Theses on

I. Purulent Ophthalmia
   As it is in Egypt.

II. Arabian Elephantiasis.

by

Mohammed Badre.
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I.
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II.
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Puerulent Ophthalmia.
Its causes, symptoms,
Contagious nature,
and
Course.
Introduction.

Believing, that all the views delivered to the faculty must be the productions of their own, it is not to be wondered at, that, in selecting Purulent Ophthalmia as the subject of the following treatise, I have done so on account of my familiarity with it, arising both from the prevalence of that disease in Egypt, and from a year and three quarters practice in the Ophth. wards at Cairo. Another reason for my doing so is that since 1801 no trouble has been taken by the profession either to investigate its causes or point out the best remedies to be adopted in its cure. However, much as I have been of the disease, I have not contented myself in the following thesis with stating the results of my own limited observations; but, unsatisfied with my lame and imperfect knowledge, I have
Called to my assistance almost all the writers on this subject from Prosper Alpinus up to the present time. In offering this treatise on Malaria, I claim no new discoveries, nor any mere
whatever; I only claim having supplied, so far as was in my power what was
wanting, viz. the necessary statistics from which to draw a fair conclusion as to
the prevalent causes of the disease, and the
best remedies to be used in its cure. I
have also faithfully described its symptoms
which I have had good opportunities of
witnessing, and have stated a sovereign
remedy, which, though not discovered,
was at least brought into general use
by one of our own Egyptian Professors.

Trust that in so doing, my ef-
forts may in some degree contrib-
ute to the dispelling of that gloom
of ignorance which at present seems
to bellow the subject.
History of Pannent Ophthalmia.
Since its first Appearance in Egypt.

It has not been in my power, nor have I had enough of time to read all the histories relating to this disease, in order to gather from them all their ideas that I might satisfy the curiosity of every inquirer; but from several treatises on the subject have I collected extracts sufficient to constitute a kind of sketch of its history.

He never finds Ophthalmia mentioned in the history of Egypt, excepting that it is stated that many of the Pharaohs or Tahamaon (times) were blind, but whether from this disease or not we cannot decide. None of the ancient historians either Greek or Roman, or even Hebrew or Arabian mention anything above it, with the exception of Herodotus who speaks of the disease of the eye in Egypt. Sidney observed that, "out of 100 persons in Egypt there are 20 blind, and"
A with one eye, and to have their eyes red, purulent, or covered with films. Savary says that the Great Mosque of El Azhar contains 70,000 persons. French, English, and Italian surgeons who accompanied to Egypt the troops engaged in the war of 1861-2, witnessed the lamentable effects of ophthalmia in that country, and have with their faithful pens described them in a vivid and heart-stirring manner. Hence it appears that the appearance of the disease in Egypt dates from the time when that country knelt under the heavy yoke of the sovereign Turks. Since then Egypt seems to have been the cradle in which Ophthalmitis has been nurtured and cherished and as if by hereditary predisposition, the disease now seems as if engrafted upon the constitutions of the inhabitants before birth, so that, when brought to light, the innumerable exciting causes find them an easy prey upon which to pounce.

But this is not all, this fell disease seems
To impart to Egypt some of the bygone qualities which distinguished it under the reigns of the Pharaohs, the sovereigns of the world. Anciently Egypt with no meagrely hand scattered civilization and the fine arts over the whole world; and now, she as unerringly by means of this and other diseases, works forth her pernicious and deadly poisons to spread havoc and death amongst mankind. Authors mention that two-thirds of the French army were attacked by Ophthalmia. Rush records that out of 120 men 90 lost their eyes. In 1850, 2317 soldiers became blind from Ophthalmia.
Purulent Ophthalmia

is an acute inflammation of the mucous membrane of the eyelids, attended with an increased secretion, resembling pus in all respects but superficially in consistence and colour, and hence its name. Professor Mathew Keach Brown and Macgregor are of opinion that the disease first attacks the conjunctiva of the eyelids, very often it did not extend to the conjunctiva of the eyeballs, though it may last for weeks and months, and if it does it seldom remains long. Muller and Richter consider the disease to be an exanthematic eruption or chronic impetigo from the yellowish-red grains to be seen in the mucous between the eyelids and the eyeball, and also from the fissures and grooves seen in the mucous membrane of the lids. Their principal argument for this opinion is that in the commencement the disease is very mild, and that the eyelids do not then show
any inflammation. Muller even objects to the name of Ophthalmia, as it may occur without inflammation. He considers it to be a morbid change in the conjunctiva of the lids, whilst the Meibomian glands are healthy and show no change of structure. He describes the different degrees of the disease thus. 1. When no pain is felt nor redness seen, but a feeling as if it were sand or gravel pressing on the eye. The edge of the lid becomes narrow and of a dark red colour being congested with blood. The rest of the mucous membrane is healthy. There is a flow of tears and mucous secretion on which depends the contagious nature of the disease. 2. When all the symptoms become more appreciable and especially the granular appearance on the lids which gives them a deep red colour, and when noaccule can be distinguished. The 3 degree is the virulent during the course of which all the mischief is done.
Causes of Incurable Ophthalmia, as it appears in Egypt.

In treating of the causes of Ophthalmia, I shall enumerate chronologically, stating the authority names, all that has been said about them from the beginning of the 15th century up to the present time. I shall also attempt to point out the more important causes, and those which I believe to be the true ones.

Among the predisposing causes I mention
1. Fatigue. The three lower classes in Egypt, viz. the poor, the labourers, and the soldiers, being unmercifully treated are exposed to a vast amount of fatigue and accordingly we find that they are almost the only victims of the disease.
2. Want of food or living solely on vegetable diet, a thing common enough in Egypt. Meagre food either animal or vegetable, an improper diet, or glutony are also predisposing causes.
3. Want of clothing, or dressing in thin cotton
4. Exposure to cold or wind.
5. Living in low and damp places, or near a marsh.
6. Wearing the heavy turban...
By shurrah is meant Damascus tobacco mixed with opium.
Wrongly learnt more than protects the sight.
This is proved by the peasants being more subject to cataracts than officers in the army who are of the same caste. 9. Continued bathing by water in the midday when the eyes are congested from the heat. 10. Continued exposure to, or inhalation of, the smoke of tobacco, Indian hemp, opium or narcotics. 9. Bad ventilation resulting from the fear of the inhabitants for the "misoom." 11. The atmosphere irritated by the carbonic acid gas arising from the refuse in the streets, or the dung-hills and stagnant pools in country places. 12. The malaria arising from the artificial lakes made for the hemp and rice, and kept up for 5 of the summer months. 13. The abuse of Chai, liquor, which are consumed to the amount of from 6 to 10 pints daily by the working classes of Cairo. 14. Cholera. 9. Malnutrition is conducive to chlorosis, and excessive heat predisposes to scurvy, as do imperfect perspiration and previous attacks of the disease. 15. Hereditary predisposition in the inhabitants. This however I do not consider correct, as Europeans, Greeks, Hindoos, &c. are
as liable to be attacked by the disease as the native Egyptians, and this would not be the case had hereditary predisposition anything to do in the matter. Nor do I believe that idleness and indulgence are predisposing causes, for our people are more free of the disease than the Spaniards who are lazier than the dogs in Cairo, and the blacks who are as stupid and inoffensive as the Hippopotami.

Exciting Causes

1. Excessive heat, together with the vivid light of the sun increased by reflection, is very injurious to the eye. It excites the conjunctiva and causes congestion or determination of blood which, when continued for any length of time, seldom fails to produce inflammation. This is more severely felt by strangers. During the Hammamtime or 30 days of fevers in the middle of summer, Ophthalmia prevails to such a degree that 10 out of 10 are seen with their eyes bandaged. This arises from the air being at that time dried and full of small particles
of sand, or lime, or nitrous powder, or whatever they like to call it. The dry air absorbs the
moisture of the conjunctiva and leaves the
palpebral conjunctiva to rest against one an-
other. The eye then becomes to want the natural
secretion which protects it from the direct-
rays of the sun, and washes out any foreign
body which may happen to enter it. This being
sustained the sun and sand are sure to
cause Ophthalmia. The incantation habit in
which the Egyptians indulge of dashing cold
water on their eyes, and even dipping their
heads and faces in water is a very bad
thing for producing Ophthalmia. And if we add
to these the checking of the perspiration
by bathing, which is considered indis-
ensible, the luxury of the warm bath,
the feasting on salt dried fish which is fac-
desirable during this season of the year,
the wealings arising from bleeding to free their
systems (as they say), from the poison of the
Tamarulce, be cannot wonder at the great
prevalency of the disease.
I have stated that the Hamaërene, or 5 or 7 days of poison, is a great cause of Ophth.; and I can prove it by the statements of many authors, and by various statistics. Bruen in his letter to l'Academie de médecine especially mentions as causes of Ophth. heat, light, & the burning wind. Larrey did the same. Macgregor observes that the Hamaërene is the only cause to which he can attribute the disease, from its heat, its long duration and the suddenness of its outbreak. Power said, that during the time of the Hamaërene the heat caused the vegetable and animal matters, so abundantly strewn in the streets of Cairo, to putrefy, and from these effluvia or virus arose the cause of the disease. Prosper Alpinus, Poteney, La Dijon- tie, Clignor Valdetti, who lived as a doctor 15 years in Cairo mention the heat as one of the principal causes of the disease. All the Arabian surgeons and doctors are now of the same o-
So far as statistics go, I may remark that during the time of the Hemacene, according to the general register in the Hospital, from 30 to 40 patients enter, whilst during winter the average number is from 1 to 5. At that time also, rich, poor, Arabs, Turks, and foreigners are admitted to the Hospital, whilst at other times only the poor who are exposed to the mighty dew [of which I will afterwards speak] enter. Again, whilst the students of the military school, founded by the late Pasha, remained in Cairo, and were not exposed to the sultry heat, few of any color came to the hospital; but as soon as they were removed to Tassua in the middle of the desert or in daily were received into the hospital, and carriages were made for their transport. When His Highness was informed of this, he immediately removed the school back from Tassua and the disease disappeared. The regiments in Yemen on the border of the desert used to send great numbers of the soldiers to the hospital, with bare eyes, while all the others...
regiments who were exposed to the same fatigues & hardships in drilling were exempt from the disease. The charity schools and many patients to the Outfit.

Towards on the Saturday, the day after the holiday, when the boys have been most exposed to the heat. Lazy boys have then nothing more to do, when they do not wish to go to school, but to expose themselves to the heat in midday when they are sure to catch the disease.

2. Light. - The excessive light which is reflected from the rocky hills, the sandy plains, or the white washed houses is a great cause of Ophthalmia.

After heat. - The glare of the light from the fixtures in illuminated halls, or the blaze from the reflection of a furnace or glass house combined with heat also causes it. The flickering flame of a candle or fire whilst studying by causing a great exertion in the eye if fix it on the page, if long continued may also cause Ophthalmia.
The students in St. Cybar or Great Mosque, the Copts or writers who employ themselves whole nights in calculating or writing, and elder students of all kinds are more exposed to the disease than the members of other professions. I myself used to experience it as well as most of my friends when studying for nights. The only remedy was bledding. This operation may be performed 5 or 6 times during summer.

3. Hot Winds.

Hot winds blowing from the desert, accompanied as they are by burning dust cannot fail to excite the eye and cause it to inflame. Pseudo Alpinus, Lomoni, Lavardi, Renati, and more recently Roman agree that these winds cannot certainly contribute if they are not a great cause of both.

Lavo-ardhi says that during these blowing winds neither natives nor strangers nor even dogs, camels and donkeys can escape the disease.

Sir David Stewart says that when the last winds
are blowing. 200 persons are attacked by
Ophthalmia, when the miliary weather re-
turns are cured. The preceding causes
by Heat, light, and Hot winds cannot
fail to produce Ophthalmia.

**4 Heavy News.**

"The Real cause of Ophthalmia," says Asali-
mi, "is nightly dew, which, producing chill-
iness, checks perspiration which gets pent-
up in the weak parts of the body. This
along with the exposure to the burning
heat and arid light during the day,
takes effect on the eye and causes Ophi-
ma. I consider the nightly dew, which, in Egypt,
coverts the earth as it were with torrents
of rain, as one of the most inveterate
causes of this disease. After the excitement
to which the eye has been exposed during
the day, the reaction caused in it, by the
sudden change in the atmosphere at night,
is immense, as at that time the air becomes
cold, chilly, and full of moisture. This is
more keenly felt in the neighbourhood of the
Ribe, such as at Grand Cairo, and the low situated places in the Delta, Gourah, Gergaz, Domiet, Alexandria, Rasheid, &c. are surrounded with water at the inundation, the atmosphere becoming cold towards evening, the water which has been evaporated during the day falls at night in heavy drops on the people, who, careless of the consequences, sleep it may be naked on the house-tops, the terraces, or even the streets. Rovary thirsts that were it not for this cause, Gourah would not exist. Though Rovney says that the people sleep on the house-tops & terraces in Houan, Belbe, and Siahboker without getting Gourah, as in Egypt, I very forets will go a much further way than mere theory. To prove that this is a powerful cause I will give the opinion of an Ameer of the Bektachins, who said, "The heat may be as intense and burning as a furnace but it never causes sore eyes.
amongst us; but let him who wishes to preserve the bright star shining in his countenance, dread the march by night or even the mighty forerunner of his enemy. This he attains his crown, and let him not be as light as possible to prevent the tree from falling through." From the Register general I find the cause assigned by most if not all of the patients is sleeping out of doors, or (if a soldier) being exposed to the morda air at night when walking in the barrack parade or in the fields as the poor slaves under Ibrahim Pasha's cons. The poor who sleep on the outside, and whose protecting roof is Heaven's earth, are aware of this fact and make a kind of head dress to cover their faces and heads during night. I will remem-
ber that before I had ever time to ask a patient how he had got Ephraim, he would say "Sir, I have been watching all night in the fields and have got this disease." Mr. Coulthorpe became so convinced that this was
The text on this page is not legible due to the quality of the image. It appears to be a handwritten page, but the content cannot be accurately transcribed.
5 feet. This is also favourable for causing or exciting the disease. The water-carriers in Egypt know this so well that they erect high stones to stand on when they are filling their bags with water. To guard exposure to the atmosphere when the body is heated and perspiring. This is common enough with bath-managers, blacksmiths, and workmen in the glasshouses.

I cannot leave this part of the subject without impressing upon travellers and residents in Egypt the necessity of avoiding the dew during night.

I have read many travellers' books and I know they cannot be aware of the great effect it has in causing Ophthalmia, as they would have mentioned it. and consequently travellers who go to Egypt go unprepared. My home is the only one who speaks about it, and I believe had he not resided in Egypt for years and suffered
from it he would have passed over it in silence. To my own knowledge during my residence in the hospital for upwards of 3 years, I met with numerous patients in the Ophthal. wards who told distinctly that they had carefully, during the day, avoided the intense heat; but being obliged to wake during the night they could not help getting the disease. In fact more patients were and are received in the morning than during any other part of the day, and this is not the result of inability to come at any other time, for many reside near the hospital and could have come at any time.

I shall now state the causes assigned by various authors for the disease though I differ from many of them.

T. Prosper Alpinus assigned the cause to the fine boundary matter floating in the
atmosphere. I. But Dr. Beys thinks, with some French authors, that the nitrate of lime which abounds in Egypt and which is very deleterious, may be diffused through the air and cause Cophtha. I can imagine that this would be a more powerful cause than the nitrous powder of Alpanis, for nitre is found in many places where Cophtha does not exist. America, India and Spain have all more nitre in their soil than Egypt and nowhere do we find the disease of the eye so formidable as in our country. May this nitre factory be very near our Hospital and seldom do we receive any patients from it. Bavarss constituent carbonate of lime to be this cause. He tried the experiments on some dogs and 3 minutes after applying the salt inflammation took place and they became to get blind. But any other irritating salt would have the same effect on the delicate membrane of the eye.
Dr. Powis, an English Surgeon, attached to the medical staff in 1806, and who was attacked by the disease, states as its cause the gases arising from the decomposition of animal and vegetable matters, and the amoniacal and other fixed salts which arise from them floating in the atmosphere and becoming destructive to the eye. He also says that the excrementsitious matter of the mosquitoes is one of the exciting causes of Ophthalmia. Hassalquist gives as a cause the exhalation arising from the stagnant water of the canals which traverse the whole of Lower Egypt. B. Harrey entertains an opinion which nobody before him has entertained of, that, "the suppression of diarrhoea is the constant cause of Ophthalmia." It is the suppression of catarrh or hemorrhage of any natural discharge, which becoming stopped may naturally be a good cause, but not the only one. Before the soldiers had diarrhoea they had Cholera. I Brown thinks that a bilious col-
tion, as well as the irritating food such as
which, onions, &c, which the people eat, are both
and causes. S. Cuothrle, the Professor of Hygiene,
tated in his lectures on the causes, that
many of the patients complaining of sore
had been stung by insects. And to prove
so, he took me to the hospital, and exami-
ned the eyes of the patients who had come that
daay, &c. Found in some the wings of insects,
and in others the ova of them which had been
united there. However, he does not think that
this is the only cause. It has one other cause, his suc-
cessor, pointed out a fact which holds good
with all the common diseases in Egypt.
the feeding on salt dry fish, sour oil, cheese,
milk, &c., &c, is a common food of the poor classes, the principal di-
nants of the hospital. I must confess that
this observation deserves more credit than we
an bestow on him. He also shows that these
irritating substances are the cause of Elephanti-
isis, Lepra, and other diseases to which the poor-
classes are subject. 11. Locomotio and the dis-
ses of the terminal membranes of the joints, rheumatism, which sometimes become sus-

cended in the joints and appear in the eye.

It is also mentioned among the causes of acute rheumatism, in the muscles caucaus-

culent as well as gonorrhoeal Uproth. 12. Apps.

ins of the stomach and bowels, which are known
cal constant headaches, thirst, a tinge of

gallow colour in the conjunctiva, and ev

curring pain in the eye.

This arises from the collection of impurities in

the proem air, and by the sympathy existing

between the serous membrane Uproth. occurs.

13. Hooping cough, measles, and small-pox, but

especially the latter, are often causes of Uproth.

And here I may be allowed to point out the

eor into which Mr. Savary along with many

other has fallen. Mr. Savary in his travels, state

that he saw in the Great Mosque at grand Cairo

at this person. This he attribute to purulent

Uproth. But had he paid the least attention to

their countenances he would have discovered the

gly fevers which rendered their faces hideous, the
consequence of small-pox. Almost all the children born in the Mosque are brought there in infancy and are brought up in charity. Indeed most of the third people in Egypt have never been the world. They are often born blind, or if not, seldom pass childhood before they are attacked by small-pox, the worst of all the causes of blindness. It is even said that as a cause of blindness, by a eunuch, who was engaged with his soldiers in digging out and setting stones to build the palace of the Padishah. It mentions that not a day passed, during the complete congress, in which there were not from 10 to 12 added the hospital from Ophtha. We can easily imagine this as harming the eye, first mechanically, irritating the conjunctiva by its secretion; second: Absorbing the moisture of the eye; third: Chemically, by being an acid body, inflames the eye.

I shall conclude the cause, by one remark. Nothing, in my humble opinion, can be assigned as a real cause for Ophthalmania, except sudden changes of the temperature, and the
different states which the atmosphere assumes in our country. In the morning it is colder here than here, considering the cotton dress we wear. An hour after, the heat begins to diffuse itself like a furnace, and goes on steadily increasing till after midday when it begins to fall down. At sunset a chilly cold takes place, followed by torrents of dew during the whole night. This I consider not only sufficient to cause the disease, but to blind the eyes.
Contagious Nature of
Ophthalmia.

To prove the contagious nature of this dis-
ase we have the testimony of 

Charles Forbes, Edmondston, Delpech, and 

of Hof Böe in his last testimony to the 

French Academy. The contagious nature of 

this was known as early as the time of Arox-

otus, whose opinion, though a little different,

still bore some similarity to ours. It being 

that the contagious power was effected by

mutation. Both haue and Phitarth men-

little further than Aristotle and said the

contagion was merely through sympathy.

Haynini was the first who looked upon Con-

tagion in the same light as we do.

And thus he obtained from his long

experience in Ferrara. Nicholas Shaw

believes contagion to be accomplished

by mere inspection of the eyes. With

Edmonstone and Hauine Cluff strongly

believe in this, and have each proved
the assertion by facts. Very tell a case of two sergeants, one of whom being attached by Ophthalm, the other came to visit him in his tent. While the healthy one was trying to persuade his friend that the disease was not Ophthalm, and gazing in his eyes, he himself felt a sudden pain and the tears began to flow. In a short time he shared in his companion's misfortune. Edmondstone says that one day he had to visit more patients than usual on account of the illness of his assistant. He felt, during his visit, a sudden pain, and in half an hour he was in his bed, attached by the very disease he was trying to combat.

Huxley tells us that one day he did not visit his patients. Next day on coming back he felt a pain. On looking at his face in a mirror he found that they were red and congested, and, in fact, he was about to be seized with Ophthalm. He immediately
conceived that this was caused by looking on the patients. He was made more certain of this, when, on deferring the examination of the rest, and taking his eyes from looking at them a pain left, as well as the congestion and redness. All this tends to prove the contagious nature of the disease, by whether by contact or infection it is not yet decided. I shall now enumerate the opinions entertained by different authors on the subject. And first it may not be out of place to mention, that, though the disease was once looked upon as being peculiar to Egypt, and spreading thence by infection or contagion (if contagion may be more used as meaning infection by contact); it has now been proved that the disease can be found almost everywhere, and the out of such a virulent type as in Egypt. It is still the same species, purulent Ophthalmia. It is also believed that it can be produced atmospheric influence in an epidemic, that are or even endemic, in other localities besides
So contagious nature through the atmosphere strongly believed by Mackenzie who objects to contagion by contact. He placed in one eye a rag, coated in the secretion of another eye attacked by purulent ophthalm. 3 times during the night without the least effect. Slesse do not believe in its contagious per contractum, injection by distance he says is enough. J. Miller is of opinion that the atmosphere in crowded places such as ships, schools, barracks, prisons, and factories, by far the most common thing by which contagion takes place. He says that neither sleeping in the same bed with the patient, washing in his basin, using his towels, putting on his clothes, embracing nor touching him could produce ophthalm; he adds that even injecting the matter into the eye could not cause it. J. Scarpa, Bover, Petit and Parassou even deny that the gonorrheal discharge applied to the eye would cause ophthalm. They say it would cause only a temporary
tain. 5. Bothber looks upon its contagion in three ways, - either by application of the matter, as in syphilis; its conveyance by the air, as in measles, or by both, as in small-pox. Edmondstone says that the atmosphere itself is sufficient to cause Ophth. In the ship Albemarle, the disease attacked and soon spread to the whole crew. I myself cannot help believing that Ophth. can be produced without contact. But Boy did every thing in his power during 3 months to prevent contact in any shape. And his conclusion was that it can be propagated without actual contact. Dr. W. Adams holds the same opinion.

On the other hand Macquagro, Smillie, Vetch, Squirta, Lawrence, and a host of others believe that contagion cannot take place without contact. Macquagro gives a very conclusive proof. He says, "In the Charity Hospital the boys and girls were kept separate. The disease got in among the boys, and soon spread among them through their frequent intercourse.
with one another. The Child did not take it all some time afterwards when they caught from the atmosphere. He said also that the disease is more destructive in the months of July, August, and September than during the whole summer. Thus he said as from the sultry heat of the atmosphere, and there was no need of contact.

Sennit took the matter from a diseased eye and applied it to a blind boy, who got the disease, although Mamani, scoff, and elder performed like experiments on dogs and other animals without the least effect. Rich tells us that two nurses, who were injecting the eyes and got a little of the matter more attached and hence he firmly believes that contact is necessary.

Sennit's opinion is that the disease is contagious both by contact and infection under certain circumstances. When it broke out in Paris in 1765, it spread to Versailles and not to St. Germain, although the latter place was nearer to Paris than the former. This a-
from the more frequent intercourse of the poor with those of Verrières, than with those of St. German. Roguetta strongly believes in contract for, says he, "Why is the disease more common with the poor than the rich? or with the natives than the strangers? Certainly, because there is a greater intercourse between the poor and the natives, than between the rich and the strangers."

Dr. Lawrence cites a case where a poor woman washed her own and her children's faces in a barrel filled with gonorrhœal matter, and they all contracted the disease. Indeed, there is no need for any contract. How can we account for the rapid march of Ophthalmitis from one boy to hundreds in a school, from one soldier to
almost all the regiment. From a mason's companions, nay, even from a village in the North to one in the South of Egypt, between which there is no intercourse, and even supposing that there is intercourse, is it, that when the atmosphere changes, we receive one patient from Cairo we'll receive hundreds from the villages? Certainly the atmosphere is the medium. And this the fleas which abound in Egypt and serve as pernicious medium through which the disease can be transported from one village to another, without the interference of any human being. In fact, contagion can be distance and per contrariam can the place.

I shall give the opinion of Mr. Courguené, who, from his long experience, and 17 years of service, rendered to the Government and country, as Professor of Ophthalmic in the College, and Surgeon in the Ophthalm wards, is considered the only man on whose opinion the profession may rely with perfect confi-
ance. He says, "In vain do we look for the cause of the contagion through any other medium than the atmosphere." On one occasion he was sent by government to inspect some villages. In one of them he found only one patient. He left it, and returned after an 8 hours' tour in some other villages, and found many complaining of phthisis, and at last he had 12 patients. Struck by this formidable fact he was questioned them, and found that there had been no intercourse between them.

He met with many other striking facts which all tend to prove that the atmosphere and the atmosphere alone, is more than enough to cause contagion. His experiments with gonorrheal discharge were all failures in causing phthisis, he believes that gonorrhoea may cause siliculent ulcers of metastasis, and not by contact. But if the former experiments upon be strong and robust, he washes out with hot the matter put in his eyes. He must not overlook the important facts, for on them depend the rights of medicine, may, of a million of the unhappy Narrative.
Conditions necessary for Contagion.

In whatever light we look upon contagion, whether by application of matter to the eyes or by the atmosphere, it must be modified by certain conditions which have been deduced from the experiments made by Perringer.

The discharge of the first degree of the disease causes the second; that of the second, unless very thin, causes the third; but that the third is undoubtedly contagious.

Sound eyes are more apt to catch the disease from those weakened already, or accustomed to in-purum-venous discharge.

If the discharge is kept from the body, the body loses its infecting power. Hence, the sooner is applied to the eyes, the earlier the symptoms of the disease appear. (The time occupied in provoking the disease is from 6 to 24 hours. The track of the disease is made during the night, not during the day.)
Should cold water be poured upon the eyes and make them, it will prevent the contagion.

General conditions of Contagion. The degree of contact whether short or long determines the contagion.

The quantity introduced has great influence. The quality of the matter—Whether from the first, second, or third degrees, and whether used with an irritating lachrymal discharge, or free from it.

The State of the Atmosphere. If hot and sultry it hastens the appearance of the first symptoms, and causes the disease to be more rapid and destructive.

The Difference of susceptibility in different persons has a great effect. The discharge from a patient's eyes causes if applied to the other, but it has no power to induce the disease in his own eye, while that from another urethra would do so, and would have no effect on his own
2 Symptoms.

Whether Ophthalmia arises from external causes, or from the application of viruses to the eyes, the symptoms sooner or later appear and by them alone is the disease distinguished from hosts of others which may be compounded with it. These symptoms divide the disease into 3 stages, although sometimes when it is very virulent the line of demarcation between them is lost.

First Stage. The disease attacks the palpebral conjunctiva, the semilunar membrane, and the canalicula lacteomalis, before any other part of the eye, and when once it is tended to the sclerotic conjunctiva, it goes so rapidly that it with the greatest difficulty we can ascertain how far the mischief has gone. The first symptom is an itching in the eyes, a flow of tears, and a peculiar sensation as if some foreign body such as gravel or sand were rolling in the
The eye-lids become stiff and swollen from vascularity, their movement hurts the eye-ball. The swelling is soft, elastic, and slippery and sometimes reaches an enormous size, even as large as a pomegranate, hence the name sometimes given to it, (pomegranate eyes). A little pressure on the eyelids causes them to bleed. But the characteristics are the feeling of gravel described before, and the numbing of sight arising from the mucus-like matter deposited on the cornea and which by and by becomes collected in the external canthus of the eye. The feeling of sand is more manifest during the night which is easily accounted for by the congestion of the blood-vessels consequent upon the heat of the bed. The lids, pressing together, also increase the pain, which sometimes becomes so severe, as to prevent the patient from sleeping, and he is compelled to walk up and down, and keep his eyes open to relieve the pain by forcing them get cooled by currents of air which cause the blood-vessels to contract. Another
remarkable symptom of this stage, is that at this the patient feels no uneasiness from the light, tho' at least he cannot bear it. Hence many of the patients become first aware that they are attacked by Uphothia, from the appearance of their eyes, and not from any pain in them, such is the insidious way in which the disease begins its attack. - This degree of Uphothia called "Uphalmia Levis."

The second degree begins slowly and imperceptibly with an increased pain and redness in the eye and an enormous tumefaction in the lid. Chemosis becomes manifest in the globe of the eye from the extension of the disease to it. The mucous secretion becomes first diminished and then suppressed. After hours after this an acid discharge comes down the Meibomian glands. Secretion becomes augmented, and by its action of the lashes takes place in the morning. The discharge at first is Watery, then mucous, and lastly mixed with mucus and pus. The disease becomes worse and worse, until inflammation is complete with a blinding of the sight. The eye becomes dry and hot, and the patient is in a state of exhaustion and weakness.
it becomes pure pus, thick, viscid, opaque, indurated, and detached into particles from the effects of heat and the pressure of the eyelids. This purulent discharge lodges itself in the inner angle of the eye. Its colour is greenish-yellow, but more frequently yellow. It is mixed with a fatty normal discharge, irritable in its nature, and to the Circassians causes great pain when it falls upon their delicate cheeks. Sometimes it flows uninterruptedly wetting the sheets of the bed. Should it happen to touch the other eye, it also is sure to become affected. The quantity of the discharge during the night varies from to 2 ounces. This quantity is increased during the day by the exposure to light and sound which cause the tears to flow streams, increasing the quantity from ounces to pints. This secretion comes partly from the effusion which takes place, under mucous membrane of the eyelids and globe of the eye, partly from an inflam
catory development in the vessels, which
cause dilated, and let the serum of
the blood pass out; partly from the in-
filtrated mucous which becomes puffy,
and the crepitus which burst out from
the pressure of the eyelids; and lastly
from the inflammation which is go-
ing on, and the Meibomian secretion.
The pain of the second degree can be
imagined, from the confinement of the mat-
er in the inflamed conjunctiva of the
globe, and the transfixation of the eyelids.
This pain is described by the patients to be,
as if needles were being driven through
the eye. They also feel a fulness and thrust-
ing at the temples. The pain, though
irradiating, is relieved by intervals of
sleep. The paroxysms are irregular in their
duration. At night they are long and
acutely painful. During the day they
are easier, unless the patient keeps his eyes
open and exposes them to the excitement
of the mind and light. During the
interval the patient feels happy and com-
dfortable. But no sooner does the paroxysm
begin than he is thrown into the most
distressing state of agony, raving up
and down the room alternately
curting and foraying, opening and
shutting his eyes, now entreating his
companions to blow on them, and
at another time pouring water over
them himself. The pain generally shifts
from one eye to another, the patient
seldom complaining of both eyes at
once. The sufferers themselves compare
the pain to a red-hot nail being
forcibly driven through their eye, or
to a hammer beating on their tem-
poles, or to a liquid fire circulating thro-
ugh their whole bodies. Fainting is often the
result of the intense pain. Sometimes
it becomes concentrated in one spot, so
that the patient can point out its
position to the surgeon. The mu-
cous membrane of the eye and that
between the eyelids and eyeballs become
miliary, pulpy, thick, and granular like
the red seeds of a pomegranate, and hence
a ripe pomegranate is considered fa-
tal by the natives, however, without
foundation. The eye becomes of an in-
tensely red colour, with patches of a
still deeper red. At this period the disease
has fairly seized hold of the eye-ball, a
misfortune rendered more certain by the
painful pain concentrated in that organ.
Inspection now commences, and the
chambers of the eyes become full-dilated,
and, projecting forwards between the
eyelids, cause their eversion, and after-
wards their inversion. The fluid in great
quantities. The bold of the eye is dis-
jecting—nothing but a bedridden
looking mass, exiled with pus like a ca-
cer. The cornea becomes opaque from the
deposition of matter in and around its
limbus. It ulcerates, and at last bursts
in a paradigm of pain. The abscess which
ead formed then the changes its contents.
the iris prolapses, and the tunics of
t he eye becoming collapsed, known is
nearly lost for the moment.
The cellular tissue, between the conjunctiva
and the globe of the eye, becomes raised
from the effusion of pus. At first it
is separated from the cornea by a white
circle, but at last it doubles and overlaps
it, so that the cornea seems to be buried
in a pit, formed by the elevated chem-
axis which projects between the lids and is
then confounded with the globe of the
eye. The eyelids are at first stiff and
closed over the eye, and continue for
some time to resist the pressure of
the ball consequent upon the increase
size of the chamber of the eye. But
at last they give way and become
erected. This is called "Ophthalman
Gravis."
The bursting of the cornea may take place
on 4 times during the paroxysms of the pa-
tient continues strong and healthy, and
in every occasion he will feel relieved
from the pain. This may occur in
each eye alternately till the para-om-
iforms become shorter and more irregular, and
the pain which has tormented him for
weeks abates and at last ceases.

Different opinions are enter-
tained by authors as to how the cornea
becomes ruptured. Vefedt believes that it-
takes place in a line across the lower
part of the cornea. Before rupture this
line is known by its opacity, and by
its obstructing the sight. When it be-
at does so in a smooth line, as if it-
ship like the fleshy—MacKenzie is of opinion
that rupture of the cornea occurs in two-
ways. I. From the preceding ulceration, or
2. From the formation of an abscess, which
becoming ruptured ulcerates. Housine Hiff,
who carefully watched what precededrup-
ture, says that both these cases may hap-
ten, and not only in the lower part, but
also in the centre of the cornea, when the chambers of the eye become enormously distended either by an infusion of humour, or pus formed or poured into them. In this way the rupture of the lower capsule of the lens is more likely to take place, and let out the aqueous humour of the eye. By this means the eye shrinks in, and the eyelids contract upon it through life.

The future rupture of the cornea can be foretold from the pain felt in the orbit, forehead, and temples, heat, thirst, and fainting; or from the different aspects it assumes before it takes place. Its colour at first is white, then yellow, from the infiltration of pus, which makes it look granular, and elevates it from the pit formed by the chemosis of the conjunctiva. It begins to ulcerate, the intersts become wider and deeper.
every day, and at last burst and
bore forth the contents of the cham-
bers. Sometimes the patient thinks that
his vision is now restored to him.
But, alas! this does not last long
until the iris protrudes and his fon-
dest hopes are disappointed. The iris
at last adheres to the margin of the
cornea and forms what is called
Staphyloma, either partial or complete.
Sometimes the iris protrudes through
a number of small openings and
dears like a small black prominence.
This form of the disease has received
the name of Staphyloma Pterinosa.

Another form of the disease, cal-
ed Choroidal Uveitis, occurs, but
very rarely, and it is generally persons who
have been weakened by some other dis-
ease, who fall victims to this variety.
It comes on slowly and gradually;
there is no local nor constitutional
symptom, except a pain which is com-
arid by the sufferers to the "rip" of soap in the eyes. Discontent is apt to accompany and complicate the disease, from the ability consequent upon the long vigilance. Some muscles of the eye become contracted, others paralytic, the tarsi close it. If the rectus superior contracts, and the inferior is in a paralytic state, the pupil becomes hid under the upper eyelid, and in this case the patient is compelled to throw back his head in order to see. But if the inferior is contracted and the superior paralytic, he has to hold his head down. The eyelids spasmodically contract, and inspire the right for a short time. This impediment of sight does not arise so much from the mechanical contraction as from the formation of specks on the cornea, from the hard, indurated pus which is cooped up there.
During the atmospheric pressure of the eye. Sometimes the collected lumps of pus distort the pupil, and by this means the sight is impeded.

The serous membrane acquires in this degree of Ophthalmia a kind of thickness and flabbiness. It loses granulated. The cornea increases in its vascular-ity, it acquires a larger size. Its opacity but uncommonly increases, sometime after the continuance of the disease, especially if the granulated lids are stiff. The serous layer covering the cornea becomes of an incredible thickness, and acquires a looseness so that it appears to be larger than the cornea itself. Hence we afterwards find a haziness of sight, nebulous etc.

I find that Professor Beer (of Vienna) and others divide the disease into 3 degrees, the former into 1. Inflammation of the eyelids, 2. Inflammation of the parts intervening between the orbit and the globe of the eye.
3. Inflammation of the eye ball itself. and the latter into 1. When the disease affects the mucous membranes of the eyelids and the eye. 2. When it affects the sclerotic coat. and 3. When it extends to the Iris. In each of these degrees, ditch has given a name.
Alterations left after Ulcers in the Palpebral Conjunction.

The Palpebral Conjunction is, after the first degree, a velvety, or finely granulated appearance, as if covered with dust. But, after the second or third degree, it looks as if seeds of millet were strewn upon it. This is what is called the granulated state of the palpebrum, the conjunctival granulation of More, who describes them as elevations of the mucous membrane, with broad bases and thin summits, which look as if flattened by the pressure of the globe of the eye. They are large on the middle of the inferior, but small at either angle. Their edges appear of a blood-red, pale, or violet colour. They are more common on the lower than on the upper eyelid.

These granulations are not the effects of inflammation, nor are they in proportion
to the severity, they are the proper organs of the disease, which require an inflammatory emulsion to be developed. They are the cause of the disease and their existence indicates a latent state of Ophthalmia which may at any time break out. They seldom ulcerate after their excision or cauterization, nor are they the seat of abscesses as Dagonzi admired to show. The ciliary margin, with the exception of the phlyctena lacrymalis, is by Eble considered to be the seat of the disease, which extends to the tarsi and a line below them. But beyond this, the other parts become inflamed symptomatically. This is the chronic Ophthalmia of Eble, which is the most dangerous of all kinds, as acute Ophthalmia may supervene at any time so long as the chronic state remains in the eyelid.
consequences of Inflammation on the Globe of the eye.

Drowning, which is rare, according to

Bursting of the cornea, often before ulceration, and evacuation of the contents of the chamber of the eye.

Lupification of the Cornea and its subsequent ulceration, and the escape of the lens vitreous humour and complete collapse of the eyeball.

Interstitial deposition of lymph, whether deep, superficial, extensive, or limited.

Opacity from the cicatrization of the intumes.

Posteaeus vitreus, either partial or complete, and its adhesion to the cornea.

Loosening of the mucous membrane covering the cornea, with its thickening and the enlargement of its blood-vessels which cause the diminution of transparency, and the wear and wi-
irritable state of the cornea, as well as im-
pairs the vision.

2. Change of colour in the choroid plex-
us which becomes red, or either red, or loss
of its pigments, and adhesion of the
Retina to it.

3. Change of colour in the aqueous humour
and lens which become of a
golden hue.

4. Temporary or permanent Ectropium and
Entropium of the eye-lids.
Distinction between Gonorrhoeal and Purulent Ophthalmia.

The gonorrhoeal is distinguished by the swelling of the conjunctiva of the eye, and purulent by that of the eyelids. Gonorrhoeal does not destroy the eye so much as purulent, and occurs in single cases, whilst purulent is epidemic and occurs in many.

5. Gonorrhoeal attacks persons who have had Gonorrhoea, while purulent may take place without previous gonorrhoea, and attacks anybody exposed to its contagion.

4. Gonorrhoeal appears and ends suddenly, with great violence, while purulent comes in a middle course, neither quickly nor slowly.

5. Gonorrhoeal generally attacks one eye, while purulent attacks both though not at the same time.

6. Gonorrhoeal plays the mischief upon the cornea, causing its
sloughing, while furunculose pustules on the conjunctiva of the palpebrae and almost always leaves cedropsorum behind it.
Treatment of Ophthalmia, as Practised by the Natives.

I shall first speak of the cures practised by the natives. It is very natural that they should pour cold water on their eyes to alleviate the pain and diminish the swelling. So confident are the natives of the value of this remedy, that they despise any other which may be proposed to them by well-educated people. The rich use rose-water and attribute the benefit derived from it to the rose. In some places in Upper Egypt, the people powdering sugar, mix it with the flour of any vegetable, and make a poultice of it. This they believe an infallible cure. Inakes how ammonia in the nose, and make the patient smell a newly divided onion. This causes an abundant flow of tears, and certainly diminishes the pain and swelling for a short time. The Hindoos use an infusion of tobacco which they pour on the eyes, and give the patient betel to chew, undoubtedly a
ood remedy, and one which has often succeeded, when the medicines of which the
French boast in our country have failed. The barbers cure it by shaving the hair
across the forehead, and by plucking a hair or two out of the eye-lashes, to cause irritation,
enlarged and flow of tears, some put
the juice of Utahie or camphor to stop it im-
mediately. The poor, ignorant, superstitious
people hang a stone of a reddish colour
before the eyes, thinking that it absorbs the
blood from them. The wealthy merchants bring
a stone from Mecca, called "Hagar il Bati",
the stone of the Prophet, and rubbing it
on their lids suspend it before their eyes
by a string from their turban. The people
in lower Egypt put the juice of a lemon, pome-
granate, or other acridulous vegetable on the eyes,
which succeeds in arresting the disease. A
quack pretends to cure every disease of the eye,
and succeeded in some cases. He kept the
secret of his cure for some years, but at last
it was discovered to be an infusion of
gall and pomegranate bark. Urine is
ployed by some as a collyrium. Cea-matris
favourite remedy with the inhabitants of
Alexandria. Common salt dissolved in water
the cure the Chahes use for Uplish. If all
sicks, accompanied like the other cures by read-
ing some chapters from the koran. The Tag-
bring yamzami water and sell it to
rich as an invaluable cure for every kind
disease especially for those of the eyes. Many
make use of nothing but a slip of paper
covered with sentences, and through faith
they confess that their afflictions are cured.
Barbers use scarification, cupping, and phle-
botomy in the forehead.
Prevention.

The first thing to be observed is to avoid everything that might hurt the eyes and encourage this formidable disease. If the attack has taken place, use a bandage to protect the eyes from further excitement. By this, the bad effects of the intense heat of the day, the cold air of eve, the heavy dew at night are avoided. Travelling by night, or sleeping in the open air without covering the eyes should be avoided. An example of the bad effects of this may be seen in the boatmen of the Nile. Who, tempted by the flattering silvery rays of the moon spent nights after night in fishing, and who are almost all the victims of this disease. With tales of four officers, two of whom slept within their tent, and two, tempted by the clearness of the moon, and the solemnness of the night, slept out. The former arose in the morning safe and sound, and
the latter paid dearly to nature for their
night's lodgings, as they were both at-
tacked by Uplists and Avarsha.
Close inspection should be made daily, &
even hourly; for such is the nature
of the disease that it manifests itself
in less than two hours. When it is dis-
covered, the person attacked should at
once proceed to the hospital, to obtain
relief, and prevent its extension.
Should the disease appear in many persons
at one time, they ought to be separated
and by this means its further progress
is stopped. Crowding promotes conta-
gion. All intercourse between patients suf-
fering from Uplists should be prevented.

Thespisae we have done all we could
do to prevent the disease, but in vain.
What ought we to do then? Are we to use
Antiphlogistics, or astringents, or blisters,
or each of them in a particular order?
This is a question often asked and never
power. Some use one and discard the other, and, if contrary to our opinion, bring forward more convincing proofs of the efficacy of their cure. Indeed I know of no other disease which has so puzzled and still puzzles the cleverest men in the profession. The fact is this: Purulent Uplith. is not always the same and cannot always be cured by the same remedy. For each variety there are certain curative means, and what would cure one variety would have no effect on another. I must illustrate this by some examples. For the hardy, stout, and healthy peasant, when attacked by Uplith. There is no cure but full and free blood-letting. Give him astringents alone, and he would run the risk of losing his sight in 14 days. The opium-eater is cured by astringents alone. Bleed him, and you would not only destroy his sight, but you would kill him, his constitution weakened and broken as it is. Give
him the same dose of opium which you would give to a person who does not eat it habitually, and you will be no good, give him a larger dose and you will weaken his constitution and make him an easy prey to the disease. But an irreparable fatigue, an exhausted soldier or working man, can neither bear bleeding nor astringents in concentrated doses or in substances applied to his eyes, must certainly have the aid both of astringents and sedatives. Thus, according to the circumstances which modify the disease, are the modes of curing also modified.

It is not my intention here to question others' opinions about what they consider the best mode of cure, but I think that all the different methods should be compared, and the best selected and tried. In our hospitals, we changed the remedies as often as capricious minds suggested something new. As yet, however, there is
t one of our surgeons, who would dare offer one cure as infallible (although he may have practiced for years,) as the European surgeons do. But they all agree that what would cure in one case would have no effect in another.

I consider that the cure of the disease is far more important than investigating its causes, or watching the progress of its symptoms. Because the disease is evident, it must appear; and therefore may heroically strive against nature, she must prevail. Nature is stronger than giant man, and defies him. Then let us not wage a useless war with a stronger enemy, but let us try to pacify her. This is what I understand to be the true spirit of medicine, and this is my sole object in writing this treatise.
Treatment followed in the Hospital at Grand Cairo.

In carrying out the cure most approved of in the hospitals at Cairo, 3 things are borne in mind. First the temperament of the patient, i.e. his age, and next not very far, for we have to deal with males only in our hospitals, and 3. his occupation. These being fully understood and duly weighed, we now proceed to the cure. If the patient is healthy and robust - a countryman as we call them, and if his occupation is farming or anything that does not interfere with his health, we never for a moment hesitate in bleeding him. Hypocrite and watch the arrestment of circulation in his eyes which very often change their crimson colour for a pale one. By bleeding largely, and opening a large puncture in most veins at once, so that the blood gushes out as if from the mouth of a
ing, we never fail to stop the disease, unless it has reached the second stage, and even then, if it has not ravaged the interior of the eye. Syncope does not regulate the quantity of blood, for this person can often lose pounds of blood, without the least change on them. Whilst fast persons fall, as if lifeless, on the loss of the least quantity, nor do we wait for syncope for persons to accustomed to bleed as our countrymen, seldom fall into it. He are advised not to delay bleeding on account of nausea or vomiting through fear of it, as in the Circassians. Persons who are weak and harassed by disease, and who have been kept a long time in hospital are do not bleed, but at once give them nauseants and vomiting, which act upon the disease in the same way as bleeding does with country hens or peasants.

By bleeding, the disease is checked at once, and if not, the agonizing pain
at least alleviated. The acid secretion diminished, and ectropium is at ease cured. By it we also prevent the formation of the granulations, which would become the seeds of the disease. And which would only need heat and moisture to burst out anew, even after apparent cure. Bleeding then is an indispensable remedy which must be used, at least in our country, where fevers abound. Sir George Ballingall urges on timeous and full blood-letting. First, Reck and Muller believe that blood-letting is the true cure for Ophthalmitis. Rust takes from 1 to 3 pounds, Reetz from 1 to 3 pints. MacKenzie is in favour of repeated bleeding while Rust, Reetz, Roe, Ware and Walther prefer full bleeding at first, and cupping afterwards. Professor Guthrie advises every medical man to carry a lancet instead of a ponderous useless sword. This may raise a laugh or provoke a smile, but the members of the Egyptian
entirely approve of the advice. I remember that Dr. Lallemand once recommended tartar emetic instead of bleeding. This pleased the physician of his Highness as tried on a strong country-hon without effect. The poor fellow begged to be led and permitted to leave the hospital. Which Mr. Boutqui did at once and thus saved his eyes. Bleeding then this may be opposed by some is the sovereign remedy of Ophtha. and nothing, I think, can surpass it. I firmly believe that were it not for the new doctors— the barbers— who know no cure, but bleeding, half the population of Egypt would lose their eyesight. Let me state one fact which should convince its bitterest enemy of the efficiency of this cure. In 1849, before the art of bleeding was taught to the barbers by Clos-son, the number of Ophtha patients in the hospital was 693. Compare this to 12 the number in 1855. The number is daily decreasing, and last summer the
While wards were almost entirely empty, this can only be accounted for by the fact that the people can be cured by the耙 as well as if they were going to the hospital.

After general bleeding we may use cupping on the temples, or leeches on the eyelids, in some rare cases. Mackenzie and Lawrence use scarification on the mucous membrane of the eyelids. Neither recommends cutting out a piece of the mucous membrane of the eye-lids and eye-ball, to let the blood flow, to soothe the pain. Welch advises us to puncture the cornea to ease the painful sensation arising from the distention of the eye. All these are unnecessary and cruel practices, and can be substituted by bleeding. And why should we add torture to what is unbearable already? It must be borne in mind that though I advocate bleeding, conscientiously believing that it is a valuable remedy, preventive, and
stiphlogastic, and that it checks the disease without any further trouble to the surgeon or suffering to the patient. I never would bleed a weak woman, old man, or poor man emaciated by disease, for I am sure that such an insidious step would do more harm than good. It would heighten the debility of the patient, most likely cause a relapse of the disease, and promote the destruction already begun in his eye. It would facilitate ulceration, weaken the system which is already in a parlous state for the future bear the paroxysm of pain, and would in fact expose the patient to other complications which would aid in developing the disease.

Yet, Esmondston and Benzoni have another favourite remedy, which can not be relied upon, but which may alleviate the pain, and perhaps diminish but not root out the disease—exposure to the air. Mr. Murray tells us that he used
make his troops march or promenade
and that by this means many were
recovered. A sea voyage is recommended
by Buzoni and other Italian doc-
tors who practiced many years in
their country.

As an auxiliary means to bleeding, we give
boungatives and emetics immediately af-
after. English surgeons are fond of alterna-
tives, such as calomel and opium which
may greatly benefit their countrymen
but which have little effect on the E-
gyptian opium-eaters, unless the dose be
doubled or tripled, and then it is so
expensive that few can afford to buy
it. Conna alces, Tamarinas & Manna are
cheaper and have in them the same effect
as opium. Euphorbics are used by the
French doctors when followed by pediluca
and Dover's powder before going to bed.

Pouseants are highly praised by Berth.
He says that among 3000 soldiers, he could not
have cured the majority of them, without them
Local Applications.

After bleeding, and giving purgatives, nauseants &c. the majority of surgeons recommend the application of cold water to the eyes either directly or indirectly. Some continue to pour water over them, after they have covered them with rags. Others, as that change the rags whenever they get warm. This is done in the Cairo hospital. — Gerick places the patient in a tub full of tepid water and lets cold water fall on him from a height of 5 feet. He is then put to bed and perspires profusely through the night. Gerick assures us that by the aid of this alone he cured purulent ulcers in 3 days.

After the first degree of past warm fomentations are of the greatest service especially if mixed with balsamum; although liquid ammonia is by far the best if
prepare to be able to share some difficulties the discussion already. But that is what breeding the only reasonable and more useful. But upon these occasions, they might have them.

In conclusion, people agree that they have a frame. However, from this, the最好 frame to use.
to superintend its application during the night and servants during the day, whilst he overlooked both. It was successful in every trial. Mr. Bourqui followed his example with the same result. It is now kept boiling in an iron pan just outside the leprous wards, and servants are appointed to change the rags whenever they become cold, taking care not to take off the one till the other is in its place. It may be said that a warm fomentation would do the same. But I say, no. The results of the two are as plain as the sun. Others may say that this remedy was tried before. But, did it succeed? And if it did succeed, why was it not recommended to the profession? Houeine Huff is certainly not the discoverer of it, but he is the first who has successfully used it. I have never met with the use of camomile.
except once when a gentleman is said to have used it in Syria, for many years. I am not sure whether he ever met or heard of Nasirine Chill. I hope that this important subject may meet the attention of every one interested in the matter and that the aspiring surgeons may be hailed with warm acclamation. I am happy to find that Sir George Balfour all recommends a fomentation of chamomile and poppy. The same physician also recommends the colouring of the wound green and the shaving of the hair to prevent determination to the eye.

Astringents.

These remedies are used only after the inflammation has been subdued by antiphlogistics. Mr. Guthrie uses them at the onset of the disease, even in concentrated solutions and substances, such as sulphate of copper or nitrate of silver. Sulphate of
lyric is only used in mild cases.

Dr Graves of Dublin agrees with him and makes this the most useful cure. Dr Graves cites Mr Hasting's remedy, a lotion given to him by a Hakeem who practiced many years in Syria and Egypt. This cure was considered infallible, but I doubt that it is something like the infusion of knot-galls and pomegranate bark, spoken of before. At least we may infer this from the agonizing pain it produces. What this infallible remedy is Dr Graves does not tell us, and I suppose Mr Hasting himself does not know, but I think it will be nothing more than an astringent. I cannot be sure that astringents could cure the disease from its commencement; however, since as I am, I must be trampled upon by the force. I mean that I, a mere student, cannot dare to oppose great men like Mr Hasting.
and Dr. Graves. Nothing can cure the disease and at its onset too; but I cannot be justified in offering an opinion or agreeing with them till I see their remedy succeed. Then, and not till then, will I can speak from experience, and not from theory, or out of respect to those gentlemen. In the mean time I take their word for it, and impatiently wait till I try it.
It is not an easy thing to embrace a new creed. I have been taught that astringents are used after antiphlogistics, and the truth of my instruction has been confirmed by facts and experience.

Muller, Halloran, Peth, Ware, MacKenzie—all agree that astringents are of no avail, if relied upon without fluid letting, and other remedies besides. Muller's formula is from 2 to 3 grains of sulphate of zinc (not 10 or 15 as in the concentrated solution of Mr. Guthrie) in 31 of water, or 2 or 3 grs. of sulphate of copper in 31 of water, used 3 or 4 times a day. Halloran rules sulphate of zinc, in substance, but not in the onset. Nitrate of silver may be used, 10 grs in 31 of water, after antiphlogistics.
Saltpetre of zinc on the plea that it neither cools the pain nor diminishes the discharge, and is trustworthy to the cornea. Vulpian, Delpech, Brunan, and MacGregor speak highly of nitrate of silver. Vulpian says, "It has all the advantages of any other astringent, and, moreover, eases the pain, decreases the discharge, and seldom causes opacity to the excoriated cornea." Brunan's formula is 3 gds. in qt. of water. MacGregor uses it, and puts Cetorine ointment on, to prevent the adhesion of the lids and to alleviate the pain, which is felt after the application of the nitrate of silver.

Sulphure of Opium is used among other remedies and is highly beneficial. Dr. Povey assures us that after experimenting on 500 patients he was convinced of its great efficacy. Briggs puts oil of thurine in the
and then washes them with cold water to remove the pain and heat consequent upon its use.

The gentian tincture implies confidence in the drug, or in the compound itself when applied to the eyes. (This is also successfully used by our barbers.) He makes an ointment of opium and mercury and rubs it on the eye brows.

Treatment of Chronic Ophthalmo in the eye lids.

Some excuse the granulations with a pair of scissors. Another uses the

Charonics and astringents. His formula is - 2 grs. of nitrate of silver, in 3

of water, rubbed in with a camel-hair brush. Mr. Gautier uses sulphate of copper in substance, and, keeping

the everted lid open for a short time, washes it with water, and drops

in tincture of opium to ease the

pain. Rust and Lawrence desire
to use of astringents, as astringents can produce the same effect.

Malllini condemns the cruel practice of excising the diseased part of the lid, when nitrate of silver, or sulphate of copper, if applied, and the lid kept by a strip of adhesive plaster or a spring, restores it to its natural position after its eversion. He observes that in all the cases of ec- tropium which fell under his hand he never used any method but this; and in none of them did he fail to restore the lid in its eversion to its natural position.

Jinis
Arabian Elephants
Preface.

The motives that induced me to write on elephantiasis, were, that, ever and above the interest which every man, professional and non-professional, feels for all important and interesting a subject, I heard some lectures delivered by Haller, and with Graham Pasha to our own country. This gave me time to take small amount of pains to dissect every tumour after that Big had performed the operation and the fruits of his researches, which I have inserted in my thesis, will, I have no doubt, add greatly to the knowledge of the profession.

H.B.
Arabian Elephantiasis.

This disease has long been known to the Arabian Physicians. It was celebrated surgeon, in his book of medicine and surgery, details minutely what is now known of the nature of this disease, except its pathological anatomy. In Bagdad, hence Salamanca and Hidh Yaman. This disease is now very common. Abyzina was the first who gave it the name of "ouj-iel-feal," or the "disease of the elephant," from a circumstance which happened to him. An Indian merchant came to consult him, and Abyzina said to him: particularly, "Why do you bring your elephant here? Do you wish to sell it?" Abyzina tried in vain to cure him, and the reigning Calipha, to whom the gave his elephant, presented him with some money to take him to his own country. After Alphonse hath notice of this
Diseases, in the account of his travels
in Egypt, about A.D. 1590. - Binard
was taken prisoner by the Mamelukes, pretended to cure this disease,
and obtained his liberty. This was in
1672. - In 1801 Harry gave the first
scientific description of the disease.
Clot Bey, in Abouzidan, as we are told
was elevated to his high rank by
his dexterity in curing it by perform-
ing an operation several times be-
fore Mohamed Pasha. Lallemand, who
came with Ibrahim Pasha as his doctor
was interested in this disease, and so
anxious to see the operation perform-
ed by Clot Bey, that 3 patients were
sent for from the Delta on whom
the operation was performed, which
termed Lallemand Scuriosity, and ad-
ded to our knowledge of the patho-
logical anatomy of the disease, for
he, with the enthusiasm of a French
surgeon, shut himself up in our dis-
acting room for 5 days, and the result of his research was copied for the use of the students.
Elephantiasis

is a chronic, indurated swelling of the subcutaneous tissue usually accompanied by alterations in the skin, or enor- mous growth of the cellular tissues with interstitial deposition of albuminous matter. It attacks any part of the human body though generally the inferior extremities and the scrotum. We have many authenticated cases of it attacking the upper extremities, as the face or scalp. Scheneck tells us of a man whose head was larger than that of an ox. Another man's nose covered the lower part of his face and he was compelled to keep it up by bandages for convenience in breathing. Other cases have occurred in which the breast increased to such an enormous size that it hung upon the knees. Dispenziner records a case of elephant in the labia majora. Boyle of another in the
erge of the anus. Delpich saw a case of abdominal ephel, composed of cavities filled cream of different colours, yellow, green and transparent. I adviced to perform the operation on ephel below the navel with scissors, which is low as the middle of the thigh.

Cases of ephel of an enormous magnitude are recorded by different surgeons. The weight varies from 1 to 200 pounds.

Biron Laverre relates a case of 120 lb. Not Beug one of 110, and other 12 cases varying in size and weight, 6 of which weight from 60 up to 95 lb. - Ismail performed in India, an operation on a case which weighed 50 lb. besides all other cases of various weights and sizes, one of which was used by the owner as a writing desk. Alard mentions a case where the tumour was as large as the body. Delpich in his "Phine Clinique" relates a case of 50 lb. histom performed the operation on a case of both.

Nabarouic Bey, one Arabian surgeon
performed the operation on 9 persons, whose history is kept in the register general at Cairo. One of them weighed 96 lb. Mohamed Ali, another surgeon at Grande Cairo performed the operations on 17 persons. One of the tumours weighed 107 lb. There is a case in Cairo of a tumour of immense size on an old, blind person. I saw it myself, and believe it will weigh 100 lb. In the Bibliothèque de médecine, there is recorded a case of a tumour 12 lb. Mr. Wilks in 1815 operated on a patient whose tumour was 165 pounds avoirdupois. But the most remarkable case of all is that of 208 lb recorded in the Ephemerid Germanica.
Causes of Elephantiasis.

The first cause of Elephantiasis is stated by Hippocrates to be salt-fish. It is a remarkable fact that nothing seemed to escape the eyes of this vigilant physician, the father of our profession, and it is stranger still that we find his observations corroborated and confirmed by the physicians of the present day. It has been observed by Mohamed Ali, the surgeon, that of eating salt-fish, tea, cheese, milk, salt and some vegetables full of maggots, garlic and onions, which are devouring by the people in the Delta, is not the predisposing cause it is certainly the exciting cause of the disease; and why not so, when all the patients upon whom he performed his observations were natives of the Delta. I think it is fair to draw the inference that this has something to do...
with this disease as well as it has
in Bepora or Bongam which is also
common in those places, and in Abyss
nia according to Bruce. But I shall
not give an opinion on a subject
which yet hangs between doubt and
certainty.

The causes of the disease are well re-
corded in a book lately published by
Mr. Estaire, who has seen much of the
disease in Bengal. Here are almost
his own words: "The disease is attributed
to a hot, moist, malarious, breathing cli-
mate where the poor are ill-fed, and ill-
clothed, from their ignorance, indifference
and poverty, where they pay no attention
to draining, nor avoid the heat and
exhalations. The pools there are hot-beds of
malaria, and when the people build
their miserable huts on their banks, and
their clothes in them, and cook their vict
mals in their water, it is not to be
wondered at that the disease is so
common." Who would not agree with
Dr Leake when he proves his asser-
tions by plain facts? "Once" says he,
"I was called to be consulted by a rich
Hindoo about his disease which was
elephantiasis. What was my sur-
prise to find 5 of the same fami-
ly, men, women, and children at-
tacked by the same disease, to a
greater or less degree. All were living
in a house built around a pool of
the above description."

It is attributed the disease to a local
inflammation which follows the attack
of intermittent fever. I cannot but
agree with him, knowing that the same
thing takes place in our country,
in which, as in Bengal the disease
is endemic.

Larry attribute the disease in our coun-
try to the loose breeches worn by the
natives: but if this is the case, why is
it that in Upper Egypt, where the peasant
or the same clothes as those in town,
disease is scarcely known?

Blowig's opinion is that the noxious gas
exhaled from the artificial pools in
which decomposition of animal and co-

gestable matters takes place, are absorbed
by the pendulous serotum, which is al-
ready softened and delayed by the wa-
ter of the pond, in which the peasants
of the Delta, who work in the rice fields,
are continually immersed.

Now humid situations surrounded by

amy places also cause elephantiasis.

Kornor is of the same opinion as Soall
and Blowig. He says: "No sooner were
sanitary regulations enforced among
the inhabitants of Rio Janeiro, than

eleph disappeared. The disease is endemic
in Barbados, and it is attributed to the

sudden colds, the coldness of the nights, and
the continued blowing of the winds.

In Cochinchina and Japan 1 out of every ten
is attacked by elephant from their being hv-
used to the cold winds when working
them in the fields.

This disease is common on the left bank of
the Yangtse, Rubia, Ceylon, Malabar, Japan.
and America, West India Islands, Rio Janeiro,
Bengal, the Delta of Egypt, near Rashid
Damiat and the Lake of Bahna in
Upper Egypt, or dried. In fact it is found
in all places bordering on the sea, or long
rivers, such as the Caribbean Islands, and
rarely in Ireland and the Shetneys.

Excessive overseer, chronic ulceration of the
leg consequent on syphilis, repeated at-
tacks of erysipelas or erythma, duoden.
gast, varicose condition of the veins,
their contraction or obliteration, phlebitic
swelling of hernia, impendiment of the venous
circulation, are all causes of elephant of the
lower extremities. Another cause is repeated
operation for hydrocele. I saw a case of this
kind in which the tumour was 10 lbs weight
after its excision. The skin was smooth, soft,
glistening, and unlike any other elephant.
had ever seen before. The patient told the surgeon that he had been operated upon 5 times for hydrocele, and at the end of every time the tumour had gradually increased.

The patient traced the history of this growth to the biting of an ant, which is not unlikely for these creatures are very large in our country, and their bite is very painful. Another attributed his disease to the falling of a candlestick which he was stealing from a mosque — a just punishment for his sacrilegious intentions.
Symptoms.

It is very difficult to follow the symptoms of the disease from the beginning to the end, because the patient seldom presents themselves, until the disease has fairly established itself, and the first symptoms have disappeared. For my own part, I never witnessed any of the foremonitory symptoms, and what I have to say about them is taken from Dr. Harvey's description.

The disease is ushered in by a lassitude and feebleness of the lower extremities, so that the patient finds it difficult to move them. Long continued shiverings, uneasiness, thirst, vomiting, intestinal heat after the shiverings, delirium, palpitation of the heart and sweating. The face of the patient becomes discolorated, his lips grow thick, cracked and dry, and the gums pale and flabby. This fever becomes periodic, sometimes general chills in
In the patient's right leg, the first appearance of a painful sensation is felt in the course of the vein saphena, which extends from the groin to the toes. A chain of tumours, like a red line or hard knotted cord, stretches from the groin to the knee and ankles. The surrounding parts become swollen, red, and hot. Erythema shows itself in the neighbourhood of the red line and extends to the whole of the limb. The skin becomes erythematous. The subcutaneous areolar tissue thickens, the limbs tense up, and the neighbouring joints stiffen and incapable of any movement. This passes away, and after a shorter or longer time, 7 days, weeks, months or years, the same fit comes on again and causes the same uneasiness to the patient. These fits may be repeated for many times. A patient assured us that whenever he tried to make use of his limbs the fit came on. Bayer mentions a case in which the fit took place 3 times.
Second Stage. The limbs become very large from the deposition of lymph albumen in the adipose tissue. The patient often points out the increase which follows the fit. Bouilland measured the limb after each fit, and found that the later ones, though not so often repeated, added more to it than the ones going before. It also becomes hard and resists the pressure of the finger. It may be smooth and uniform, or rough and covered with elevations which are so distinct that each elevation is stated by the patient to be the result of each and such a fit, so that no cannot be at a loss to know the number of fits. The skin of the affected parts remaining tense in its wound, and the cells of the areolar tissue, after digestion are found to contain a fibrinous deposit. Pimples are often seen on the limbs, which, from the red appearance it assumes, then gets the name of the mulberry branch. These pimples afterwards
...violet and give the skin a brown-

tone. The veins also become varic-

eous, which adds to the discoloration of

the skin. The dermoids are elevated from

the corium covered by blackish crusts from

edentations of the ulcerated pimples.

Itching is bitterly complained of by the

patient, who cannot help disfiguring

the pimples by his nails, and this causes

their ulceration. The ulcers are not deep,

but very wide and of a beathome ap-

pearance, and the matter coming out of them

tasteful and disagreeable to the pa-


tient himself. The lint seems to be paral-

ized from the pressure of the deposited mat-

ter on the muscles. The heat of the part

is augmented; but the sensibility becomes

diminished by degrees. Often the patient

loses flesh, his face acquires a tawny col-

our, his breath fetid. Trophey and dear-

hea are common accompaniments of

this disease.

The Third Stage is characterized by in-


ence thickening of the skin, induration of the skin which resembles that of an elephant, of a black colour, and covered with large yellow or brown scales from the ulcers, loss of sensibility and of motion, general debility and weakness. There is a characteristic mark of this stage of the disease, the patient almost always faints when he leaves his bed and tries to stand erect. Sometimes, however, the disease creeps in insensibly without any of the preceding symptoms, and it is not till it has acquired a large eye and weight, and a consistence like a stone, that the patient attention is attracted.
Pathological Anatomy.
(After Lallemand)

The skin is thick, indurated, and dry. Its epidermis is easily separated from the dermis. There is a new layer of false membrane between the two. The thickness of the skin varies from half an inch to an inch. The areolar tissue is also thick, and filled with albuminous or glutinous matter. There is fibrinous deposit in those parts exposed to pressure. In one case, some bloody substance was seen in the areola. The serum is yellow or greenish, thick, heavy, its specific gravity coming to 1.045, and full of detached bits of areolar tissue. The areolar tissue may be said to be divided into 4 or 5 layers, the upper ones harder than the under. The testes are atrophied or enlarged, and harder than usual. The glands are not the least enlarged but become softer. The lymphatics are large, and some of them are filled with deposits
matter. The veins too are larger than what they are naturally, but sometimes they are flattened altogether as was observed in some cases by Bonilla. In the above mentioned case, the same vein was in some cases filled with clots of blood, which would have formed a fibrinous deposit in the mucous layer of the veins. — In a serousal elephantiasis, the veins were as large as a carrot, the finger could pass through some of them, and their coats were half an inch thick. Their layers were easily separated, and a new layer of carilageous consistence was found in one of them. The arteries were unaffected. Fabre mentions a case in which he found the arteries ossified and containing very little blood. The nerves were not at all changed. Though in a French work, they were said to turn 14 times as large as their natural size. Some hydatids were seen in different parts of the serousum and clots of congealed blood. In the limbs, the bones instead of being hypertrophic
ability for evitias. The victims of this
disease are looked upon as wretched crea-
tures, who deserve not to be envirored
on account of their infirmity, which
is given to them by Heaven as a pun-
ishment for their iniquity.
Treatment.

In the beginning of the disease, many surgeons have succeeded in arresting its rapid growth, or even curing it altogether. Some have used antiphlogistics, blood letting, leeching, emollient applications, purging, and elevation of the limb or stethum in a bag.

Of this antiphlogistic treatment I saw three cases: A brother and her two children, a boy and girl, were all attacked in their lower limbs. The cause the mother assigned was walking half the distance between Alexandria, which took them two days and nights, having been compelled to flee with her children from some injustice or other which would have been done them. The children were cured, but the mother, although she had the same disease in the same stage, was put, and was at last dismissed from the
hospital for importuning the surgeon, and taxing his patience too much.

Solution of Potassa, of Potassium, assisted by cold water, is said to be successful in the incipient stage, in some instances. At Rio Janeiro, a plant called the Tuna Brasiliensis is said to have been used with great success, but whether externally or internally the author does not tell us.

Lisfranc used compression and local bleeding in the first stage, and blistering in the second and third, and he says every case of bleph. might be cured in this manner.

Ales, by compression cured a case of 12 years standing.

Seventeen years ago, before our present professor came from Paris, the cases for bleph. were carried to such an extent as to be the means of leading many patients to their grave, some natives pretended to cure the disease by an obstetric issue or actual cauterity, or by driv-
ing treated mails through the hypen
trophiad serotum. One used to burn
it in the following horrid manner. They
put gunpowder in a serpentine line
over the serotum, and then set fire to it.
This mode of cure, we were told by a pa-
tient of 70 years of age, is very com-
m mon and very destructive of life.
This patient had seen a great many of
his countrymen attacked like him. Some
had tried this cure and had died
a long time before, probably from an in-
ternal inflammation. A inflammation
of the peritonaeum, as these elephant-ines are almost always accompanied
by hernia.
In Upper Egypt and Algyccima, they use
for the cure of this disease, the bite
of a particular kind of snake.
Henry tells of a case which was cured
by spontaneously bursting and letting
some parts of water flow.
The most effectual cure is exterminating
the tumour or amputating the limb. I shall not describe an amputation as it is of daily occurrence. But exterminating the benetal tumour is very rare here. Therefore I shall describe the operation as it was done first by Clisto Boy, a method now followed by all the professors in the college at Granada Cares, and which I have myself witnessed no less than 3 times.

The objects of this operation are, 1. to make a new serotum out of the huge mass of the tumour. 2. to separate the penis from its new covering. 3. to follow the course of the spermatic cords to the testis, taking care not to injure any of these organs. The patient is laid on his back on a table, as for the operation for the extraction of stones in the bladder. His hands and feet are tied together. The perineum projects forwards on the edge of the table. 4 assistants are at least required, one on each side and a
third at the head of the patient to administer ammonia or vinegar should he faint during the operation. The same assistant also has the charge of keeping the cords and the testis in a clean handkerchief or rag during the operation, and the catheter later introduced into the penis during its separation. A fourth assistant is required to handle the instrument and keep up the tumour for the surgeon. The surgeon stands in front clad in a tight dress which prevents his clothes from being soiled by the stream of blood which breaks out in such force as to reach the bystanders, although they may be some yards off. He then makes two similar incisions beginning from the upper part of the tumour to the perineum. The convexity of these incisions is towards the central part of the tumour, their concavity towards the thigh, and by long clothes of the knife.
he separate these flaps, which are kept in the hands of the assistant under the arteries, small though they may be, are tied or compressed. The second process is to cut two deep incisions along the course of the spermatic cords, and separate them with the testes which often adhere to the lower and back part of the tumour. If either of the testes is atrophied or disorganised, the cord is tied above it, and it is cut out. Of these is hydrocele the operation for it is performed at the same time. Hydrocele is often very useful when it accompanies clefts. For the testes often do not adhere to the back, but are in the centre of the tumour. Hence the operator follows the course of the cords upwards. This being done he makes a transverse incision in the mavel canal formed for the penis, which incision crosses the two deep ones already made.
for the cords. Then he separated the penis from below upwards, taking care not to injure the glans penis. It was sug-
gested by Dr. Aranwé Bay to cut this new covering of the penis by scissors to pre-
vent any injury to it. This covering being taken away, the surgeon intro-
duces the catheter and lifts up the penis to complete its separation from the tumour.

Third process. This operation being finished, the surgeon measures from
the skin of the tumour a sufficient covering for the testes, and the cords; then cuts away all the rest, and ties the arteries, and lastly sews the new covering from the bottom up-
wards. Some lint or sago are then applied, and a bag to elevate the scrotum is
fastened on. This done, the patient is put to bed. I have minutely described this
operation since it differs from those of Liston, Littel, Esthale, Alpeck &c. and as I have often seen its success.
Results of the Operation.

We will first speak of the success of Esdaile's operations on 28 patients. In 13 all the parts were saved, 6 lost 1 testis. And in one all the parts were removed. The size of the cephal. varied from 1 to 70 pounds. Not one case was fatal; but it must be remembered that he performed the operation on 17 out of this number under the influence of mesmerism.

But he performed even operations. Two of the patients died from mortification of the wound in sultry weather. Five survived. Little had 2. all recovered after the operation. One of the tumours weighed 10 lbs.

170 had 8, two died. 3 lost 1 testis and survived. Three recovered without a loss.

Lisson had 2, male & female, both recovered.
Richmond performed on four. All recovered. One tumour weighed 84 lb.
Larrey performed on one patient in Egypt who recovered after the operation, but died 3 months after.

But Boy performed the operation often. As to the results I could not gain sufficient information, since he performed them in Abou Zagabal, 50 Mile from Cairo, at a time when there was no general register kept in the hospitals. None of his operations are recorded. One of the tumours weighed 110 lb., and the patient recovered. Both the other cases were also successful; but one of the patients died 5 months after from Peritonitis: he had a hernia at the same time.

Delaunay performed on 9 persons. One of the tumours weighed 94 lb. Four of the patients died, each being about 60 years old. 5 recovered, and two are still alive.
Mohamed Ali the head surgeon after Akbaranie operated on 17. I witnessed 8 of the operations. Most of his patients were in martaba, from 30 to 60. Some of them were old and worn out.

Of these, eleven survived. Three left the hospital before they were absolutely cured, and we heard no more of them. Three died from gangrene, during the hot summer, which gave him a hint not to operate during that season, but to wait for winter. The last three are yet alive. One of them is a camel-driver who passes the hospital every day. Whenever he comes before it, he raises his hands to heaven, and prays for Mohamed Ali who saved him from his infertility.

Another one whose tumour weighed more than 15 lb, is yet alive, and told the surgeon that he now is in danger of being drowned, for he has nothing now to save him as his tumour once did. When he was coming down the Nile to
Came to be cured, he happened to be filling a vessel out of the river, and fell overboard, all except his tumour which remained on board and thus saved him. Mohamed Ali has performed many operations since then, and their history and success are recorded in the register general of the hospital, all except one came from Lower Egypt. That one exception came from India. Eleven from Bombay, three from Pastisch, two from St. Marie in Lower Egypt, two from St. Saphronia, and the chief-mastor from Grand Cairo.

Finis.