

and perfect form; the evidence speaks of its very imperfect character. The report is silent as to the possibility of cure.

"Certainly, all the circumstances combined, form a case of no ordinary difficulty. It is no easy matter to discover and define a safe principle to act upon; perhaps it is impossible affirmatively to lay down any principle, which, if carried to either extreme, might not be mischievous. Very little assistance can be obtained from authorities. I must rather endeavour to find out what are the true principles of law and reason applicable to the case, following us far as practicable, or rather not contradicting former decisions." Sexual intercourse, present or to come, is necessary to constitute the marriage bond between young persons. And this intercourse must be ordinary and complete, not partial and imperfect; yet it would not be proper to say, that every degree of imperfection would deprive it of its natural character. There must be degrees difficult to deal with; but if so imperfect as to be scarcely natural, I should not hesitate to say, that, legally speaking, it is no intercourse at all.

The evidence of the witnesses is somewhat ambiguous. As to conception, there is no doubt that the malformation is incurable, but it is to me doubtful whether they mean that it is incurable as to the mere coitus. If there is a reasonable probability that the lady can be made capable of the natural sort of coitus, I cannot pronounce this marriage void; but if she is not, and cannot be made capable of more than an incipient, imperfect and unnatural coitus, I would pronounce it void. Such an intercourse must cause disgust, lead to adulterous connection, or else force the husband to a state of quasi unnatural connection.

The discrepancy between the report and the evidence is such as to prevent a decision until Dr. Capo is examined, and the following questions, in addition to the examination of the parties, are to be put to him:

1. Whether (without regard to the impossibility of conception) the lady was, at the time of his examination, capable of the act of generation in its natural and ordinary meaning, or only of incipient and imperfect coition?

2. Whether, if not capable of generation in its natural and ordinary meaning, but only of incipient and imperfect coition, such defect arises from malformation incapable of cure, so as to allow of the natural and perfect act of coition?

Dr. Capo, after mentioning his examination of the female in March, 1844, and his subsequent one in consultation with Drs Bird and Levor, in April, says that during the latter he found the depth of the vagina increased in depth. It was precisely two inches; the natural depth would be from four inches to four inches and a half; that this state of things is decidedly a malformation of the sexual organs, positively irremediable; no operation could be performed to effect a cure; that she is capable of a restricted and limited connection, and not of one in its natural and ordinary meaning: it cannot be called perfect, though it is beyond incipient coition. It is just possible that a further, but very slight improvement might take place by continual, frequent sexual intercourse, or by mechanical means. "I will not swear that the vagina is impossible to be further elongated, but I do swear, that it could not be effected without endangering life, or running serious risk of doing so."

July 8. The cause came before the court again, with the additional evidence of Dr. Capo, and after hearing counsel thereon, the judge pronounced the marriage null and void.

T. R. B.

HYGIENE.

92. *Egypt as a Winter Residence for Invalids.*—(*Monthly Journ. Med. Sci.*, Nov. 1847.)—Dr. WALTER BAIN accompanied a young gentleman in delicate health to spend the winter in Egypt, and having had his attention directed to the climate, and its influence on disease, has given the results of his observations:—

"In Cairo, lat. 30° N., during October and November, the thermometric range was as follows:—

Months.	Thermometer.		Diurnal Range.			
	Max.	Min.	Med.	Greatest.	Least.	Med.
October,	78°	67°	73°	10°	4°	7°
November,	74	60	64	11	2	5

"During this period, rain fell once, a slight shower of a few minutes' duration. In October, the waters of the inundation were rapidly subsiding, and in consequence, there was a considerable quantity of moisture in the air; but by November, the river had contracted within its banks, the water had disappeared from the ground, and the air became perfectly dry. Until November there was almost no wind, but with that month northerly breezes set in, and continued without any change during the entire winter. The winds exhibited a good deal of periodicity, blowing strongly during the day, thus moderating the extreme heat, and suffering a diminution of intensity, frequently amounting to complete cessation at sunset. During November the sky was beautifully clear, the air dry and elastic. The heat of the day was considerable, but very agreeable. The nights were mild, and dews of very rare occurrence.

"At the end of this month, we commenced the voyage up the Nile, and as a general rule, it was observed, that, in proportion as we sailed farther south, the midday temperature increased, while that of the night diminished. Rain fell once during the voyage—of ten weeks' duration—and dews were as unfrequent as at Cairo. The evenings were very mild, but as the night advanced, the temperature sunk so much, that we felt the air excessively cold. At Thebes, lat. 26° N., I had an opportunity of observing the thermometer for a week.

Thermometer.			Diurnal Range.		
Max.	Min.	Med.	Greatest.	Least.	Med.
81	68°	77°	12°	5°	9°

"In Nuhia, the same phenomena were noticed, the only difference being, that the maximum and minimum temperatures were, the one greater, and the other less, than at Thebes.

"Our downward voyage commenced January 4th, 1847; and every day we felt the heat less, and the winds colder. At Thebes, for three days, I find that the thermometer ranged as follows:—

Days.	8 A. M.	Noon.	8 P. M.
January 15	64°	76°	66°
" 16	62°	75°	64°
" 17	63°	79°	67°

"The wind blew strongly against us during the entire voyage down the river, and was so cold that we could not expose ourselves to it without protection; and, when we reached Cairo, the weather was disagreeably cold for several weeks. Rain fell five times during February; the sky was cloudy, and the sun obscured. The thermometric range for the month was as follows:—

Max.	Min.	Med.
76°	57°	61°

"The maximum temperature stated in the table, was reached during the last days of the month, about which time the weather began to improve, and in a short while Cairo became as agreeable as before.

"The chief peculiarity of the Egyptian climate is its dryness, proved, by the foregoing observations, by the united testimony of travellers, but, above all, by the monuments on the banks of the Nile, the sculptured surfaces of which have retained, during a period of several thousand years, all the sharpness and polish of their finished state, and by the brightness of the colours which adorn the interior of temples and tombs, for ages exposed to the influence of the atmosphere. Moisture is found in the air only during the subsidence of the Nile, and even then it is rapidly abstracted by the arid sands of the desert, which hem in the valley of the river on every side. The heat of the summer months is said to be very great; but during the five months of the year spent by us in the country, it was not only tolerable, but very pleasant. In spring, the Egyptians are annoyed by the prevalence of a hot south-east wind, similar to the sirocco of Malta and the Italian

coasts, and, like it, also trying both to natives and strangers. It is called by the natives "Khamseen," or fifty-days wind, and usually sets in about the middle of March; but it is generally heralded by pilot blasts for several days before its appearance. During this season, the diseases peculiar to Egypt prevail with greatest intensity; but, if we except it, and the period during which the Nile is subsiding—when intermittents abound and plague usually begins—this country is said to be remarkably favourable to health and longevity.

"The climate of Egypt is liked by most Europeans, and many have chosen to live in Cairo in preference to any other place, solely on account of the atmosphere. Most of those who sojourned there during last winter, on account of health, derived much benefit, and several, who had formerly wintered in other places, gave it a decided preference. My friend improved very much during his stay. Pulmonary symptoms, which had begun in Scotland, disappeared on his arrival in Egypt, and were never afterwards thought of; and chronic bronchitis, with a cough which harassed myself incessantly, gradually became less severe, and, ere I left the country, had quite gone.

"Egypt offers to the invalid the advantages of a warm and dry winter residence, and, though the temperature is not so equable as that of some other places, it possesses the additional recommendation of being, perhaps, the most interesting country in the world, affording thus, with bodily ease and comfort, mental recreation of the highest order.

"The invalid who intends passing the winter in Egypt, should not land in that country before the middle or end of November, and, on reaching Alexandria, he ought to start for Cairo without delay. As in almost all cases, he must leave England in September, or early in October, he ought to arrange his voyage so as to delay somewhat in a latitude north of the Mediterranean. Any route may be chosen. Through France to Marseilles, or Germany to Trieste, are now common highways to the East; but, on the whole, I think the best way for the invalid to adopt is, to leave Southampton for Corunna, thence down through Spain and Portugal to Lisbon or Cadiz, from either of which ports he can find steamers to transport him to Malta and the Levant. This I deem a very agreeable route. The climate of Spain is finer than that of Germany, and even that of France, during the month of October; and, as it is customary to return through Europe, a passing glance at the Peninsula may thus be obtained without additional trouble or expense. Once in Cairo he should be in no hurry to proceed up the Nile. The short winter experienced by the Cairenes is during January and February; so these months ought to be spent in Nubia, the most southerly region to which a voyage can be made with comfort.

"Cairo and its environs afford sufficient amusement for a month, and by the end of December, the Nile voyage may be undertaken. Two months are usually spent on the river; by the invalid the voyage should be prolonged to the middle of February, by which time the weather in Cairo is generally agreeable. The error generally committed by those who undertake the ascent of the Nile, is that of starting too soon; going up into a very warm climate, and then descending to a latitude in which considerable cold is felt in winter. This was the mistake into which we fell, and I cannot too seriously warn all who are ailing, carefully to avoid it.

"Before leaving Britain, the invalid should provide himself with clothing of two kinds; one, the ordinary attire of Britain, the other, such as is worn in hot countries; everything else may, and ought, to be laid in at Alexandria or Cairo. In either of these towns every article may be provided for making the voyage, not only in comfort, but luxuriously; and in either place servants may be got without difficulty. To take anything from England or Malta involves very great expense, and to hire servants in either place is not only very expensive, but is the source of more annoyance than can be conceived; for though the Egyptian servants are, perhaps, the basest rascals on the face of the earth, they are not so accomplished in villainy as the Italian or Maltese.

"Travelling is thoroughly understood by the Arab dragoman, and it may be performed as comfortably in Egypt as in England; no fears, therefore, of privation or roeghing, need deter any one from making the voyage. The hotels in Cairo and Alexandria are very good, and for a family, or such as study economy and quiet, houses may now be procured in both towns. The English language is alone

sufficient for the East, because most of the servants understand it; but, if Italian be spoken, the traveller's enjoyment will be greatly increased.

"Egypt should be left about the beginning or middle of March—circumstances, and the route to be taken on leaving, determining the precise time. If it be intended to return to England, the invalid should delay in Cairo or Alexandria till the middle of March, when he may leave for Malta with safety; but he ought not to proceed further north until the middle of April, unless he goes to Italy, and travels slowly through the Neapolitan and Roman states. Most persons who visit Egypt, however, make the tour across the desert to Syria, and, if circumstances permit, I would strongly advise all to perform it. The desert is full of interest; very different, indeed, from the idea usually entertained of it by Europeans; and as it forms the highway to a land associated with the earliest thoughts of every Christian, a journey through its wild and cheerless wastes greatly enhances the delight experienced at the first glimpse of the hills of Judea. To the invalid it possesses still other attractions. The climate is finer than that of Egypt, and the change of life there undergone, and the exercise which the traveller is obliged to take, are frequently of far more service in restoring health than any length of mere residence in any climate, and when improvement has already begun, there are few places better calculated to advance it.

"The journey across the desert may be accomplished as comfortably as the voyage on the Nile, and after a day or two, without the slightest fatigue. Last year numerous parties, and among the number many ladies, performed the trip, and all, without exception, bore testimony to the pleasure and benefit they derived from their wanderings.

"On leaving Egypt for Syria, there is a choice of routes, one a journey of thirty days, by Mount Sinai, Akaba, and Petra; the other, of twelve days, by El Arish and Gaza, on the south-east coast of the Mediterranean. To the invalid; I advise the longest, because, if improvement can be effected at all by climate, it must take place under the desert sky, and besides, it is the most interesting route. If he choose it, he ought to leave Cairo by the beginning of March, and thus enter Syria by the end of the month, leaving ample time for making the tour of Palestine, and being ready to sail from Beyrout to Marseilles by the steamer of the last week of April or first of May. By going to Marseilles, voyagers from the Levant now obtain free pratique in twenty-four hours, a comfort which those who have performed quarantine can appreciate. From Marseilles to England is a journey of four or five days, and in a few months, when part of the railways now constructing have been finished, will be much shorter.

"In bringing the above detached notices to a close, I would only express a hope, that no imaginary fears may deter medical men in recommending, or patients in adopting, the East as a residence and travelling ground during the winter. The annoyances to which the traveller is subjected are not very great, and are every day diminishing, and the expense of living and travelling is not greater than in other countries."

93. *Influence of Seasons on Health.*—In order to appreciate the influence of the seasons on the public health, we must proceed on an extensive scale; and the only source from which information can be drawn, without danger of too great errors, is found in the movements of the populations of hospitals and infirmaries. Going on this principle, M. Casper, of Berlin, offers the results of observations made on 155,000 cases of recent diseases, comprised in a period of seven years, from 1833 to 1840, the most extensive table yet made public. These 155,000 patients at Berlin are thus distributed, according to the season:—Summer, 40,700; Winter, 39,024; Autumn, 37,865; Spring, 37,748. Hence it follows, that in Berlin the greatest number of patients is in the summer; the least in the spring; and the numbers in spring and autumn are about alike. If, then, that season which causes the least amount of disease be regarded as the most healthy, summer is at the bottom of the scale, while spring is at the top,—speaking here of Berlin. Looking to the months in which disease is most prevalent, January and August occupy the first rank; then follow, with little difference between them, July, April, September, June, February, March, November and October; lastly, May and December; the two last furnishing fewest cases. If, instead of taking the number