PURE JAMS.

It is a difficult thing nowadays to obtain good and thoroughly pure jam; so many unpleasant stories are to be heard of the various ingredients of which some confections are said to consist that one is disposed rather to forego the luxury than run the risk of eating carrots and turnips, old orange peel, or even worse, sweetened and flavoured. In such a dilemma as this the "Women's London Gardening Association," of 62 and 64, Lower Sloane Street, S.W., come to our aid and offer us pure preserves in the shape of jams (without stones), jellies, marmalades, bottled fruits, damson cheese, and devilled almonds—all of which are made on the premises under the superintendence of a lady cook. Among the specialties of this Association are apricot chutney and white clover honey. Sweetmeats coloured especially to match any scheme of table decoration may be obtained.

Housewives and mothers need no longer fear for the digestions of their children or of those for whom they have to cater; if they cannot make their own preserves they cannot do better than buy from the "Women's London Gardening Association."

NEW DIETETIC PREPARATIONS.

MESSRS. VAN ABBOTT AND SONS, 6, Duke Street, Grosvenor Square, prepare "digestive biscuits" for the use of adults and children. On account of their mild laxative property they are specially recommended to ladies suffering from constipation. They are also said to contain no drugs or chemicals, but to be made from a combination of different kinds of flour. Our examination shows this to be the case; moreover, the biscuits are well made and very palatable; they contain a large proportion of the whole meal of the cereal, the bran being in a finely divided condition, thus rendering the biscuits more digestible and less irritating in their laxative action.

We have also received from Messrs. Van Abbott and Sons a sample of their invalid consommé. It is a clear soup of a gelatinous consistency, and is said to be made from meat from which all fatty matter and tendons have been removed, flavoured with vegetables. According to our analysis it contains 3.7 per cent. extractives, of which 0.76 per cent. is mineral matter. It is put up in glass bottles, containing about three-quarters of a pint.

A LOCKING SAFETY PIN.

We have received from Mr. William Robb, of Kincardine O'Neil, N.B., a sample of a locking safety pin. The idea of the invention is to prevent the pin becoming unfastened while in use, a feature of great desirability. The point of the

FIG. 1.

pin when closed is held in position by a small spring, and it can be released immediately by slight pressure on the spring. This little invention appears likely to be of great utility.

NOTES ON HEALTH RESORTS.

XXII.—THE WINTER CLIMATE OF EGYPT.

By C. THEODORE WILLIAMS, M.D., F.R.C.P.,

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THE climate of the desert has, according to modern views, strong claims on our attention, because it combines with great dryness, moderate warmth and remarkable asepticity. Owing to the absence of vegetation—which, by retaining moisture, moderates extremes of temperature—radiation is a marked feature, and between maximum and minimum there is a wide difference, which naturally gives rise to air currents or wind of often very considerable velocity.

On the whole, the desert climate best adapted to invalids is that of Egypt, and this by reason of its accessibility and the comfort and luxuries which the Nile services supply, as well as because of the great attractions of its magnificent history and archæology.

During a recent visit to the Land of the Pharaohs and an ascent of the Nile to the second cataract, I took the opportunity of investigating certain points of climatic importance to patients, and of ascertaining how far the advantages of desert air can be utilised for treatment.

Leaving London on December 20th, 1895, we traversed France and North Italy covered with snow, but on reaching the Adriatic found a milder region, free from frost and snow, and allowing us to discard wraps, the temperature at Brindisi being 61° F. Embarking on the P. and O. ss. *Chusan*, we had the smoothest of voyages to Port Said in three days, our course skirting the beautiful Ionian Isles, the rocky Peloponnesus, and Candia with its majestic Mount Ida, the water becoming warmer and the air more balmy as we approached the African coast. The observations on board the *Chusan* gave a rise of air temperature from 61° to 68°, and the water from 66° to 70° during the three days' voyage. Some rain had fallen at Port Said, and this prevented dust on the railway journey to Cairo through the desert, with all its fascinating sights of Arab life, of caravans of camels, of buffaloes, and of the armies of pelicans and the gay flamingoes on the shores of Lake Menzaleh.

As we passed later through the well-watered land of Goshen it was warm enough, but as we approached the capital of Egypt, and descried the citadel, with the splendid minarets of Mehemet Ali's mosque, a mist was rising from the surrounding country, and the bases of the Pyramids of Gizeh were shrouded in vapour. Next day the mist had extended, and from the citadel we noted that it had its origin in the Valley of the Nile, and specially in the land irrigated by the river between the Mokattam Hills and the rock terrace on which stand the Pyramids, the mist being thickest on the western bank of the Nile.

That evening we started by train along the Nile bank to join the post steamer at Girgeh, and for some hours found ourselves enveloped in a white fog, in which the tops of the palm trees and mosque domes seemed to float mysteriously. But early next morn we witnessed a gorgeous sunrise, with all mists cleared away, and on embarking on the *Nefret Ari* we were soon steaming up the broad yellow Nile in magnificent weather, which continued during the whole journey to Wady Halfa.

With regard to these mists, on which so much stress is laid by visitors, they are only the natural result of surrounding conditions. The Nile overflows, soaking the subsoil with moisture, and covering the surface with a layer of mud, and irrigation distributes this flood over as large a surface as possible. The Nile then slowly and gradually sinks to low level, and the sun's rays, nearly tropical, cause rapid evaporation from this vast area of irrigated land, forming mists which are generally dissipated on reaching the desert.

Nevertheless, with all this ground moisture, it cannot be said that Cairo and Lower Egypt have a moist climate, for its average relative humidity percentage is only 58.4, its rainfall 1.22 inch, and the number of days on which rain falls not more than fifteen. The rate of evaporation is 7 inches a month.

Ascending the Nile to Luxor we found the temperature gradually rising, but the motion of the steamer always pro-

cured us plenty of air, and often too much, in the daytime, and at night we always anchored.

Sunrise and sunset were magnificent beyond words, the Nile turning to a roseate colour, and the Libyan and Arabian mountains passing in succession through all the tints from red to grey, now lighting up with gold and crimson, now fading into cold steel colour, the feathery foliage of the palms and the graceful minarets of the mosques standing out in striking relief against the glowing sky.

The cultivated strip of the Nile bank varies considerably in width, being sometimes miles broad, and including palm groves, large fields of corn, vetch, lupins, sugar cane and cotton, and sometimes, as above the first cataract, it is limited to the actual river bank, and there, directly the Nile begins to sink, the seed is scattered literally on the water, and the damp soil shows in the course of a few weeks abundance of sprouting vegetation.

Luxor and Assouan are the only resting places fit for invalids on the Upper Nile, but these during the months of December, January, February, and March offer distinct climatic advantages. They differ considerably in their relations to the Nile and the desert. Luxor stands on a wide strip of level cultivated ground on which lie the ruins of the temples of Luxor and of Karnak, and at some distance from the desert. On the opposite side of the river is another wide strip of fertile land ending in the Libyan range of hills, and containing the grand remains of ancient Thebes.

Most of this rich plain on either side of the Nile is flooded by the Nile, which penetrates into the Temple of Luxor and makes islands of the great Memnons of Thebes. For the rest of the year the soil is only kept moist by innumerable *sakiyehs*, as there is practically no rain.

There is very little desert near Luxor, for sterile ranges of hills enclose the plains on either side. On the Western or Theban shore is a fine range of mountains, in which lie the tombs of the kings, and on the slopes of Der el Bahri, part of this range, good sites for hotels and villas could be found, provided a water supply could be obtained by artesian wells. It would be a great advantage to have a residence above the Nile level, and free from all chance of subsoil leakage.

Luxor has three excellent hotels, abundant supplies of every kind, two experienced English doctors—Mr. Longmore and Dr. Canney—and English nurses. There are opportunities of exercise in the form of horse and donkey riding and walking, and when the heat does not permit this, boating is always agreeable.

The whole country is full of antiquarian interest, and everybody appears to be either studying or excavating temples, and the arrivals and departures of steamers and dahabiyehs impart great activity.

Many meteorological observations have been taken at Luxor, but somewhat irregularly. Dr. Leigh Canney has lately, however, carried them on with recording instruments of great accuracy, and has arranged for having similar records contemporaneously taken at Cairo and at Assouan, so that comparison of the different climates can be tabulated, and Dr. Canney will shortly furnish a paper on the subject.

He kindly showed me his records, from which I glean the following: During the winter months there is a day temperature of from 60° to 80° F., and a fall at night of about 30°. The daily rise commences about 6 A.M., and the maximum is reached at 2 P.M., which in winter is from 75° to 85° F. After this the fall commences, but it is a gradual one, and even immediately after sunset it is not as rapid as might be supposed by one's sensations, for 5° is about the greatest lowering within an hour after sunset. The fall continues till 4 or 5 A.M.; the minimum in January, 1896, was 40° F.

The humidity percentage is very low in the daytime—namely, from 30 to 40 per cent., but at night it rises to 80 and even 90 per cent., and the presence of this extraordinary amount of nocturnal moisture is evidenced by the acacia trees, which drip in the early morning.

The temperature and humidity curves on the recording instruments are the most uniform I have ever seen, the rise and fall always taking place at the same hours, the columns only apparently varying in height according to the wind. A north wind depresses both temperature and humidity

columns, and a southerly one causes them to rise, but under either condition the form of the curve and the difference of 30° between the extremes of temperature appears to be maintained.

Mr. Longmore kindly showed me the Luxor Hospital for natives, established a few years ago by subscribers, of whom the largest are Messrs. Thomas Cook and Son. This hospital has 26 beds and a large out-patient department. There are a good many surgical cases and plenty of important operations, but the principal medical diseases seem to be parasitic, and I saw several cases of ankylostomiasis, a remarkable disease, due to the presence of rhabditic nematoid worms in the duodenum and jejunum, which, in addition to digestive troubles and emaciation, cause the most intense anæmia, and in some cases death. According to Dr. Sandwith, of Cairo, who has written an exhaustive pamphlet on the subject,¹ the disease appears to arise from eating or swallowing earth or muddy water containing the embryos of the parasite, and the successful treatment is by large doses of thymol (30 grains) repeated several times, and followed by a purgative. The hospital is a great boon to the native poor, and the out-patient department is attended by numbers of Arabs coming even from Nubia and the Soudan.

Assouan lies 137 miles south of Luxor, just below the first cataract, and is situated under very different conditions. The Nile stream is intersected by numerous rocky islands, and, when we come to the cataract, is hemmed in by granite walls. The town is picturesquely situated on the eastern bank, and has the desert to the east and south, with a small tract of cultivated land to the north. Opposite is the Elephantine Island, used for the military hospital of the Egyptian troops, and beyond this are cliff-like hills catacombed by rock tombs, including the Grenfell ones. Assouan is placed above high Nile mark, and is not affected by the inundation; it is girt with palm groves and acacias, and the presence of a military garrison and band is enlivening. There is an excellent hotel and an amusing bazaar.

Camel and donkey riding are the favourite exercise, while sailing or rowing on the river affords a pleasant variation. The meteorological observations taken by Dr. Jalland, the resident medical man, show the general temperature course to be the same as at Luxor, there being the regular rise from 6 A.M. to 2 P.M., when the winter maximum, 80° to 90° F., is reached, then the gradual subsidence through the afternoon and night, the minimum, 50° to 60° F., being attained between 4 and 5 A.M., the difference between the extremes being 30°, as at Luxor, and this difference is almost constant during the months of December, January, and February. The lowering of the maximum is due to the prevalence of north wind, the usual one in winter. The humidity ranges from 30 to 90 per cent., or 25 to 85, being exceedingly low by day, often 30 per cent., 20 per cent., or even 0; but at night, that is, between 8 P.M. and 6 A.M., it rises to 70, 80, and even 90 per cent., which, in a locality like Assouan, rainless and surrounded by desert, is the more remarkable, as it is difficult to say whence the moisture comes, except from the Nile itself. The climate of Assouan is warmer and drier than that of Luxor but it is somewhat more windy, and this imparts a freshness which is very agreeable, but the north wind is at times very trying, especially after great heat. Another wind of a different character is the well-known khamseen, which blows from the south and south-east, and is laden with particles of sand. We had some experience of this during our descent of the Nile as we were approaching Cairo. The effect is peculiar. As the cloud of sand approaches it obscures all near objects; the palms and villages are completely shrouded, and the sun turns a greenish hue. The air is suffocating and irritating to the throat and eyes. It generally blows three days, and is at times very strong, making everyone uncomfortable. The prevalence of the khamseen is accompanied by a rise of the barometer and a fall in the humidity percentage.

South of Assouan the climate of the Nile Valley is very fine under the more complete desert influence. There are picturesque Nubian villages and plenty of ancient temples, but no accommodation for invalids, and at present the district is more or less in military occupation, and though accessible to tourists on Cook's boats cannot be considered as a health resort. And this leads me to say a word on the

¹ *Anchylostomiasis*, 1895.

Nile boats generally, and their suitability for invalids. Few rivers, if any, are supplied with more convenient steamers and more luxurious private barges or dahabiyehs than the Nile, chiefly owing to the enterprise and good organisation of Messrs. Cook and Son.

The tourist boats are floating hotels, furnished with hot and cold baths, with electric light, with convenient cabins, an obliging staff, medical attendance, and first-rate food, and providing delightful excursions day by day, which are only too tempting and fatiguing for invalids.

The post boats, though smaller, are hardly less comfortable, and have the advantage of enabling their passengers to see more of the Nile traffic and native life, though they do not stop at all the temples or ruins, and make the voyage more speedily.

Perhaps the most suitable for patients are the dahabiyehs, as they make the ascent of the river in a leisurely way, sailing with the wind or being towed (by steam tugs if desired), and halting when and where they please, because they are not tied to time, but can linger where the passengers find most attractions. They are usually well supplied with food, but complaints are made of the draughts; and as this mode of conveyance is very costly, it is out of reach of a large number of invalids.

In a climate characterised by powerful sunshine and great nocturnal radiation there must always be difficulty in protecting patients, and especially pulmonary patients, from extremes of temperature, even when they are lodged in tolerably well-constructed houses; but this difficulty is largely augmented if for the house a wooden or iron steamer be substituted, the upper and lower decks containing the cabins, the walls of which are thin and the passages draughty. On a warm still day the progress of the ship provides a breeze which is pleasant to everyone, but when the prevalent north wind blows, and especially on descending the Nile, when the steamer faces the wind, the blast is keen and productive of serious effects on delicate people. The effects of radiation after sunset are decided; for Dr. Marcet's valuable observations on a Nile boat² show a fall of 12° to 15° between 6 P.M. and 9 P.M.; but they also indicate that some accessions of heat take place from the neighbouring overheated desert air condensing over the cooler Nile stream.

The Nile itself is far more equable in temperature than its banks, and, though it flows from tropical regions, it is cool and condenses much of the moisture arising from its highly-cultivated and irrigated shores.

The cases in which the Nile voyage is most beneficial are those of overworked brain, showing itself in nerve exhaustion. The easy movement of the vessel, the beautiful scenes, the novelty of the native life and habits, and the archaeological wonders, in a fine climate, exercise a healthful influence on an overwrought mind, and soon restore the sufferer to comparative health.

Probably in most cases the health stations of Luxor and Assouan are preferable to life on the Nile boats, as here in good hotels, protected from cold winds and the effects of nocturnal radiation, the patient enjoys the splendid climate, and has ample facilities for exercise, while he is kept under medical supervision.

The air of the desert, with the advantage of proximity to Cairo, can be enjoyed at Mena House, close by the Pyramids, one of the best hotels in respect of sanitation and food that I have visited; and the able physician (Dr. Bentley) and the painstaking manager do all that is possible to suit the requirements of invalids. Helouan, three-quarters of an hour by rail from Cairo, standing on a spur of the Mokattam Hills, some 120 feet above the Nile, and on the edge of the desert, can also be recommended. There is an excellent hotel, with a fine view of the Pyramids across the river, and there are sulphur and saline springs; but a lack of shade, except in the hotel tents, is complained of, as the trees are young and small.

Medical men visiting Cairo should not omit seeing the Kasr-el-Aini Hospital, where Dr. F. M. Sandwith has a clinic, which for interest and completeness rivals any in the great European cities. The variety of races treated here is remarkable, and the number of rare diseases which Dr. Sandwith demonstrates in Arabic and in English is worth study. Here I saw good examples of ankylostomiasis,

pellagra, and bilharzia, and I regret to say a number of cases of phthisis occurring in Africans other than the inhabitants of Lower Egypt, and some from Nubia and Equatoria, which are supposed to be exempt from this disease; but this only proves that it may arise under highly insanitary conditions in the most favoured climes.

Egypt, as Herodotus says, is the gift of the Nile, and owes its existence and fertility to that soil-laden river, the overflow of which by modern engineering, as in the "Barrage," is stored and distributed through many irrigating channels. By this means the area of cultivated land in Lower Egypt has been largely increased and the number of crops doubled, and when a similar system is applied to Upper Egypt, as proposed at Philæ, a still larger area will be brought under cultivation, and the country probably become one of the most productive in the world.

It is curious that there is little or no malaria in Egypt, except in the Delta, when we consider that the basements of many houses near the Nile are under water for one or two months every year, and that as the waters retire they leave a vast surface of mud, which under the rays of a semi-tropical sun exhale moisture on a large scale and appear to present conditions favourable to development of miasmatic organisms.

The principal diseases are ophthalmia, dysentery, liver affections, and parasitic disease. Occasionally there are visitations of cholera, but the drying up of the Nile inundation does not seem to be accompanied by any special outbreak of disease among the inhabitants. At the same time, it is well for patients to avoid this period, and not to arrive in Egypt till the end of November or the beginning of December, and then the sooner they reach the desert the better. For we medical men look to the pure aseptic desert air as most likely to benefit our patients, and reflect with a touch of melancholy that the justifiable aim of modern civilisation and scientific improvements is to thrust the desert as far back as possible from that great pathway of North Africa, the Nile, so that as Egypt increases in fertility and riches it will become less eligible as a health resort.

REPORT ON THE BABY-FARMING SYSTEM AND ITS EVILS.

[SPECIAL REPORT TO THE BRITISH MEDICAL JOURNAL.]

IV.—INFANT LIFE PROTECTION ACT IN AUSTRALIA.

In a previous article reference has been made to the Infant Life Protection Act which is in force in Victoria. As very little seems to be known of this Act in England, it is now proposed to deal somewhat fully with its more important clauses. Although the Act was passed by the Legislature in 1890, it did not come into force until January, 1893. The primary object of the measure, it is asserted, was if possible to suppress the traffic in, and cruel treatment of, illegitimate children in the baby farms, and according to the *Australian Medical Journal*, from which the details of the Act are quoted, in the issue of November, 1895, the general consensus of opinion in the colony is that the measure has succeeded in effecting this much desired reformation to a very large extent. The following is a brief summary of the leading features of the Act:

No person is allowed to adopt or maintain a child, apart from its mother, for a longer period than three days, unless registered by the police under the Act. The Chief Commissioner of Police keeps a list of all persons so registered, with a description of the house, etc. The term of registration lasts only until the last day of December in the year of registration, and a new application has to be made for each year, but no fees are charged either for registration or its renewal.

The police have right of entry into these registered houses, and may take a medical man with them if they deem it necessary.

Each nurse is bound to keep a roll in which she enters the name, age, sex of each child below 2 years coming under her charge, the date of admission, and full particulars of the person from whom the child was received. In case the child is removed from the nurse, the name, address, and signature of the person receiving the child have to be entered on the roll, together with the date of removal. A copy of each such entry has to be sent to the Chief Commissioner of Police within three days of the reception or removal of each child. The police have the right to ask for these rolls and inspect them, and, if they deem fit, retain them. Falsifying the roll or furnishing false particulars of any matter that is required to be entered in the roll is punishable under the Act.

If from information received it seems advisable to the Commissioner of

² *Quarterly Journal of Royal Meteorological Society*, 1885, p. 275.