In his first interview with the Governor of St. Helena, Napoleon said emphatically: "Egypt is the most important country in the world."

Rose, Life of Napoleon, vol. i. p. 356.

Earum proprie rerum sit historia, quibus rebus gerendis interfuerit is qui narrat.

Gellius, Noctes Atticae, v. 18.

τὰ δ' ἔργα τῶν πραγμάτων ἐν τῷ πολέμῳ οἷς ἔκ τοῦ παρατηροῦσα πυρήνας γράφειν, οἷος ἔμοι ἐδόκει, ἀλλ' οἷς τε αὐτὸς παρηγ, καὶ παρὰ τῶν ἄλλων ὅσον δυνατὸν ἀκριβεῖα περὶ ἐκάστου ἐπεξετάζων.

Thucydides, i. 22.

IN TWO VOLUMES

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CHAPTER LIII

FINANCE

The first bankruptcy of Egypt—Risk of a second bankruptcy—The Race against Bankruptcy—The era of reform—Fiscal relief—Reduction of taxation—Increase of revenue—Expenditure—Aggregate surplus since 1888—The indebtedness of the fellaheen—Distribution of land—Importance of the financial question.

"Great," says Carlyle, "is Bankruptcy. . . . Honour to Bankruptcy; ever righteous on the great scale, though in detail it is so cruel. Under all falsehoods it works unweariedly mining. No falsehood, did it rise heaven high and cover the world, but Bankruptcy, one day, will sweep it down and make us free of it." ¹

In Egypt, bankruptcy, of a truth, destroyed many false gods and pricked many bubbles. Notably, it dashed down Ismail Pasha, the great high-priest of Sham, from that false eminence which he had attained, and allowed him to be pulverised by the adventurers who were his former worshippers. More than this, bankruptcy, riding roughshod over all who would not recognise the irresistible nature of its action, brought home to the minds of a reluctant Egyptian Ministry that they must needs abandon the Soudan, at all events for a time, because they could not afford to stay there. These and many other benefits did bankruptcy, in its ruthlessness, confer on a land whose

¹ French Revolution, Book iii. c. i.

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government had for many years been one gigantic falsehood.

When the British troops occupied Egypt in 1882, one act of bankruptcy had already been committed. In 1879, the Government of Egypt declared themselves insolvent. In 1880, a composition with their creditors was effected. Nevertheless, under the combined influences of the Arabi rebellion and the cataclysm in the Soudan, the Treasury was again on the high road to another act of bankruptcy. There was, however, this difference between the financial chaos of 1878-79 and that of 1882-83. During the earlier of these two periods, the hopes of every well-wisher to Egypt were based on a declaration of bankruptcy. It was impossible to apply a remedy until the true facts of the case were recognised. In 1882-83, on the other hand, it was in the true interest of every Egyptian, and of every sympathiser with Egypt, to stave off bankruptcy, for the remedy which would certainly have been applied, had a condition of bankruptcy been declared, was almost as bad as the disease. That remedy was international government in excelsis. Hence, the Egyptian Government had to enter upon what Lord Milner has aptly termed "The Race against Bankruptcy."

The struggle was long and arduous. For some while, the issue seemed doubtful. The final result was a complete triumph. It may be said that the period of doubt lasted till 1888. By that time, the race had been virtually won.

So long as the Egyptian Government and their British advisers were in constant danger of being throttled by bankruptcy, it was hopeless to think seriously of fiscal reform. More than this, any improvement in the administrative system which involved an increase of expenditure—and it may
be said that practically every improvement required money—had to be set aside. Attention was concentrated on one object, and that was how to make both ends meet. But when financial equilibrium was assured, the aspect of affairs changed.

When it became known that the Egyptian Treasury was in possession of a surplus, all the various interests concerned clamoured for the redress of long-standing and often very legitimate grievances. The inhabitant of the country pleaded that his land-tax was too high, and pointed with justice to the fall in the price of agricultural produce as a reason for affording him relief. The inhabitant of the town complained of the oppressive nature of the octroi duty. The population in general urged that the price of salt was excessive. The possessor of live stock asked why he should pay a tax for every sheep or goat on his farm. The seller of produce at every market or fair dwelt on the fact that his goods had to be weighed by a Government official who charged a fee for the Treasury and another fee for himself. Why, again, it was urged, should railway, postal, and telegraph rates be higher in Egypt than elsewhere? Why should a boat passing under a bridge pay a toll, whilst a passenger going over the bridge paid nothing? These, and a hundred other arguments and proposals, were put forward by the advocates of fiscal reform.

On the other hand, each zealous official, anxious to improve the administration of his own Department, hurled in demands for money on a poverty-stricken Treasury. The soldier wanted more troops, and painted in gloomy colours the dangers to which the frontier was exposed by reason of the proximity of the Dervishes. The Police officer wanted more policemen to assist in the capture of brigands. The jurist urged that, without well-paid judges, it was impossible to establish a pure system
of justice. The educationalist pointed out with great truth that, unless the sums placed at the disposal of the Department of Public Instruction were greatly increased, the execution of the policy of employing Egyptian rather than European agency in the administration of the country would have to be indefinitely postponed. The soldier, the policeman, the jurist, the director of prisons, and the schoolmaster all joined in asking for the construction of expensive buildings. The medical authorities clamoured for hospitals, and pointed out that, without improved sanitation, which was a bottomless financial abyss, there could be no guarantee against epidemic disease. The engineer showed that it was false economy not to extend the system of irrigation, to drain the fields, to make roads, and to develop railway communication. Following on the larger demands, came every species of minor proposal. Would it not be an attraction to the tourists, who spent so much money in Egypt, if a theatrical company visited Cairo in the winter? How could this be managed unless the Government gave a subvention to the theatre? Was it not a scandal, now that a civilised Power was virtually governing Egypt, that more was not done to protect the ancient monuments of the country from injury? What report would the winter visitors to Egypt make when they returned to Europe, if, in driving to the Pyramids, they were bumped over a road which had not been repaired since the Empress Eugénie drove over it some twenty years previously? These, and scores of other questions, were asked, in tones of more or less indignant remonstrance, by individuals who realised the desirability of paying attention to some one or other subject in which they were interested, but who had no clear perception of the financial situation considered as a whole.
Under all these circumstances, it behoved those who were responsible for the financial guidance of the Egyptian Government to act with great caution. It was clear that, as a wave of European civilisation was to sweep over the land, all the paraphernalia of civilisation—that is to say, its judges and law-courts, its hospitals, its schools, its reformatories for juvenile offenders, and so on—would, sooner or later, have to be introduced; but the main point to be borne in mind was this: that, in introducing all these reforms, Egypt should not be allowed to slip back into the slough of bankruptcy from which it had been so hardly and so recently rescued. The principal difficulty was to decide which were the most pressing amongst the many points requiring attention. It was thought that, before the sick man was provided with a comfortable hospital, before the criminal was lodged in a prison built on improved penological principles, before schools were provided, and even before rival litigants could be provided with an adequate number of honest and capable judges, or before the judges could be located in suitable buildings, it was essential to alleviate the burthens which weighed on the mass of the population. Fiscal relief had a prior claim to administrative reform. It was, therefore, decided that, whilst penuriously doling out grants to the spending Departments, the principal efforts of the Government should be devoted to devising means for the relief of taxation.

It is not necessary that I should give in detail the fiscal history of Egypt since the British occupation. It will be sufficient to say that direct taxation has been reduced by little less than £2,000,000 a year. In the domain of indirect taxation, the Salt Tax, the collection of which was attended with great hardship to the poorest classes
of the population,\(^1\) the octroi duties, the bridge and lock dues on the Nile,\(^2\) and the tax both on river boats and on sea fishing-boats have been wholly abolished. The Registration dues on the sale of land have been reduced from 5 to 2 per cent. The Light dues have been greatly diminished in amount. So also has the tax on ferries. The Customs duties on coal, liquid fuel, charcoal, firewood, timber for building purposes, petroleum, live stock, and dead meat have been reduced from 8 to 4 per cent. The inland fishery industry has been relieved from the vexatious and onerous restrictions which were formerly imposed on it. The Postal, Telegraph, and Railway rates have been largely reduced. The only increase in taxation has been in the tobacco duty, which has been raised from P.T. 14 to P.T. 20 per kilogramme. There cannot be a doubt that the whole Egyptian population is now very lightly taxed. The taxation is, however, still unequally distributed. The urban population do not bear their fair share of the public burdens. In this, as in so many other matters, the Capitulations bar the way to reform.

In spite of these large reductions of taxation, the revenue has grown from £E.8,935,000 in 1883 to £E.15,337,000 in 1906—an increase of no less than £E.6,402,000.

The expenditure has, of course, increased with the growing revenue, but it has been carefully controlled. In 1883, it amounted to £E.8,554,000, and in 1906 to £E.12,393,000—\(^3\) an increase of £E.3,839,000.

\(^1\) See Egypt, No. 1 of 1905, p. 33, and No. 1 of 1906, p. 191.
\(^2\) The development of Nile traffic has been very remarkable. I give a single instance. The number of boats passing the Atfæh lock, which connects the Mahmoudieh Canal and the Nile, in 1900—the year before the abolition of the toll—was only 4564. In 1905, nearly 22,000 passed.
\(^3\) These figures are exclusive of £E.1,238,000 debited to Special Funds in 1883, and of £E.760,000 similarly debited in 1906.
The following three facts will perhaps bring clearly home to the mind of the reader the general nature of the results obtained by the financial administration of Egypt since the British occupation in 1882.

In the first place, I have to record that, up to 1888, either a deficit was annually incurred, or else financial equilibrium was preserved with the utmost difficulty. Then the tide turned. During the eighteen years from 1889 to 1906, both inclusive, the aggregate surplus realised by the Egyptian Treasury amounted to more than 27½ millions sterling.

The second fact which I have to record is no less striking. During the twenty years preceding December 31, 1906, extraordinary expenditure to the extent of £E.19,303,000 was incurred on railways, canals, and public buildings. Of this large sum, only £E.3,610,000 was borrowed. The remainder was provided out of revenue. Moreover, on December 30, 1906, a Reserve Fund of £E.3,050,000 stood to the credit of the Commissioners of the Debt. The Reserve Fund of the Egyptian Government amounted on the same date to £E.11,055,000, of which only £E.2,353,000 had at that date been engaged for capital expenditure. Both of these Funds, amounting in the aggregate to £E.14,105,000, were provided out of revenue.

In the third place, I wish to draw attention to the facts and figures relating to the indebtedness of Egypt. In 1883, the capital of the Debt, which was then held exclusively by the public, amounted to £96,457,000, and the charge on account of interest and sinking fund to £4,268,000. Since then, the Guaranteed Loan, which amounted to £9,424,000, has been issued; £4,882,000 has been borrowed for the execution of public works, and for the commutation of pensions and of allocations to
the Khedivial family. The conversion operation of 1890 added £3,904,000 to the nominal capital of the Debt. In all, £18,210,000 has been added to the capital of the Debt. On the other hand, the Daira Loan, which in 1883 amounted to £9,009,000, has been entirely paid off. The Domains Loan, which in 1883 amounted to £8,255,000, has been reduced to £1,316,000. The Guaranteed Loan has been reduced to £7,765,000, a reduction of £1,659,000 from the original amount.

On December 28, 1906, the outstanding capital of the Debt in the hands of the public amounted to £87,416,000. The charge on account of interest and sinking fund borne by the taxpayers was £3,368,000. There has, therefore, in twenty-three years been a reduction of £9,041,000 in the capital of the Debt, and of £900,000 in the charge on account of interest and sinking fund.

These facts and figures speak for themselves. Considerations of space preclude me from describing in detail the beneficial results which have accrued to the population of Egypt in every direction from the substitution of a sound fiscal policy for the oppressive and ruinous system of government to which they were formerly subjected.

I may, however, allude to one point of special importance.

Lord Dufferin, writing in 1883, alluded to "the encumbered condition of a considerable proportion of the fellaheen lands" as "one of the most distressing subjects connected with the present social condition of the country." There was a tendency, he added, "for the land to pass out of the hands of the present owners into those of foreign creditors."

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1 In addition to this, stock to the amount of £8,760,000 was held by the Egyptian Treasury and the Commissioners of the Debt. This stock will be gradually sold, and the proceeds of the sales expended on remunerative public works. In the meanwhile, the interest is, of course, credited to the Egyptian Government.
There can be no doubt of the very great importance of the question to which Lord Dufferin drew attention. In the first place, as Lord Dufferin very truly remarked, a transfer on a huge scale of the landed property of the country to foreign creditors "could scarcely take place without producing an agrarian crisis (Lord Dufferin might also have added, a political crisis) which would prove equally disastrous to the creditors, the debtors, and the Government." Then, again, the arguments in favour of small holdings apply with somewhat special force in Egypt. Owing to the fact that there is not generally any serious congestion of the population, competition rents have not as yet resulted in any grave strife between landlords and tenants. Nevertheless, as the population increases, and the area of cultivable but uncultivated land diminishes, there will be, to say the least, a risk that issues will eventually arise between landlords and tenants, somewhat similar to those which have caused so much trouble in other countries—notably in India and in Ireland. The best way to postpone this strife, as also to mitigate its intensity should it eventually prove to be inevitable, will be to avoid the adoption of any measures which will tend towards the disappearance of the small proprietors.

The political arguments in favour of this policy are no less strong than those of a purely economic character. I know of no measure more calculated to destroy any hopes that the Egyptians will eventually become really autonomous, and that they will exercise whatever self-governing powers they may some day acquire in the interests of the whole community, than the displacement of the small proprietors, more especially if the large landowners, who would take their places, were, to any excessive degree, of European nationality.
The policy which has been persistently pursued by the Egyptian Government of recent years has, therefore, been to endeavour, by a variety of indirect but perfectly legitimate means, to maintain the small proprietors in the possession of their holdings, and, whilst affording all reasonable facilities for the employment of European capital in land development, to do nothing which would tend towards ousting Egyptian proprietors and substituting Europeans in their places.

Of these means, the improvement in the system of irrigation has perhaps been the most important and the most productive of result. The establishment of an Agricultural Bank, which has advanced sums amounting in the aggregate to about £9,000,000 in small sums to the fellaheen, and of Agricultural and Horticultural Societies, which have been the means of spreading a knowledge of scientific agriculture and horticulture, and have also facilitated the purchase by the cultivators of good seed and of manure, have also been potent influences acting in the same direction.¹

There can be no doubt that these efforts have been crowned with success. On January 1, 1907, only 665,226 acres were held by 6021 foreign landowners,² as against 4,765,546 acres held by 1,224,560 Egyptian proprietors. Of the latter, the holdings of 1,081,348 proprietors were of less than 5 acres in extent; the holdings of 132,198 varied from 5 to 50 acres, thus leaving 11,054

¹ Full descriptions of the creation and working both of the Agricultural Bank and of the Agricultural and Horticultural Societies are given in the Annual Reports which have been laid before Parliament.
² For further details up to December 31, 1905 see Egypt, No. 1 of 1907, p. 50. A great deal of the land now held by foreigners belongs to Land Companies. It will eventually be sold. One of the highest authorities on this subject in Egypt (the late M. Felix Suaires) assured me that he was convinced that, before many years had passed, almost the whole of the land in Egypt would be in the hands of Egyptians.
proprietors of more than 50 acres. It may, I think, be confidently stated that the danger, which Lord Dufferin apprehended, has been averted.

Finance is often considered a repellent subject, and, because it is repellent, it has gained a reputation for being more difficult to understand than is really the case. There are, indeed, some few economic and currency questions which are abstruse, but the difficulty of understanding even these has been in no small degree increased by the cloud of words with which writers on subjects of this sort often surround issues in themselves simple. One merit of the Egyptian financial situation was this, that no semi-insoluble economic problem lurked between the leaves of the Budget. The Finance Minister had not, as in India, to deal with a congested population, of whom a large percentage were in normal times living on the verge of starvation. He never had to refer to the pages of Malthus or Mill, of Ricardo or Bastiat. The complications arising from a bewildering political situation had done a good deal to obscure the problems which he had to solve, and to hinder their solution. But, in truth, all that was required in Egypt, in order to understand the situation, was a knowledge of arithmetic, patience to unravel the cumbersome system of accounts which was the offspring of internationalism, and a sturdy recognition of the fact that neither an individual nor a State can with impunity go on living for an indefinite period above his or its income.

The main facts relating to Egyptian finance, when once the thread of the international labyrinth had\(^1\) been found, were, in fact, very simple; when

\(^1\) I use the past tense because, with the practical abolition of the Caisse de la Dette, the financial situation, and notably the system of accounts, has been very greatly simplified.
they were understood, they were not uninteresting. "Nothing," as Lord Milner truly says, "in this strange land is commonplace." The subject cannot surely be devoid of interest when it is remembered that the difference between the magic words surplus and deficit meant whether the Egyptian cultivator was, or was not, to be allowed to reap the fruits of his labour; whether, after supplying the wants of the State, he was to be left with barely enough to keep body and soul together, or whether he was to enjoy some degree of rustic ease; whether he was to be eternally condemned to live in a wretched mud hut, or whether he might have an opportunity given to him of improving his dwelling-house; whether he should or should not have water supplied to his fields in due season; whether his disputes with his neighbours should be settled by a judge who decided them on principles of law, or whether he should be left to the callous caprice of some individual ignorant of law and cognisant only of bakhshish; whether, if he were ill, he should be able to go to a well-kept hospital, or whether he should be unable to obtain any better medical assistance than that which could be given to his watch-dog or his donkey; whether a school, in which something useful could be learnt, should be provided for his children, or whether they should be left in the hands of teachers whose highest knowledge consisted in being able to intone a few texts, which they themselves only half understood, from the Koran; whether, if he suffered from mental aberration, he should be properly treated in a well-kept Lunatic Asylum, or whether he should be chained to a post and undergo the treatment of a wild beast; whether he could travel from one part of the country to another, or communicate with his friends by post or telegraph, at a reasonable or only at a prohibitive cost; in fact, whether he, and the
ten millions of Egyptians who were like him, were or were not to have a chance afforded to them of taking a few steps upwards on the ladder of moral and material improvement.

This, and much more, is implied when it is stated that the British and Egyptian financiers arrested bankruptcy, turned a deficit into a surplus, relieved taxation, increased the revenue, controlled the expenditure, and raised Egyptian credit to a level only second to that of France and England. All the other reforms which were effected flow from this one fact, that the financial administration of Egypt has been honest, and that the country, being by nature endowed with great recuperative power, and being inhabited by an industrious population, responded to the honesty of its rulers. It may be doubted whether in any other country such a remarkable transformation has been made in so short a time.
CHAPTER LIV

IRRIGATION

Nature's bounty to Egypt—The work of the Pharaohs—Turkish neglect—Progress under British guidance—Programme of the future—Causes of the progress—Qualifications of the officers selected—Absence of international obstruction—Loan of £1,800,000—Support of the public—Importance of the work.

"If you dispute Providence and Destiny," says an ancient author, "you can find many things in human affairs and nature that you would suppose might be much better performed in this or that way; as, for instance, that Egypt should have plenty of rain of its own without being irrigated from the land of Ethiopia." 1 It may be doubted whether nowadays any one would be inclined to dispute Providence and Destiny on this ground. Indeed, the extraordinary fertility for which Egypt has from time immemorial been famous, which made Homer apply to it the epithet of ζητεωρος, and which led Juvenal to sing of the divitis ostia Nili, is mainly due to the fact that its fields are not irrigated by the rain which falls within its own confines, but by the vast stores of water which sweep down the Nile from the centre of Africa. In no other country in the world may the agriculturist be so surely guaranteed against the accidents and vicissitudes of the seasons. It is true that if the Nile is unusually high or low, the

1 Strabo, Book iv. e. i.

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cultivator is or, at all events, was exposed, in the one case, to the evils of inundation, and in the other case, to those of drought. But there is this notable difference between risks of this nature and those incidental to the cultivation of the fields in countries which depend for their water-supply on their own rainfall, namely, that whereas no human effort can increase or diminish the quantity of rain which falls from the clouds, it is, on the other hand, within the resources of human skill to so regulate the water of the Nile flood as to mitigate, if not altogether to obviate, any dangers arising from an insufficient or an excessive supply of water. In this highly favoured country, Nature seems to have said to Man: I grant you the most favourable conditions possible under which to till the soil,—a genial climate, an assured supply of water, and a natural fertilising element, which, with scarcely an effort of your own, will every year recuperate the productive powers of the soil; it is for you to turn to advantage the gifts which I have lavished on you.

How did Man utilise his advantages? In the early days of Egyptian civilisation, he made great and creditable efforts to turn them to account. "It is certain," says Colonel Ross, "that in old days, there must have been native engineering talent of the very highest order, and when we read of such and such a King restoring public works in a long and glorious reign, there must have existed a continuous supply of good engineering talent which had carte blanche from the ruler of the day."¹

The Pharaohs, it would thus appear, used their talent according to the best of their lights. The Turks, who ultimately succeeded them, hid theirs in a napkin, with the result that Nature, indignant at the treatment accorded to her, minimised the

¹ Colonel Ross's Introduction to Willcocks' Egyptian Irrigation, p. vi.
value of her gifts and exacted penalties for the neglect of her laws. In later Mohammedan times, no serious efforts were made to avert drought or inundation. The general condition of Egyptian irrigation at the time when England took the affairs of the country in hand, was thus described by Colonel Ross:

"There can be no manner of doubt that, up to 1882, Egyptian irrigation was going downhill. Every year, some false step was taken in spite of the engineer. Every year, the corvée lost ground in its out-turn of work, drains were abandoned or became useless, and canals became less of artificial and more of natural channels wholly influenced by the natural rise and fall of the Nile. . . . Owing to many causes, the native talent has sunk so low that, without modern scientific aid, the Egyptians could not work their own canals. They have sunk into a dead conservatism. . . . The absence of repairs, so common to all Mohammedan countries, and the existence of the corvée, or forced labour, have also largely contributed to the lowering of the standard of Egyptian engineers' design and method."

Here was a grand opportunity for the Englishman, and nobly did he avail himself of it. Considering the importance of the subject, and the pride which every Englishman must feel at the splendid results obtained by those of his countrymen whom Lord Milner rightly terms "the saviours of Egyptian irrigation," a sore temptation exists to deal with this matter in some detail. On the other hand, it is desirable to abridge this work; moreover, the subject has been already treated by a highly qualified writer. The lassitude which pervades both man and beast in Egypt during the hot months, when the land is baked by the fiery African sun and windswept by the scorching khamsin; the general relief experienced when the
Nile begins to rise; the anxiety to know whether the water will pass the level of those "low cubits" which, it is said, were designated by the Arabs "the angels of death";¹ the fear lest Nature should be too prodigal of her gifts and destroy by excess what, it was hoped, she would have bestowed by moderation; the revival of the whole country when the waters retire and the earth begins to yield forth her increase; all these things have been admirably related by Lord Milner in a chapter of his work, entitled *The Struggle for Water*. He has also described the care, the watchfulness, and the untiring energy displayed by the British engineers in their endeavours to direct and bridle the forces of Nature. At one time, water had to be economised and hydraulic skill exercised to make the most of a scanty supply. Again, at other times, constant vigilance was required to guard against inundation. During the season of low Nile, a system of rotations was adopted, under which the limited supply of water was turned to the best advantage in the interests of the entire population. The privileged classes learnt to their dismay that the rights of their humble neighbours must be respected. The Barrage—a work which owed its origin to the genius of a French engineer—was, in spite of strong opposition, repaired and rendered capable of doing excellent service.² New canals were

¹ "With good reason the Arabs designate the low cubits by the name of the "angels of death," for, if the river does not reach its full height, famine and destruction come upon the whole land of Egypt." —Mommsen’s *Provinces of the Roman Empire*, vol. ii. p. 252.

² When the works at the Barrage were in course of construction, I visited them in company with Ali Pasha Moubarek. He was at that time Minister of Public Works, and had passed many years of his life in the service of that Department. He strongly opposed Sir Colin Scott-Moncrieff’s plan for repairing the Barrage, and was in favour of the costly and wasteful alternative of erecting huge pumps. He remarked to me casually on his way down the river that he had not visited the Barrage for twenty-seven years. He was quite unconscious of the criticism on his own conduct which this admission involved.
dug. A variety of useful works were executed in Upper Egypt to guard against the effects of a low Nile. Drainage went hand in hand with irrigation. Before the British engineers had been at work ten years, the cotton crop was trebled, the sugar crop more than trebled, and the country was being gradually covered with a network of light railways and agricultural roads in order to enable the produce to be brought to market.

Much, however, as the British engineer has done for Egypt, his work is not yet complete. The whole of the cultivable lands in Egypt are not as yet brought under cultivation. In order to attain this object, it is estimated that it will be necessary to store about four million cubic metres of water. The magnificent dam constructed at Assouan, which has already rendered invaluable service to the country, is capable of storing one million cubic metres. Works are now in course of execution which will increase its storage capacity to about $2\frac{1}{4}$ millions of cubic metres. It is not as yet decided how any further supply will be obtained, but a general sketch of the projects which are worthy of consideration has been given in Sir William Garstlin's masterly report of March 1904. Probably, I shall not be far from the mark if I say that, in the course of the next fifteen or twenty years, some twenty millions sterling may profitably be spent in improving the Egyptian and Soudanese systems of irrigation.

1 The question of the extent to which the area of cotton-bearing land is capable of increase was examined in some detail in my Report for the year 1906. See Egypt, No. 1 of 1907, pp. 45-47.
2 To give one example, it is estimated that the conversion, which is now nearly complete, of 404,470 acres of land in Middle Egypt from a system of basin to one of perennial irrigation will increase the rental value of those lands by no less than £E.2,022,350, and the sale value by £E.28,312,900.—Annual Report of the Irrigation Department, 1906, p. 178.
3 See Egypt, No. 2 of 1904.
When, eventually, the waters of the Nile, from the Lakes to the sea, are brought fully under control, it will be possible to boast that Man—in this case, the Englishman—has turned the gifts of Nature to the best possible advantage.

The operations of the Irrigation Department have, in fact, been singularly successful, perhaps more so than those of any other Department of the Government. To what causes may this success be attributed?

It has, in the first place, been due to the high character and marked capacity of the British engineers, who were chosen with the utmost care. The superior officials of the Irrigation Department came from India, a country which affords an excellent training for the hydraulic engineer. Armed with the previous knowledge which they had acquired, they studied the various problems which Egyptian irrigation presented for solution, and proposed nothing until they had obtained a thorough mastery of the facts with which they had to deal. So far as I know, they have never yet made a serious mistake.

But the qualifications of the individuals, high though they were, would have availed but little had not their labours been exerted in a sphere where adventitious circumstances were favourable to success.

The first of these circumstances was that, relatively to some other branches of the Egyptian service, the Public Works Department was from the first freed from the incubus of internationalism. It is not to be supposed that the actions of the British engineers were not in some degree hampered by the meshes which an obstructive diplomacy had, with perverse ingenuity, flung over the whole governmental machine of Egypt. Any such supposition would be erroneous. Ubiquitous inter-
nationalism, by imposing a fantastic financial system on the country, and by secreting for many years the economies resulting from the partial conversion of the Debt, limited the funds which it was possible to place at the disposal of the British engineers, and thus diminished their power of doing good. More than this, that duality, which was the bane of the Egyptian administrative system, existed at one time in the heart of the Public Works Department, but fortunately in a relatively innocuous form. This duality was, however, abolished at an early period of the occupation. It was felt that, in view of the importance of the Irrigation Department, it should be exclusively in British hands. "It is evident," Lord Dufferin wrote in 1883, "that the present irrigation service of Egypt is wanting in intelligent direction and honest and efficient inspection. . . . Egypt is so similar to many of the irrigated districts in India that it is only natural to turn to that country for advice."

Thus, the British engineers were left free to design and to execute their own plans for the canalisation of the country. They were spared the calamity of having to deal with an International Board. They could decide on the construction of a canal without having to consider whether the policy of Great Britain in the Pacific or Indian Oceans was viewed with favour at Berlin or Paris. This was a great negative advantage. The comparative freedom of action accorded to the British engineers contributed in no small degree to the success which attended their operations.

In one other respect, the British engineers were fortunate. However remarkable may have been their professional skill, and however sound their plans, it is obvious that they could have done nothing without money. Funds were fortunately
provided for them. When the London Conference on the financial affairs of Egypt took place in 1884, it was proposed to borrow £1,000,000, to be applied to the improvement of the irrigation system of the country. The proposal met with a good deal of opposition. Doubts were at the time expressed by competent British authorities as to the wisdom of adopting this course. Those doubts were based on reasonable grounds. Excessive borrowing had brought Egypt to the verge of ruin, and it was pointed out that to increase the debt of a State which was then in a well-nigh bankrupt condition was, at best, a hazardous experiment. Others, who had more confidence in the future of Egypt and in the elasticity of its resources, were in favour of a bolder policy. They supported the view which, it must be admitted, at the time appeared somewhat paradoxical, that the best way to relieve the country from the burthen of a crushing debt resulting from loans, the proceeds of which had been to a large extent squandered, would be to contract a further loan, and to apply the money thus obtained to developing the resources of the country. After a sharp struggle, this latter view prevailed. A sum of £1,000,000 for irrigation purposes was included in the loan contracted for the payment of the Alexandria indemnities and other purposes. In 1890, an additional sum of £800,000 was placed at the disposal of the Public Works Department for irrigation and drainage works.

In my Report for 1891, after describing the extent to which the productive powers of the country had been increased by irrigation, I added:—

"The policy of increasing the debt of Egypt, which was adopted seven years ago, has been amply justified. I should be the last to wish that the facts which I have narrated above should be
used as a justification for reckless borrowing, but they certainly do show that cases may arise in which a quasi-bankrupt State, if it be possessed of great natural resources, may be placed in a position of solvency by adding to its debt, provided always that the money borrowed be judiciously applied. In cases of this sort, the main difficulty generally is to ensure the execution of the proviso. So far as Egypt is concerned, I have no hesitation in saying that the expenditure of this £1,800,000 on irrigation and drainage has contributed probably more than any one cause to the comparative prosperity that the country now enjoys. It ensured the solvency of the Egyptian Treasury, and until this was done, no very serious effort was possible in the direction of moral and material progress."

Lastly, when once his value had been recognised—that is to say, in a very short space of time—the British engineer secured the support of Egyptian public opinion. The facts were, indeed, so strong as to bring conviction to the minds of the most prejudiced and sceptical. The fellah might fail to realise the utility and insignificance of some of the reforms instituted under British tutelage, but he knew the value of water to an extent which can perhaps scarcely be appreciated by inhabitants of northern countries. No amount of misrepresentation could persuade him that the man who brought to his fields, in a measure surpassing his wildest expectations, the element for which he thirsted, was not his benefactor.

Till taught by pain,

Men really know not what good water's worth.¹

The British engineer, in fact, unconsciously accomplished a feat which, in the eyes of a politician, is perhaps even more remarkable than

¹ Don Juan, ii. 84.
that of controlling the refractory waters of the Nile. He justified Western methods to Eastern minds. He inculcated, in a manner which arrested and captivated even the blurred intellect and wayward imagination of the poor, ignorant Egyptian fellah, the lesson that the usurer and the retailer of adulterated drinks are not the sole products of European civilisation; and, inasmuch as he achieved this object, he deserves the gratitude not only of all intelligent Asiatics, but also of all Europeans—of the rulers of Algiers and of Tunis as well as those of India.