CHAPTER II

EDUCATION AND THE PENETRATION OF WESTERN CULTURE IN EGYPT FROM 1798 TO 1848

The French Occupation

The French invasion in 1798 is the turning point in the history of modern Egypt. This event suddenly brought the Egyptians into contact with a disciplined Western military organisation with up-to-date equipment and accompanied by the pick of France’s scholars and experts.

The French forces in the field had no difficulty in defeating the Mamlûk soldiery, a defeat so disastrous in fact, that the Mamlûk power was never able to recover its hold on the country. The occupation that followed lasted for about three years. During this time, the French were so much engaged in further fighting and putting down insurrections that they had little time to take an active part in the intellectual life of the Egyptians.

Much has been claimed by the French and for them on account of the cultural work carried by the French savants and embodied in that famous collection La Description de l’Egypte but their research work was for the benefit of European learning and not for the enlightenment of the Egyptian people. Moreover, the members of the institut d’Egypte were Frenchmen; there was no provision for the membership of Egyptians nor were Arabic studies organised except for the advantage of the French themselves; and as soon as the army was evacuated, the institut ceased to exist.

The invasion was an act of aggression and it was not in the nature of things that the Egyptians should take an interest in any of their aggressors’ institutions, most of which, were bound up with military life or were thought by the Egyptians to be so. The institut set up by Napoleon was, in fact, visited by Egyptians, but merely out of curiosity, al-Jabarti gives a long account of a visit to the library and other departments ¹ of the institut which left a good impression on him, especially when he saw the collections of books in various languages with which the French soldiers reading them and the scientific instruments with which the chemists experimented. But he ends up his description with the following words, “... things which minds like ours cannot comprehend” to show how hopelessly it was beyond him. Bouhienne gives another account of a visit by Shaikh al-Bakri in the following terms “The art of imposing on mankind has, at all times, been an important part of the art of governing; and it was not that portion of the science of government which Bonaparte was the least acquainted with. He neglected no opportunity of shewing off to the Egyptians the superiority of France, in arts and sciences; but it happened oftener than once, that the natural instinct of the Egyptians thwarted his endeavours in this way. Some days after the visit of the fortune-teller, he wished, if I may so express myself, to oppose conjurer to conjurer. For this purpose, he invited the principal Sheiks to be present at some chemical experiments performed by M. Berthollet. The General expected to be much amused at their astonishment; but the miracles of the transformation of liquids, electrical commotions and galvanism did not elicit from them any symptom of surprise. They witnessed the operations of our able chemist with the most imperturbable indifference. When they were ended, the Sheikh El Bekry desired the interpreter to tell M. Berthollet that it was all very fine; “but,” said he, “ask him whether he can make me be in Morocco and here at one and the same moment?” M. Berthollet replied in the negative, with a shrug of the shoulders. “Oh! then,” said the Sheikh, “he is not half a conjurer.”

French Schools

Apparently, two schools were established by the French authorities during the occupation for the children of French parents; they also had the idea of setting up a school of drawing, but they do not appear to have done anything in

² Zaid, Tadhkik Asal al-Lughat al-Arabiyyah, Vol. IV, 15 and Tadhkik Missir, Vol. II, 186, al-Jabarti states that Laporte was Elas Madrasat al-Mohlab—probably this was one of the schools opened by the French (III, 154 line 12, VI, 309). There are references to Laporte who was a printer in Journal de Nouveaux sur l’expédition d’Egypte by Villiers du Terrage, Paris, 1829, pp. 7, 34 and 350. This Laporte died in 1799 while al-Jabarti’s reference is under the year 1800.
The study of education and the matter. A report was also made to Bonaparte on the opening of a civil hospital which was to have become a school of medicine and in which natives were to have been trained. The students were to have a knowledge of French and in order to acquire this knowledge, a kind of primary school was to have been established where the elements of the arts and sciences were to have been taught in French, but here again, the plan did not come to anything. In any case, the French were not very optimistic about immediate results of such an enterprise.1

Military Reforms under the French

If the French made no attempt to teach the Egyptians, they did not fail to experiment with local man power for military purposes; Maghribi soldiers were organised according to the French system and were drilled by French officers, the words of command being given in French. Through Ya'qūb, who was appointed General of the Copts, a levy was made of about two thousand of his co-religionists in Upper Egypt; these levies were dressed in French uniform, trained and attached to the French army.2

Young Mamluks between the ages of sixteen and twenty were also enrolled in the French army and, according to Reyraud, made excellent soldiers.3 Nikālī (Nicolas), admiral of Murād's fleet was also taken into the service of the French with other Greeks4 while Barthelemy, who had been an artilleryman5 in the service of Muhammad Bey al-Alī, was made a police chief6 and had a retinue of Mamluks. Turks were also formed into companies in order to police Cairo and the suburbs7 while Syrians were employed as interpreters.8

3 Politis, op. cit., I/123.
4 There were also Syrian and Coptic battalions but the Greek seemed to be the most important one (Politis, I/142-6); many of the men who had joined these auxiliary regiments went to France where they were formed the Cie des Études d’Orient (Politis, I/199) and it is interesting to note in Rifa‘al’s Tābih al-Irāqī fi Tābih al-Bābīrā that he met some of them in Marseille together with other refugees in 1826 (see page 36 of the 1848 edition). Rifa‘al states that there were few Muslims left as they had either died or had turned Christian especially the Georgian and Circassian.
5 Politis states that he had been a porter.
7 Politis, Ibid., I/122.
8 Carali, op. cit., I/39–90.

Literature in Modern Egypt

Printing

It cannot be claimed that the printing-press confiscated by Bonaparte from the College of the Propaganda in Rome 1 and placed under the directorship of J. J. Marcel published anything that could affect Egyptian culture advantageously; apart from the proclamations printed by the French, the press turned out about twenty publications, mostly for the use of the French themselves.8

In addition to the press under Marcel’s control (it included type for the printing of Arabic, Turkish, Persian, Greek and European languages), there was also another press under Marc Aurel9 where the first numbers of the Courrier de l’Égypte were printed. Aurel’s press was afterwards amalgamated with Marcel’s and from that time the Courrier de l’Égypte together with the other publications was printed by Marcel with the collaboration of Aurel.4

1 The Maronite translators attached to the college were also taken to Egypt for work in the printing department of the Army of Occupation; these together with other employees received fixed salaries varying from 300 to 500 francs a month. The most important names mentioned are Ilyās Fatḥallāh and Yūsuf Mushābī (they probably helped Marcel to translate the proclamations into Arabic), see Carali, op. cit., I/39, and references under. Tarrāfīt is wrong in stating that this press was brought from Paris—see Tarrāfīt as-Ṣāliḥī, al-ʿArabiyah, Beyrūt, 1913, Vol. I, p. 45.


1. Alphabet arabe, turk et persan. 1798.
2. Exercices de lecture d’arabe littéral. 1798.
3. Courrier de l’Égypte. 1798.
5. La Décalogue Égyptienne. 1799.
6. Description dell’ alfabeto, by Antonio Savarri. 1799.
7 and 8. Annuaire de la République française. 1799.
8. Fables de Logeman. 1799.
11. Annuaire de la République française. 1799.
12. La Décalogue Égyptienne. 1799.
13. Constitution de la République française. 1799.
15. Tarnībch. 1800.
17. Amnawat al-République française. 1800.
18. Tarnībch fi waṣikha da el-ṣalāyat. 1800.
19. La Décalogue Égyptienne. 1800.
21. Grammaire arabe vulgaire. 1801.
22. Tarrāfīt states that Aurel went to Egypt with Marcel as a simple employee but he appears to have been sent with a press from Paris purposely for the publication of a newspaper. He styled himself Imprimer de Paride.
23. Aurel took the printing press back with him to Paris where it was used for the publication of Oriental works (see al-Ḥifūl—as above—p. 109, and Bulletin de l’Institut Égyptien, 50 Série, Tome I, année 1908, p. 106).
THE STUDY OF EDUCATION AND

Newspapers

The Courrier de l’Egypte was the first newspaper to be published in Egypt and was intended for sale to the French; it contained notices of political events and news from Europe. The Décade Égyptienne, called a journal littéraire et d’économie politique was more in the nature of a scientific and literary journal which contained papers on Egyptian matters.1 The first volume contained papers on the project for opening the school of drawing,2 and the agricultural establishment,3 on the management and produce of the lands of Damietta,4 a translation of the opening chapter of the Korân,5 an extract from an Arabic geographical work,6 and a report on the Bimâristân.7 The second volume contained a paper on the opening of the school of medicine,8 another on Coptic convents 9 and Marcel’s paper on the Fables of Loûmân,10 while the third volume gave another paper on agriculture and commerce in Upper Egypt,11 a paper on the baking of bread,12 and another on the palm tree,13 the letters exchanged between the Dëwân and Degenesettes regarding the acceptance of the work on small pox,14 a memoir on administration in Egypt,15 and a paper on the military education of the Mamlûks.16

There is another vague reference to a kind of bulletin which was printed daily in Cairo and sent out to the troops in the town and in the provinces. The events were recorded by Ismâ’il al-Khareshiäh,17 but who translated them into French for the troops it is impossible to say.18 It is of interest to note that there is no

1 References to these two newspapers can be found in Târîkh, op. cit., p. 45, Zâlîdan, Ta’rîkh Adâb al-Lughat al-Arabiyah, IV, 172, and Elgood, Bonaparte’s adventure in Egypt, note page 146 and p. 171. Degenesettes and then Courrier were the editors of these newspapers; 110 numbers of the Courrier appeared while there were three volumes of the Décade.

2 I 191.

3 I 194.


5 I 297.

6 II 5-9.

7 II 111.

8 II 120 and 248.

9 III 79-105.

10 III 106-110. This work was translated from the Arabic (see note No. 18 in the list of works published by the French, 1 9) by Don Raphael de Mouchis and it is the only work that al-Jabarti mentions in his Annals (III, 111-113). Except for the Tanhûb, he says that it was a quite a good little book (Risâlah la dâr sa bihâ fi bâbihâ). There is no evidence that the work had any circulation.

11 III 105-230.

12 III 239.

13 al-Jab., IV 238-239.

14 Târîkh, op. cit., pp. 46-49, states definitely that it was an Arabic journal called Al-Hindâbî al-Lughatí with no other authority but the above from al-Jabarti. Zâlîdan, op. cit., IV 172, calls it the Tanhûb. Apparently Menou wished to start an Arabic newspaper and to call it the Monument du monde but his choice found a native editor, see Histoire scientifique de l’Expedition francaise en Egypte, Paris, 1800—33. Vol. XVIII, pp. 87-9, where Menou and his enterprise are referred to in the

100

LITERATURE IN MODERN EGYPT

specimen of any such bulletin in the Collection Marcel preserved in the Institut Égyptien in Cairo.

Egyptian Learning and the Occupation

The French invasion and occupation of Egypt had a distinctly adverse effect on learning in Egypt; madrasah life was disorganised and during the three years’ occupation, al-Jabarti no longer gives us the long and interesting biographies of ‘ulamâ’ who died, but he gives us brief mentions of those who were executed by the French and references to those who left Cairo altogether and went to the provinces.3 But Napoleon who, up to the revolt, had tried to make use of the shâikhs to suit his own ends, must have failed to understand them; he certainly seemed to have under-rated their abilities to stir up the people against him and he relied too much on flattery.4 Nevertheless, al-Azhâr never regained its former prestige after the revolt especially in view of Napoleon’s changed attitude towards it,5 while subsequent events showed that others were not slow to make use of the lesson taught by the French that the shâikhs could be used as a stepping-stone to gain control over the people and could also be set aside without much fear of reaction.

Muhammad ‘Alî’s advent to Power

"Tous les peuples de l’empire ottoman étant essentiellement guerriers, il ne faut pas s’étonner que tout principe d’instruction et de civilisation doive se rapporter à ce qui constitue l’éducation militaire; on ne peut commencer par la toute tentative. Ils ne comprennent pas les peuples à eux que sous ce point de vue. Je vous le dis une fois pour toutes, afin que vous ne soyez pas surpris des premières directions données aux idées par les Européens."


following terms: “Un jour il (Menou) se réveilla avec l’idée de fonder un Moniteur arabe, idée réalisée depuis par Mouhammed-‘Alî. Une seule chose l’arrêta, la choû ou un rédacteur indigène. On avait bien trouvé, parmi nos orientalistes et nos interprètes, des hommes capables de réaliser ce projet, Belletête, Marcel, dom Rafael; mais pas un chevât ne le comprit ou ne voulut le comprendre et Menou d’ailleurs, saisant d’une idée à une autre, oublia bientôt celle-là.”

1 See Lane, Modern Egyptians, p. 215. "Learning was in a much more flourishing state in Cairo before the entrance of the French army than it had been of late years. It suffered severely from this invasion; not through direct oppression, but in consequence of the panic which this event occasioned, and the troubles by which it was followed."

2 ab-Jab., III 105-110.


4 For Napoleon’s reasons for making use of the shâikh class see Shaykh Gharbal, op. cit. p. 9 and Napoleon’s Campagnes d’Egypte, II, 151 sqq.

5 Elgood, op. cit. p. 161.
THE STUDY OF EDUCATION AND

The six years following the French occupation were eventful ones. This is not the place to describe in any kind of detail the way by which Muhammad 'Ali climbed to power. He had come to Egypt with the Turkish army, an unknown officer in a corps of Albanians, and, with the withdrawal of the Turks, he happened to be one of the two chiefs left behind with the Albanians. His military position, however, gave him some prestige and helped him to come to the fore; and he could not avoid being drawn into local politics. He first sided with the Mamlūk party and then with the Turkish governor, then his successful intrigues first against Khusrur Pasha and finally against Khurshid Pasha left him in a dominant position in the Capital, supported by the 'ulamā' who had been won over in the meantime. The Sublime Porte, realizing its impotency in Egyptian affairs, had to accept the position and Muhammad 'Ali was solemnly installed as Governor of Egypt in April, 1806.

Although the period just mentioned did not lend itself to the peaceful resumption of normal life, some attempts were made to try various commanders to reorganize the military resources at their disposal, a fact which shows the spirit of the times whether the inspiration came from Turkish ideas or from French example.

Al-Alfi Bey and Husain Kāshīf al-Yahūdī (al-Afranjī), both seem to have been inspired by the direct example of the French, for both of them organised forces and tried to copy European uniforms and methods of drill and formation. Khusrur, however, who had come from Constantinople, was a compatriot of Kāshīf Husain Pasha, the brother-in-law of Salīm III, and both Khusrur and Husain had the reputation of being zealous reformers. He appears to have brought his ideas of reform with him for we find him enlisting into his service all available Frenchmen; these he drafted into a special regiment of Mamlūks and placed under a French officer who instructed them in military exercises giving the words of command in French. Part of their uniform, however, was copied from Turkish models. The Pasha also formed a Sudanese regiment

and provided these soldiers with uniforms similar to those of the French, at the same time forming a special escort of negroes for himself under a French officer and a private guard of eighteen Frenchmen for his Hārin.

These efforts at military reform both in Egypt and also in Turkey, where the attempts to reorganise must have been known to Muhammad 'Ali, together with the experience of facing both French and English armies, were bound to have shown to Muhammad 'Ali the necessity of reform. His defeat of an English force in 1807, besides raising him in the estimation of the 'ulamā' and those who had supported him, would certainly have sufficed to fire his ambitions and to encourage him to adopt up-to-date means. Before he could make any headway, he had several obstacles to remove from his path, one was the power of the Mamlūks whom he massacred in 1811 thus making his position safe at least against local pretenders. Another obstacle was the lack of financial resources sufficient to support, in the first place, his turbulent Albanians who had stayed by him and had helped him climb to power and, in the second, to pay for the wars in which he was already becoming involved, to begin with, at the request of the Sūltān himself, and eventually for his own aggrandisement.

In fact, Muhammad 'Ali had hardly begun to consolidate his position when he was called upon by the Sūltān, Māhmed II, to send an army to Arabia to put down the Wahhābīs which occupied him from 1811 to 1819. Besides this campaign, however, he conquered the Südān in 1820 to 1822, engaged in the Sūltān's war with Greece from 1822 to 1828, invaded and conquered Syria from 1831 to 1834 and became involved in a conflict with the Sūltān from 1838 to 1841. The more Muhammad 'Ali became involved in war, the more did he realise his urgent need of money and of a fighting force that would be entirely under his will and not a source of danger and a menace to himself as were his Albanians.

It was during the first war that he decreed the confiscation of all property including the wakf property of the mosque of al-Azhar and the other mosques thus making himself the sole farmer of Egypt; it was the Arabian war that helped him to get rid of his troublesome Albanians and it was during this war that he began his long series of reforms which continued up to his last campaign which ended between 1840 and 1841.

1. Ibid., III/212-VII/112-3.
2. Ibid., III/222-VII/112-3, the Pasha gave the Turkish name to his reforms, viz: Niẓām jaddī (Niẓām-1-Jaddī—see art. Encycl. of Islam).
THE STUDY OF EDUCATION AND

By the end of the Arabian war, Muhammad 'Ali's financial plans were sufficiently well advanced to enable him to concentrate on his reforms, the most important of which were the re-organisation of his army and navy according to European models. But these brought in their wake other developments such as the establishment of arsenals, dockyards, factories, hospitals, military schools, agricultural departments, etc., all of which were essential to a country which was to maintain the huge fighting forces that Muhammad 'Ali had in mind.

Muhammad 'Ali's conquests were not only of the military kind; his commercial enterprise enabled him to become not only the ruler of the country, but also the sole merchant and farmer; it was the combination of his monopolisation of all the economic resources of Egypt and his ability to force on to the country a highly-developed military system that resulted in his thirty years meteoric career.

It is our object in this chapter to describe as fully as the authorities allow the reforms of Muhammad 'Ali in so far as they affected education and intellectual life, whether applied to his military organisation or to the civil population. There is plenty of information available but no effort has hitherto been made to put the material together in a comprehensive form, nor has any account been given of the ultimate fate of his institutions immediately after the signing of the London peace treaty in 1841 and of their effect upon the old-established institutions described in the preceding chapter.

In view of the fact that Muhammad 'Ali laid down the basis of the future social system of Egypt and that it is intended to carry this work right down to the present day, certain aspects of Muhammad 'Ali's innovations are worthy of close attention, so that the development may be traced in detail from one generation to the other. Perhaps by a true exposition of the facts, we may be able to understand how it is that the system of education in use in Egypt at the present day is so ill-adapted to the country and why it is so defective.

Muhammad 'Ali's First Education Missions and Schools

That Muhammad 'Ali had made up his mind at an early date to adopt entirely different methods of organisation is proved by his missions to Europe of young men. It was typical of him to send men of his own kind to Europe to see for themselves what was lacking in the country and what the Westerners

LITERATURE IN MODERN EGYPT

had to give and teach and what was suitable to the Turk's ideas of progress and reform rather than to depend solely on the advice of foreigners who happened to be in the country, on adventurers, or on special envoys sent from Europe as was done in Constantinople. The political situation as yet, hardly warranted his search for allies who might put him on the right road in return for inevitable concessions but, in spite of that, there is evidence that individual Italians—probably Rosetti for one—were consulted. Muhammad 'Ali in his choice of a country to which he could send his young men, it was to Italy that his first mission departed. Italy was probably chosen mainly for the reason that it was still not more than a geographical expression and consequently there were no fears of political influence, but on the other hand, the reasons may have been purely technical.

Muhammad 'Ali's greatest obstacle in his efforts to introduce reforms was the lack of qualified men especially in technical matters. There were no teachers or other kinds of professional men available in Egypt who could help Muhammad 'Ali to establish factories, arsenals and other technical departments or to open schools where Western learning could be given. He realised this handicap from the very beginning and in order to remedy it, he began sending missions of students to Italy as early as 1809, particularly to Leghorn, Milan, Florence and Rome in order to study military science, ship-building, printing and engineering. The first mission student was 'Uthmán Ef. Nūr-Addin who left Egypt in 1809 and spent five years at Pisa and Leghorn where he was sent at the instigation of Joseph Bokty, the Consul-General of Sweden; he then spent two further years at Paris and returned to Egypt in 1817.1 The names of the students of the earliest missions are, in most cases, impossible to trace, but one other important name has come

---

1 Lack of complete and accurate information about these early missions is due to the fact that there are few official records available for this early period owing to a fire which broke out in the Citadel in 1820, when many of the records were supposed to have been destroyed; see Deny, Sommaire des Archives turques, Cairo, 1930, pp. 15-17. For the above information on 'Uthmán Ef. Nūr-Addin, see R. Cattani, Le Régne de Mohamed Ali d'après les Archives russes en Egypte, Cairo, 1931, pp. 387-8. The other accounts of 'Uthmán Ef.'s education are all wrong, see Al-Amir 'Umar Tāshu', Al-Bīlā'īd al-'Inbīyād, Alexandria, 1934, p. 11, and 'Abd al-Rahmān ar-Rūfīt, ‘Ibrāhīm al-Habash al-Kaṣimiyyah, Vol. III, Brochii, Giornale esteso in Egitto, nella Siria e nella Nubia, Brescia, 1841-3, Vol. I, p. 160; Balboni, Gli Italiani nella Civiltà Egittana del Secolo XIX, Alexandria, 1956, Vol. I, p. 253, note 4; Pétites d'Avenel et Hiétendal, L'Egypte sous la domination de Méhémet-Ali, Paris, 1848, p. 142; al-Abrīn, 25th March, 1934, p. 7, art. by Husain Shafi'ī.
THE STUDY OF EDUCATION AND

down to us, that of Nikûlâ Musâbîki Efî, who was sent to Rome and
and Milan to study printing in 1815. Some students were
sent to England in 1818 to learn ship-building, the management of
ships and mechanics. The total number of students sent to
Europe up to 1818 was twenty-eight, and their total cost was
£30,000 up to 1826. There is no evidence of students having
been sent between 1818 and 1826, the date of the first large
education mission which is popularly called the first sent by
Muhammad 'Ali to Europe.

These early mission students stayed in Europe for about
four years. There are no lists of the twenty-eight students
who were sent, but from our sources, it would appear that
the following were amongst them in view of the functions they
were called upon to fulfill and which they could not have performed
had it not been for some kind of special training:

Ahmad Ef. Khalî; Muhammad Ef.: Mâhmd Bey; Ahmad Ef.
al-Muhandis; Amin Ef. al-Mîhâria; 'Uthmân Ef. Aghâ; 'Hasân Ef.

While Muhammad 'Ali was waiting for the return of his
officials, he was not idle. On 2nd August, 1815, with the help of
a certain 'Ibrâhîm Aghâ from Constantinople, he tried to
establish the nişâm jadîd in his army, but failed completely.
Had it not been for 'Abdîn Bey who informed Muhammad 'Ali of
a plot against him, he would have probably lost the power
he had taken so much trouble to attain; as it was, he only

1 Tûsin, op. cit., p. 10, ar-Râfî'i Bey, op. cit., III [432.
2 Zaidân, Ta'rikh dâhî al-thughîr al-arabîyân, IV [66, and ar-Râfî'i Bey,
op. cit., III [453.
3 'Artûn Pasha, L'instruction Publique en Egypte, Paris, 1890, Annexe E.
4 'Abdar-Rahmân ar-Râfî'i, op. cit., p. 435.
5 'Artûn Pasha, ibid., Annexe E.
6 'Abdar-Rahmân, for example, as above. Ilyâs al-Ayyûbi in his Ta'rikh Mîsir [ft
Ahd al-Mihâria Senûrî, Cairo, 1923, Vol. I, p. 170, gives the date of the first
mission as 1826—probably a printer's error.

These names are given here for the sake of reference; they will be referred to
below. Clot Bey refers to these early missions and makes the remark that
Muhammad 'Ali sent "surtout plusieurs jeunes musulmans pour y faire leur
the above names are those of Moslems and probably Turks, there were
certainly no Egyptians among them. Muhammad 'Ali's object was to form a
body of men capable of carrying out his orders in the various enterprises he
undertook.

2 Above p. 111, note 2. This term, literally new system, was given for every
kind of innovation introduced into the Turkish Empire from Selim III's
time but it generally meant simply the new army in Egypt.
3 See Douin, Une Mission Militaire auprès de Mohamed Ali, Cairo, 1923,

LITERATURE IN MODERN EGYPT

emerged from the crisis by making a number of promises about
paying up the soldiers' arrears and restoring the waqf property
to the mosques which, of course, he did not fulfill.

Between September and October, 1816, Muhammad 'Ali
opened a school in the Citadel under Hasan Efendi ar-Darwizh
al-Muṣâfî who was not an Egyptian, but probably an Arab
who had spent some time in Constantinople. He had travelled
extensively, knew several languages and was well versed
in mathematics and other branches of knowledge. He seemed
to have arrived in Egypt a short time before the opening of
the school, but long enough to get to know people of consequence.
He came to the notice of Muhammad 'Ali through teaching
calligraphy and arithmetic to some of the Pasha's Mamlûks.
According to al-Jabarti, Hasan Efendi eventually suggested
to the Pasha that he should be allowed to open a school where
the Pasha's Mamlûks could attend and also the sons of the
inhabitants of the town and Muhammad 'Ali, pleased with the
idea, agreed and gave an order for the school to be opened.
Muhammad 'Ali sent to England for mathematical, surveying
and astronomical instruments and to Constantinople for another
teacher (Rûbûl-addîn Efendi) who taught the Turkish-speaking
students arithmetic and geometry in their own tongue. But it
would appear that even this was a dangerous experiment for
Hasan Efendi was looked upon with suspicion and his calamiators
accused him of being an atheist and of being in possession of
a book by Ibn Râwandî against the Korân. The death of one
of his students whom he had struck brought about his final
degrace only nine months after he had been placed in charge of
the school, and Rûbûl-addîn Efendi was put in his place.

The number of students in this school was eighty, and all
were given a monthly allowance, clothed and fed. They were
chosen from amongst the young Mamlûks whom Muhammad
'Ali had attached to his person after the massacre of the Mamlûks.
The studies occupied the best part of the day, from sunrise
to sunset, and the pupils were taught reading, writing, the
Korân, Turkish, Persian, Italian, physical exercises, military
tactics, the use of arms and riding.

1 al-Jabarti, IV/255-IX/192-3 and IV/264-2-IX/207-8, and 'Abdar-
Rahmân ar-Râfî'i, op. cit., pp. 441-443.
2 al-Jabá, IV/251-IX/207, Artûn, op. cit., pp. 68-70 and Brocchi, ibid., p. 176,
who stated on the 12th December, 1822, "ma non si ammettono in esso che figh
di Turchi."
3 Amin Sâmil, al-'Alâm al-Misrî, Cairo, 1927, p. 7, and Ilyâs al-Ayyûbi,
THE STUDY OF EDUCATION AND

There was also another school in the Citadel called the Dār al-Handasah 1 made up from various other elements of the population, and it was to these that arithmetic, geometry, and mathematics were taught. 2 There is mention of an order from Muḥammad ‘Alī who dated the 12th September, 1820, to the Kâthib al-‘Abîn 3 appointing an Italian priest to this school to teach Italian geometry and another order dated the 16th September, 1820, to the same officer appointing a European by the name of Kustî as a teacher of drawing and mathematics to five or six of the students of the Dār al-Handasah who were to be formed into another school called Madrasat al-Handasah which was eventually opened in May, 1821, at Bûlak. 4 This Kustî can be no other than Xavier Pascal Coste who is mentioned by Planat 5 as having been the founder and director of the Institution civile des ingénieurs des ponts et chaussées and is credited with having rendered very important services. He could not have been director but was probably in charge of the organisation of

6 Letter No. 442, Register No. 3, dated 10th Dhî-ul-‘Uljjah, 1235 (14th December, 1819), in the ‘Abîn Archives. 7 al-Jâbî, IV, 265-267, where it is stated that they were the sons of the poor inhabitants of Cairo and the Mamlûk; he did not seem aware that there were no schools. 8 Brocchi, op. cit., I, p. 176—states that “Il genere è concepito a tutti i giovani di alcun nome religioso e cristiano.” According to Letter No. 6 (see note 3), the students of the Citadel school were made up from the Märişîn and Muḥammad ‘Alî’s Mamlûk. 9 Amin Sâmî, op. cit., p. 7 and Brocchi, op. cit., p. 176. 10 Pronounced Rîshûyâ or Rîshûyâ. 11 The best account of the Madrasat al-Handasah is given by Brocchi, op. cit., Vol. I, pp. 159, 176-8 and 207. Brocchi went to Egypt in 1822 and died in Khartum in 1826; he wrote several works on geology and minerals but his journals which are not mentioned in the Encyclopédie Italiens, Vol. VIII, p. 908, were published posthumously. See also Planat, op. cit., pp. 31-2, and Vialaletto, Histoire de l’Egypte Moderne, Paris, 1835, Vol. II, p. 255, where he states that the school was “destinée à l’enseignement des premiers éléments des arts et des sciences exactes; un assez grand nombre de jeunes gens turcs et arabes y furent appelés; et, malgré une foule d’obstacles suscités par l’ignorance et les préjugés religieux, il en sortit bientôt des élèves qui commençaient le cadastre de la Basse Égypte.” The nucleus of the school must have been formed in accordance with Muḥammad ‘Alî’s order of the 16th September, 1820 and developed by ‘Uthmân Elnêt Nûr-addin on his return from Europe. 12 Brocchi, op. cit., p. 176, states that the school was set up in the Palace of Ibrahim Pasha while Balboni, op. cit., p. 253, states that it was opened in the Palace of Ismâ‘îl Pasha. Neither Amin Sâmî in his al-Tâbœqa fi Miṣr (see p. 7 and footnote, 47, Pl. 5 of the Appendices) nor ‘Abdâr-Râhîm ar-Râfîî in his Tarîkh al-Jâhshat al-Kuwayityiq (Vol. III, pp. 441-3) give any reference to this important school and both are under the impression that there were only two schools and those in the Citadel. 13 Planat, op. cit., p. 86. Coste is the author of a work on Arab architecture and in this he must be considered as Frères d’Avenues predecesseurs. His map of Lower Egypt which he drew up between 1817 and 1828 is worthy of interest and, no doubt, has some connection with his work at the school. He is the author of a valuable but important work which is not mentioned by Hilmy and Mannin in their Bibliographies, viz., Mémoires d’un artiste. Notes et souvenirs de voyage, 1817-1817, Marseilles, 1878.

LITERATURE IN MODERN EGYPT

studies. Brocchi does not mention Coste’s name, although he visited the school three months after his appointment.

The students of this third school were also fed and clothed besides being taught and in addition received thirty to one hundred and fifty piastres a month as an encouragement to parents to send their sons, the allowance being paid according to the capacity of the students and thus serving as a further encouragement to work and progress. Italian was taught by Ab. Scagliotti of Piedmont whom Brocchi describes as a mediocresissimo uomo and mathematics were taught by Don Carlo Bilotti of Calabria; a third Italian, Lorenzo Masi, who had been employed, by Muḥammad ‘Alî on the Mahmûdiyyah Canal enterprise, was employed to teach land-surveying and map-making, while ‘Uthmân Ef. Nûr-addin was made Director and charged with teaching French. 1 The name of the Arabic teacher, Don Raphael, is already familiar to us; he was also engaged in translating works into Arabic and in preparing an Italian-Arabic Dictionary and some of his work was actually published and printed by the Bûlak Printing Press. 2

Another name is mentioned by Balboni, 3 that of Bergonzoni who arrived in Egypt in 1818, and was eventually employed as a teacher of physics and was probably one of Mâsi’s colleagues. As early as 1819, in fact, a map of the Bahriyyah with the Mahmûdiyyah Canal had been prepared by Girolamo Segato, the legends being in Arabic and French, and, according to Balboni, this was the first map to be printed with Arabic signs 4; probably this Segato, too, was on the staff of the Bûlak school.

Muḥammad ‘Alî’s chief aim in establishing this third school which was probably meant to take the place of the Dâr al-Handasah in the Citadel, was to form a body of land-surveyors that might enable him to dispense with the services of the Copts which must have been most distasteful and unsatisfactory to him. By their system, they were in a very strong position, as they were better acquainted than anyone else with the country’s resources while their system was too complicated for anyone else to master. Consequently, this new school met with opposi-

1 Brocchi, op. cit., I, 157-158. 2 Journal asiatique, 4th series, Vol. II, 1843, pp. 5-23, these works will be dealt with in another volume. 3 Op. cit., I, 277. 4 Balboni, op. cit., Vol. I, p. 253, Balboni, too, quoting Brocchi, states that there was also a Massechichi who was put in charge of the Bûlak Printing Press, p. 253, note 4, but Brocchi mentions him as Massachichi and states quite clearly that he was a Maronite, see Vol. I, p. 175, see also below. 109
THE STUDY OF EDUCATION AND

from the Copts, those who objected to this outside interference and maintained that their methods were superior to those of the European.  

It is significant too, that Muhammad 'Ali's first attempt to found a school of any importance was staffed by Christian priests, even for teaching Arabic, and that no mention is made of the employment of any native teacher (Nūr-Addīn was a Turk). Probably a large number of the students were Copts. Muhammad 'Ali made the teachers do practical work in addition to teaching the students, a principle he adopted at the very beginning of his reforms and to which he adhered throughout his reign.

A further interesting experiment in this school was that it had a library attached to it, the first of its kind to be owned by any non-European minority in Egypt. Most of the books were

 Frenc

and on a variety of subjects: on military science, mathematics, arts and crafts, encyclopaedias, legislations, the latter including the works of Dante and Rousseau; there was also a French translation and many works on the political constitutions of Europe.

Most of these works must have been made 'Ali through 'Uthmān Nūr-Addīn while he was in Constantinople including an Arabic translation, the Turkish translation of one of Vauban's works on mathematics translated from the French; these were ordered from Constantinople by Muhammad 'Ali hi Kapu 31st December, 1820, the order being sent to jib Efendi. Muhammad 'Ali also asked

LITERATURE IN MODERN EGYPT

Salim Efendi to send teachers who knew French and Turkish well, in order to teach in his schools, and for the services of a qualified engineer. This order was sent before his own officials had returned from Europe and indicates not only the difficulties Muhammad 'Ali had in finding qualified men for his enterprises in Egypt, but also his interest in Turkish models of reform.

The Niṣām Jādīd

While Muhammad 'Ali was developing the educational side of his reforms for purely administrative purposes, he also sought to expand his military reforms; and just as he had used his small Dar al-Handasah in the Citadel as the nucleus of his Madrasat al-Handasah at Bulaq, he used the small body of Mamluks that he was training in the Citadel as the nucleus for his new army. In 1820, he again resolved on the organisation of the Niṣām Jādīd by which date he had disposed of the majority of the troops who had opposed its creation in 1815, the greater part of them having been used up in his Arabian campaigns or in his expeditions to the Sudan.

By this time, force of circumstances had drawn Muhammad 'Ali to Drovetti, the Consul-General for France, whose advice on military and other technical matters Muhammad 'Ali had begun to appreciate, and where Italians had hitherto been almost alone in assisting the Pasha, we now find Frenchmen and French officials coming to his aid especially where there was much responsibility. In July, 1819, Captain Sève, an ex-officer of the French army landed in Egypt with letters of introduction and was presented to Muhammad 'Ali by Drovetti. Sève joined the Pasha's services and his first mission was to look for coal in Upper Egypt, but failure brought him back just as Ibrahim Pasha had returned triumphantly from Arabia.

Another unsuccessful attempt was made in Cairo to introduce the European system into the army by Sève in the presence of Muhammad 'Ali, and so in October, 1820, Sève was sent to Isna with three or four hundred Mamluks who were to be trained as officers of the new army.

2 Dounin, Une Mission Militaire Française auprès de Mohamed Ali, Cairo, 1913, pp. vii-xii.
3 Dounin, ibid., p. xii.
4 According to some authorities 500 Mamluks were sent, some belonging to Muhammad 'Ali and some to other members of his family.
THE STUDY OF EDUCATION AND

The difficulty of this experiment cannot be underestimated. The differences in character and religion between instructor and instructed and the obstinate opposition of the latter were very great obstacles indeed, but the language problem must have been the greatest of all, for Sève could hardly have picked up more than a few words of Turkish and Arabic while his pupils had no knowledge of French. In due course, however, these obstacles gradually disappeared.1

About the same time that Sève was sent to Upper Egypt, Ismā‘īl Pasha, Muhammād ‘Alī’s son, was sent on an expedition to Somnār and Nubia from where large numbers of negroes were sent to be drafted into battalions to form the rank and file of the new army.2 Ismā‘l proved to be in an unsuitable situation for these slave-troops and so Muhammād ‘Alī issued two orders on the 8th August, 1821, one to the effect that a military school was to be organised under Ahmad Efr. al-Muhandis3 and Sulaimān Aghā (Sève’s new name and title for he had embraced Islam and had been given the title of Aghā) and the other to the effect that the military school was to be organised at Aswān.4

The numbers of the imported slaves seem to have increased fairly rapidly for we find another order issued on the 30th October, 1821 to Muhammād Bey,5 appointing Aṃn Ef. al-Mī‘mārī6 to renovate existing buildings and to build barracks (thubanāt), each one capable of holding one thousand soldiers.7 On the 25th January, 1822, presumably after the barracks had been built, Muhammād Bey was appointed Nāṣrī of the Aswān encampment8 and on the 16th February, 1822, new instructors were appointed to assist Sulaimān Aghā.9 Included among the new instructors was Lieut.-Col. Mary,10 a Corsican,11 who was

1 Dunīn, op. cit., pp. xiii-xiv, and Vingtirinier’s biography of Sève Sélène Pasha (Joseph Sève), Paris, 1886.
2 Dunīn, ibid., pp. xiii-xiv, and Vaulabelle, op. cit., II/231, and Planat, op. cit., p. 27.
3 See above p. 15—most probably a mission student.
4 Aṃn Sāmī, Taḥbīm an-Nil, Vol. II, p. 291, at-Talīm fi Misr, p. 7. The school and other establishments were built on the Elephantine Island—see Dunīn, ibid., p. xiv. There is another order dated the 24th August, 1821, fixing the salaries of officials and arranging for the supply of materials, see Taḥbīm, p. 291.
5 Muhammād Bey was Nāṣrī of Military Affairs—al-Askaryiah.
6 See page 106, also most probably a mission student.
7 Aṃn Sāmī, at-Talīm, p. 8.
8 Taḥbīm, II/204 and at-Talīm, p. 8. The cadets are recommended to look up to Muhammād Bey as a father and to do their best to acquire the necessary branches of knowledge.
9 Taḥbīm, II/204 and at-Talīm, p. 8.
10 Dunīn, op. cit., p. xiv.
THE STUDY OF EDUCATION AND

"Ali wished to show Drovetti and Salt 1 his new army of 24,000 towards the end of 1823, it was at the camp Baní 'Adî, near Manfalût, that it was drawn up for review. 2

It had not taken long for Muhammad 'Ali to realise that negro slaves were unsuitable as soldiers for they could not stand the climate. Apparently at the suggestion of Drovetti, the Pasha made up his mind to use Egyptians and he could not have found a better recruiting ground than in Upper Egypt. Apart from the Coptic battalions formed by the French, this was the first serious attempt to use Egyptians as soldiers for centuries.

The new army consisted of six regiments of five battalions each and to each battalion there were 800 men. The officers so far had no settled uniform, but the soldiers were provided with a rough kind of uniform and were armed with French rifles. The most important characteristic of this army was that it was made up of slave officers of Circassian, Albanian and Turkish origin and that all the troops were looked upon as the Pasha's personal property. The European instructors were not looked upon as part of the army, but rather as civil servants attached to the regiments with the Turkish title of da'îmîjî—inspector; they had no military rank and were appointed at fixed rates of pay, promotion to them simply meaning a rise in increment. 3 Religion seemed to be the chief obstacle in the path of these instructors. Sève, by his conversion, removed this obstacle and thus opened the way to his promotion in just the same way as a Turkish officer.

These new regiments were soon put to the test. The first was sent on active service against the Wakhâbîs, the second to Semmar, the third, fourth, fifth and sixth under İbrahim Pasha against the Greeks 4 and their successes everywhere were brilliant. It was their success that completely hypnotised Muhammad 'Ali and he now set the machinery going for the development of his fighting services on as large a scale as possible; his experiments also encouraged him to set up further establishments that were indispensable to the army. New creations now followed one another rapidly and it is to these that we shall

1 Salt was the English Consul-General.
2 Dounin, op. cit., p. xiv.
3 Vaubalbe, op. cit., II 229. They received a commencing salary of 4,000 francs a year, two suits, a house and 60 francs a month for ration allowance, see also Planat, op. cit., p. 40, and Cadavalhe et Brevoux, L'Egypte et la Turquie, Paris, 1846, Vol. I, p. 111.
4 One battalion of each regiment was retained in Egypt to serve as a nucleus for fresh armies.

LITERATURE IN MODERN EGYPT

turn in order to trace their history and to describe their organisation and how they fitted in with the new order of things.

THE PERIOD OF EXPANSION—1824 TO 1837

The French Military Mission

The next period of Muhammad 'Ali's rule was one of great activity, the most significant feature of which was the more intensive use of the services of foreigners and, in particular, of French technical and military men, several of whom were of high standing in their own country. The most outstanding of these was General Boyer who brought a military mission with him from France in 1824.1

The main object of this military mission as far as Muhammad 'Ali was concerned was the training of additional regiments for his army. 2 Boyer's task was confined to the formation of infantry battalions though from the beginning he tried to make himself indispensable and fought hard for the predominance of French influence. This was, however, the very thing Muhammad 'Ali had made up his mind to avoid; he wanted servants not masters. From the beginning, Muhammad 'Ali cleverly avoided giving Boyer any rank in his forces, 3 thus, in spite of his high rank in the French army, his position in the Egyptian army was of no account. 4 Boyer was simply expected to teach and to advise, not to act, action being left to Muhammad 'Ali's man, 5 in fact, Boyer was looked upon as little more than an instructor himself. 6

One of the duties of the military mission was to acquire the services of French officers as military instructors and, naturally

1 The idea of this military mission seems to have emanated from Muhammad 'Ali himself for he commissioned a French merchant called Tournaire for this purpose; this agent interviewed Gen. Beliard in France and the latter chose Gen. Boyer who was accompanied by M. Livron, Col. Gaudin, Comm. Adolphe de Tarde and his brother, Cap. Paulin de Tarde, Capt. Cheminelle and Pujol, Lieut. Ledieu and Davignaud, a surgeon. The Mission landed at Alexandria on the 24th November, 1824, see Dounin, Une Mission militaire, Cairo, 1923, p. 6, and Planat, op. cit., pp. 67-8.
2 Dounin, op. cit., pp. 75-7. The 7th, 8th and 9th regiments were formed and dispatched to Morea as early as August, 1825; no sooner were they out of the country when Muhammad 'Ali ordered the conscription of the 10th, 11th and 12th regiments. Boyer's training camp was at first situated about a mile to the south of Old Cairo, but owing to periodic inundation, it was removed to Kubbah which in turn, was found to be too near Cairo, so Khâlik was eventually decided upon. The locality was called Jhâhîd 'Abîd.
3 Dounin, op. cit., pp. 12 and 17.
4 Dounin, ibid., p. 38.
5 Dounin, ibid., p. 40.
6 Dounin, ibid., p. 64. Planat, op. cit., p. 92.
enough, it made it a part of its policy to introduce as many Frenchmen as possible into the country in order partly to counteract the strong position of the Italians.\(^7\) Although Boyer had no high opinion of the latter,\(^8\) they still continued to be engaged\(^9\) probably through the agency of Bokty and other Italians in the service of the Pasha.

At various times during Boyer’s mission, applications were made to France for French officers\(^4\) who were to bring elementary text-books with them for use in the Egyptian services;\(^5\) on their arrival they were given a practical examination on the parade ground\(^6\) and not all of the instructors succeeded.\(^7\) All European instructors were placed under Colonel Gaudin.\(^8\)

Perhaps one of the greatest drawbacks about the employment of these foreigners was the lack of uniformity of method. Although Muhammad ‘Ali had decided to use Frenchmen and French methods, he still relied a great deal on Italians who were naturally not very keen on following French example. Boyer criticised Muhammad ‘Ali very strongly for having sent his officials to Italian military schools.\(^8\) Another disadvantage in this confused system was the perpetual intrigues firstly between Italians and French, secondly, between the French of the official mission and those who had already been given employment and who claimed to have done all the pioneer work and, lastly, on the part of the Turks themselves, who were against the whole group of foreigners disliking them personally and loathing their innovations.\(^10\)

One of the most useful services undertaken during the Boyer mission was the development of the artillery under Col. Rey with the help of two Turkish officers who had studied atConstantinople,\(^11\) but here again, Boyer criticises the type of

---

1. Donin, ibid., p. 77.
2. Donin, ibid., p. 4.
3. Donin, ibid., p. 22.
4. Donin, ibid., p. 23.
8. Donin, ibid., p. 36 and Planat, op. cit., p. 98.
9. Donin, ibid., p. 41.
10. Almost every work dealing with this subject brings out these intrigues and counter-intrigues—Donin, ibid., pp. 52–3. Planat, ibid., p. 73; Frères d’Avennes and Bosc (amost); op. cit., p. 132. The position of foreign officials was most difficult; they endeavoured to improve it but the attitude of the Turks never allowed for any amelioration. The Turks was convinced that the foreigner who came to Egypt did so because he could find nothing to do in his own country, see Donin, ibid., pp. 52–3. “Rien n’est rebâti ici comme les officiers qui s’y rendent de leur plein gré. On pense que la misère les a forcés à venir tendre la main au Pacha.”
11. Donin, ibid., p. 77.

---

**LITERATURE IN MODERN EGYPT**

 draconist into this new service chiefly on account of his illiteracy.\(^1\)

That the mission succeeded in forming the required number of officers’ cadres and battalions in as short a period as possible is beyond doubt, but its personal relations were far from a success. Muhammad ‘Ali had no difficulty in accepting the resignation of Boyer and his colleagues in August, 1826,\(^2\) undoubtedly realising the danger of employing foreign officials of such high rank. He had already made up his mind that, if he wished to continue his reforms, he must use his own men as far as possible and it was probably with this idea that he suddenly promoted Uthmân Nūr addīn to the rank of Major-General in May, 1825.\(^3\)

**Military Schools**

As a consequence of this intensive military training, it was necessary to train officers and with this object in view, the Būlāk School mentioned above was transferred to Kaṣr al-‘Aīn\(^4\) in July, 1825, and was called the Madrasat al-Jihādiyyah or Madrasat al-Jihādiyyah al-Harbīyah or Madrasat al-Tajūsiyyah al-Harbīyah. The school received about six hundred students,\(^5\) at the time of its transfer and later on all the other military schools drew their recruits from this madrasah. The ages of the students ranged from twelve to sixteen; they were a mixture of Turks, Circassians, Georgians, Greeks, Armenians, and Kurds who were taught Turkish, Arabic, Italian by a certain Rastaçi; drawing, arithmetic and geometry by a certain Don Carlos and were drilled in infantry exercises by Daumeguer and Acrerbo;\(^6\) there were no Egyptians in this school.\(^7\)

---

1. Donin, ibid., pp. 77 and 97 and 120 where the same criticism is made of the infantry officers—see also Planat, ibid., pp. 103-4.
2. Donin, ibid., pp. 135-6.
3. Planat, ibid., p. 82.
4. Vaullébelle, op. cit., p. 255, and Planat, ibid., p. 32 who both call it a college or lyceé. See also ar-Raﬁ‘i Bey, op. cit., Vol. III 397 and Amin Sālih, al-Talā‘um, p. 8, and Appendix III, p. 50 who are both under the impression that this college was an entirely new one.
6. Planat, ibid., p. 362. What happened to the teachers and students of the original Būlāk School is hard to say as there is no further information concerning it; according to Planat (ibid., p. 86), the cadastral survey still existed; probably a section of the Kaṣr al-‘Aīn college was used for this purpose.
7. Instruction publique en Égypte, Paris, 1890, p. 72. This school might almost be termed a "depôt" or "collecting house" for all the slaves that Muhammad ‘Ali purchased in order to form them into his commanding officers in the army. There is no doubt about the fact that Muhammad ‘Ali still bought slaves as the following extract from a letter dated 18th July, 1831, proves:—"Voici ce que le Pacha m’a dit confidentiellement et de son propre
THE STUDY OF EDUCATION AND

mān Nūr-addin was again responsible for the organisation of this school while Ḩāmid Ef. Khalīl was placed in charge as director (nāẓir).

This School, however, was transferred to Abū Zābal in October, 1836 after having functioned at Kašr al-ʿAinī for about eleven years under seven different directors. The date of its transfer coincides approximately with that of the Medical School to Kašr al-ʿAinī to the palace which had been occupied by the Military Preparatory School.

At Abū Zābal, the Pre-

mouvement, en m’ajoutant que je pouvais même en écrire à Votre Excellence. Vous connaissez comment je suis élevé au pouvoir en Égypte; vous savez que je ne veux pas tenir en brèche les Arabes afin de tirer parti de leur caractère, il me faut des Turcs formés aux nouvelles institutions que j’ai établies; que je ne puis me fier à des musulmans déjà âgés, venant de Constantinople chercher du pain dans les États que je gouverne, lesquels ne veulent rien apprendre, et encore moins puis-je me servir de chefs Arabains ou Romélites qui ne sont susceptibles d’aucune espèce d’attachement, n’exerçant la profession des armes que pour faire de l’argent et aller jouer chez eux de leurs épaques. Vous avez dû observer dans le temps qu’après m’être servi d’eux pour repousser l’expédition anglaise, renverser la puissance des Mamelouks, détruire celle d’Abdallah El-Homayun, chef des Bahábies, et conquérir l’Éthiopie, j’ai inlassablement éliminé cette soldatesque indisciplinable, au fur et à mesure que la nouvelle organisation militaire acquérait en Égypte de la consistance et de l’extension. Il entre dans le système que je suis établi, que l’état des choses se veuilleindre que mon serviteur le plus fidèle et le plus obéissant, qui est l’armée de Constantinople de nos esclaves blancs de l’Égypte. Leur habitude de ces messieurs se livrent depuis longtemps à ce trafic et il y en a plusieurs qui rapportent en échange des esclaves de la Négriote et de l’Oubssaine. Des marchands, venant de Russie, de pays frontières de l’Empire de Russie, reviennent de jeunes enfants, et même des soldats turcs en achetaient des indigènes; les uns et les autres les entreprenaient le plus souvent dans la forêt d’Anapa et d’autres marchands vendaient les pour les transporter à Constantinople sur les bâtiments ottomans.” See R. Cattau, Le Régne de Mohamed Aly à d’après les Archives russes en Égypte, Vol. 1, pp. 425-6. It is most significant that Muhammad ‘Ali did his utmost to acquire the services of Europeans for his army and in 1826 an order dated 24th November, sent to Najib Ef. Kapu Kikhây at Constantinople asking him to send to Egypt any available youths who could read and write in order to enter his service, see Taḵwīm, II/356. About the same time is curious to note that Mahmut II sent a letter to Muhammad ‘Ali asking for “Egyptian” officers to be sent to Constantinople to teach Turkish soldiers the “new system” because he did not wish to use Europeans. Muhammad ‘Ali declined to do so on the grounds that he had no Egyptian officers capable of instructing and that he was obliged to employ European officers, see letter N. 43, Daftar No. 22 dated 12th Muḥarram, 1240 (1826)—Abū Zīyāt Archives and Taḵwīm, II/325. (Probably “Egyptians” here means Turkish officers coming from Constantinople). Muhammad ‘Ali declined to do so on the grounds that he had no Egyptian officers capable of instructing and that he was obliged to employ European officers, see letter N. 43, Daftar No. 22 dated 12th Muḥarram, 1240—Abū Zīyāt Archives and Taḵwīm, II/325. (Probably “Egyptians” here means Turkish officers coming from Constantinople). Muhammad ‘Ali declined to do so on the grounds that he had no Egyptian officers capable of instructing and that he was obliged to employ European officers, see letter N. 43, Daftar No. 22 dated 12th Muḥarram, 1240 (1826) and 12th Muḥarram, 1240 (1826) and

LITERATURE IN MODERN EGYPT

puratory School continued under one director, Ibrahim Ef. Ra’fah, until it was closed in 1841.

In October of the same year, a Staff College was established by Ulüm Nūr-addin at Khānqāh and Platon was made its director. It was generally called Mektub ar-Riayā or Madrasat Arıkā (al-) Harb, (by the Europeans l’Ecole de l’État-major), and was intended for the elite of Muhammad ‘Ali’s men for it was open to Turks and Mamluks from Constantinople who were given the rank of lieutenant on admission. At a later date, probably when Muhammad ‘Ali began to feel the shortage of men more acutely, he allowed Egyptians to attend as a special favour but they were not allowed to sit for the examinations and were given no rank. This school was begun with eighteen officers as students, there being two colonels, two commandants and the rest adjutants and captains. The courses were arranged by Platon who taught gunnery, fortification, geometrical and reconnaissance; a certain Cosmano gave diary drill and tactics, Ḥasan (Shaikh?) taught arithmetic and geometry, Liedieu and Koenig taught French.

This was the first experiment in Egypt in what might be called higher training; the obstacles appear to have been very great especially in view of the linguistic difficulties again and the lack of any kind of preparatory education on the part of the students. Two years later, the Staff College had seventy-one officers following the courses which were reorganised as follows:

- Platon—director
- geometrical military tactics, reconnaissance, gunnery, temporary and permanent fortifications.
- Sh. Ḥasan
- arithmetic in Arabic.
- Arif Ef.
- geometry in Turkish.

1 Sa‘īd, op. cit., p. 45 and ar-Ra‘fī’s ‘Al‘m Iṣra‘īl, Vol. I/223.
2 Sa‘īd, al-Ta‘līm, p. 9, ar-Ra‘fī’s ‘Al‘m, op. cit., III/371. Dc. op. cit., p. 211.
3 Clot, Bey, Ṭa‘līm, II/333 (where he gives 1826 as the date of establishment).
5 Prisses d’Avennes and Ḥammūt, op. cit., p. 133.
6 In the Turkish sense—"the school of the dignitaries.
7 Prisses d’Avennes and Ḥammūt, op. cit., p. 133.
8 Platon, ibid., pp. 99-95.
9 Platon calls it an "école spéciale" and the Kašr al-ʿAinī school a lyce."
THE STUDY OF EDUCATION AND

Arif Ef. ... trigonometry, Turkish (course not yet
given).

Lt.-Col. Vogt ... infantry drill (theory and practice).
Pachot (Pachod) ... French—1st division.
Koenig ... French—2nd division.
Abbé Célésia ... physics.

The period of study was of four years' duration nominally
but at the time Planat was writing his book (1830), the fourth
year had not yet been given:

First year  Second year  Third year  Fourth year
arithmetic  geometry  trigonometry  physics
figure  temporary  permanent  fortifications
drawing  fortifications  field works  chemistry
topography  French  military surveying  military recon-
gunnery  French naissance  higher
platoon and  castrametation  map making  geography
company  battalion drill  French  history

The Staff College seems to have been the first school to have
been established on definite French lines with French as the
principal language of instruction. From now onwards, in
spite of Boyer's withdrawal from the scene, one notices a
decided turn in favour of French ideas and a wider application
of their methods of education and training although, as will
be seen later, the number of Italian officials did not decrease.

The Nakhlah or 'Depot' at Djahab Abadd was now set aside
for the training of junior officers. In 1836, there were about
five hundred who are described by Planat as a horde indolente
et indisciplinée who had to be taught in Turkish, a language
which they spoke, but could not write; the officers were
divided into three classes under three European instructors, the
principal one being M. Piasso, a Piedmontese.

As far as can be ascertained, one of the Citadel schools still
appears to have functioned although there is hardly any informa-

1 Document No. 298, Daftar No. 41, 28th Muḥarram, 1247. Amin Sabi states
that he could find no information about this school, see al-Tawār, app. No.
3, p. 39.
2 Vaulabelle, op. cit., p. 253, who states that there were about 3,200 men
in all; see also Planat, ibid., p. 170.
3 Boyer, Les Premières Prétentions de Mohan Al, Cairo, 1926, p. 77. Planat,
ibid., p. 170 gives the name of (Vincent) Willenich who was placed in charge
of the training. For the important contribution of the Italians to the building
of the Egyptian navy, see Sammarco, La Marina Egitana sotto Mohan Al,
Cairo, 1931: Gnaemard, op. cit., p. 211.
4 Established in 1813 according to Zaghli, al-Misr al-Naṣirī, Cairo, 1900, p. 166.
5 Vaulabelle, ibid., pp. 255-6 French officers were also employed. The young
officers were recruited from the Bûlûk school. At this time a Turk was in
charge of the fleet and Hajjī 'Umar, an Egyptian, in charge of naval construc-
tion, see Clot Bey, Aperçu, II, p. 327.
6 Planat, ibid., pp. 92 and 98. So far it has not been able to trace the name
of this Commission in Turkish or Arabic.

120

LITERATURE IN MODERN EGYPT

tion about it; an official document dated 9th July, 1831,
shows that ash-Shāmāshirī Aghā was at the head of this school.

About the same time that the Bûlûk school was established,
a levy was made of Nile boatmen, who were sent to Alexandria
to be trained on four old corvettes for the Navy that Muhammad
'Ali intended to build. It appears that at this early time,
the instruction was again entrusted to Italians. Old Turkish
officers were placed in charge of the men and the officers used
to present themselves every morning to the Divân al-Bahriyit
4 to receive nautical training and lessons in mathematics and
lineal drawing, rather as an example to the younger officers
who were again drawn from the Turkish and Circassian races
and placed in a fifth corvette.

The Commission d'Instruction

Perhaps in order to introduce uniformity in method and
some kind of centralised control over the schools and military
instructors attached to the various regiments, an order was
issued through the Divân al-Jihâdîyit, presumably from
Muhammad 'Ali himself, to the effect that a Commission d'In-
struction should be formed. The Commission was under
the presidency of the Nâzîr of the Divân al-Jihâdîyit and the
members of the first Commission were Maj.-Gen. 'Ummân Bey
Nūr-Addîn, Gen. Boyer, the Turkish Colonels, Col. Gaudin
who was in charge of the European instructors, Col. Key, in
charge of artillery, Com. Tarle and Capt. Tarle, and the first
meeting was held in January, 1826. This was the first attempt
in Egypt to form any kind of bureaucratic control over the
schools as before that date, the reforms and the establishment
of the schools depended on the will of Muhammad 'Ali who

1 Document No. 298, Daftar No. 41, 28th Muḥarram, 1247. Amin Sabi states
that he could find no information about this school, see al-Tawār, app. No.
3, p. 45.
2 From now onwards, in spite of Boyer's withdrawal from the scene, one notices a
decided turn in favour of French ideas and a wider application of their methods of
education and training although, as will be seen later, the number of Italian officials
did not decrease.
3 The Nakhlah or 'Depot' at Djahab Abadd was now set aside for the training of
junior officers. In 1836, there were about five hundred who are described by
Planat as a horde indolente et indisciplinée who had to be taught in Turkish, a
language which they spoke, but could not write; the officers were divided into
three classes under three European instructors, the principal one being M. Piasso,
a Piedmontese.
4 As far as can be ascertained, one of the Citadel schools still appears to have
functioned although there is hardly any informa-
THE STUDY OF EDUCATION AND

seemed to act according to the suggestions of 'Uthman Nur-Addin. With the resignation of Boyer, the Commission was reformed, still, of course, under the Nâsir of the Diwan al-Jihādiyyah with the following members, 'Uthman Nur-addin, the Turkish Colonels of the regiments, the Colonel of the Staff College (Salim Bey), Col. Gaudin who, although belonging to the Boyer mission, did not resign with his chief, Lt.-Col. Vogt, Lt.-Col. Delforte, several battalion instructors and Planat who acted as secretary. The duties of this Commission are not given by Planat, who is the only authority to mention this important link in the history of education in Egypt, but from this date, schools were opened one after the other and since all of them came under the supervision of the Diwan al-Jihādiyyah the Commission had presumably control over them.

The School of Medicine

The School of Medicine has been the subject of much controversy especially with a group of French writers who wrote during and just after Muhammad 'Ali's reign. It must be remembered that it was a period of Franco-Egyptian rapprochement and it was as much the interest of the French to praise what Muhammad 'Ali had done as it was his to get people to write about him; typical of this kind of literature is Gounis's L'Egypte au XIXe siècle, 2 aussi obscieux qu'hyperbolique. 3 One of the main sources for the history of the School of Medicine and, in fact, for many of Muhammad 'Ali's innovations has nearly always been the work written by Clot Bey, particularly his Aperçu général sur l'Égypte. 4 This work is purely apologetic and propagandistic in character, and when it is compared with all the other material written on the school and other institutions can only lead the reader to the conclusion that Clot's main object in writing his Aperçu was for the benefit of the name of his patron in Europe in addition to its being a piece of self-praise.

It was expected that the work done by Muhammad 'Ali in Egypt as presented by Clot Bey would give the impression that the Pasha was an enlightened monarch who had the interests

LITERATURE IN MODERN EGYPT

and welfare of the Egyptians at heart and that he had done everything in his power to introduce and encourage learning and science in his country or rather in the country that he had made his own. Unfortunately for Clot Bey, his work was followed up three years afterwards by Hamon's L'Égypte sous M'hâmet-Alli 5 which is considerably larger than Clot's book. It is fully documented and the writer devotes about thirty pages to an investigation of the medical school the contents of which are confirmed elsewhere. Hamon and Clot were rivals and it was Hamon's bitterness and disappointment that caused him to write his history and to question the work done by Clot Bey but, in spite of that, Hamon's account is nearer the truth and more sincere. Each writer had his partisans; Clot had Jomard and Perron, 6 while Hamon inspired both Schoelcher and Gisquet. 7

Moreover, we have contemporary evidence to show that Clot regretted having written his work on Egypt. Frisses d'Avennes reports: "Clot Bey n'est pas en grande faveur auprès du Pacha et se repent d'avoir fait ou fait faire dans son livre, c'est-à-dire, dans le livre qui porte son nom, un aussi beau panégyrique de M'hâmet-Alli," 8 while Comte de Saint-Ferriol gives us an account of a conversation he had with Clot Bey: "2 janvier, 1842. Nouvelle visite à Clot Bey. C'est un petit homme vif, éveillé, au verbe haut, au ton tranchant, à l'esprit ferme de lui-même, ne manquant pas d'une certaine franchise: aussi, après une ample connaissance et poussée par nos questions, il nous a tout simplement avoué qu'il était désolé d'avoir fait son livre: il paraît que sa faveur baisse et qu'il ne pourra pas tenir longtemps. . . . On peut d'ailleurs admettre qu'outre son dessein de tromper les autres, il a été trompé lui-même, comme il nous le disait, sur la portée et la solidité de tout de qui se saisissent Égypte. . . ." The severest critics of Clot Bey are to be found amongst Frenchmen, 8 although

---

1 Planat, ibid., p. 357.
2 Paris, 1847.
3 See J-M. Carré, Voyages et Études Francaises en Égypte, Cairo, 1923, Vol. I, p. 285. This two-volume work is indispensable to the student of Egypt as it is a valuable introduction to the study of the French sources.
4 Paris, 1840. Clot Bey also published his own reports on the hospital and school.

11 See, for example, article by Saint-Marc Girardin in Revue des Deux Mondes, Vol. 23, 4th Series, Paris, 1840, pp. 905-920 in which he reviews Clot Bey's work.
THE STUDY OF EDUCATION AND

again, we find writers who have nothing but good to say of him especially those whom he had the honour of showing round his creations.

The fullest contemporary account in English of the medical school and hospital was written by Dr. J. Bowring in a Parliamentary Report addressed to Lord Palmerston, but even this was written from material given to Bowring by Clot Bey and lacks in criticism.9

Nevertheless, in spite of adverse criticisms, Clot Bey must have the credit of being the pioneer in introducing modern medical studies into Egypt for whatever the immediate results may have been, the attempt bore fruit in the long run.

Medical services had been organised from the beginning of the Niẓām addīd (p. 113) under Dussap and seem to have developed in size according to the needs of the ever-growing army until the arrival of Clot Bey in 1825, who suggested to M. Bosari, Muhammad ‘Ali’s private physician, that a Health Council should be set up.8 The idea was accepted and the first council was composed of three members, not including Clot Bey, with Bosari as president and it met for the first time at Khānkāh on the 25th March, 1825; a little before that date, the Council received two other members, Dr. Clot and M. Luigi Alessandri who was then head of the central pharmacy in the Citadel.4 It was the duty of the Council to advise the Niẓir of the Diwan al-Jiḥādiyyah on medical affairs.6

The idea and arguments in favour of the establishment of a School of Medicine and the plan and method of study were elaborately set out in persuasive language in a letter written by Clot to ‘Uthmān Nûr addīn on the 25th July, 1826.6 The main points of his letter were as follows:—

(a) 750 young Egyptians with a knowledge of Arabic and arithmetic were to be assembled at the central hospital to be taught by teachers under Clot’s orders;

(b) medicine was to be taught and at the same time, the students were to be taught French;

(c) the following subjects were to be taught: physics, chemistry, botany, anatomy, physiology, surgery, materia medica, toxicology, therapeutics, pathology, pharmacy.

(d) the instruction was to be given in the language of the students through the intermediary of learned translators (traducteurs crédibles);

(e) the government was to be guaranteed as to the satisfactory working of the system by setting up a Commission to conduct the examinations under the Presidency of the Niẓir of the Diwan al-Jiḥādiyyah and members of the Health Council.

(f) the course of study was to be over a period of four years at the end of which period the students would pass out as military surgeons.

Immediately the plan was made public it was criticised on the ground that the Egyptians were not capable of studying medicine, that it was impossible to teach through the intermediary of interpreters, that there were no able teachers in the country and that the Moslem faith was against the study of anatomy.1 In spite of opposition, however, the school was opened at the Hospital of Abū Zaḥal and studies began on the 28th February, 1827.8

The obstacles were definitely greater than any that were faced on the opening of the other establishments. It was an experiment; for the first time, the students were all Egyptians and appear to have been members of al-Azhar mosque. In any case, it was not to be expected that the Turks and Circassians would have anything to do with such an enterprise as they considered themselves far too superior to follow any other profession but that of arms. It can be understood therefore, why this school had to suffer more inconvenience than any of the others in view of the fact that it was composed of two elements against whom the Turks were most prejudiced, namely, Europeans and Egyptians.

One hundred students were chosen and were given quarters in the hospital itself and, as in the other establishments, they were fed, clothed, lodged and paid a monthly allowance in addition to being taught at the charge of the government.

These students, coming from al-Azhar, with the syllabus and method of study of which we have already made ourselves familiar,
THE STUDY OF EDUCATION AND

were now taught the following subjects by the European teachers whose names are given below 1:


Gaetani ... General, descriptive and pathological Anatomy. Physiology.

Bernard ... Private, public and military hygiene. Legal medicine.


Célésia ... Chemistry. Physics.

Figari ... Botany. Lasperanza ... Preparation of Anatomical lessons. Preparation of Anatomical and Pathological Parts.

Ucelli ... French. 3

Gaetani had to retire at the end of the first year, being replaced by Cherubini, a graduate of Paris and Montpellier, who already had a private practice in Cairo. 4 In the third year Barthélemy left and his post was taken up by Rivière, 5 while in the same year, owing to additional subjects being taught, Alessandri was made responsible for the courses of Chemistry, Zoology and Pharmacy and Célésia for Physics, Astronomy and Meteorology. 6 In the fourth year, Cherubini was transferred to a post with the army in Syria and Pruner was appointed instead. 7

For teaching purposes, the students were divided into sections of ten, the best student of each section acting as a kind of tutor to the rest. It was a most curious situation; a hundred

1 Clot, Compte rendu, pp. 6-7, see also Planat, op. cit., p. 358 which differs a little.
2 Spelt by Planat as Duvignault, ibid., p. 68—this teacher had been on the Boyer mission.
3 According to La Contemporaine en Égypte, Paris, 1831, Vol. I, p. 355. Ucelli also taught Italian but this is probably due to a misunderstanding. Figari was Director of the Botanical Garden.
4 Clot, Compte rendu, p. 46.
5 Clot, ibid., pp. 50-54—the post was open to competition.
6 Clot, ibid., p. 78.
7 Clot, ibid., pp. 89 and 97.

LITERATURE IN MODERN EGYPT

Egyptian students from al-Azhar who knew only Arabic 8 and who had never received any training but in Arabic grammar, Koranic Exegesis, Fikh, etc., gathered together in order to be trained in medical and scientific subjects of which they had not the slightest idea by a number of European teachers who did not know the language of their students and who themselves were not even homogeneous, Clot, Bernard, Barthélemy, Duvigneau being French, Gaetani, Spanish, Célésia, Alessandri and Figari, Italian, Ucelli, a Piedmontese and Pruner, a Bavarian. 9

The actual method of instruction adopted by Clot Bey was to avail himself of interpreters, 10 who translated the lessons in the presence of the teachers; the teachers explained all the difficult points to the translator and both revised the lesson in order to ensure accuracy. The Arabic text was then dictated to the classes and the monitor or tutor of each section was given permission to ask the interpreter for the explanation of any part of the lesson that he or the students in his section could not understand; the interpreter had to answer himself or else have recourse to the teacher again. In order to ensure that the students learnt their lessons, monthly examinations were held and the best student of the section was made monitor, the competition for the place of monitor thus serving as an encouragement to the students to work hard.

Clot Bey in another report admitted the fact that there were no translators at first capable of handling the material, 4 but he seems to have acquired the services of two men at the beginning of the first year, namely, M. Raphael 4 and M. 'Anhūrį, a Syrian. 4 Raphael knew Italian, French and Arabic while 'Anhūrį knew Arabic and Italian only; in the second year, two others are mentioned, Vidal and Sakākīn. 7 Another account states that Clot Bey chose several local Christians who could speak French and Arabic, and attached them to the school as interpreters on condition, of course, that they would be among the first to

8 According to Hamont, op. cit., II, 99, many of the students could hardly read and write.
9 Clot, both Aperçu and Compte rendu passim.
10 Clot, Aperçu, II, 112 and Compte rendu, p. 12.
11 Clot, Compte rendu de l'État de l'Enseignement médical de l'Égypte, Marseille, p. 1849.
12 Don Raphael—see above.
14 Clot, Compte rendu, p. 45.
THE STUDY OF EDUCATION AND

study medicine and that each interpreter was to specialise in a certain branch but no names are given.1

Clot maintains in his work 2 that he had the greatest difficulty at the beginning in persuading the government to allow autopsies in view of popular religious feeling against it, but eventually a fatwa was issued by the mufît allowing it, thus clearing away this obstacle.3

It was quite clear even to the optimistic Clot that some kind of preparation was necessary before his students could approach their medical and scientific studies and, with this aim in view, he had an annexe opened in the grounds of the hospital where the students were taught arithmetic, geometry, cosmography and history while in another department, they were taught French so that they could study medical science in the original texts.4

Michaud of the Académie française was asked to examine the students in French in March, 1831, and Clot Bey publishes a long appreciation by the examiner in his Compte rendu, 5 but Michaud’s account elsewhere 6 is far from being appreciative and is given here in his own words: “J’étais ravi de tout ce que je voyais écrit sur l’ardoise; j’ai voulu complimenter les élèves; je me félicitais de voir enfin la langue française devenue une des langues de l’Égypte, mais quelle a été ma surprise, quand j’ai vu que personne ne m’entendait, et que mes paroles étaient comme la voix du désert. Voici comment se fait l’enseignement de notre langue; le professeur de français, qui est un Piémontais, adresse en italien chacune de ses leçons à un professeur qui le transmet en arabe aux élèves; la réponse des élèves est traduite en italien et transmise ainsi au maître de français; au milieu de toutes ces traductions, il y a du miracle qu’on s’entende comme on le fait sur les règles de la syntaxe, mais comme la langue française ne figure que sur le tableau où s’inscrivent les demandes et les réponses, personne n’apprend à la parler, pas même le maître qui s’est approché de moi pour m’expliquer sa méthode, et qui me

LITERATURE IN MODERN EGYPT

l’a expliquée comme il a pu, non sans faire quelques fautes de prononciation.”

The addition of this extra preparatory work made it impossible for the original plan of a four years’ course to be workable and it appears to have been extended to six years later on; in any case, the first course was extended to a period of five years by the Naẓîr of Dīwâns al-Jihâdîyân to make up for the obstacles that Clot had had to meet with and for the time that had been lost.1

At the end of each year, 2 a public examination was held in the hospital when all the state dignitaries and the consuls were invited together with any distinguished visitors who happened to be in Egypt. The original plan had been to promote the students from year to year, to sous-aides at the end of the second year, aides-majors at the end of the fourth and then they were all to be posted to the various hospitals and with the regiments, 3 but actually, this plan was not put into practice for Muhammad ‘Ali was so short of medical officers that the students were not allowed to complete their courses.

Already in the second year, Clot reports that some had been taken away and given posts 4; between the third and fourth years, others were also withdrawn, 5 and by the end of the fifth year, there remained only fifteen students who had completed five years’ training and by that time, eighty-three had already been given employment.6 The Examinations’ results were classified as follows:—

<table>
<thead>
<tr>
<th></th>
<th>1st year</th>
<th>2nd year</th>
<th>3rd year</th>
<th>5th year</th>
</tr>
</thead>
<tbody>
<tr>
<td>Promoted</td>
<td>.</td>
<td>20</td>
<td>.</td>
<td>43</td>
</tr>
<tr>
<td>First-class</td>
<td>.</td>
<td>26</td>
<td>23</td>
<td>24</td>
</tr>
<tr>
<td>Second-class</td>
<td>.</td>
<td>21</td>
<td>21</td>
<td>7</td>
</tr>
<tr>
<td>Third-class</td>
<td>.</td>
<td>.</td>
<td>.</td>
<td>.</td>
</tr>
<tr>
<td></td>
<td>101</td>
<td>93</td>
<td>124</td>
<td>80</td>
</tr>
<tr>
<td>Ill and failures</td>
<td>.</td>
<td>.</td>
<td>.</td>
<td>.</td>
</tr>
<tr>
<td>not examined</td>
<td>.</td>
<td>.</td>
<td>.</td>
<td>.</td>
</tr>
<tr>
<td>special</td>
<td>2</td>
<td>.</td>
<td>.</td>
<td>113</td>
</tr>
</tbody>
</table>

1 Bourguès, Histoire du Dr. Clot Bey, s.d. and p. 399.
2 Aperçu, II, 140-41 and Compte rendu, pp. 3-6 and 147-8.
3 Sharafl, op. cit., p. 8. Hamont, op. cit., II, 90, maintains that the people were far too afraid to raise any opposition to any of Muhammad ‘Ali’s enterprises. He mentions the name of Shafik Haasan al-Aṭṭar whom Muhammad ‘Ali made Shafik of Al-Azhar—it is to be doubted whether he represented all Egyptian opinion.
4 Compte rendu, pp. 150-51 and Aperçu, II, 143.
5 Pp. 152-4.

1 Clot, Compte rendu, pp. 95-96.
2 The scholastic year began 1st Shawal and ended 1st Ramadân, Clot, Compte rendu, p. 13.
3 Clot Bey, Aperçu II, 199, they acquired practice from work in the hospitals.
4 Compte rendu, p. 45. Ten students who were useless as medical students were sent to the provinces to teach the “benefits of vaccination,” ibid., p. 17.
5 Clot, Compte rendu, p. 84.
6 Clot, ibid., p. 96. 129
THE STUDY OF EDUCATION AND

It is impossible to give careful statistics of the numbers of students in the school; when Clot Bey was in France in November, 1832, he claimed to have provided the army with one hundred and fifty surgeons and to have three hundred students at the school during that year.

Five years after the foundation of the school, Clot Bey maintains that his efforts and those of his collaborators were crowned with success. There may have been individual cases of success, but generally speaking, there was far too much haste about turning out men who had not learnt enough and the result was that many were turned back.

There was a great deal of criticism aimed at the system of examinations to the effect that Clot actually gave the questions of the examinations to the students in order to ensure a certain number of successes; otherwise, the opposing parties would have brought about the downfall of the school together with its director. Muhammad ‘Ali got to hear of these reports and at the end of the third year, asked Dr. Pariset of Paris who was in Egypt doing research work, to undertake the supervision of the examination as president of the committee and to make a report on both the examination and the school. Negrub Bey Mahfouz in his rather sketchy account of the History of Medical Education in Egypt seems to think that Hamont was at the bottom of the insinuations against Clot Bey, but Pariset’s report which was published in 1833, ten years before Hamont’s book, shows the general trend of feeling regarding Clot Bey and his school, and, in spite of the fact that the report is favourable, one cannot but judge the school by results. The examination may have shown to Pariset that the students were up to

1 For the first year, see Clot’s Compte rendu, p. 17, the second, p. 45, the third, p. 64–5, the fifth, pp. 96, 104, 113–17.
2 Clot, Compte rendu, p. 215.
3 Clot, Compte rendu, p. 215. A certain number of Syrians was also accepted—see also Ibrahim Elal Shal, op. cit., pp. 9–10.
4 Clot, Asya., II, 1314.
7 The School of Medicine appears to have gone through a very difficult time, for it is reported that in 1829, Muhammad ‘Ali was so discouraged by the progress and work of the school, that he had the full intention of closing it and turning it into a silk factory; see Carrué, op. cit., 1837.
8 Clot Bey, Compte rendu, pp. 63–76. Pariset wrote a note on the plague in Egypt—see Cattaul, op. cit., I, 308, 347 and 382.
9 One of Hamont’s sources of information was ‘Amr ‘Abd al-Rahman, the translator on the staff of the school—Hamont, op. cit., II, 99.

LITERATURE IN MODERN EGYPT

standard, although the number of passers was lower than in other years, but the knowledge tested was only that of booklearning and memory and no student in the world has a more developed memory than the Azhar; there is far too much evidence to show that he was other than a miserable failure when it came to a question of practical work.

The School of Medicine was transferred to Kafr al-Aint in 1837, but before going on to the other schools, some reference will be made to two other medical schools attached to the School of Medicine, the School of Pharmacists and the School of Maternity.

School of Pharmacists

The first attempts to establish a school of pharmacists goes back to November, 1829, when one was opened in the Hibmah Khānah in the Citadel and another at Abū Za‘bal; the former was closed in January, 1830, and amalgamated with that of Abū Za‘bal under an Italian, Luigi Alessandri, who was succeeded by the Abbe Célésia. Already by April, 1832, this school had provided fourteen pharmacists for the army but, in addition to the native pharmacists, a relatively large number of Europeans was employed on account that Hamont is rather critical.

1 Clot Bey was fortunate in having the patronage of officials representing the French Government such as Minnaut, Boidussemond and others, who obviously used their influence with Muhammad ‘Ali to keep the institution going. There was also the question of the Pasha’s own amour propre in having once started on his enterprise and having attracted the attention of Europe, he could not very well close it down. Duhameleon his report to Nesselrodte dated 6th July, 1837, states “L’École de médecine, qui n’a fourni que des sujets médiocres à l’armée, est peut-être celle qui a le plus lâché à désirer jusqu’à présent. Les connaissances variées que l’on est en droit d’exiger d’un bon médecin sont trop au-dessus de l’intelligence commune des Arabes pour qu’on puisse espérer les voir réussir dans cette branche du savoir humain, et on aurait peut-être mieux fait d’envoyer quelques élèves distingués étudier dans les universités d’Europe que de créer une buanderie de médecins en Egypte pour laquelle le pays n’offre pas même les premiers éléments; Cattaul, op. cit., II, pp. 395–6.
2 See above, page 118.
3 Tahboun, H., p. 258, where each is called madrasat al-Ash-Shulah, also at-Ta‘lim, App. III, p. 47, where only one is mentioned as the madrasat al-Aziziyah under Husain Agha; apparently Alessandri, who was the Inspector of this service, had his headquarters in the Citadel; see Clot Bey, Compte rendu, p. 130.
5 Clot Bey, op. cit., pp. 98 and 157.
6 Vernacci Bey, ibid., p. 10, gives the names of 34 Italians as Pharmacists and 74 doctors.
7 Clot Bey, ibid., p. 98.
8 Hamont, op. cit., II, 108.
THE STUDY OF EDUCATION AND

School of Maternity

Another interesting medical training experiment of Clot Bey was the establishment of the School of Maternity—Madrasat al-Wilādah in between 1831 and 1832 in the School of Medicine itself.1 For some time, it was not possible to get young girls or women to enter this School of their own free will. The first batch of girl students was made up of ten Abyssinian and Sudanese girls bought in the Cairo slave markets together with two eunuchs sent by Muhammad 'Ali from his palace. In 1835, ten more slaves were added and ten orphan girls who happened to be under the treatment of the doctors in the Bimaristan and who, when cured, were taken over by the Government, as their parents did not claim them, and trained as midwives; thus the total number of students was thirty-four including the eunuchs who were also made to follow the courses.2

Mlle. Suzanne Voilquin, a Saint-Simonite, was put in charge of the girls’ education from 1834–1836;3 from 1836, she was succeeded by Mlle. Palmyre Gault who had been a student at the Maternité in Paris.4

As all the girls were illiterate, they had to be taught Arabic first and later on, Mlle. Gault taught them a little French in addition to midwifery, vaccination, cupping and bandaging, and the elements of materia medica and dispensing.5

A book dealing with midwifery was translated into Arabic and served as a text-book for the class.6

On graduation, the midwives were given the same rank as the men students of the medical school.7

The Veterinary School

It was not until 1827 that two European veterinary surgeons, Hamont and Prétéot, both graduates of the Alfort School in France, arrived in Egypt.8 Up to that time, diseases and sick animals were not given scientific medical care; it fell to the lot of the native farrier to look after the horses, but the other

1 Clot Bey, Compte rendu, p. 99 and pp. 157–160.
2 Mahfouz, op. cit., p. 71.
4 Clot Bey, Aperçu Général, II/424; Mahfouz, op. cit., pp. 71–2.
6 Clot Bey, ibid., II/424 and Compte rendu, p. 158.
7 Clot Bey, Aperçu Général, II/425.
8 Hamont, op. cit., II/115–164; they seem to have landed in Egypt in October, 1836; see also Guénard, op. cit., pp. 236–239.

LITERATURE IN MODERN EGYPT

animals seem to have been left to their fate.1 An unusually grave epidemic broke out among the buffaloes in Lower Egypt and it appears that Muḥammad ‘Alī was prevailed upon to seek the assistance of European specialists.

As the epidemic of epizootic broke out in Lower Egypt, Rosetta was chosen first of all for the school of veterinary studies and both Hamont and Prétéot had to go to this town to start their activities. Unfortunately, Prétéot fell very ill soon after arrival in 1827 and had to leave the country; he went to Smyrna where he died.

Hamont, a Frenchman, was given the services of an interpreter who could not speak French but only Italian, Arabic and Turkish; an Azhari shaikh was also attached to him, and, between these three, it was hoped to teach veterinary science to some ten Egyptians sent from Cairo and, at the same time, to cure the cattle of their diseases. The arrangements for school accommodation were far from satisfactory while the usual intrigues between teachers, interpreters, students and officials seem to have been, if anything, rather worse than in Cairo.

In 1829,9 the school was transferred to Abī Za‘bal and was given temporary accommodation in the School of Medicine until a new building had been erected,8 but here again, Hamont seems to have met with further difficulties, including the rivalry of Clot Bey, who was anxious to have the School of Veterinary Science under his authority.4

Once near the capital, Hamont learnt how to get into contact with responsible people including Shaikh ʿAṣār al-ʿAṭār, Shaikh al-Azhar and favourite of Muḥammad ‘Alī, and the Nāẓir of the Diwān al-Jihādīyuh who both lent their support. His new school soon had fifty students and accommodation for the treatment of some one hundred and forty horses; provision was also made for the teaching of French and for the 1 Hamont, op. cit., II/129, gives the translation of a letter from Umar Bey the Governor of Ṭamāţ; “Je vous enjoin de leur faire voir les bœufs malades par accidents communs, afin qu’ils puissent opposer au mal, les remèdes dont ils se disent porteurs. Et pour ne pas les retarder dans leurs excursions, abstenez-vous de montrer les animaux dont les maladies viennent de Dieu, maladies contre lesquelles aucune puissance humaine ne peut rien.”
2 ʿAṣār, Ta’līm, p. 373 and p. 390.
3 Hamont, op. cit., II/138 and Clot Bey, Aperçu Général, II/441.
4 Hamont, ibid., II/138–9.
5 Hamont, ibid., II/140; Clot Bey, op. cit., II/441 gives the figure as 100.
6 It is important to note that the students were placed under a Turkish Nāẓir for discipline (Hamont, ibid., II/141) as with nearly all the schools.

733
THE STUDY OF EDUCATION AND

services of a second and very able interpreter called Fara‘ūn, while Shaikh Muṣṭafā, who had given Hamont so much trouble at Rosetta, now encouraged by the growing importance of Hamont’s establishment, seems to have turned over a new leaf and to have given his best to the work.

By an inter-collegiate arrangement, the students of the veterinary school followed certain courses at the School of Medicine, such as physics, chemistry, botany, pharmacy, etc., thus avoiding the necessity of duplicating certain posts, while theoretical and practical subjects connected with veterinary science were taught by Hamont himself. In due course, he was allowed the services of three European specialists by the Dīwān al-Jihādiyyah and these helped in the practical training in the hospital.

In addition to the direction of studies at this school, Hamont had to inspect the regimental veterinary hospitals. In 1833, he was also called upon to reorganise the Ḥārah at Shubrā which, up to that date, had been managed according to the old traditional methods. The Veterinary School was eventually transferred to Shubrā in 1839 to where the Agricultural School had also been transferred from Nabārūh and put under the care of Hamont.

OTHER MILITARY SCHOOLS

The Schools of Music

In an endeavour to keep as close to the European model as possible, Muhammad ‘Ali introduced the system of regimental bands. A school for the training of trumpeters and buglers was opened in 1824 under Ḥasan Aghā (Ujājk al-Tarmīblīk wa’l-Burūnījiyyah), and another special school for trumpeters in August of the same year under ‘Uṣmān Aghā, a Turk from Constantinople; both these schools were experiments under Turks and did not last long; the exact dates of the closure of the first one are not given, but the second one was closed in December of the same year.

A more serious attempt was made in August, 1827, at

LITERATURE IN MODERN EGYPT

Khākānā under ‘Alī Efendi as Director; the teachers were French while the direction of studies was in the hands of a Spaniard. The students, numbered by Clot as two hundred and as one hundred and thirty by Mengin, were taught Arabic by Egyptian teachers. This school was closed down in September, 1835, and during the eight years of existence, there were five different directors.

Both Clot and Hamont criticise the school mainly on the ground that French national and regimental tunes and airs were simply copied and that no attempt was made to compose anything Egyptian or Turkish. The performance was tolerably correct, but entirely without spirit. The object in borrowing European military music could only have been an imitation as it must have been understood that neither the Turks nor the Egyptians would appreciate European music any more than it was possible for the European to understand and appreciate Turkish and Egyptian music; the only instrument the Egyptians did take a liking to was the big drum. After the abolition of the Music School at Khākānā, a European music instructor was attached to each regiment.

Another Music School was opened under ‘Uṣmān Ef. in September, 1834, but was closed in September of the following year; St. John gives the description of yet another such school in the Citadel under a German who taught the Egyptians German and Italian music; the official documents in ‘Abdīn Palace mention the closing of four other Music Schools in 1841.

The Cavalry School

For a long time Muḥammad ‘Alī was not attracted by the

1 Šāmī, ibid., p. 54.
2 Clot, Bey, Aperçu général, II, 144.
3 Clot, Bey, ibid., II, 143.
4 Clot, Bey, ibid., II, 145-6.
5 Šāmī, at-Ta‘ītīm, app. III, p. 54.
6 Šāmī, ibid., p. 54.
THE STUDY OF EDUCATION AND

European cavalry system and it was not until after Ibrahim Pasha had seen French cavalry in action in Morea that he decided to adopt it in Egypt.\(^1\)

A cavalry mission was sent from France in November, 1829\(^*\) and the School (Madrasat as-Sawârî) was opened in April, 1831, at al-Gizah in Murâd Bey’s palace under the Directorship of Hâfiz Ef. Ismâ’il\(^*\) with Lt.-Col. Varin, an old aide-de-camp of Marshal Gouvion Saint-Cyr,\(^*\) as Director of Studies.

In July, 1833, there were two hundred and twenty Turkish and Mamlûk students and thirty Egyptians who were to become trumpeters;\(^*\) four years later there were four hundred, but the numbers seem to have fluctuated considerably.

Varin endeavoured to copy the organisation of the Saumur School; even the students were dressed, but for the turbash, like the French chasseurs. Besides the regular cavalry manoeuvres, the students were taught infantry exercises, fencing, military administration, Turkish, Arabic, Persian and French.\(^*\)

Of all Muhammad 'Ali’s schools, this one seems to have been the most successful from the point of view of organisation and results. St. John, who calls it the School of Cadets states that “It is here, indeed, that the greatest proficiency has been effected in every branch of education; these youths, dressed like European cavalry officers, with the exception of the turbash, which they still retain, having acquired a degree of general knowledge, and refinement in their carriage and behaviour, foreign to the rest of their countrymen.”\(^*\)

Marshal Raguse\(^*\) and Boislecomte\(^*\) both speak very highly of Varin who was responsible for the organisation, and it was through these two Frenchmen that Muhammad 'Ali promoted him to the rank of Colonel with the title of Bey. Hamont\(^*\)

*Cattani, ibid., p. 364, Fessizni to Nesselrod, 18th November, 1829.
*Clot Bey, op. cit., II/370.
*Donin, La Mission du Baron de Boislecomte, Cairo, 1927, p. 136.
*St. John, op. cit., II/399.
*Raguse, op. cit., III/386.
*Donin, La Mission du Baron de Boislecomte, pp. 58, 108 and 136; see also Clot Bey, op. cit., ibid., II/219-220 and Râfîl, op. cit., III/368-9.

LITERATURE IN MODERN EGYPT

criticises the school on the ground that the students were taken away and given employment before they had completed the course.\(^1\)

The Artillery School

Attention had been given to the development of artillery on European lines almost as soon as Muhammad ‘Ali began his reforms (see above p. 24). M. Gonthard de Venera was one of the first Europeans to be employed by Muhammad ‘Ali for this branch although he had no school under him;\(^*\) Adham Bey also gave mathematical instruction to several officers with a view to training for the artillery service;\(^*\) under Col. Rey, the service was still further developed while Planat taught gunnery at the Staff School.\(^*\)

In June, 1831, a properly organised School of Artillery was opened at Turâ (Madrasat al-Tâbiyiyâh)\(^*\) for about three to four hundred students who were taught Turkish, Arabic, French, Italian, arithmetic, algebra, geometry, mechanics, drawing, topography, fortification, infantry, cavalry and artillery exercises, construction of batteries and bridge-building. The School was under Khalil Ef. as Nasîr until May, 1832,\(^*\) but Col. Segueras, a Spaniard,\(^*\) was in charge of the organisation and instruction until nearly the end of 1833 when he was dismissed by Muhammad ‘Ali through the intrigues of Sulaimân Pasha and Muqitâr Bey;\(^*\) from that time, Bruneau, a graduate of the Polytechnique at Paris and a Saint-Simonite, was in charge of instruction;\(^*\) but eventually became Nasîr.\(^*\)

The students came from the Ǧaṣr al-ʾAjin School and the usual complaint is made that the students were not allowed to complete their courses and were sent out on active service.

*Hamont, op. cit., II/164.
*P. and H., op. cit., p. 133.
*Planat, ibid., p. 93.
*Stani, op. cit., app. III, p. 52 and Taâzawim, II/382.
*Cattani, op. cit., Vol. II, p. 111, p. 394, where Duhamel gives the number as 196.
*Mengin, op. cit., II/190.
*Stani, op. cit., p. 57; as with most of Muhammad ‘Ali’s establishments, there was a continual change of Nasîr, from June, 1831, to March, 1849, there were seven changes, the last being Bruneau who kept his post for seven years.
*Clot Bey, op. cit., II/221, states that he was a Portuguese.
*Scott, Rambles in Egypt and Canidia, London, 1837, II/336 and Puckler-Muskau, Egypt under Muhammad Ali, London, 1843, II/191; this will be dealt with in some detail below.
*He was called by the usual title of taṭīmçî see official register, No. 2021, 'Abûlī Archives.
*Poujoulat, op. cit., II/516; Carré, op. cit., II/162 and 272.
The Study of Education and

before they were fully prepared.¹ Those intended to be officers were either Turks or Mamluks but there was also an additional class of about one hundred Egyptians who were trained as gunners and were taught English as well as Italian.²

The Infantry Schools

Infantry training was pressed forward but the organisation of training centres seems to have lacked the consistency of the other military establishments probably due to the fact that the directorship was always changing hands.

The main training camp was situated a few miles to the north of Cairo near Khānkāh at a place called Jihād Abād; an infantry school (Madrasat al-Biyāḍah) was opened at Khānkāh in September, 1832³ but closed down in May, 1834; it was transferred to Damietta in June of the same year where it continued to function under the Piemontese, Lieut.-Col. Bolognini, until January, 1841, and then it was transferred to Abū Zaʿbal.⁴ Guémard maintains on the authority of Forni that an Infantry School was opened at Damietta in 1822, but this is not supported by Forni nor any other authority.⁵

The Damietta Infantry School had four hundred students who were trained as officers and under-officers;⁶ they appear to have been Turks and Mamluks for the most part⁷ and were taught military exercises and manoeuvres, military administration, Turkish, Arabic and Persian.⁸

¹St. John, op. cit., II/358-9.
²Denin, La Mission du Baron de Boisdean, p. 137.
³Tahānī, II/406 and Artīn, op. cit., p. 191.
⁴Tahānī, II/423 and al-Tālim, app. III, p. 51, and Artīn, ibid., p. 191; Bolognini, op. cit., III/356. Boisdean in July, 1833, states that there were no infantry schools in Egypt. According to the Tahānī, II/437, another infantry school was opened at Damietta in January, 1835; it may simply have been a new building for the accommodation of the students who were probably under canvas. Sulaimān Pasha was Inspector-General at the time and took a lot of interest in this school owing to its proximity to Syria perhaps. Baghe saw only one infantry school in 1834-35—see op. cit., III/427; A certain 'Abdīn Ef. was appointed there as teacher of geography in October, 1833 (see Tahānī, II/431).
⁵Guémard, op. cit., p. 134, gives his reference as Forni (Viaggio nell'Egitto e nell'alba Nubica, 1839), Vol. I, p. 407, but no reference is made to the town in question on this page and, although Damietta is described on p. 470, yet no reference is made to any infantry school there nor to Bolognini. He also quotes Deyn (op. cit.), p. 125 in support of his statement, but Deny's date refers to the opening of the Denin al-Fikkiyyah (see above, p. 23, note 2).⁶Cot Bev, op. cit., II/218.⁷Cot Bev, op. cit., II/218.

LITERATURE IN MODERN EGYPT

There is record of the opening of another Infantry School at Jihād Abād in July, 1832, but it was closed in April, 1834.⁴

The High School

This school was called the Mahlab al-ʿĀlī and by the French, École Supérieure ou École des Princes;⁸ it was opened rather earlier than the date given by Sāmī⁹ as it was attended by Artīn Ef.¹⁰ who went to Europe in 1826 as a member of the education mission.

It was organised on European lines as a military school for the training of the sons of Muḥammad ʿĀli and other members of his family and the sons of his high officials.¹¹ The students of this school, of whom Hamont speaks very highly, were taught Turkish, Arabic, Persian, French, history, mathematics, and the usual military subjects.¹²

The Naval Schools

Reference has already been made to the beginning of naval training (see above, p. 121). The formation of an actual school for the training of Naval Officers seems to have been in 1825 under Ḥasan Bev al-Kubruslī.¹³ The training was given in one of the ships and, a little later, another ship was added to this service under Kenj ʿUṯmān Bev. There appears to have been a strong feeling of animosity between ʿUṯmān Nūr-addīn and Ḥasan al-Kubruslī and, one Friday while the students were absent and ʿUṯmān Nūr-addīn was on a tour of inspection, Ḥasan set a trap to blow up the powder magazine hoping thereby to get rid of his enemy; ʿUṯmān escaped but Ḥasan fell into his own trap and was blown to pieces.¹⁴ This early school is reputed to have done excellent work in producing officers amongst whom can be mentioned Ḥasan Ef. al-Iṣkandarīnī, Muḥammad Ef. Shāhīn, Muḥammad Ef. Nāmī, Ḥasan Ef. Saʿrān, who were sent to France to complete their studies and 'Abdal-Ḥamīd Ef.

¹Tahānī, II/402; Sāmī, al-Tālim, app. III, p. 51; Artīn, op. cit., p. 192.
²Journal asiatique, 1843, p. 81.
⁴Revue d'Égypte, II/424-5.
⁶Hamont, ibid., II/326.
⁷Sarhank, Ḥabīb al-ʿĀẓār, II/343.
⁸Sarhank, ibid., II/343 and Cattau, op. cit., I/315, Pezoni to Bokky, 27th September, 1827.
⁹Sarhank, ibid., II/343.
¹⁰Sarhank, ibid., II/343.
THE STUDY OF EDUCATION AND

Yusuf Ef. Akah, Abdal-Karim Ef. and Muhammad Ef. Al-
Islambuli, who were sent to England.1

After the destruction of the fleet at Navarino in 1827, Muhammad 'Ali made up his mind to rebuild another on a
much larger scale. Some twelve thousand men were trained
under Besson Bey2 in a school set up near Ra's at-Tin in
Alexandria, some sixteen hundred were instructed in ship-
building and the rest were taught, not only the handling
of ships, but also naval gunnery and military tactics, so that
they could be used both on land and at sea.3 Besson Bey
was helped in his task by Haji 'Umar and another native called
Shakir Ef. Al-Iskanderan.4 Letellier, another French officer,
was the chief instructor of a French Naval Mission brought
to Egypt by Livron5 and did very useful work for the Egyptian
navy, but the real credit for building the new fleet must be given
to Cérisy, a French engineer formerly employed at Toulon,
who arrived in Egypt in 1829, and took over the direction of
the shipyards.6

The supply of men for the rank and file of the navy and for
skilled labour in the dockyards came from the provinces7
through the usual methods of conscription,8 but the question
of the supply of officers seems to have been more difficult for
Muhammad 'Ali and to have become increasingly so as time
went on. We have already mentioned the case where a "requisi-
tion" of two hundred students between the ages of fifteen and
twenty was made on the Madrasat Al-Jahidiyah to be trained
in the ships; another reference is found to the effect that
Muhammad 'Ali made a request to his own followers asking them
to supply him with three of their Mamluks, in some cases
five, for service as officers "since the matter is of a religious
necessity."9

Under de Cérisy, the navy grew rapidly and, with the increase
in the numbers of officers and men, a better organised school

1 Sarbakh, op. cit., II/243. See also under Education Missions below.
2 Sarbakh, ibid., II/242.
3 Sarbakh, Ibid., II/242 and Guérard, op. cit., p. 214.
4 Sarbakh, ibid., II/237.
5 Cattan, op. cit., I/83, Pezzone to Ribeauvillé, 6th August, 1827, also
Guérard, ibid., pp. 216 to 225.
6 Cattan, op. cit., I/334, Pezzone to Ribeauvillé, 20th February, 1829,
also Guérard, loc. cit.
7 Fahlé, see Tukri, II/348 and II/391.
8 The term šabaqa 'ali is generally used when referring to the conscription
of provincials.
9 Taharim, II/383.

LITERATURE IN MODERN EGYPT

was opened at Ra's at-Tin for the reception and training of
Mamluk officers under European and local teachers; the
names of two of the former are given as Antoine Banassy and
Camillo Moskani,1 both Italians, and Muhammad Ef. at-Tar-
junam.2 The School (Madrasat Al-Nawādīyah) was placed under
the Nāṣir, Bimbashī İbrāhīm Ağâ Istanaşahî until October, 1833,
Sâhebgül Ağâsî Muhammad Arûm Ef. succeeded him until
June, 1837, and then Muhammad Ef. Kârâshî until November,
1839,3 it being the practice of Muhammad 'Ali to place a Turk
in charge rather than a European (unless he was a convert to
Islam) as the Moslems were very sensitive about being under
the authority of a Christian.4

In May, 1834, the number of Mamluks at this Naval School
is given as one hundred and sixty. They were taught arithmetic,
geometry, geography and navigation; the students were
divided out among the ships when they were in action in order
to acquire practical experience.5

While the standard of training is reported as being higher
in the navy than in the army,6 the main criticisms deal with the
insufficient experience of the officers; they lacked judgment
in the most elementary matters such as the strength of the wind
and the amount of sail to carry; they generally waited until
something broke down before they realised that action was
necessary.7

OTHER TECHNICAL SCHOOLS

The School of War Munitions

In July, 1833, a School was set up under the name of Mašlak
al-Mušimmat al-Hārbiyyah8 under a certain Mumluk Ef.

1 Sarhank, op. cit., II/237, but Avocani is probably the right name; see
Vernucci, op. cit., p. 11, Balboui, op. cit., I/390, and Guérard, op. cit., pp. 218
and 225.
2 Sarbakh, ibid., II/237.
3 Sam, at-Talûm, app. III, p. 53.
4 Guérard, op. cit., p. 216.
7 Cattan, ibid., Vol. II, pt. II, p. 475, Duhamel to Nesselrode, 2nd October,
1837.
8 Cattan, ibid., Vol. II, pt. I, p. 91 (see n.1) : Clot Bey, op. cit., II/266;
P. and H., op. cit., p. 142; Scott, op. cit., I/32-3; Vauclus, op. cit.,
X/355-6; Cadallene and Brevony, op. cit., I/47-9; Doin, La Mission
de l'Europe en Egypte, pp. 119-24; Ridâ'î, Manâhîl al-Allâh, 2nd ed., pp. 239-
240, and 'Ali Mâlàmak, al-Khillâj, Vol. I/36-9 all give some account of the Naval
School, but that given by Sarbakh contains more detail.
9 Sam, at-Talûm, app. III, p. 51 and Taharim, II/345.
who was relieved of his post in September of the following year, and, although the date of the closure of the school is given as March, 1836, yet no further names of directors are given. The actual functions of the school are not given; Artin translates the name as École des ateliers militaires while Deny gives the meaning of the word muḥimmāt as munitions and so the school probably had some connection with the Cairo Arsenal and Munitions Factory under the authority of Adham Bey (see above, p. 137). Hardly any mention is made of this establishment and in view of its short duration, it may be concluded that it was one of the many unsuccessful experiments.

The School of Mineralogy
A more important school, perhaps, was the Madrasat al-Maʿādān or School of Mineralogy which was established in Old Cairo in May, 1834 under Yusuf Kāshīf. Elsewhere, however, it is stated that Lambert, the Saint-Simonite, was in charge of a School of Mines in 1835; this was the school opened in the house of the Daftardār Bey in al-Azabkiyah in Dhīl-Kaʿdah, 1250—March, 1835. The order from Muhammad ‘Alli regarding the opening of the School of Mines was issued to Sulaimān Pasha, and it appears that the arrangements were carried out through Sulaimān Pasha, Adham Ef. and the Saint-Simonite group. Lambert does not appear to have had any connection with the Old Cairo school which was closed down in August, 1836, probably because the newly organised School of Engineering was able to teach the subjects connected with mineralogy. The School of Mines opened in March, 1835, was probably absorbed into the School of Engineering at about the same time.

The School of Engineering

The School of Engineering or Polytechnique of the French writers—Madrasat al-Muhandisīkhānāh, is perhaps one of Muhammad ‘Alli’s most interesting experiments at introducing technical training into the country. It is recorded that this School was opened at Būlāk in May, 1834, under the nagirshīrt of Artin Ef. (afterwards Bey) until September of the same year, he was then succeeded by the capable Yusuf Ef. Hekelyān, who was Nāzir from November, 1834 until September, 1837. Lambert then became Nāzir and remained in that post until April, 1849, when ‘Allī Muḥarrak took over the school until September, 1834. Actually, however, the School was not opened on the officially recorded date but was reorganised; the School of Engineering certainly existed in 1834, but owing to the lack of records on the one hand regarding the activities of the school between 1820 and 1834, and on the other, to the efforts of French writers to claim for their nationals all the credit of being the pioneers in introducing engineering studies into Egypt, one is hard put to it to collect sufficient data to enable a full account of the school to be written.

We are in possession of sufficient evidence, however, to support the fact that the School of Engineering was in existence before the reorganisation in May, 1834; we have one order emanating from Muḥammad ‘Allī dated 7th Shawwāl 1246—23rd March, 1831—appointing al-Hājj Ahmad Aghā as Wakil of the Muhandishkhānāh, another dated 23rd Jumādā I, 1249—8th October, 1833—where Aḥzarīs were to be attached to the same establishment at forty piastres and fifteen piastres a month and a third dated Shawwāl 1249—February, 1834, ordering the students of that school to go and watch building activities in order to get some practice.

One authority states that Artin was called upon to reorganise the School of Engineers which had been transferred to Būlāk, while Enfantin, to whom much of the credit is attributed in this pioneer work, states quite definitely in March, 1834, that the nucleus for a School of Engineering already existed, i.e.,

2 Artin, op. cit., p. 193; Sāmī, op. cit., p. 47; but in the Revue d’Égypte II/425–6, the date is given as 1835 which must be an error as we have a letter written by Enfantin to Lambert dated 6th September, 1834, pointing out that Artin was being taken away from the School and being made a member of the Council (presumably Muḥammad ‘Allī’s Maḥās al-A’lī) see Oeuvres d’Enfantin, Paris, 1872, Vol. XXX, p. 2.
3 Sāmī, op. cit., p. 47.
4 Taḥwīl, II/380.
5 Taḥwīl, II/418.
6 Oeuvres d’Enfantin, Vol. II/XXIX, p. 122, letter dated 19th March, 1834 to Linant, "... faire établir le plus promptement possible et pour un nombre assez considérable d’élèves, l’école polytechnique dont le noyau est déjà là, et, qui dans un an sera une péninsule productive, et un magasin d’instruments de travail."

143
THE STUDY OF EDUCATION AND

two months before the officially recorded date, which, of course, indicates that a School of Engineering of a kind existed in Egypt from the formation of the Dār al-Handasah in December, 1820, and continued, in fact, all throughout the reigns of Muhammad 'Ali and 'Abbās I. It was reorganised on two different occasions, the first time under Coste and Nūr-addīn, in May, 1821; and the second, under the Saint-Simonite group with the help of the ex-Mission students such as Artīn and Hekekyān. From May 1834, however, it came to be known as the Polytechnic on account of its being an attempt to make it a copy of the Polytechnique at Paris, but actually the Arābo-Turkish name was more or less the same; it started as the Dār al-Handasah and with the transfer to Būlāk, came to be called the Madrasat al-Handasah, but even in the orders before the reorganisation, it is referred as the Muhandisḵānāh which name it has kept until the present day.

This school, however, seems to have been intended to serve non-military needs, although Jomard calls it la grande école militaire. The military side appears to have been considered for Planat mentions that a School of Military Engineering was contemplated at Khānsā, but at the time of his writing 1828, neither the personnel nor the students had been chosen; he suggests that the students were to be the pick of the other schools.3 Still, John, however, paid a visit to the School of Military Engineering where he found about one hundred selected young men who were taught surveying, fortification, how to attack and defend places, mining, etc.; he criticised the school in much the same way as the other establishments were criticised, that the students were drafted into active service before they had learnt enough.4

The sudden importance of the School of Engineering coincides with the arrival of the Saint-Simonites in Egypt and the total eclipse of the scarcely-mentioned Coste; from that date, the future of Engineering works and studies is linked up with the careers of Lambert, Linant de Bellefonds who, together with Enfantine, Sulaimān Pasha, Artīn, Malik and others, reorganised this branch.5 Through the inspiration and influence of the Saint-Simonites under Enfantine, a school was also opened at

LITERATURE IN MODERN EGYPT

the Barrage before the reorganisation at Būlāk 1 was started; it was suggested that the Barrage School should be kept open for practical work 2 under Linant who eventually became Director of Public Works. 3

The main avowed object of the Saint-Simonites was the industrial and cultural development of Egypt and the opening of the Suez Canal. 4 The project of encouraging engineering studies in Egypt, while providing employment for a number of Frenchmen and giving a good opening for the growth of French culture, certainly seemed sincere, and, although it bore fruit in the long run, yet the tradition of the Egyptian engineering service has never been sufficiently strong to remain independent of European experts. In fact, it has really become a part of the traditional system in technical branches of the Egyptian service that serious enterprises are always undertaken by Europeans.

On reorganisation, one hundred students were recruited from the Darḵānāh (v. infra) and the Kāṣr al-‘Aīn School 5; they were taught Turkish, Persian, French, physics, chemistry, mineralogy, drawing, cosmography and mathematics over a period of three years, 6 but as the real development of this school falls into the period after the reorganisation of the administration of the schools, it is proposed to deal more fully with this below.

The School of Applied Chemistry

Amongst the schools that were opened during this period, mention is made by Jomard 7 of a School of Applied Chemistry under Heim; Artīn gives its name as the École de chimie appliquée à l’industrie and gives its opening date as 1829. 8 According to the Tabāhīm, 9 a School of Chemistry was opened at Old Cairo on the 8th Jam. II, 1247—14th November, 1831—for five students; the Wāḥa’t Miṣrijah confirms that such a

1 Jomard, op. cit., p. 48.
2 Planat, op. cit., p. 351.
3 Planat, op. cit., p. 351.
4 1828.
5 Artīn, op. cit., p. 5.
6 Oeuvres d’Enfantine, XXXIX, 190, 531.
7 Ibid., p. 104.
10 Tabāhīm, II/426; Azharis were also attached to Linant to learn mathematics, etc., Tabāhīm, II/426 (November, 1835).
11 Cadalvène and Brevery, L’Égypte et la Turquie, Paris, 1836, 1/127.
13 Artīn, op. cit., p. 79.
14 Tabāhīm, II/385.
THE STUDY OF EDUCATION AND

school was in existence and that there also appeared to be some
competition between two Frenchmen for post of director; the
original director had contracted to teach five students, but
another by the name of Roche appeared on the scene and
volunteered to teach ten students and to do the work better.1
Little information is available concerning the attempts to pro-
duce chemists; both St. John 2 and Clot Bey 3 mention the
existence of a Chemical Works at Old Cairo, the latter in more
detail than St. John, and it appears that the object was to
provide natives to do skilled work in Muḥammad ‘Ali’s factories.

The Civil Schools

The system of keeping records and registers in connection
with administrative accountancy that Muḥammad ‘Ali found
on being made Governor of Egypt was in the hands of the
Eşfandīs of the Accountancy Department who had had the
monopoly of their tasks for generations, while the Copts seem
to have had the monopoly of tax-collating and land-assessing.
We have already seen that an attempt was made to make a
 cadastral survey of Lower Egypt (c.s. sufrā, p. 168), but no attempt
to reorganise the system of book-keeping and accountancy
appears to have been made until a later date.

The idea of introducing a satisfactory system of accountancy
seems to have come from various sources; Jomard, Bowring
and others were all asked in turn for suggestions but, as with
all Muḥammad ‘Ali’s innovations, one cannot hardly attribute
to any one person the credit of having promoted the adoption
of some new idea. It seems to have been the practice of the
ruler to have derived ideas and information from anyone who
happened to know something about the subject he had in mind.
In one case, Commandant Jean Haraggi, a Copt who had joined
the battalion of the Chasseurs d’Orient, and who was attached
to the Boyer mission, is credited with having established the
new system of accountancy in 1825 with the aid of Jomard.4
Elsewhere a certain Zaccar, originally a native of Cairo who
had lived for some time at Trieste, but who had been obliged
to return to Egypt on account of a change in his fortune, is

1 Wāḥibī, Misrīyāt, No. 316, 8th Jan., II, 1247—14th November, 1831—
page 3, line 24.
2 St. John, op. cit., II 423.
3 Clot Bey, op. cit., II 424-5.
4 Gudinard, op. cit., p. 258. Sakañini, De l’Égypte et de l’intervention
européenne dans les affaires d’Orient, Paris, 1833, p. 23.

LITERATURE IN MODERN EGYPT

supposed to have proposed to Muḥammad ‘Ali in 1827 that the
European system of accountancy should be adopted in Egypt.1
In June, 1828, it is recorded that Muḥammad ‘Ali gave orders
to ‘Uṯmān Nūr-āddin to see that the change was effected, and,
in addition to his rank as Major-General, he was made Director of
Accounts for the general administration of Egypt while Zaccar
was instructed to teach the various employees.2

An order was issued in Muḥarram, 1245—July 1829—to a
Certain ‘Abd-al-Bākī Ef. al-Mūr, the Chief Accountant and
Storekeeper of the Divān al-Iskādiyāh to the effect that the
account and registers under his control should henceforth be
kept according to the European system from which it would
appear that Muḥammad ‘Ali’s first order to Nūr-āddin applied
only to the Divān al-‘Ālī, probably as an experiment, and not
to all the Divāns; it also points to the wisdom of Muḥammad
‘Ali in not wishing to change the whole system at once stroke
of the pen, knowing full well that such a sudden change would
result in confusion.

There is enough evidence to show that Muḥammad ‘Ali was
aiming at a higher standard of administrative efficiency and
at a system whereby the affairs of the country would be more and
more under the control of men who were of his own following
and whom he could trust. Everybody in his service was re-
quired to learn to read and write; we have, in fact, an order
dated 3rd Jan., II, 1245—30th November, 1829—dismissing
certain ma’mūrs who were illiterate.3 No mention is made
about the disposal of the ma’mūrs in question. They were
probably given posts of less responsibility, for it is to be doubted
whether they were allowed to be unemployed; even the students
who were dismissed from the schools either on account of bad
behaviour or failure in their examinations were given some task
in the government.4 No doubt this kind of treatment was meant
as an example to the rest of the officers in order to make them
keener and more efficient. Even the village headmen (omdāha)
were ordered to learn to read and write,5 after various com-
plaints had been made about their illiteracy,6 and the public

1 Cattani, op. cit., I 253. Perzoni to Nesselrode, 22nd June, 1828.
2 Cattani, op. cit., I 253.
3 Taḥṣīr, II 244, and also Donz, L’Égypte de 1828 à 1830, Roux, 1835,
p. 131, Mémant a Count Portalis, letter dated 22 July, 1829.
4 Taḥṣīr, II 258.
5 Art. 24 of the Regulations for the Preparatory Schools.
6 Taḥṣīr, II 247, order to Muḥṭar Bey dated Jan. I, 1250—October, 1834.
7 Ibid., II 346.
THE STUDY OF EDUCATION AND

The mu'āwīnāt to the Majlis al-Mashwarah; these mu'āwīns were divided into three classes, each with a special salary.

Another order was issued 18th Rabi' I, 1252—3rd July, 1836—first the Wahīl of the Dīwān al-Jihādiyyah to the effect that a School of Accountancy was to be opened in his administration and that thirty students from the above Darshkhānah were to be taken to form the nucleus but the Wahīl apparently had great difficulty in finding more than eight with the necessary qualifications.¹

The staffing of the provincial offices with qualified clerks was dealt with by Muḥammad 'Ali on the advice of ʿIbrāhīm Pasha; an order was issued on the 8th Rajab 1245—3rd January, 1830—on the effect that accommodation had to be found in the Majlis al-Mashwarah for the teaching of the clerks of the Dīwān, Turkish, Arabic and subjects connected with agriculture (nakāl al-jatābah). By the same order, Muḥammad Ef. Davīdār, who knew both languages and was experienced in provincial affairs, was nominated Nāṣir of the School with Shaikh Muṣṭafā as teacher of Arabic. The Dīwān clerks were to be taught first and then posted in the provinces, others from the provinces taking their places until all the clerks were efficient in their work.²

On 16th Jam. I, 1250—20th September, 1834—still another school was opened in the Citadel; it was called the Madrasah li-Ta'lim al-Idārat al-Mulkiyyah—"l'Ecole d'administration et de traduction"³; it was under Arṭūn and Eṣṭefān and seems to have had Muḥammad 'Ali's special patronage for several translations were done here for his own reading.⁴ But in spite of all these schools, no effective system was introduced into the Accountancy branch.⁵

Other Schools

Other schools were started before the reorganisation of the administration of education, but as the development of most of them belongs to the later period, it is only intended to give a brief reference to them here.

¹ Tadrust, II/459.
² Tadrust, II/352 and Wahīl 'Mīsīr, No. 49, Rajab, 1245.
³ Tadrust, II/334 and 'Aḥdīn Archives.
⁴ Revue d'Égypte, II/425-6; Ẓayn, op. cit., p. 48; Guérin, op. cit., p. 393.
⁵ Revue d'Égypte, II/425-6: the subject of translations will be dealt with in another volume.
THE STUDY OF EDUCATION AND

The School of Signalling

The School of Signalling was begun in Ramadān, 1245—February, 1830—with fifteen students at thirty piastres a month with an increase of ten piastres when they had completed their training; the students were all Egyptians from the provinces. 1

The School of Arts and Crafts

This School appears to have been the Madrasat ʿaṣ-Ṣināʿah or Industrial School which was opened in Dhi‘l-Hijjah, 1246—May, 1831—and was probably connected with the factory system of Muḥammad All. 2 Boislecomte reports that Mr. Galloway had a dozen young men under him at Rosetta to whom he taught some general ideas of managing manufactories. 3 This school eventually made way for a much larger one under Hekeyyān.

The School of Irrigation

This school was begun in September, 1831, under an English irrigation engineer 4; accommodation was provided for ten students but no further information is available on this early experiment which was quite independent of the Muḥandīshīnān; the school probably ceased to exist when the students were given employment, and canalisation and irrigation were taught at the reorganised Būlāk school.

The School of Translation

This is the School of Translation—Madrasat al-Tarjamah which was afterwards called the School of Languages—Madrasat al-Alsun 5; it was opened in June, 1836, under a certain Ibrāhīm Ef. who remained director until January, 1837, 6 and was then succeeded by Ṣifāʾah Bey. The function and development of this school belong to the post-reorganisation period when the work done by this school will be given closer attention. 7

1 Taḥwīl, II, 393.
2 Ibid., II, 382.
4 Taḥwīl, II, 383.
5 Ṣulḥ Majdī, Ḧāyat as-Zaman bi-Maḥāfīz Khādīm al-Wajān, d. 1290, in my possession, p. 24 sq.
6 Ṣayn, al-Tātim, app. III, p. 46 and Aram, op. cit., p. 192. It is not clear who this Ibrāhīm Ef. was; there was only one Ibrāhīm Ef. (Wahl) on the mission to Europe in 1826, but he was sent back without finishing his studies, see Ṣayn, op. cit., p. 47.

LITERATURE IN MODERN EGYPT

The School of Agriculture

Perhaps the School of Agriculture (Madrassat az-Zirāʿah or Model Farm) was one of Muḥammad All’s least successful experiments. He had had recourse to European and even to Indian experts for the introduction or resuscitation of the cultivation of certain products; 8 Jumel helped with the cultivation of cotton, 9 Bengalis with indigo 10 and a Greek with the cultivation of madder. 11 It was not until 1248—1833—that Muḥammad All made up his mind definitely about the opening of an agricultural school 12; for this purpose, he set aside one hundred faddāmāt at Nabārū and ordered thirty students to be sent there who must be the sons of Shāikhīs-balād or the well-to-do 13; at the end of April, 1834, two students were sent from the Kaṣr al-Aʿnī School. 14

In the meantime, Muḥammad All had sent to France for a complete staff of teachers and demonstrators together with the necessary implements and equipment. 15 The main difficulty at first seems to have been the absence of any school accommodation and it was not until August, 1835, that the lower part of a new building was finished. 16

M. Grandjean was at the head of this agricultural mission which even included ploughmen and smiths; he was assisted by an Armenian called Yuṣuf Ef. al-ʿArmani, who had been sent to Roville in 1826 to study agriculture; 17 he seems to have acted both as interpreter and supervisor. 18

The school seems to have been so badly managed and there was so much opposition from the people and the local authorities that Grandjean resigned in disgust and left the country. 19 The director’s post was now filled by Yuṣuf Ef. who had rather a lot of influence at the court of Muḥammad All through his Armenian friends who were well represented there and, in spite

1 Clot Bey, op. cit., II, 378–9.
2 P. and H., op. cit., p. 142.
3 P. and H., ibid., p. 149.
4 Taḥwīl, II, 414; according to St. John, op. cit., II, 406–7, the school had not yet been opened although Muḥammad All had expressed his intention of doing so.
5 Taḥwīl, II, 414, Hamont, op. cit., II, 265, gives the number as 46.
6 Taḥwīl, II, 412.
7 Hamont, ibid., II, 275–7, Maḥbūr, al-Ḵaṭḥāṭī, XVII, 344.
8 Taḥwīl, II, 449.
9 Taḥwīl, op. cit., p. 44; the cultivation of the mandarin orange in Egypt is attributed to this Yuṣuf Efendi, hence the name given to that fruit, Yuṣuf Efendi, Yuṣuf Efendiyah and Yuṣuf Efendiyat (phrash).
10 Hamont, ibid., II, 279–9.
of an increase in the opposition and of ridicule from the local people, nothing was done for a little while.

The school lost all the prestige it ever had and simply deteriorated into a farm of much the same kind as other farms except that the crops that were grown cost twice the price of production, and it was probably this fact that made Muḥammad ʿAli listen to the tales that were told about Yūsuf Ef. and his school. Eventually the Armenian was dismissed and Hamont was asked to report on the failure of the Nabarōh experiment and then to take charge of it. In August, 1836 the School was transferred to Shubrā, but Nabarōh still appears to have been kept as a model farm where the Hārūnah were established and to where the Veterinary School was transferred in 1837.

The Mosque and Kuttāb System and Primary Education 1824-1836

All the schools dealt with above were essentially intended for special training, mainly naval and military, but even those that were not actually providing officers and men for active service were intended for some auxiliary service connected with the supply and demand of the forces, either directly or indirectly. Not a single institution was set up philanthropically or for the sole purpose of improving the intellectual outlook of the people.

It seems remarkable that Muḥammad ʿAli was able to find students for his special schools without any system of primary or lower grade schools specially so formed for the preparation of students for this higher training. Up to 1833, Muḥammad ʿAli seemed to have drawn his recruits from two different sources. The non-Egyptians provided the officers and students for the military schools; these were for the most part Circassian Mamluks with a sprinkling of Greeks, Kurds, Albanians and Georgians. The other source was, of course, Egyptian; the Egyptian element provided men for the medical, veterinary, engineering and administrative services and schools and were rarely given any high post of responsibility.

1 Hamont, ibid., II/483-6 but Séaun, op. cit., p. 47 for the date who states, however, that the school was opened instead of transferred and reorganised.
2 V. infra p. 207.
3 Mubārak, ibid., XII/119-122.
4 i.e., at about the same time as the Medical School was transferred from Aḥbāb al-ʿAsr al-ʿAin-Mahfouz, op. cit., p. 35; Clot Bey, op. cit., II/445-6 and Hamont, op. cit., II/487.

Literature in Modern Egypt

The question as to what kind of Egyptian student was recruited into the schools seems easy to answer. There was, practically speaking, only the one class, namely, the falāḥīn. Most of the artisan classes were drawn into the factory system and probably did not provide recruits for the school system. Muḥammad ʿAli certainly drew on the provinces for young Egyptians to serve in the schools and it seems as if they were taken from the kuttāb (mahāsib).

An order issued 7th August, 1829, to the Maʿmūr of Upper Egypt asked for ten youths from the Mahāṣib al-Banāʿīr wal-Kūrā in order to study in the dockyards at Alexandria; they were to be between the ages of ten and twenty, sound of limbs and to know how to read and write. Muḥammad ʿAli, as has been seen above, drew on al-ʿAṣhar frequently for student, in large numbers for the various non-military schools and the expression Mahāṣib al-Banāʿīr wal-Kūrā (literally—the schools of the chief provincial towns and villages) can only refer to the mosque schools and kuttāb deals with in the first chapter, which Muḥammad ʿAli had drawn into his system for the sake of recruiting and conscription.

The Egyptians were averse not only to military service which they dreaded, but also to joining Muḥammad ʿAli’s school, which they rightly regarded as connected with his military system and conscription, the method of which was condemned by every contemporary writer; even Clot Bey states that the system employed was en effet vicieux, inhumain déplorable.

The effect of this aversion was disastrous to the old-established system already dealt with above for it was the cause of frightening people away from the mosque and discouraged fathers from sending their boys to the village kuttāb. The mosques and schools had already received a severe blow when Muḥammad ʿAli had confiscated the waḥf funds and properties which had gradually been accumulating over centuries; the whole economic system and social life of the people were completely disorganised and deflected from their natural course by an entirely arbitrary system which enabled one man to commandeer produce, property and man power alike. It was not until the reign of Ismāʿīl Pasha that the old order of life gradually returned, and even then, as

1 Taḥsim, II/498.
2 Clot Bey, op. cit., II/255; he deals with the question of conscription in pages 255-262.
THE STUDY OF EDUCATION AND

we shall see, the old religious school, including al-Azhar, never regained its previous position in the social frame.

Under Muhammad ‘Ali, very little was available for settlement on private and religious institutions; that part of the budget that was spent on education was devoted to those ephemeral establishments connected with the army.

The authorities for the period make very little reference to the old school system, but the few references that have been made by writers prove the bad state of the kuttabs and mosque. Michaud writes an appropriate letter in March 1834, on a visit to a village; it runs as follows:—

"Quand nous sommes rentrés au village, le réis nous a montré une mosquée qui tombe en ruine, et qu’on ne répare point; il nous a fait voir une école pour les enfants, qui est abandonnée. Le Pacha, nous a-t-il dit, s’est emparé de tous les biens qui appartenaient aux mosquées et aux établissements de charité; il s’est bien engagé à payer quelques pensions, certaines sommes annuelles pour la réparation et l’entretien des mosquées et des écoles, mais ce qu’il donne ne suffit pas toujours."

Poujoulat, in a letter dated 22 April, 1838, states that "les écoles purement musulmanes qui étaient attachées aux mosquées du Caire, sont tombées tout à fait," and regarding al-Azhar, that it was in a bad state "qui annonce une ruine prochaine."

Olin points out the same in 1839 and states that Muhammad ‘Ali was unpopular with the shaikh class; Laorty-Hadjji refers to the diminished numbers of students in the mosque of al-Azhar owing to the confiscation of waqf property, and what applies to al-Azhar, applies still more to the provinces where there was less resistance, for even Muhammad ‘Ali felt constrained to seek some religious support in Cairo since he posed as a progressive Moslem ruler. From the Muhammad ‘Ali period, we generally find, too, that the Shaikh of al-Azhar was appointed by the ruler rather than by the old system of election.

This new practice was far from beneficial to the mosque itself as Muhammad ‘Ali naturally chose a man who was favourable and pliable; Shaikh Hasan al-Aṭṭār was an opportunist and a traitor.

LITERATURE IN MODERN EGYPT

was a particular example of the type of shaikh that helped to make possible the new order of things.1

With the support of the Shaikh of the mosque, Muhammad ‘Ali proceeded to introduce his innovations not only independently of the ‘ulama’, as Arminjon aptly remarks,2 but even against them.

It seems that the mosque schools and kuttabs had begun to disappear in Upper Egypt by 1833 or else they were so badly attended that some kind of action was deemed necessary. In May of that year, we find Muhammad ‘Ali issuing an order for the creation of ten maktabs in Upper Egypt, his favourite recruiting field. 3 They were as follows:—

Abū Tīg province of Asyūt;  Manfālīt province of Asyūt.
Asyūt;  Manfālīt province of Asyūt.
Igūmin province of Girgā;  Sābūn province of Asyūt.
Girgā;  Sābūn province of Asyūt.
Mallawī province of Asyūt;  Tabās province of Girgā.

That these schools were definitely for the purpose of recruiting fresh blood for the Cairo military schools cannot be denied for in the very next month (Ṣafar) of the same year, Muhammad ‘Ali sent out an order for the "requisition" of eighty youths from these schools; they were to know how to read and write, were to be between the ages of thirteen and twenty and were to be, above all, of good physique and strong; they were destined for the Giza school.4

On the 9th Shawwal, 1249—2nd March, 1834—Muhammad ‘Ali issued another order to the Muḍir of the Sharkiyyah province for the building and establishment of four more maktabs at al-‘Aziyyah, Kufur Nigm, az-Zakāzīk and al-Wadi.5

The first ten schools are shown in the lists given by Sāmā in the appendix of his work on education in Egypt; their date of establishment is shown as May, 1833, and of closure as April, 1835, except in the case of Girgā which is given as April, 1834 (probably a misprint); it would thus appear from these dates that Muhammad ‘Ali’s experiments at opening primary schools

1 Shaikh Sulaimān Raṣād, Kans al-Jāshar fi Taʾrīkh al-Aṣhar, Cairo, 1320, p. 140, al-‘Aṭṭār was a friend of Hamon’s, see above, p. 52.
3 Sāmā, al-Taʾlīm, pp. 41-44 and Taḥdīth, 11/141; order dated Muḥarram, 1249—May, 1833.
4 Taḥdīth, 11/141; He also asked for thirty students from Cairo, but no school is mentioned.
5 Taḥdīth, 11/418.