The following data should be noted, as they have an important bearing on the efficient working of the system:

1. The temperature of the air.
2. The temperature of the water in the cooling tank at the moment of distillation.
3. The bore of the rubber tubing.
4. The height of the opening B of the tank, above the opening Y of the condenser.

A thermometer was introduced into the rubber tubing at Z, and the temperature of the cooling water recorded during the continuous distillation of 500 cubic centimetres of water.

This experiment was repeated several times, and it was found that the rise in temperature, from the beginning of the distillation to the end, was never more than three degrees centigrade.

A further experiment was carried out, distilling over 1,000 cubic centimetres of water. This continuous distillation occupied about nine hours, and the rise in temperature of the cooling water at the outlet pipe of the condenser was only 5.75 degrees centigrade.

Another series of experiments showed that rubber tubing with a bore of ten millimetres gave the most satisfactory results, and also that the opening at B should be about twelve inches above the opening in the condenser at Y.

The essential points for efficiency are:

(a) Sufficient bore of pipes to allow of a free inflow and outflow of water.
(b) That the tubes are in a continuous upward incline from the condenser to the cooling tank.
(c) That the level of the lower tube of the tank at B should be above that of the upper tube at Y.

Note.—The entrance of the upper tube in the cooling tank must always be kept covered by water, or circulation will not take place.

The advantages of the system are:

1. There is no wastage of water.
2. Saving of labour where there is no water supply laid on, as this system dispenses with the work of refilling the cooling tank.
3. Requires no attention, and is simple in operation.
4. It is quite efficient in summer weather.

The room temperature during these experiments varied between 19 and 26.5° centigrade.

A FEW NOTES ON JAMAICA.

By MRS. PERCY HOPE-FALKNER.

Having recently returned from India, and being entirely defeated by the English summer, the problem arose of "summer holidays." A trip to Jamaica seemed to afford a solution to many difficulties, cost little more than "going to the seaside," and gave an opportunity of seeing the place where one might quite possibly be stationed some time. These notes are intended to give up-to-date information to people going out for a three years' tour of duty.

The journey out is very simple, only one line of passenger steamers, Elders
and Fyffes, Limited, runs direct from England. Tickets were obtained at a cost of £75 per adult (children half price) for the return trip, the cost has since then been raised to £90 return, and is likely to be increased, an important consideration when thinking of leave. Travelling via New York is very much dearer. The journey is exactly fourteen days outward bound, of which approximately six days are cold, and possibly rough; returning the ship calls at Santa Marta, South America, for bananas, and the journey occupies eighteen days, but the experience is most interesting.

Special trains leave Bristol in connexion with the boats which sail weekly, and when one has “suffered many things” on transports, one appreciates the comfort on these ships. They are thoroughly comfortable and well equipped, and with the exception of one or two, not so well run, the feeding is excellent. The “Pataua” and “Coronado” hold a reputation for excellence beyond all the others, and the former can be vouched for personally, the catering being equal to any first-class hotel. The captains and officers of all the ships are universally described as being considerate and obliging, in every possible way, and given fine weather the trip is thoroughly enjoyable.

If possible it is well to have someone to meet one on arrival; any strange place makes one feel rather dazed at first, and the noise, heat, etc., inevitable in any docks, emphasize the feeling of being a “stranger in a strange land.” However, there are usually porters from the various hotels who are able to relieve one of the most of the worry, and take the luggage on ahead. There are three possible hotels, the nearest to the docks being the “Myrtle Bank,” a beautiful hotel owned by the United Fruit Company, but expensive, the price running from 30s. to 60s. a day, without extras, in the season. The South Coast Hotel is clean and nice, and nearest to the military lines costs from 25s. per day, but is much frequented by the “Chosen People.” Constant Spring Hotel is entirely British, special terms are made for officers and their families, and it is large and airy, situated six miles out of Kingston, which is a great advantage where children are concerned, and it is cool in the hot weather, and boasts of a good swimming bath. There is a boarding house kept by a Mrs. Gould, Hope Road, Kingston, where one can be quite comfortable at three and a half guineas a week, and it is nearer the barracks, hospital, &c., than any of the other places.

One hears a lot of Jamaica’s perfect climate, but it is seldom mentioned that from May to September it is distinctly hot, and when the thermometer was just over 90° F. it was strangely reminiscent of Bombay, and involved frequent changes of clothing. Up in the hills one can find it even uncomfortably cold, and the result of a one-day expedition was a sharp attack of malaria for one of the party, the first since leaving Jhansi, and of course contracted in India. The mosquitoes are quite the most vicious and persistent ever encountered; and everyone uses nets, but the general opinion is that they are non-malarial, except in the swamps.

It may be of interest to note that our party of three all took five grains of quinine nightly from the second day of arrival, all having been in India, and two full of malaria, in spite of which the girl of fifteen years had a sharp attack on the tenth day, which proved to be malaria under the usual blood test.

All clothing should be brought out from home, there is no equivalent for the Indian “Dirzie,” and the shops are very poor, English goods being on an average
180 per cent over the home prices. A few things can be obtained locally, but there is not much choice of variety, and one may at any time be faced with one of life's greatest tragedies, viz., seeing someone else in a duplicate of a treasured garment.

An English lady, wife of a retired naval officer, is starting a dress establishment, which affords a more hopeful prospect for cases of emergency. One needs an unlimited supply of simple cotton frocks; they soon fade, and get shabby at the hands of the laundress, and quite a few evening gowns are required for the many dances occurring during the season. Furs are practically useless, and only thin coats and skirts can ever be worn, white shoes are always in evidence by day, and only the cheapest American type can be purchased locally (that is cheap in quality but extortionate in price). In fact, eighteen years "in the service," and many of them spent in foreign lands, makes one speak with a little authority (on matters of clothes), and say "if going to Jamaica, take everything in the way of wearing apparel." The same advice applies to the "mere male," cotton suits and cotton uniforms are best obtained at home, they are far from attractive if obtained locally.

There are in all about eight R.A.M.C. billets, and nothing like the number of quarters available, the S.M.O. has a fairly nice quarter, the rooms are rather small and dark, and a major occupies another, and at Port Royal there is one very small and uncomfortable quarter. Most people try to get furnished houses, and rather nice ones of the bungalow type are available at £10 per month, but one may have to wait some time for these as they are always in demand.

One would like to give more detailed information as to the Corps duties, etc., and the S.M.O. promised to forward some for the purpose of this article, but that promise was not fulfilled, one therefore cannot give technical details beyond that usually there is a British regiment; at present there is only one Company of the Sussex and a few gunners on the Island. The hospital contains 130 beds, the charge pay and all extras for a Lieut.-Colonel 7s. 6d. per day, and there is a good deal of work at present holding boards on the men of the West India Regiment. Most of the troops are in barracks in the hill station, Newcastle, and presumably an M.O. would have to be stationed there.

Furniture of a kind is supplied in the ordinary houses and a small amount is usually provided in quarters, but one is well advised to take out any small things, such as portable chairs and tables, glass, china, linen, silver, curtains, cushions, etc., and for anything not required there would be a ready sale locally.

At first the servants strike one as quite hopeless. Of the respect due to a white woman from a negro, and as required from a native in India, they are quite ignorant. It is nothing for a hotel porter to receive an order, say for tea, lounging on the servants' bench, and it needed some days' training before those encountered were made to "toe the line." Once, however, one gets accustomed to their irritating slowness, they are not so bad, though not to be compared with the good Indian servant. The usual household has a dusky lady called a "butleress," a housemaid, a cook and laundress for indoor work. They wages average from 19s. weekly and they "feed themselves," but insist on being paid weekly. Quite a usual trick is to clear out directly they have been paid, without giving notice, and they are absolutely independent in this way and appear to do much as they like.
Clinical and other Notes

Jamaica is going through a curious phase socially at present, and there is little done at King's House except occasional official shows. No one in the garrison appears to entertain, and the frequent little dinners that are the rule in India seem to be almost unknown. The garrison dances are not at all popular, and the laboured explanation as to why this or that person won't go to this or that affair are boring in the extreme. In the present group of people stationed in Kingston, there seems little real friendliness, and no hospitality among themselves, nor towards the Jamaicans. Here one touches on a delicate subject; society in the island is undoubtedly very mixed, in social status and in colour, but there are charming people to know, and surely it is far better to look for these than to remain in splendid isolation in the "camp set."

A motor car is a necessity and all American makes can be obtained at a lower cost than at home. Horses are not expensive, and local traps can sometimes be had. Failing one's own, there only remains the rickety hired "bus," a kind of double Surrey in its youth, uncomfortable and expensive. The trams are occasionally used by Europeans, but one would require perfect health, perfect temper and a perfect sense of humour to make this a practice. One can rarely travel in them without some personal comments from ladies of extreme dustiness and uncertain age, or being stared at by negroes who appear to have no respect for white women.

Jamaica is supposed to be very healthy for children, and there are schools in the hills where the teaching is excellent, but all colours and classes are mixed indiscriminately, and the children develop a villainous local accent. One often finds, however, comparatively decent people who do not mind these "trifles," and after all it is merely a question of the individual point of view.

There is a certain amount of polo of a mild type, heaps of excellent tennis, two good clubs, though none completely military, fishing and bathing, ad lib. There is a pretty little racecourse and some quite good racing in the season, but not much in the way of shooting except alligators and pigeons.

The general opinion of expenses for living in Jamaica is that, while far from cheap, it is less than in England at present, that is for actual foodstuffs and things not imported, and one can on the whole lead a pleasant life there, for a time anyway.

Most of us in the Service think of places abroad from the point of view of possibly settling there on retirement, but one can only just touch on such a big subject here. Briefly, there are many openings for good medical men, who can afford to wait for a practice to "make itself," but any kind of land scheme the present inflated prices would make impossible. Sugar estates for example are changing hands at hundreds of thousands of pounds, so are banana plantations, and those in the know foretell a big slump within the next few years.

But for a three years' tour one has quite a number of advantages compared to either serving at home, with its unending moves; or to the more strenuous climate of India, and on the whole Jamaica may be counted among the best foreign stations.

ERRATUM.

Read "mainly" for "namely" in the first line on p. 292 of Brevet Lieutenant-Colonel W. P. Macarthur's paper.