supply M. de Lesseps, and the company which shall be formed under his auspices, with whatever number of native workmen they may require, at the daily pay of one franc per man.

And finally, as the fresh water canal from the Nile is a necessary condition to the commencement of the labours on the Grand Canal, the Viceroy has commenced constructing this portion of the works at his own cost, with the intention of making it over subsequently to the company at the prices laid down in the original estimates. It has been said that this canal is a necessary condition to the commencement of the works. No water to supply the wants of an army of labourers is to be found in the arid and sandy plains of the Isthmus, and, therefore, a canal to supply that water must be made before the principal work can be taken in hand.

The stipulation, that four-fifths of the workmen employed upon the canalization shall be natives of Egypt, though it appears under the heading of conditions, is in reality a privilege, and one without which the execution of the



BITTER LAKES.

modern Egypt what the inhabitants were of the Egypt of Herodotus. But to this day the fellahs possess a positive talent for earthworks, and of course they are accustomed to labour in a climate which would be positively fatal to European workmen.

A striking instance of the manner in which great national works are executed in Egypt by a general levy of labourers has recently been furnished by the cleansing of the great Mahmoudieh Canal. For some years past, this canal had been getting choked up with mud, and although the traffic upon it was extremely active, it was becoming somewhat difficult. The canal is sixty miles in length, and very wide. Ten millions of cubic feet of muddy sediment had to be removed from the bed of the canal, and this sediment was used to make a carriage road, thirty-two feet broad, from Alexandria to the Nile. The time allotted to the work was one month, and the number of workmen fixed at 67,000. The Governors of the provinces sent 115,000 labourers, and the work was completed in twenty-two days. It commenced on the 10th of April last. The canal was re-opened for navigation on the 5th of May. The number of sick among the workmen did not amount to five in a thousand, and they were always well provided with necessaries. The Mahmoudieh Canal may now be looked upon as an entirely new work, from its increased width and greater draught of water, and the handsome road running beside it.

The obligation resting on M. de Lesseps and his coadjutors, to construct canals for irrigation, is also in close connexion with another instance of generous liberality on the part of the Viceroy, viz., the grant of all public lands which shall be irrigated and cultivated under the auspices of the company. The extent of these, that is to say, of unappropriated public lands on the Isthmus, is very great, for the simple reason that they are at present utterly value-

less. Almost the whole of the Isthmus is devoid of vegetation, and has been so ever since the neglect and decay of the system of irrigation, which made Egypt, including the Isthmus, the most fertile country of the ancient world. What that country has been, and what it promises to be under the rule of a benevolent, energetic, and enlightened Prince, is a topic at once interesting and instructive. It was the granary of less favoured regions. During the first famine mentioned in sacred history, we learn "that there was corn in Egypt." Its abundance supplied in turns the wants of the great conquering nations, from the Persians to the Arabs. The Isthmus, in particular, contains the Valley of Wadee Tumilat, the Land of Goshen of Scripture history; and the ruins of towns, large and populous, prove that the Isthmus of Suez has not always been the arid and unproductive plain which it now is.

This contrast between the fertility of the past and the present sterility is easily explained. Throughout Egypt rains and heavy dews are very rare, while the sun scorches the land, and burns up every vestige of vegetation. But as soon as a desert tract is supplied with water, vegetation the most varied, abundant, and luxurious, springs up. The simile of an oasis, or a green spot in the dreary waste of life, is familiar to all readers of poetry. Now, there is no oasis in the desert without its spring of fresh water; and wherever a spring is uncovered, and the water made to flow over the sandy plain, there does the grass spring up, and there do shrubs and trees thrive. The chief agricultural labour in Egypt, the only one which is required, and which, at the same time, is indispensable, is the conducting the waters of the only river, the Nile, into and spreading them over the districts to be cultivated. The Nile, it is hardly necessary to repeat, overflows its banks and inundates the country along its course at certain periods in the year; and its waters, when

receding, leaves the land covered with a layer of rich mould. Those were the prosperous periods of Egypt when a perfect system of canalization extended the benefits of this fertilising inundation over a large portion of Egypt, and when every portion of the country could at least command an abundant supply of Nile water for irrigation. Even in the worst periods of Egyptian history, the Valley of the Nile, the lands naturally within reach of the inundation, have always preserved their ancient fertility. The Crown lands on the Isthmus, therefore, waste though they be, will, merely by the construction of a canal of irrigation and the necessary works for the diffusion of the water, become a most valuable property. While the Viceroy of Egypt stipulates with M. de Lesseps for a canal of irrigation, he places him in free possession of all the Crown lands which this canal shall redeem from utter sterility.

Such is the result of M. de Lesseps' labours. In less than two years, since he first conceived the grand idea of the Suez Canal, he has ascertained the most practicable and remunerative means for a junction of the two seas; he has won the approbation, if not as yet the formal consent, of the Sultan who, as suzerain, has a voice in a matter so strongly affecting the prosperity and future greatness of Egypt; he has obtained a charter bestowing great advantages upon the company he is forming; and he has, by means of the International Commission of Engineers, obtained the highest scientific authority for the practicability of his project.

The report of this Commission having been carefully prepared in full, and containing all the minutiæ of information, the sections, measurements, observations of tides, &c. &c., has just been published.

CHAPTER V.

THE WORK TO BE DONE.

THE work to be done is the cutting of a canal fit for the passage of the largest ships, at the narrowest point of the Isthmus, from Pelusium to Suez; the improving the harbour of Suez; the creating a harbour at Pelusium, and an inland harbour in Lake Timshah; the cutting of an auxiliary canal to connect the ship canal with the Nile; and the cutting of two small canals for the purpose of irrigation and supply of water to the labourers engaged on the works.

The Ship Canal will be ninety miles in length; it will be 330 feet wide at the water line; and its bottom will be twenty feet below the level of low water in the Mediterranean.

The present Port of Suez is to be deepened to twenty-five and twenty-nine feet below low-water mark, over a superficies of about fifty acres. It is to serve for the embouchure of the canal, and will communicate with the roadstead by an outer port formed by a channel 1,830 feet wide, running in a straight line from NN.E. to SS.W. Beyond the bank of sand which forms the enclosure of the roadstead this channel will be protected by two jetties of rubble work, carried as far as a depth of twenty feet. Of these two jetties, one will be twenty feet wide at the crown, the other thirteen, and they are to be surmounted by a parapet three

feet high. The foundation will be formed of natural blocks taken from the foot of the Attaka mountains, on the west shore of the roadstead. The masonry for the crown work and the parapet is to be constructed of freestone from the quarries of M. Salem or of the Attaka. To this must be added the construction of a floating beacon and a lighthouse, to mark the entrance to the roadstead; of a beacon at the entrance of the port, and also the buoying and marking of the reefs around the roadstead.

The harbour works, to be formed in the Gulf of Pelusium, will be on the western shore of the Gulf, between the Bays of Pelusium and Dibeh, at the distance of about 140 furlongs from Tineh, opposite the ancient Tanis, or Saïd. This port is to be formed by a channel, 1,312 feet wide, running south-west and north-east. There are to be two jetties. The northern jetty will extend to 12,284 feet, until it reaches a depth of thirty-two feet; the southern jetty will stop at 8,200 feet, at a depth of twenty-five feet. The northern jetty is to be twenty-six feet wide at the crown; the southern jetty thirteen feet. They are both to be raised seven and a-half feet above the water, and surmounted by a parapet.

The jetties constructed of rubble work, will be established on the sand, and be filled up from within in proportion as the blocks sink from the clearing out of the channel. There is also to be a signal-light on Damietta Point, and two lights on the heads of the jetties.

Lake Timshah, situated, as the reader will remember, in the centre of the Isthmus, at the entrance of the valley *Wadee* Tumilat, is to be formed into an inland port, to which both the outward and inward navigation will tend. On its shores will be established magazines, stables, workshops for repairs, 4,600 feet of quay walls for mooring vessels and embarking merchandise, as well as a graving dock 390 feet long by 80.

In the vicinity of Lake Timshah, and in this portion of the

Isthmus alone, it will be necessary artificially to fix the downs, to prevent the portion of the canal traversing this district from being choked up with sand. The superficies of the downs to be fixed is 5,000 acres, but as the nature of the soil admits of their being fixed by means of *seed-plots*, and as the profit of this operation, which raises forests while it fixes downs, is considerable, it is a question as yet undecided, whether the naturally-fixed downs of the Isthmus are not also to be taken into this sort of cultivation. And this the more, as forests in their growth produce arable land, and correct the excessive dryness of the air; and also because the present population of Egypt is too scanty to cultivate the whole of the lands capable of irrigation by the canals which are about to be constructed. If, in addition to the moveable downs, seed-plots and replantations were made upon all the downs naturally fixed, 250,000 acres of forest land might thus be formed.

In France, where the fixing of moveable downs has been carried out to a great extent, experience has shown that this is one of the most productive operations of silviculture. Downs planted with pines, for instance, commence to be productive in the eighth year, and in the twentieth year the cultivator begins to extract resin from the trees. At thirty years the produce is most abundant, and continues up to eighty years, when the wood is fit for building purposes. The average revenue (for resin) for an acre of pines amounts to forty-four francs.

The smaller alimentary and irrigating canal is to start from the Nile at Kusr el Nil, and follow the ancient canal of Trajan and Amrou to Belbeis and Ras el Wady—the Pithom of the Bible. Up to this point, the work to be done is confined to widening the ancient canal, which was re-opened in the time of Mehemet Ali. From Ras el Wady the canal is to be continued to Lake Timshah. The width

of the canal is to be eighty feet on the waterline—sufficient to allow two steamboats to pass each other without inconvenience. Its depth is to be about twenty-two feet, and its fall 0·03 in a thousand, in order to secure a speed that shall not exceed 0·65 in. per second. This canal will be capable of supplying from 400 to 750 cubic feet of water per second, sufficient for the irrigation of 47,000 feddans of land (46,412½ acres), during the inundation.

The two smaller canals, for irrigation and supply, branching off from the former canal towards Suez and Pelusium, will be eighty feet wide.

For the Grand Maritime Canal, the total quantity of earth to be removed is 3,307,077,985,510 cubic feet. Of this quantity, 1,581,710,000 cubic feet is to be excavated to the level of low water in the Mediterranean, while 1,725,367,985,510 being below this level, must be excavated under water. For the dry works, supposing each labourer to do 70 cubic feet per day, it would only require 15,250 labourers for five years to complete the earthworks. The excavations under water can be completed by forty single steam-dredging machines, of twenty horse-power, within five years. While dredging machines of greater power would do the same work in less time, and at less cost.

The number of cubic feet of earth to be moved in the cutting of the Canal of Communication between the Nile and the Suez Canal is 361,230,940. The small Canal of Irrigation will require the removal of 77,647,500 cubic feet of earth.

The engineers of the Viceroy of Egypt have proposed to distribute the work over the time fixed for its completion in the following manner :—

The Canal of Communication, with its locks, and the Irrigating Canal are proposed for the first year. Their completion within this time will require the labour of

20,898 men for 300 days. As much larger armies of workmen are occasionally raised in Egypt, the number of hands required in this instance is easily obtainable. In the first year, also, the grand yards will be formed at the quarries, with all the railways, quays, and landing-places for the extraction and supply, on a large scale, of the stone necesary for the moles, jetties, &c. Contracts will be made with the manufacturers for the supply of dredges, lighters, towing-barges, boats, and other machines to be employed in the execution of the works.

In the second year eight dredges will be mounted in the harbour of Suez, to excavate the channel and the foundations of the jetties. The operations at the quarries, the erection of the jetties, &c. &c., are taken in hand. Fresh water will be thrown into Lake Timshah, to set to work all the other disposable dredges. Thirty thousand workmen will perform all the clearance in the extent of the Bitter Lakes, and for the remainder of the canal. They will prepare a trench in the ground to six feet below low water, and so form a channel fifty-five feet wide, which will enable the barges and machines to pass and repass the whole extent of the Isthmus. All the force will be applied to form a communication between Suez and Lake Timshah, and consequently, between Suez and the Nile the fixing of the downs and the irrigation of the lands will commence.

In the third year, the communication of Lake Timshah with the Mediterranean will be opened, and all the disposable force will be employed in making the scouring basin and erecting the jetties. The earthworks will be continued, the dredging, also the sowing on the downs and the agricultural labours. The number of workmen employed is estimated at 20,000.

The same works will continue in the fourth year, with the

same number of workmen as in the year before. In the fifth and sixth years the same operations will still be continued; but so many men will no longer be required, for the dredges will perform the principal part of the work, and the operations at the quarries can be pushed on with all possible activity.

CHAPTER VI.

A BILL OF COSTS AND PROFITS.

I WOULD warn the lighter class of readers not to meddle with this chapter; and this the more, as the preceding one must have tried their patience sorely. But to men of facts and figures I need not address such an apologetic warning. They consider a business scheme from a business point of view. They may have come to the conclusion that the Suez Canal is desirable, that its influence on commerce would be most beneficent, and that it will restore to Egypt her ancient and proverbial fertility. They may believe the assertion of engineers, the most competent in their generation, that the scheme is easy of execution. All this is very satisfactory, no doubt, but it is not all that is required. The question naturally suggests itself, what will be the expense of all these works, and how and by what means do the promoters of the Suez Canal expect to realise a fair interest for the capital to be sunk in the undertaking?

It appears, from an estimate prepared by Mougel Bey and Linant Bey, engineers to the Viceroy of Egypt, that the total expense of all the works mentioned in the preceding chapter, including all contingent expenses, will amount to 200,000,000 francs, or £8,000,000; the actual cost of the canal itself would only be £5,720,000. The estimate, of which this figure is the result, is drawn up by men who for the last twenty years have been superintending the

construction of canals and harbours in Egypt, and who are familiar with the natural and technical resources of the country. They know the price and the amount of labour to be expected from any given number of workmen; they know where the stone, &c., is to be found; what are the costs of quarrying and transport; and they can tell what is the price of English machinery when imported into Egypt, and what the expense of working that machinery. All these are matters with which a long working experience in the service of the Egyptian Government has made them most familiar. Their estimate, therefore, of £8,000,000 for the whole of the works—viz., the digging of the canals, the improvement of one harbour and the creation of two others, and the fixing of the sands—is most accurate, and as trustworthy as engineers' estimates can be. It is true that engineers have, now and then, underrated the cost of projected works, more especially of railroads. But these miscalculations occurred, either in the early period of railway making, when all classes concerned knew very little and had a great deal to learn, or in cases where engineers have been called upon to draw up estimates of lines in countries or provinces with the resources of which they were but imperfectly acquainted. But when, as in the present case, the engineers are familiar with the work and with the country in which it is to be done, their estimates must be allowed to be correct. Eight millions, therefore, may be assumed to be the sum at which the Suez Canal, with all the works appertaining thereunto, can and will be executed. This is a large sum, but one which has frequently and profitably been invested in great undertakings. It is less by one-third than the sum expended on the railway from London to York, or on that between Paris and Lyons. Or, to take another standard of comparison, it is about the same amount as that which in the last two years has been

expended monthly by France and England in carrying on the Crimean war—with what advantage or profit, time will show.

The subsidy of £185,000 per annum, assured by Government to the new Australian Steam-Navigation Company, for carrying the mails, *via* Egypt, represents a capital of about three and a-half millions. And this is only a single subsidy paid to one company. Whether, with a Ship Canal through the Isthmus of Suez, the great steamboat companies could not afford to carry the mails with smaller subsidies, and yet derive greater advantage from the contract, is a question for the superior judgment of commercial readers.

The sources of revenue on which the promoters of the Suez Canal found their expectations of making the project answer in a commercial sense, are the tolls on tonnage and passengers of ships passing through the canal from Pelusium to Suez, and *vice versa*; the anchorage dues at Port Timshah; the tolls on the Canal of Communication between Lake Timshah and the Nile; and the profits arising from the cultivation of lands and the fixing of downs.

Take the last-named item first, because its profits, though certain, are slow. In France, where downs have been fixed on an extensive scale, the annual income derived from such forest-lands, after twenty years' standing, is estimated at forty-four francs per acre. As it is desirable to understate rather than overstate the advantages of the great undertaking of which this is a feeble exposition, let it be assumed that, in the case of the downs of Lake Timshah, the income derived from the sale of resin shall be twenty-five francs, or £1 per acre. Five thousand acres only need of necessity be fixed; but as conversion of downs into forest-land is profitable and labour cheap, it is not too much to presume that the company will carry out their intention of

foresting 60,000 acres, which, after the lapse of twenty years, will yield an annual revenue of as many pounds.

The cultivation of lands now waste from want of irrigation, is an operation yielding larger and quicker returns. The moment the soil of Egypt is watered, it becomes productive. The average profit per acre is £4, as has been proved by the experience of seven years on a tract of land reclaimed from the marshy desert of Lake Elko. Supposing only 60,000 acres were irrigated during the first year, the result would be an income of £240,000.

The traffic returns of the Mahmoudieh Canal give a clue to the amount of tonnage which may be expected to avail itself of the Canal of Communication between the Nile and Lake Timshah. About 62,400 tons are now annually transported on the Mahmoudieh. Suppose that the Canal of Communication transports only one-fourth of this tonnage—say, 15,600 tons, a reduction altogether improbable, the tolls on this canal, at ten francs per ton, will amount to 156,000 francs, or £6,240.

It has been assumed, and that in moderate computation, that the tonnage which is likely to pass through the Suez Canal will not be less than 3,000,000 tons per annum, even without the new impetus which the junction of the Mediterranean with the Red Sea is certain to give to the commerce of the world. At ten francs per ton, this tonnage would represent a revenue of 30,000,000 francs, or £1,200,000. But, even admitting that only one-half of this anticipation were realised, and that the tonnage amounted to only 15,000,000, the revenue would still present the very respectable figure of £600,000, and thus for the sake of the most sceptical minds I am content to let it stand.

Acting on the same principle of assuming the very lowest figure for anchorage-dues at Lake Timshah, and assuming the tonnage paying those dues to be about half the tonnage

passing through the canal at one franc per ton, I calculate that the revenue under this head would amount to £30,000.

With the single exception of the revenues to be derived from lands, much lower figures have been assumed than by the originators of the project, whose minuteness of inquiry and conscientious research far exceed mine. It is probable that their higher figures still understate the truth, and that they are far from making an adequate allowance for the gigantic strides with which commerce with the East is progressing. But in assuming, for argument's sake, the very lowest figures, my object was to show, that, even with the most modest anticipations, the Suez Canal promised to return an ample percentage on the capital to be invested. To recapitulate the amounts of revenues, there has been assumed, from

The fixing of downs	£60,000
The cultivation of lands	60,000
Total .	£120,000

which, as prospective revenue, shall not be allowed to enter into this calculation. It will be confined purely and simply to the canal and port dues, and the result, as has been shown, is from

Tolls on the Canal of Communication . . .	£6,240
Tolls on the Suez Canal	600,000
Port dues of Lake Timshah	30,000
Total .	£636,240

which sum represents the minimum interest on the capital of £8,000,000.

Both here and in the original scheme a multitude of revenues are passed over in silence, which in the aggregate cannot fail to be pretty considerable—such as the supply of water to the population of Suez and Port Timshah; the rent of stations for watering ships; the rent of all the magazines and buildings, which have been employed in the

execution of the canal; the towing of vessels by the steamers purchased by the company, for the service of the dredges and the transport of materials.

But there is one grand feature which should not be passed over in silence, and that is the commerce, almost unknown at present, with those vast countries bordering upon or in the vicinity of the new highway to India and the East. The countries referred to, their produce, their population and its wants, are hardly known in our best-informed commercial circles; they have not, up to the present, entered into the sphere of our speculations. And yet Abyssinia, Yemen, Hedjaz, Muscata, and the coast of Africa, are rich in coffee, gum arabic, wax, skins, ivory, wool, indigo, mules, timber, and cabinet woods. Along the coasts of the Red Sea are rich mines of sulphur and lead, quarries of marble and porphyry, and extended beaches suitable for the establishment of salt-pits.

Nor is it too much to say that the opening of the Red Sea will create new occupations—such as whale and cachalot fishing in the South Seas; pearl fishing in the Persian Gulf and Indian Sea; as well as the pursuit of mother-of-pearl, tortoiseshell, and coral: nor that a great part of the Mediterranean fishermen will proceed to the Indian Sea to pursue their occupation and increase the activity of the navigation of the Suez Canal.

In short, the cutting through the Isthmus of Suez will increase tenfold the operations of commerce and navigation, and, as with every undertaking which is founded upon a sound principle, its consequences are beyond the reach of calculation, and the seemingly wildest ideas will always be surpassed by the reality.

Let those who would realise this fact try to remember the days when railways were first struggling into existence, and compare the anticipations of even their most sanguine

advocates, as to their extent of traffic, with the actual and still increasing numbers of passengers and tons of goods which are now transported between towns whose intercourse and traffic were satisfactorily kept up by a couple of coaches and a dozen of waggons. If the last thirty years have taught us one lesson more than another, it is that facilities for traffic will create traffic, even where it does not exist, and that the opening of new routes to commerce developes an amount of commerce which was never dreamed of in the philosophy of those who opened them.

As therefore, in the preceding estimates, the least sanguine view of the commercial success of the undertaking has been taken, I will, were it only for the sake of being impartial, now take the liberty of taking hopeful and sanguine views, and of considering the successes of the Suez Canal, such as they will appear when that route attracts, not only the major part of the shipping which now takes its way round the Cape, but also when increased facilities of navigation and lower freights have wrought a steady increase of the tonnage employed in the Eastern trade. Ever since 1853 the increase of tonnage of British ships alone, in trading with the East, has been 100,000 tons each year, while the other maritime countries of Europe have also progressed, but not so rapidly. Let us suppose, then, the Suez Canal completed. Let us suppose the average length of an Indian voyage, out and home, reduced from ten months to six months, and the average expenses of £4 16s. per ton reduced to £2 16s. per ton—for, taking my stand upon close calculations made by competent authorities, it may be affirmed that the difference of expense between merchandise carried by the Cape Route and the Suez Route will amount to £2 per ton,—suppose that a large amount of the tonnage of 4,000,000, which in 1870 will be employed in the Eastern trade, avails itself of the shorter and cheaper route *via* Suez; that the possibility

of charging less for freight will be succeeded by the entering into the import and export trade of a variety of articles which at present are not considered capable of bearing the freight; suppose the coasts of the Red Sea and the west coast of Africa furnishing their quota of raw produce, swelling the lists of our imports.—I protest that these anticipations, founded as they are on the experience of the increase of traffic caused by railroads, and on the experience of the steady annual increase of the tonnage employed in the Eastern trade, are by no means too bold; and that if an odd copy of these papers should by chance be turned up in 1870 —only fourteen years hence—the reader will smile with compassion, not because my anticipations have outstripped reality, but, because reality will be far beyond what I ventured to anticipate.

Suppose in 1870 the downs fixed, and the waste land reclaimed, in the Isthmus of Suez, have commenced returning the very moderate revenue expected from them; suppose shipping to the amount of 4,000,000 of tons passes the canal, and that one-half of these anchor in Lake Timshah, the revenues of the undertaking would amount to something like the following—

Revenue from downs and lands	£120,000
Tolls on the Canal of Communication . .	12,000
Tolls on the Suez Canal	1,600,000
Port dues of Lake Timshah	400,000
	£2,132,000

which sum would represent what now appears the maximum interest on the capital of £8,000,000.

CHAPTER VII.

EGYPT—THE CONTINENT AND THE SUEZ CANAL.

As a commercial undertaking, the Suez Canal offers a prospect of large and still increasing benefits to those who have originated, and who are about to execute it. Even in overstating every item of its cost, and underrating the extent of its success and the amounts of its revenues, it has been shown that the percentage of profit is from eight to ten per cent. on the capital employed. But were the Suez Canal simply a commercial undertaking—had it not other features to recommend it, other claims upon the attention and sympathy of the public than the promise of a large percentage to shareholders—then the project might have been safely left to the discernment—one might almost say the instinct—of the monied classes: it might be left to go into the market and be quoted in share-lists. But the canalisation of the Isthmus of Suez is a work of philanthropy, of civilisation, and of Christianity. It is the junction of the Red Sea with the Mediterranean—that is to say, the opening a straight and short road to India, Japan, China, Australia, and Polynesia. It will enable European intelligence, industry, and civilisation, to bear more unreservedly, more energetically, more extensively upon the vast regions and the millions of men that are yet to be reclaimed from a state of semi-barbarism.

It will bring Europe in close communication with the countries bordering upon the Red Sea and the Gulf of Arabia—countries which, even to this day, are merely geographical ideas to the majority of Europeans, and which, for their practical influence on us or our influence on them, might almost as well be situated in the moon. How small for instance is our communication, even indirectly, with Abyssinia and Nubia? And yet there, as in China, Japan, and many of the islands of the Indian Archipelago, are millions of our species ready to be instructed, enlightened, and enriched —living a life of hardships, privations, and servitude, in regions abounding with materials for comfort and wealth. If no other object were to be gained, the opening of the countries bordering upon the Red Sea alone would be a sufficient reason for effecting the canalisation of the Isthmus of Suez.

But the success of philanthropy and civilisation in this undertaking is closely bound up with and altogether dependent upon its commercial success. If, as some timid minds have suggested, no real saving of time and expense is effected by the opening of a shorter route to the East—if the bulk of the commerce found it in its interest to pass along the old route round the Cape, and if the Suez Canal were to be used only by the local traffic of Egypt and of the islands of the Mediterranean—if this canal were not to become one of the high roads of the world, then indeed, its civilising action too would be slow, languid, and partial. But if, as the greatest politicians and political economists have declared, the Suez Canal is certain to attract along its route the mass of shipping from Europe and America; if our merchants, the pioneers of civilisation, range over Nubia, Abyssinia, and Arabia in quest of raw produce, and import into those countries, with the manufactures of England and France, the civilising influences which sustain these countries

in their career of power, prosperity, and progress; if Aden and Suez become the emporiums of the Eastern world and the bases of operations for expeditions of commercial civilisation—then, indeed, the commercial success of the great work will be as complete as the accomplishment of a higher and holier purpose. All the countries of Europe and of the East will naturally contribute to this desirable consummation, and they will all, directly or indirectly, partake of its benefits.

I have already made mention of Egypt. Her interest in the canalisation of the Isthmus of Suez is manifested by the Viceroy's desire for its accomplishment, by the advantages he offers to the promoters of the undertaking, and the liberality with which he has contributed to the capital of the company. By the extension of the line of railway from Cairo to Suez, by the permission granted to establish a line of electric telegraphs across Egypt, Mohammed Saïd, though but recently called to power, has already sufficiently proved his resolve to continue that wise and beneficent policy by means of which Mehemet Ali raised his country from the lowest depths of misery and degradation. But the canalisation of the Isthmus of Suez is, as it were, the keystone in the arch of prosperity of modern Egypt. To this day that country possesses every one of the elements of prosperity and greatness which made her might and abundance proverbial among the nations of the ancient world. To this day she is the natural mediator between Europe and the Far East, and might draw upon her neutral ground the commerce from the interior of Africa and Asia. Overrun by conquerors, ruined for centuries; her cities deserted, her fertile plains turned into desert land, her canals destroyed and her caravan tracks overrun by tribes of vagrant Arabs, Egypt was overwhelmed with barbarism; the land had ceased to be mentioned among existing countries; its inhabitants were no longer called a nation. Her new life dates only from the

beginning of this century. The family of Mehemet Ali rescued her from ruin and barbarism so utter, so deep, so apparently hopeless, that its like is scarcely to be found in the history of any other country. Since then the work of reclaiming the fallen land has been steadily and rapidly progressing. The opening of canals for inundation and irrigation has converted barren districts into fertile plains; the plague which at one time was said to have its home in Egypt is banished from her frontiers; her peace and security have been restored. From being a sink of barbarism, such as Bruce describes her, she promises to become the advanced-post of civilisation, a lodgment from which European influences may penetrate—on the one side into the interior of Africa, on the other into the heart of a portion of Asia which has hitherto been beyond our control. The Isthmus of Suez Canal is to Egypt a pledge of further prosperity; the fresh-water canal, in connexion with the great undertaking, will convert a desert into a fertile plain; and, once more the highway of nations and the middle station between two worlds, her far-famed cities will rise from their ruins. Eminently practical men who feel inclined to smile at such anticipations should remember how, in this country and in our own days, hamlets have grown into towns, and fishing-stations into seaports. No doubt practical men in their day would have smiled at the anticipation of Southampton such as we see it, while the idea of railway towns would have tickled them into fits of laughter.

But not only is the Suez Canal expected to create the prosperity of Egypt—it is also to protect that prosperity. A canal from Pelusium to Suez, a road to the Far East in which all the nations of Europe are interested, must necessarily be a neutral passage. The interests of all European nations would be opposed to the appropriation of Egypt by any one of them. It may be said that the Turkish

Empire owes its present existence and safety to the fact of the Sultan being the guardian of the Dardanelles. If a Dardanelles could be made for Egypt, her existence in *statu quo* would also become an article in the creed of European diplomates. The proposed canal would answer the purpose, and the Viceroy's desire for its execution is as legitimate as it is sincere.

The Sultan, as the suzerain of Egypt, is not less interested in the execution of the project. From an element of weakness, a country devouring money and men without producing anything, Egypt has become an element of strength to the Turkish Empire. During the late war the Egyptian army, conveyed on board an Egyptian fleet to aid their suzerain, defended the line of the Danube and the entrenchments of Eupatoria; when the Imperial Exchequer was hopelessly empty, the expenses of the war were defrayed with gold from Egypt. The Viceroy aided his suzerain beyond the extent of his obligations to the utmost of his power and resources. The Sultan is too high-minded to forget such devotion; he has already testified his sense of it by the high and numerous honours he has recently conferred on the Viceroy. His ministers are sufficiently enlightened to understand, that, the greater the prosperity of Egypt, the greater are the advantages the Porte derives from this subject land in ordinary times, and the greater are its means of lending assistance in time of need. Turkey is about to realise the truth of Napoleon's prophetic words: that the Turkish Government will one day owe its "preservation and its glory to the execution of this project," viz., the canalisation of the Isthmus of Suez.

It is hardly necessary to advert to the Far East. Enough to say that the Suez Canal will shorten the distance from England to Calcutta by 5,300, and the distance from England to Bombay by 5,000 miles; and, with the astounding

effects of the overland route before us, it needs no prophetic spirit to anticipate the advantages which the British and Dutch colonies in India will derive from the additional facilities of intercourse, transmigration, and commerce afforded by the canal.

Austria has a direct interest in the construction of the Isthmus of Suez Canal. It is to her the complement to the free navigation of the Danube. Prince Metternich, who for more than twenty years has interested himself in the project, and Baron Bruck, who represents all Austrian aspirations after enlightenment and progress, saw that in this question lay the aggrandisement of Trieste and Venice, as well as the opening of important outlets for the produce of the Imperial provinces and of the kingdom of Hungary, where the canal from the Danube to Kostendje in the Black Sea will facilitate exportation.

CHAPTER VIII.

BRITISH INTERESTS.

Russia—the United States of America—Spain, with the Philippine Islands—Holland, with Java, Sumatra, and Borneo—the Italian and French towns in the Mediterranean—in short, all nations which hold a high maritime or commercial position, are concerned in the opening of a direct Sea Route to the Far East; but of all nations there is none so strongly and generally interested in the question as the suzerain of India and Australia, the greatest trader with China and Polynesia, the greatest among the manufacturing and ship-owning nations—England.

We, of all other nations, derived the greatest advantages from the opening of the Overland Route. We, of all other nations, must gain most from converting the Overland Route into a sea-road for our fleets of merchantmen sailing between England and the East. In that East we are the greatest landed proprietors; our possessions in India and Australia are an enormous empire, the resources of which have but just commenced developing themselves. Australia, but fifteen years ago, languishing from want of capital and labour, has grown into a great, prosperous, splendid country, with a rapidity which would dazzle and turn us giddy, if it were in the nature of man to be astounded by miracles wrought

under his own eyes. India, though a possession of comparatively more ancient date, is just opening to commerce by means of the railways, which, connecting the great towns, cross provinces whose resources await but the development of improved means of communication. Our commerce with those colonies, and with the Eastern World beyond them, has for ten years past progressed at a rate which justifies the most sanguine hopes of the future. It has already been said that for some years past the tonnage of the British shipping employed in trading with the Far East has had an annual increase of 100,000 tons. The Board of Trade Returns show that, in 1855, the year of the Crimean and Russian War, the increase was 120,000 tons, and a still greater increase of tonnage is expected in the returns for the current year. I lay stress upon this steady and rapid progress to make good my position, that, gigantic as our commerce with the East may appear, it is as it were in its infancy—that Australia developing her resources; that India bringing her treasures of produce to the seaboard; that China gradually opening to trade; that Japan, Cochin-China and the Philippine Islands—that, in short, the Far East, with its 500,000,000 of inhabitants in India and China alone, will in a few years make demands upon our commerce and shipping in comparison to which our present trade with the East will assume almost insignificant proportions.

Already many species of Indian raw produce, which a few years back were almost unknown in our markets, are largely imported into this country, and manufactured into articles eagerly purchased by the nations of America and the continent. Such an article, to quote but one example, is the cocoa-nut fibre, the manufacture of which into mats and matting, has of late been introduced into our prisons. The total annual consumption of cocoa-nut fibre in Great Britain is at present about 500 tons, valued at £100,000—a mere

beginning, this, of what will prove an important branch of industry, as soon as a cheaper ship route to India shall have reduced the prime cost of the fabric in the English markets. At present a single ship suffices to import into Great Britain the whole of her annual consumption of cocoa nut fibre. Ten years hence, perhaps, not ten nor twenty ships of the largest tonnage will suffice to carry the quantity annually used by our manufacturers, in a branch of industry in which we have taken the initiative, and of which, to all appearance, we shall long retain the monopoly.

The opening of a direct Sea Route in the place of the route round the Cape would be an immense step to accelerate the opening of the East. It would lessen the danger and expense, and shorten the time at present required for the voyage to any point on the Indian, Australian, and Chinese coasts. While the Cape Route compels our shipowners to deny themselves the advantage of steam navigation, this route *viâ* Egypt offers an abundance of coaling stations at convenient distances. Gibraltar, Malta, Port Said, Suez, and Aden would be so many houses of call on the road to the East. It is true that Venice and Trieste, that Marseilles and Genoa, would come in for a share of the enormous trading movement which must follow the opening of the Isthmus of Suez; but by far the greater portion would fall to the share of this country, which, as it is, owns and employs more than half the tonnage engaged in the Eastern trade. That is to say, Great Britain alone carries more tons of goods to and from the East than all other nations of the world put together.

A direct Ship Route to the East, admitting of the use of steam instead of sails, would have another great advantage for this country. It would increase the consumption of coal, not on our part only, but also on the part of other nations engaged in the Eastern trade. Great Britain, as the greatest

producer of coal, would naturally derive the greatest advantage from this change, and the opening of the Suez Canal would prove important to our capitalists engaged in the mining and the transport of coal.

It is not my province to enter into the vexed question, whether steam ever can or will supersede the use of sails on long voyages. The gigantic steamer now building at Millwall is a proof that the want of steam-ships for the Eastern trade is painfully felt, and that extraordinary exertions are making to supply that want. It is not, therefore, too much to say that steam, to a considerable extent, would be employed as soon as a route with coaling stations is open to steamers of the usual tonnage. For it should not be forgotten that the chief argument against steamers on long voyages is, not that their consumption of coal swallows up the profits, but that, on a route like the one round the Cape, they cannot renew their stock of fuel, and that the enormous quantity of coal they must take in for the voyage leaves them too little room for goods and passengers. This objection is done away with on a route in which the coaling stations are so frequent that vessels can, if need be, coal every four or five days.

Even if the commercial reasons which urge us to the adoption of the project of the Suez Canal were less obvious, the scheme would merit our most zealous support on account of the political advantages it offers to us.

Mr. Waghorn's scheme of the Overland Route was for many years discountenanced by the Governments of the day. It was denounced as visionary, impracticable, and unnecessary. But its advantages have proved so great that politicians in 1856 cannot understand how it was possible to govern India and Australia by means of despatches which were carried in sailing ships round the Cape. It is now an article of our political creed that the communication with India, overland *via* Egypt, is indispensable to the security of

our Eastern Empire. So essential is the passage through Egypt considered for the maintenance of our power in the East, that extreme measures have been thought of. In some quarters it has been said that we must seize upon Egypt to make sure of our communication with India. The suspicion that France, whose armies once conquered Egypt, might entertain similar plans, has been sufficient at times to disturb that cordial understanding which is so necessary to the peace and prosperity of the two nations. On either side the suspicion may be without foundation; enough that it exists, and rankles in certain minds. The canalisation of the Isthmus of Suez, which would place Egypt under the joint protectorate of the Great Powers of Europe, would reassure the most timid minds at once as to our intentions, and as to the security of our communications with the East.

This feature of the case is so forcibly stated in a memorial addressed by an eminent statesman to a not less eminent diplomate, that I shall make no excuse for quoting the passage:—

"There is a point of the globe with the free passage of which the political and commercial power of Great Britain is bound up; a point the possession of which France had on her part aspired to in former times. This point is Egypt.

"It is superfluous to define the motives which would not allow England to see Egypt in the possession of a rival nation, without opposing it by the most energetic resistance. But, what should also be taken into serious consideration is, that with less positive interests, France, under the dominion of her glorious traditions, under the impressions of other feelings, more instinctive than rational, and therefore more powerful over the impressionable spirit of her inhabitants, would not, in her turn, leave to England the peaceful sovereignty of Egypt. It is clear, that so long as the route to India is open and certain, so long as the state of the

country ensures the promptitude and facility of the communications, England will not set about creating the most grave difficulties by appropriating a territory which in her eyes has no other value than as a means of transit. It is likewise evident that France, whose policy for the last fifty years has been to contribute to the prosperity of Egypt, will not seek to realize in this direction the projects of another epoch, so long as England does not interfere.

But let one of those crises occur which have so often shaken the East; let circumstances arise wherein England should find herself under the rigorous necessity of taking a position in Egypt to prevent another Power from forestalling her, and tell us if it is possible that the Alliance could survive the complications which such an event would occasion? And why should England consider herself obliged to become mistress of Egypt, even at the risk of breaking her alliance with France? For this single reason, that Egypt is the shortest and most direct route from England to her Eastern possessions, that this route must be constantly open to her, and that, in whatever concerns this mighty interest, she could never temporize. Thus, from the position given to her by nature, Egypt might still become the subject of a conflict between France and Great Britain. This cause of rupture would disappear, if, by a providential event, the geographical conditions of the ancient world were changed, and if the commercial route to India, instead of passing through the heart of Egypt, were removed to its confines, and being opened to all the world, could never be exposed to the chance of becoming the exclusive privilege of any one." *

The event alluded to is the canalisation of the Isthmus of Suez.

* Letter from Mons. de Lesseps to Lord Stratford de Redcliffe, &c. &c., February 28, 1855.

But not only would this canalisation place our communications with India under the protectorate of the whole of Europe; it would also still further consolidate our power in India and Europe, by facilitating a rapid interchange of troops and military stores between Great Britain and her Eastern possessions. By the Overland Route we send despatches and generals. Through the Canal we might send whole regiments and parks of artillery. At present, if the Indian army wants reinforcements, or if regiments, having completed their term of service on Indian stations, are to be sent home, they must proceed by the Cape route. The troops have to pass four or five months in a sailing vessel, and on their arrival at the port for which they are bound, the men are usually so worn out, that at least two or three months more are required to make them fit for active duty. If the Isthmus of Suez were opened to navigation, troops embarked as Malta could reach Bombay in three weeks, Ceylon and Madras in four, and Calcutta in five weeks. We should not then hear of disease decimating our army on its passage out, nor of terrible accidents, such as the loss of the *Birkenhead*. India would want fewer troops, and yet have more efficient protection, for, on any emergency, there would be a possibility of reinforcing the Indian army from England, Malta, and the Ionian Islands.

During the late war, the Government made a practical admission of the advantages of the route through Egypt for military purposes. Two regiments of cavalry, men and horses, were brought from India to Aden and Suez, and from thence to the Crimea. The two regiments—the 12th Hussars and 16th Lancers—men and horses, joined the Crimean army in excellent condition, and could, if necessary, have charged the enemy on the day of their disembarcation. Of course, the expense of the transport of these troops was considerable, and, as it happened, unneces-

sary. But so great, in comparison to the Cape Route, was the saving in men and horses—for these, after all, may be reduced to £ s. d.—that to this day it is doubtful whether the passage Overland, even in ordinary times, is not the cheapest road for the transport of troops to India. The Isthmus of Suez once opened, there can be no doubt as to the question of expense. It is scarcely possible to over-estimate the importance of a plan which enables us to disembark troops on Indian soil within six weeks after their departure from England, and within four weeks after their departure from Malta.

Nor should it be forgotten that we, of all nations, are the masters of the proposed canal. From Malta, our fleets command its entrance; from Aden, its outlet. "The power in possession of Aden opens and closes the Red Sea at its will." Great Britain is that power.

CHAPTER IX.

OBJECTIONS.

An European guarantee for the security of our communications with India and Australia—the effective protection of our Indian Empire, by lessening the distance which separates it from our naval and military depôts—and the absolute command of the new highway to the East,—these are the political advantages which the project of the Suez Canal offers to England. So evident and incontestible are these advantages, that, though the subject has been discussed by the organs of parties of the most varied opinions, there has not, up to the present day, been a single voice raised in opposition to the plan on political grounds. If such objections exist in any quarter—if timid minds there are, with misgivings lest so great a change might open the door to some great and unforeseen danger—those minds have at least had the modesty to make what political objections occurred to them in the profoundest secrecy. The objections which have been made are purely commercial. What is singular, and indeed astonishing, is that they proceed from most uncommercial quarters.

The greatest commercial authorities, the East India Company and the Peninsular and Oriental Steam Navigation, have given their full concurrence, and expressed their

warmest wishes for the opening of the Suez Route. The most skilful engineers of Europe, after a long and minute examination of the ground, have recorded their opinion that the execution of the Suez Canal is easy, and its success certain; and that the construction of the two harbours at Suez and Pelusium presents none but ordinary difficulties.

In opposition to these great commercial and engineering authorities, the same sort of objections have been raised which twenty years ago were thrown in the way of Mr. Waghorn's scheme of that national institution—the "Overland Route." The Suez Canal, it is said, is impracticable—it is impossible to construct a harbour at Pelusium; the dangers of the Red Sea are enough to deter the hardiest mariners; the road, *via* Suez, is only seemingly shorter than the road round the Cape; and if the Isthmus were pierced by a canal, the bulk of shipping to and from the East would still pass round the Cape; a canal without shipping is an unprofitable speculation, and that would be the case of the Isthmus of Suez Canal.

I will not enter into the argument about the difficulty of constructing a harbour at the point near Pelusium, which the Commission of Engineers has chosen for that purpose. Enough, that the best continental and British engineers see no difficulty in making the harbour, and that, since modern geology has controverted the theory of Herodotus respecting the formation of the delta of the Nile, they have no apprehension of the harbour filling up when made. The opinion of Messrs. Rendel and M'Clean respecting the harbour at Pelusium must be taken as authoritative, until at least one British engineer of standing and reputation is found to contradict it. Up to the present the engineering profession have discovered nothing monstrous or impracticable in the facts and figures put forth by the Commission.

The next objection is founded on the supposed dangers of

the Red Sea. Perhaps it will be recollected, at the beginning of the war with Russia, how much eloquence was wasted on the subject of the dangers of the Black Sea. That sea, it was said, stood in evil repute among the ancients, who were in the greatest awe of it. It was also represented as being the constant terror of the Greek sailors, whom familiarity should have taught to despise its dangers. But, in the course of a two years' occupation of that sea by our fleets of war and transport ships, it was impossible to discover any of those dangers over which speculators on the war became so pathetic. On the contrary, it was found that the Black Sea is a very good sea, and, with the exception of the vessels lost in the gale of the 14th November, 1854—a gale of unprecedented violence, according to the statements of the oldest inhabitants of the coasts of the Euxine—none of the steamers and sailing ships of the allied fleets were lost, though never in history has the Black Sea been furrowed by the keels of so many ships.

The Red Sea is very much in the same predicament. Classic writers and Fathers of the Church have expatiated on its dangers, and to this day the voyage from Suez to the Straits of Babel-Mandeb is slow, tedious, and frequently dangerous to the native barques. The timid minds that predict the failure of the Suez Canal, demonstrate the dangers of the Red Sea by referring to the opinion of classical antiquity and the experience of St. Jerome. It would be easy to demonstrate the dangers of the Mediterranean in the same manner, by quoting the experience of St. Paul, who, on all matters nautical and theological, is a much higher authority than St. Jerome. That the Red Sea is dangerous to the native ships and sailors will astonish no one acquainted with the sort of ships and sailors to be found in those waters. Ships overloaded to such an extent that boards must be fixed over the bulwarks to prevent the water rushing in, and manned by sailors who use no lead or charts, and who undertake to

charm rocks and sandbanks, are not very safe in any sea; and if any one were to form an idea of the British Channel on the strength of the testimony and experience of such sailors, it is more than likely the idea would be far from favourable to the possibility of crossing over from France, or sailing from Southampton to London. Bruce, who sailed in the Red Sea, in the last century, lays its proverbial dangers entirely at the door of the folly, ignorance, and greed of the native sailors. Mr. Welstead, of the East India Company's service; Captains Rogers, Moresby, and Elwon; Captain Elliot, Admirals Pulteney and Malcolm, and Major-General Chesney, R.A.; and, in short, all those who know the Red Sea are in all respects of the opinion of Bruce. All whose experience makes them competent to pronounce on the subject agree in describing the dangers of the Red Sea as less than the dangers of the British Channel. The very reasonable proposal has been made of establishing a station for steam-tugs to draw sailing vessels up the Red Sea. The timid minds, whose mission it is to object, declare that this proposal is in itself a proof of the impracticability of those waters. Here again the comparison may be made with the Channel, which would appear to be equally impracticable for sailing ships, as there are a good many steam-tug stations at various points of our coast.

The fact is, the Red Sea has neither the dense fogs nor the violent equinoctial gales of the Channel. It has no Beachy Head, Goodwin Sands, or South Foreland, and other points of difficulty and danger which obtain such terrible notoriety in the newspapers under the heading of "Terrible Gale in the Channel." Even when covered with shipping, it is not likely to count shipwrecks at the rate of three per day, the average in the British waters.* The Red Sea, according to Captain Moresby, who surveyed it, has a main channel of great depth, and of a breadth varying from

* *See* Board of Trade Returns.

thirty to seventy miles, with from fifteen to twenty natural harbours of refuge which afford excellent anchorages.

It is a singular and significant fact connected with this outcry against the dangers of the Red Sea, that those who most feelingly expatiate on these dangers are men who have never made the voyage, the perils of which they describe; while all those who have navigated in the Red Sea, among whom may be specially cited Captain Harris, who has made seventy voyages through it, are of one mind in describing it as safe, and the navigation in it as easy. It is also characteristic of the objections raised that the writers of classical antiquity and Fathers of the Church are quoted in support of them. It seems like a fanatic clinging to an exploded prejudice; and it is just as reasonable as if a man, Odyssey in hand, were to expatiate on the dangers of navigation in the Mediterranean.

The next position taken is, that the passage up and down the Red Sea is at all events a very long one. It is admitted that steamers make it quick enough, and with the dates of the Indian Mail publishing every fortnight all over the country, there is not much merit in the candour of the admission. But trade winds and monsoons, it is said, will always interfere with the passage of sailing ships up and down the Red Sea. But the evidence of the distinguished naval officers above quoted is all to the effect that the trade winds and monsoons in the Red Sea are a means of safe and expeditious passage for sailing ships which select the proper season for the voyage out and home. So then it is admitted by the objectors to the scheme, and proved by the regular arrival of the Indian mail, that steamers can make quick passages up and down the Red Sea from year's end to year's end, at all seasons, and in all winds; and, if the authority of naval officers is worth any thing, it is a fact that during a greater part of the year the

voyage is all that can be desired for sailing vessels. Nor, when such ships travel out of the proper season, can it be believed there is anything extraordinary or burdensome in the proposal which has been made to establish steam-tug stations at the more difficult points of the Red Sea, and this the more, as it is not necessary for ships to be towed from one end of this sea to another. Ships combining the advantages of steam and sails can, of course, pass up and down at all seasons; and, as this combination of the screw and sails, of comparatively recent invention, is daily securing for itself a greater amount of tonnage, it is not unreasonable to suppose, that, at the period when the canal can be opened to navigation, it would serve the purposes of its originators and of commerce even if it were only used by steamers and by vessels combining steam and sails. Nor should it be forgotten that the impracticability of the Cape Route for steamers of ordinary tonnage has, for many years past, prevented the extension of steam in our commercial navy.

Next comes the objection that at sea the shortest way by miles is not the shortest way by time, and that, in reality, the route to India, and more especially that to Australia, is shorter round the Cape than through the proposed canal. This argument and the manner in which it is supported must be a source of extreme satisfaction to M. de Lesseps; for it is a great sign for a good cause if its antagonists are driven to the extremity of wilful stultification. The argument that the route to Australia *via* Suez is longer in time is proved in the mode and manner following:—the slowest passages of the slowest colliers sailing between Newcastle and Alexandria and between Aden and Suez, are recorded, and compared with the quickest passages of clipper screw-steamers sailing between Southampton or Liverpool and Melbourne, and after comparing the two figures, it is

boldly asserted that a ship might go from England round the Cape to Melbourne in about the same time a ship takes in going from England to Aden. Because it is a fact that, under circumstances the most exceptional, quick passages have been made round the Cape, therefore it is argued that the Cape route is an expeditious one. A solitary exception is palmed off as a general rule; and because lumbering vessels, heavily laden and lightly manned, take a long time to go from England to Alexandria, or from Aden to Suez, therefore it is argued that all other ships in the same route must go in the same slow way. In this manner it would be easy to prove that the shortest way from London to Hull is *via* Hamburgh—for the Hamburgh steamers go from London to Hamburgh in four, and from Hamburgh to Hull in five days; while the "Jack Brag" collier, loaded to the water's edge, and manned by a drunken mate, a man, and a boy, may possibly be three weeks or a month on her voyage from London to Hull.

Even if the Isthmus of Suez were pierced by a canal, still it is said the navigation from Australia would run through its old channel round the Cape. There is no contradicting such an expression of individual opinion beyond recording the fact, that, up to the present, the most strenuous exertions are making to emancipate the conveyance of mails and passengers from the delays of the Cape Route. The Government contract for the conveyance of the Australian mail *vid* Egypt proves, at all events, that in spite of extraordinary passages round the Cape, the Government are of opinion that the shortest road to Australia lies *vid* Egypt and up the Red Sea; and if I am not mistaken, the Government are by no means singular in this opinion. On the contrary, the course now adopted was repeatedly pressed on their attention by the Australian colonies themselves, and those colonies supply part of the

annual subsidy of £185,000 which the country pays for the carriage of those mails. And in spite of the boasted ease and despatch with which vessels from England are asserted to make the passage round the Cape to India and Australia, the Government have of late again shown their desire for a quicker and safer route to the East, by bestowing upon the scheme of the Euphrates Railway an amount of protection unprecedented in the history of similar undertakings.

The Euphrates Railway Company proposes laying down a line of rails from Seleucia in the Mediterranean to Bassorah in the Persian Gulf. So great is the anxiety in official quarters for the execution of this project, that even before a final decision was taken as to the direction of the line, a concession for the undertaking has been extorted from the Turkish Government; while, before the precise capital required was ascertained, the influence of our ambassador at Constantinople has been successfully exerted to pledge the Porte to the guarantee of a dividend of six per cent., and for ninety-nine years, on the capital which may hereafter be deemed necessary for a railway which will probably be 800 miles long, and which will cost not less, and may cost more, than £12,000,000.

If our communications with India and Australia are so sure, safe, and expeditious as the objectors to the Suez Canal pretend they are, these objectors must, if they would be consistent, raise their voices against the Euphrates Railway scheme. Whether or not they will do so remains to be seen. In the meanwhile, and while waiting for indignant protests on the part of economists in means of communication, it is easy to anticipate an objection to the Suez Canal, which most probably will be raised even while these sheets are going through the press. It is, that the Euphrates Railway secures that rapid and cheap communication with the East which the advocates of the Suez Canal justly extol as

one of those features of their undertaking which ought to ensure it the support, and which at all events should shield it from the indifference of the British Government, and from the hostility of its representatives.

With the commercial prospects of the Euphrates Valley Railway I have nothing whatever to do. They are sufficiently characterised by the exaction of an unusual guarantee extending over an unusual number of years. The value of the guarantee and the solvency of the power which makes it are questions which concern the *bonâ fide* shareholders of the company. The line from Seleucia to Bassorah, when finished, may possibly afford a more rapid means of transit than is at present afforded by the Overland mail, but that the expenses of this route must be far more considerable than the expenses of the Canal Route through the Isthmus of Suez is apparent to every one who for one moment examines the facts and figures on either side. The charter granted by the Viceroy of Egypt to the Suez Canal Company limits the highest toll to be exacted on the canal to a charge of ten francs per ton of goods and per head of passengers. The line from Seleucia to the Persian Gulf will have a length of 800 miles; and supposing (what, however, is very problematical), that on this line goods could be carried at the rate they are carried on continental railways —that is to say, at 10 centimes per ton and per kilometre— the charge for a ton of goods carried from Seleucia to Bassorah for conveyance to India and Australia would be not less than £4 15s. To this necessary charge must be added the ship freights, and the expenses of loading and unloading at Seleucia and Bassorah.* These figures are indisputable,

* The *Bombay Times*, a great authority on the cost of transport to the East, calculates that a ton of goods sent from England to Calcutta by the Euphrates Railway would be charged with freight to the amount of £40. —*See* extract from the *Bombay Times* in *The Times*, Dec. 2, 1856.

and no amount of ingenuity and circumlocution can explain them away. They prove that the Euphrates Valley Railway cannot supersede the necessity, or rival the advantages of the canalisation of the Isthmus of Suez, while a cordial adoption of the latter project would have saved the Government the trouble of extorting from the Porte a guarantee of so high an amount and for so long a period, that its necessity alone is enough to suggest the most serious doubts as to the prospects of an undertaking which from the first seems to fill its originators with alarm and dismay.

CHAPTER X.

HOSTILITIES.

It is now about a year since the projected Canal through the Isthmus of Suez was first brought to the notice of the Government of this country. Since then the scheme has won the approbation, enlisted the sympathy, and obtained the support of all the maritime nations of Europe. By far the greater part of the sum required for its execution—that is to say, £5,000,000 out of £8,000,000—has been subscribed by the Viceroy of Egypt; the Austrian ports on the Adriatic and Mediterranean; by France, Sardinia, and Holland. A portion of the remainder has been purposely left open for England. The subscriptions were ready and spontaneous, and so great and so self-evident are the commercial advantages of the scheme, that no guarantee for the payment of interest on the sum subscribed has been needed.

The portion of shares reserved for England would without difficulty be appropriated, if Mons. de Lesseps told his coadjutors that British capital should not, to some extent at least, participate in an enterprise of such paramount importance to Great Britain. But it is not to obtain the pecuniary assistance of England that these lines are written, nor are there at the present moment any financial obstacles to the immediate execution of the works.

It has been found necessary to state the details and point out the advantages of the canalisation of the Isthmus of Suez, because an appeal is needed from the Government to the opinion of this country. Humiliating as the confession may be—in the affair of the Suez Canal; in the creation of a short Ship Route to India and the Far East; in the opening of the coasts of the Red Sea to commerce, enlightenment, and civilisation; in the second great crusade which is destined to conquer the East—Great Britain stops the way. Not British science, because it has given its unreserved sanction to the plan; not British commerce, for its greatest shipping and trading companies have expressed their sympathy and approbation; not the British press, for with one solitary exception it has spoken in but one voice of encouragement and hope.

Two things are wanting to the execution of the project, and the security of those who assist in it—the sanction of the Sultan, as suzerain of Egypt, and an understanding among the maritime nations of Europe declaring the Canal through the Isthmus of Suez a neutral passage open at all times to the ships of all nations. The assent of England to an international treaty embodying this principle is indispensable, for England, by Malta and Aden, controls the approaches to the canal.

The Sultan's private opinion on the subject is on record. He expressed it last year in a letter to the Viceroy of Egypt. He sympathises with the project and desires its execution. But his formal sanction of the Charter of the Isthmus of Suez Canal Company has been withheld. The press in Turkey, at one time justly appreciating the advantages of the project, and enthusiastic for its execution, subsequently, and until a very recent date, avoided all mention of the subject. Not in consequence of a victorious controversy against the project, for no dissentient voice was raised, but

suddenly, in an unaccountable and almost mysterious manner. Public opinion on the continent ascribed this hesitation on the Sultan's part, this unaccountable silence of the Turkish press on a subject which for that press was a favourite one, to the influence of Lord Stratford de Redcliffe. Private letters from Constantinople confirmed this opinion. It is asserted that Lord de Redcliffe exerts all his influence with the Sultan and his Council to prevent the Imperial sanction of the Charter of the Suez Canal Company. It is further stated that, as a means of bribing the Divan into compliance on this subject, Lord de Redcliffe offered to abandon the views advocated by England as to the settlement of another important question—that of the Principalities; and that it was he who induced the Turkish Government to prohibit the mention of the Suez Canal in the newspapers of Turkey. It seems monstrous that a British ambassador should take the initiative against publicity any where, and that the representative of the first nation in the world should check the liberal aspirations of a Government which is generally supposed to be despotic.

The latest advices, however, show that under some more liberal influence this scandal has ceased, and the ambassadorial gag has been removed from the mouths of the Turkish editors. The first use made of its recovered freedom of speech by the *Journal de Constantinople* was to repeat *in extenso* an article by M. F. de Lesseps, clearly and forcibly pointing out the great interest Turkey had in the execution of the project. The article originally appeared in the *Journal de l'Isthme de Suez*, a periodical published in Paris to advocate the advantages of the undertaking, and was prefaced by a laudatory introduction, in which the editor directly, and in the frankest terms, expresses his entire concurrence in the views put forth as to the great benefits to be

expected from the undertaking. This entire revolution is an important and noteworthy fact.

At home, meanwnile, the English Government ignores the project, and declines expressing an opinion, while every mail from Constantinople has brought fresh evidence of the hostility of the British embassy against a scheme which, of all others, should be fostered by British statesmen, and protected by the representatives of our Government.

This apprehension, this diffidence, this fear of committing themselves to a position which they feel to be untenable, is an encouraging feature in the conduct of the Government. Whatever hostility may be felt against the project, it is not avowed, and in many instances it is even denied. But the secret workings of that hostility are apparent. They are shown in the conduct of the Lords Clarendon and De Redcliffe; they are shown in the anxiety to gain time, and the unseemly haste with which the Euphrates Valley Railway scheme, even in its unfinished state, was hurried through the Foreign-office and the Sultan's Council.

What is desired for the Suez Canal project is an examination of all its features. Its promoters, strong in the strength of their scheme, solicit controversy and defy it. They maintain, that all objections hitherto raised, have been controverted, disproved, and confounded by an appeal to indisputable facts, and to the authority of men of high standing and vast experience. Against the extollers of the Cape Route, they quote the manifest advantages which have already accrued from the Overland Route, *viâ* Egypt. Against those who pretend they cannot see the necessity for the Suez Canal, they quote the Government contract for carrying the mails to Australia, and that very Euphrates Valley Railway scheme, for the execution of which it is proposed to mulct an ally at the rate of £360,000 a-year. Against the alleged dangers of the Red

Sea, they quote Welstead, Moresby, Harris, and a host of other naval officers; and against the experience of St. Jerome they pit the experience of the Peninsular and Oriental Steam Navigation Company. Against the Euphrates Railway scheme they quote their own transit charges of ten francs per ton, as compared with £4 15s., the minimum charge per ton of goods to be transported on the line from Sileucia to Bassorah. They protest that the Suez Canal will benefit all nations, without prejudicing the interests of any of them; that, by shortening the route to India by 5,000 miles, and opening it to steamships, this Canal will spread civilisation to the remotest confines of the Far East; that by cheapening, it will multiply the transit of goods and passengers; that it will open to commerce regions which have hitherto been closed; that it will bring into commerce merchandise which as yet can not bear the charges of transport; that while it prepares peaceful conquests in countries now beyond European influence, it will strengthen the ties which connect us with our Indian and Australian Empires, secure our possession, and render more efficient our protection of them; and that, in one word, it will "*Open the Earth unto the Nations thereof!*"

NOTICE.

The following Works, original and translations, have been published, on the subject treated of in the preceding pages, and may be had either at the Publishers' or at the Isthmus of Suez Canal Office, 84, *Fleet Street, London.*

1. The Isthmus of Suez Question. By M. Ferdinand de Lesseps, Minister Plenipotentiary; pp. 223. London: Longmans, 1855.

2. New Facts and Figures relative to the Isthmus of Suez. Edited by M. Ferdinand de Lesseps. With a Reply to the Edinburgh Review. By M. Barthelemy St. Hilaire, Member of the Institute of France; pp. 223. London: Effingham Wilson, 1856.

3. British Interests in the Canalisation of the Isthmus of Suez; pp. 20. Glasgow: R. Rae, 1856.

In the Press.

4. The Canalisation of the Isthmus of Suez. Report and Plans of the International Commission. Third Series of Documents published by M. Ferdinand de Lesseps.

Published in Paris.

5. Percement de l' Isthme de Suez. Atlas des Cartes, Plans, Sondages, Profils, et Forages à l'appui du projèt de la Commission Internationale. Troisième Serie des Documents Publiés par M. Ferdinand de Lesseps. Paris: au Bureau de l' Isthme de Suez, Journal de l' Union des Deux Mers, 52, Rue Verneuil; 1856.