10 per cent. of alcohol, 10 to 18 per cent. of ordinary sugar, and 1 per cent. of common salt, at a temperature of 104° F.

M. EDEN PAUL.

## 5. Sociology.

Some Methods of Restraint applied to the Insane in Morocco [Sur quelques Moyens de Contrainte appliqués aux Aliénés au Maroc]. (Rev. de Psychiat. May, 1911.) Lwoff and Sérieux. (Translated by Dr. M. A. Collins.)

The treatment of mental diseases is, so to speak, non-existent in Morocco. The fault is not due to any antipathy between Islam and the medical treatment of the insane, but solely to the condition of profound decadence which has been developing for a long time in Morocco. Medical care is absent in that country, and the treatment of diseases of all kinds is confined to the application of the talisman, invocations, prayers, and the empirical use of some drugs, etc.

The French Government has instituted dispensaries and hospitals in the principal towns, under the direction of French doctors. Neither the fear of strangers nor religious differences have prevented the natives (both male and female) from coming in by hundreds to ask for medical and surgical treatment. The day will come when the Mussulmans of Morocco will have the insane cared for in properly managed asylums.

Our inquiry was made, thanks to the intervention of Regnault, French Minister at Tangier, M. de Billey de BeauMarchais, and of M. Gallaird, Consul at Fez, in the moristans and prisons of the principal towns of Morocco. As to our visits and the information we obtained in the most diverse conditions, we are able to state as follows:

(1) Those insane who are, or appear to be, harmless, are allowed to wander at liberty, beg in the streets, and sleep in the open air; they are clothed in rags, and even both men and women are met with in a state of complete nudity. Patients who have mystic ideas become, as in some other countries, objects of veneration by the crowd. They are those "holy men and women" living on the public roads, who have alone attracted the attention of travellers. Thus has arisen the fable current in Europe, that the lunatic in Mussulman countries is always considered a "holy" man. There is so little truth in this statement that we observed one day in Tangier, at the Socci (market), in open daylight, a dement publicly chased by a band of roughs, who were bullying him and throwing stones at him.

(2) When the inoffensive insane become troublesome or dangerous, the relatives are compelled to shut them up at home, where they are frequently tied up and ill-treated. It has happened that patients of this kind, badly supervised by their family, and who have become noisy, troublesome, and dangerous, have been shot dead by the neighbours.

(3) Those of the insane whose families refuse to keep them and are dangerous, are placed in the moristans and in the prisons. In the moristan, a kind of casual ward attached to the Mosques, is found a

mingled crowd of beggars, people suffering from fevers and contagious diseases and lunatics. No doctors visit these establishments. For purposes of economy the number of attendants is reduced to a strict There are about a hundred lunatics thus confined in Morocco, the remaining dangerous patients being placed in the prisons with the ordinary criminals. Those in charge know sometimes they are dealing with lunatics, but more often not. The most celebrated moristan in Morocco is at Fez, founded in the thirteenth century, to which no European had previously been admitted. The patients wear day and night a heavy iron collar formed of two semicircular bands joined by a kind of heavy hinge; the free ends, which are turned back at a right angle, are pierced with holes, which permit them to be joined by a ring to the end link of a heavy chain fixed to the other end of the wall. It is long enough to allow the patient to reach the door of his cell. One is not particularly astonished on entering the moristan to see a dozen or so of these patients at the door of their cells with their iron collars around their necks pulling with much force and noise to get as near as possible to the unusual visitors.

In the prison, the collar is reserved principally for night. Excited patients, like the criminals, wear fetters continuously. These fetters are formed of a thick sheet of heavy iron, pierced at each end with holes through which are spiral rings, which surround the ankles of the patients. These spiral rings are closed by a blacksmith with rivets. As the fetters only permit of the very smallest step to be taken, it is only with great difficulty that the patients can move about, and falls are frequent. The collars are used in the prisons by all at

night.

We were able to be present at the bedding of the prisoners and lunatics at the prison of Laraiche. The Moroccan prison is a vast building, with four very high walls, no windows, and having as roof a strong iron grating. For each entrance there is an opening 1½ metres high and 1 metre broad, and at a level of 1 metre from the ground. When a new prisoner arrives, the wooden shutter which forms the entrance is opened at a given signal, and the prisoner, raised by the feet, is pushed by the warders inside, where two vigorous hands pull him in by the shoulder. It is in the same way, with a little more tenderness, that important visitors are introduced. Inside is found a floor of earth; all round the walls, a ledge projecting 2 metres inwards acts as a shelter against the rain; it is under this cornice that prisoners sleep on the ground with a mat as their sole bedding.

As we entered the prison night was falling; two little smoking petroleum lamps (with no glass chimney), hanging by an iron wire, lighted the scene. In the middle of the prison we saw a pit, 16 metres deep, without protection; not far from this was an enormous heap of refuse and waste of all kinds; big rats were running about. An infectious odour from primitive w.c's separated by a single wooden screen was

poisoning the air.

A quick order was given; all the prisoners seated themselves in oriental fashion on their mats along the walls (the wall with an opening along remaining free). Another guttural order and each prisoner seized an iron collar, put it round his neck, and closed it. A chain with

strong links, one end being fixed to the wall, was piled up in the corner of the prison. The prisoner next to the pile took hold of the free end of this chain, and passed it through the holes of his collar; he then handed it to his neighbour, who did likewise, passed it on to the next, and so on to all of them. In order not to be choked by the chain, the first one had to lift it, and thus allow it to pass easily through the rings of the collars. The chain made a gruesome noise as it ran through the collars binding into a sort of bunch all these human beings. Near the last prisoner a warder waited; he took hold of the chain as it passed the last collar and pushed it through a hole in the wall. Outside the chief warder fixed it with a solid padlock which would not be unfastened till the next morning. The prisoners then lay down on their mats; they were many quite close one to another, and the least movement pulled on the collar of the next one. It was only possible to change position by turning the body exactly on its own axis. The least lateral movement caused the chain to pull on the collar around the necks of those on either side. What happens when any physiological necessity arises?

As before remarked, they lay on the mats with no pillows, and as a covering they had nothing but their clothing, usually rags. They are not sheltered from the outside air, and the nights are often cold in Morocco. In the month of April, hoar frosts sometimes cover the ground in the morning. The feeding of the prisoners does nothing to make up for the want of warmth. Only a few privileged ones receive regularly two loaves per day and some water; to the others nothing is given except water and light. They live on what their relations bring them, and on gifts in kind sent sometimes to the prison by charitable people. They can sometimes earn a few sous by making baskets. These deplorable hygienic conditions explain fully the sallow tint and the thin emaciated appearance of the inmates. From the chief warder we learnt without surprise, but not without distress, that from time to time whole groups of these prisoners become suddenly ill, they seem to become severish; "they shiver," said he, "diarrhœa appears and they die." One year they lost nine of them in fifteen days, the total number in the prison being about fifty. No doctor enters these prisons; the sick die unattended upon their mats alongside of their companions, to whom they are chained, suffering from hunger and cold without the consolation of their relations in their last moments. No register exists in the Morocco prisons; the chief warder often does not know how many prisoners he has (we had one experience which proved this conclusively). In Morocco people are condemned to prison without much ceremony; the term of imprisonment is not fixed, and prisoners remain therein till death unless reclaimed by relatives or powerful friends.

It is in such surroundings that the insane live, fettered and chained, and mixed with ordinary criminals, and usually not even recognised. In the course of one visit to the prison at Tangier, the most civilised town in Morocco, we were able, in a very short time, to discover a dozen unrecognised lunatics. One can easily imagine how many there are who drag out a miserable existence in the different prisons of Morocco. We visited the prisons of Tangier, of Laraiche, etc., and everywhere (except at Casabanca) the conditions were the same.