esters, cause a degree of irritation intermediate between that caused by the oily acids and the tarry acids, of which the syrpy acids mainly consist; this irritation is increased when the esters are distilled, and the tarry constituent thereby partly decomposed. The esters of the tarry acids and the exposed ethyl esters are far more irritant than any of the other products.

The practical outcome of these results may be stated as follows: Stocks of chaulmoogra and hydnocarpus preparations should be kept in a cool, dark place in full bottles. Under these conditions they are quite stable. As it is not practicable constantly to transfer a stock actually in use to smaller bottles, the quantity issued from stock for use in a leper institution should not exceed, say, one month's supply.

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The Leprosy Situation in England.

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R. G. Cochrane.

The average general practitioner would consider that the possibility of a case of leprosy coming into his consulting room would be so rare as not to warrant any thought being given to it. Yet Britain, with her vast colonial possessions and her people travelling throughout the world, is more subject to sporadic cases occurring than almost any other country. Therefore, it should not come as a surprise to medical men to be informed that leprosy is not only seen in the country, but that there is a voluntary colony for those afflicted with the disease.

As the authorities do not consider that the disease comes within the purview of preventive medicine as far as this country is concerned, there is no means of knowing the exact number of cases in the country, but the general estimate is between 50 and 100. The Home in Essex has accommodation for 12 patients. This means that at any one time there
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is a greater number of cases outside the Home than inside. The Home has been established for twenty-one years, and is entirely voluntary. Its maintenance is rendered possible by voluntary subscriptions, though of late years it has suffered greatly from the depression, and is now in serious financial straits. As the Government give no financial assistance whatever, the position and outlook at the present time is somewhat foreboding. The actual nursing and attendance is done by a Church of England community, the Community of St. Giles, and the leprosy Home is managed by a Committee, of which Dr. J. M. H. MacLeod is Chairman.

This is the only residential Home in the country, and up-to-date treatment and care is available for any sufferer who is stricken with this disease, and it would be a very great tragedy if this institution of mercy had to close its doors for lack of funds.

It is generally held that under modern conditions of civilisation leprosy does not tend to spread, and this is true of the disease in this country. Physicians who come across cases in this country naturally advise measures similar to those suggested in tuberculosis, viz., separate room, separate bed, separate eating utensils and separate towels and bedding, etc., with adequate disinfection before being sent to the laundry. If such measures are carried out, there is no likelihood of spread, and even when no precautions are taken the danger to the adult population is negligible. Among children and young adolescents the position is different. Personally, hold that should such come in contact with infective cases, there is an element of risk which is not negligible. Except for one instance, the contact cases in this country of which I have personal knowledge, have been in children or young adolescents.

In view of the fact that the great majority of cases which the writer has come across in this country have in the first instance been seen by general practitioners, it is of some value perhaps to suggest lines along which a diagnosis of leprosy should be made. It is of interest to note among the above cases that odd ones have turned up in five different provincial towns, not any of which were the large seaports from which such cases are expected to be observed from time to time.

In the first place let it be remembered that when the signs and symptoms of the disease are discovered which are of text-book nature, the disease has usually advanced beyond any hope of complete recovery. It is sound enough advice to be highly suspicious and seek necessary further advice.
if any one of the following points are apparent in any individual who has a somewhat puzzling complaint:

1. Residence in the tropics for a period, whether prolonged or not, and whether recent or not. The latent period of leprosy can be as long as forty years after residence in the tropics has ceased, and recently two cases have been seen, one of whom had left the tropics thirty years ago and the other sixteen.

2. History of burns without knowledge of having been burnt. In two cases recently, one woman complained of burning herself on a hot-water bottle, and the other, a man, complained of receiving burns at his work, both without pain.

3. Erythematous or infiltrated patches which have persisted for a long period which do not irritate and do not readily comply to any known type of skin disease. It is well to remember that leprosy in the European is liable to be very deceptive, and the diagnosis which I have come across have been Dhobie's itch, pityriasis versicolor, parasoriasis, syphilis, etc.

4. The anesthesis in leprosy initially is to superficial touch, e.g., cotton wool, and not to pin pricks.

5. Callosities and corns covering a trophic ulcer.

6. Because a patch is not anesthetic, it is not a "sine qua non" that it is not leprosy. This is a common fallacy, and I would most emphatically state that many patches on the trunk are not necessarily anesthetic and yet they may be leprous.

It can, however, be said that in practically all cases anesthesia will be found somewhere, but not necessarily on the lesion. Therefore, if the following points are noted, the great majority of cases will be discovered.

1. Anesthesia to light touch is usually present on the ulnar distribution of the forearm, especially the outer side of the little finger, and/or the distribution of the peroneal nerve, especially on the outer side of the foot.

2. The great majority of erythematous patches seen in the European contain bacilli. These usually are readily found by making a slit scraping as follows: A scalpel is taken, a small incision sufficiently deep to penetrate the cutis is made, but as little blood as possible drawn, the base of the incision is scraped, the tissue juice smeared on a slide and the slide fixed and stained by the ordinary Ziehl-Nielsen method. If acid-fast rods are found, then the diagnosis is clinched. The following points should be remembered:
It is useless to look for acid-fast bacilli in ulceration which is of a trophic nature or lesions of neural origin. The nasal mucosa, while often positive to a nasal scraping is not necessarily so.

With regard to treatment and clinical progress, sufficient is it to say that the average European appears to be highly resistant to the disease, but if this resistance is broken down, he usually advances rapidly, and then the outlook is poor. The older the patient the better the outlook, for it is in the growing periods of life that the disease advances most rapidly. The general routine treatment for cases in this country is the same as elsewhere. The basis of treatment is some derivative of hydnocarpus (chaulmoogra) oil. If the patients are of the type where intradermal injections are indicated, and can stand them, then they are given intradermal esters of hydnocarpus oil and creosote. The latter preparation is more generally used because of the staining properties of the iodised esters, which in the fair skin may persist for two years or more. In addition to this, other remedies are used, such as Solganol B Oleosum, carbon dioxide snow and potassium antimony tartrate where indicated. It has been found that small doses of Solganol B Oleosum are very useful. The average case in this country is difficult to treat because they are usually cutaneous cases, and the problem of reactions is a difficult one. It is in the subreactive stages that a course of Solganol B Oleosum is found to be of some value. The dosage which has been given is a six weeks' course commencing with two injections of 0.01, two injections of 0.05, and two injections of 0.1. Carbon dioxide snow has been found useful in the reduction of nodules. A fairly long application is needed for the nodules, about one to one and a half minutes, but for a less fibrous type, twenty seconds to forty seconds is sufficient. While it has been stated that the general outlook in treatment for the case in this country is poor, yet a great deal can be done to alleviate their symptoms and make life bearable. While leprosy in England is a rare disease, it occurs sufficiently enough for the general physician to remember that he may come across it.

With regard to the preventive aspects of the disease, the writer holds that while it may not be necessary to make leprosy a notifiable disease, yet there is a sufficient amount in the country to warrant an effort being made to find out if possible the number of cases in existence, and to ascertain whether the position is such that official action should be taken.