

must in charity try to improve you for all our sakes." The last says, with a brutal simplicity, "You are a nuisance; we must get rid of you."

This is no real judicial sentence. It is a declaration of war. And however feeble the criminal class may be, it is doubtful wisdom, even if it were tolerable morality, to outlaw them in such a way. The other theories are not inconsistent with each other. Indeed, all three will perhaps be recognised in the Utopian penal code, if crimes are possible in Utopia. The only difficulty is to determine whether between two possible penalties we should choose the more deterrent or the more curative; and this depends intimately on the solution of the remaining problem we laid down in the beginning—the nature and criterion of criminal accountability. This, however, we must postpone to another time, for it is a subject of independent importance, hitherto, we take leave to say, too little considered either in the theory or the practice of the English law.

3. *Italian Retrospect.*

By Dr. T. W. McDOWALL, Morpeth.

Report on Pellagra.

The "Gazzetta del Frenocomio di Reggio" is more than an ordinary asylum report. Besides the usual account of the condition of the asylum, with the necessary statistics for 1881, it contains short notices of public meetings at which the asylum was represented, as at the International Medical Congress in London. But to these we do not desire to direct attention, for there is in this pamphlet some information about pellagra which may interest English readers. This disease seems to be in Italy what general paralysis is in this country, a scourge whose origin is unknown, but which prevails in certain districts, and seems to depend on some unwholesome mode of life. To discover this error in living the Italian physicians have resolved to devote their attention, and though the results cannot as yet be said to be very great, and are, indeed, in some degree problematical, still it is worth while to show what has been done, and the method of work. We English physicians might take a lesson and begin a systematic enquiry into the conditions of general paralytics. Without doubt most valuable results would be obtained.

I.—*Results of Inquiry by the Committee of Directors of the Reggio Lunatic Asylum.*—In 1879 the directors began an inquiry relative to pellagra in the province of Reggio, and forwarded to the Communes a list of questions, with the object of procuring data as to the cause and spread of pellagra in the different districts. The chief questions were:—

1st. The number of insane afflicted with pellagra in the years 1875-9.

2nd. The number of pellagrous persons at the time of inquiry, September, 1879.

3rd. Information respecting the economic, hygienic, and alimentary condition of the various classes of the poor peasantry.

In response to these inquiries the following information was obtained :—

The sufferers from pellagra in the five years 1875-9, amounted to 3,161; that is 632 per year. Of the total number, 1,463, that is 292 per year, belong to the district of Guastalla, which has a population of 62,749. That equals 4.6 pellagrous persons per 1,000. The district of Reggio has 177,886 inhabitants, and an annual mean of 339 pellagri—a proportion of 1.9 per 1,000. The mean for the entire province is 2.9 per 1,000. If, however, the proportion be calculated on the agricultural population, which, in the province of Reggio, is reckoned at 95,564 (Govern. statistics), the proportion is 6.6 per 1,000. According to the statistics published in 1880 by the Department of Agriculture and Commerce (pellagra in Italy, 1879), the proportion would be still greater, 9.62. Both sets of figures sufficiently demonstrate that of the 44 provinces infected by pellagra, Reggio is exceeded by 22 (Brescia has 80 per 1,000) and exceeds the other 21 in intensity of this disease.

Of the 3,161 pellagri there have been 202 insane in the five years 1875-9, equal to an annual mean of 40 insane pellagri in the entire province. The percentage of insane pellagri to the total pellagri reckoned by districts is 8.2 for Reggio, which has 139 insane in 1,698 pellagri; and 4.25 per cent. for Guastalla, which has 62 insane in 1,463. Thus, the pellagri of the district of Reggio, although in proportion numerically less than those of Guastalla, show a larger proportion of insane. This may arise from the fact of many insane pellagri remaining in the hospital of Guastalla, and the smaller proportion of pellagri in general in the district of Reggio compared to Guastalla may be, at least to some extent, only apparent, and due to the fact that whereas in Guastalla every commune is infected by pellagra, in Reggio several are exempt from it, and the city of Reggio is entirely free.

If an attempt be made to estimate the total number of pellagri in the province from 1875-9, from the number of insane pellagri admitted to the asylum (using 4 per cent. as the proportion generally believed to be nearest the truth), it should amount to 5,000; or 1,000 per annum—a number considerably above that obtained in response to the questions.

As to social position and occupation, reliable information could be obtained in only 318 cases actually alive at the end of 1879. Of these 272 were "cameranti," 45 labourers, 35 "assicurati," 21 "mezzadri," and 8 small landowners. All were wretchedly poor, and lived in the country. This illness, therefore, especially affects the "cameranti," and is closely associated with poverty. The property of the

8 farmers was really entirely illusionary; their bit of ground was so hampered by mortgages that at the end of the year the interest due and the taxes absorbed the produce of their farm.

The topographic and hygienic conditions of the province, divided into districts, are as follows :—

In the district of Guastalla, which forms the lower portion of the province, and is close to the Po, of 12 Communes, 7 grow rice; 3 are subject to inundations; in only 2 are the hygienic-telluric conditions good; in all the others middling or bad. The dwellings are in the worst possible hygienic condition in 10 Communes, good in 2. In the district of Reggio, of 33 Communes 4 only grow rice, in all the others the ground is drained (dry?), and in these the hygienic-telluric conditions are good. The hygienic condition of the dwellings is bad in 13 Communes, fair in 14, good in 3. The peasantry are described as very poor in 4 Communes, rather poor in 6, and well off in 1 only. The highest wages earned by the cameranti in summer is 1.50 lire, in winter from .80 c. to one lira only.

In the district of Reggio the peasantry is equally poor.

The chief food of the poorer classes of the province is Indian corn, but it is not exclusively used by the farmers in winter, and still less in summer. But among the cameranti it is exclusively used, or nearly so, during winter, except in six mountain communes (which are free from pellagra), where chestnuts are employed with maize; from May to September a mixed diet is used.

As to the quality of the Indian corn, it is generally reputed as good or middling, but these terms are too indefinite to be of much service.

Wine is rarely used by the farmers, very rarely by the cameranti, who generally drink small wine (vinello) or frequently only water.

As to the topographical distribution of pellagra in the various communes, there are various discrepancies which make the statistics of little or no value. These discrepancies are so inexplicable and serious that the only conclusion that can be drawn from them is that there are no trustworthy statistics to show the real or relative number of pellagri in the districts to which they refer.

II.—*Committee of Inquiry on Pellagra in the Province of Reggio.*
—As the result of considerable agitation, a Commission of Inquiry was appointed “to collect all information tending to prevent and combat this disease in the province, making local excursions for this object, and to study on the spot the best means to cure it on its first appearance.”

At the first meeting Prof. Tamburini gave an account of the results obtained by the inquiry undertaken by the Directors of the Asylum (see the preceding), and made various suggestions as to the method to be followed in future inquiries.

The following proposals were adopted :—

1st. That excursions should be made to all parts of the province more or less affected with pellagra, so as to take personal cognisance of the condition of the place and families in regard to food, &c.

2nd. To send through the Prefecture a circular to the medical officers requesting :—

- a. An accurate examination of the food in some families of pellagri.
- b. The number of pellagri observed in 1881.
- c. The registration of all cases of pellagra during 1881.

3rd. That another circular be sent to the Communes requesting the number of deaths from pellagra in the years 1871-80.

4th. That another circular be sent to the Provincial Hospitals requesting information as to the number of pellagri admitted in each year from 1871-80, and the result of each case.

5th. That information be procured as to the grinding of Indian corn in each commune in each year 1871-80, and the prices of provisions for the same time.

6th. That the Committee of Mantua be corresponded with in order to learn which of the precautions and means adopted by them proved most efficacious.

It was afterwards resolved to invite the Rev. Cav. Rinaldo Anelli to lecture in Reggio and other places on his economic co-operative ovens, his system of bread-making, &c. Prof. Tamburini was further invited to give a preliminary lecture, so that the public might understand the vital importance of the subject, and the urgency of employing earnest precautions and preventive measures against pellagra.

These lectures were accordingly delivered to large and interested audiences.

Prof. Tamburini's lecture was necessarily popular, avoiding all technical phrases, &c. He drew a faithful picture of the terrible state of the poor pellagri; briefly told the history of this terrible plague; traced its topographic distribution in the regions of Europe which it has infested; showed by means of statistics its great prevalence in Italy, where no less than 100,000 persons are affected by it. He spoke of the symptoms of pellagra, and of its fatal effects, the principal of these being insanity, suicide, and hereditary degeneracy. Going on to discuss its cause, he showed that experience proved that it affected rural populations only, those whose food was bad and insufficient, and, in Italy, whose food was almost exclusively Indian corn and water, either or both of these being frequently spoiled and unwholesome. It was still a disputed question whether Indian corn as sole article of diet was the cause of pellagra because of its being insufficiently nutritious and limited in quantity, or because when damaged it contains toxic substances. He could not deny the existence of toxic pellagra due to damaged maize, but he thought that, in the majority of cases in Reggio, the disease might be due to insufficient food alone.

The lecture of the Rev. Cav. Rinaldo Anelli gave an account of the difficulties he had experienced in introducing his "co-operative ovens," and the excellent results so far obtained.

In 1873 he started a society for the mutual insurance of cattle. In time he started the oven; and whereas formerly the peasantry ate

stale and badly baked bread, they now have it always new, wholesome, and well prepared, even when they had not means to buy it, for they were allowed it on credit; and whereas formerly the Indian corn or grain which they stored in their own houses became mouldy by reason of damp, they now stored at the oven, where it was kept in good order, and gradually returned in the shape of bread.

Through great economy the "oven" is now self-supporting. The reverend lecturer concluded by stating his conviction that co-operation was the only means of escaping from the wretched condition in which the poorest classes live.

At a subsequent meeting of Committee the secretaries gave an account of their excursions to various Communes. They went, accompanied by the local physicians, to dwellings of the poorest and of those who showed signs of pellagra; they questioned them, examined their mode of living and their food; they examined the maize flour, and took samples for analysis. They thus endeavoured to obtain accurate knowledge of the exact condition of the unfortunate people. They made a short history of each family visited; Dr. Riva collected them into a report, of which the following is a summary:—

1. The food of the poor peasantry varies greatly according to their class, and in each class according to circumstances. Thus, in a family where there are a good many adults able to work, the conditions as to food are generally better, but they are wretched where in a large family only one, the head, can earn wages; and they are still worse where not a single member is sufficiently strong to work for the others. In such cases it is always the one on whom the hardest work falls who becomes afflicted with pellagra. The poorest families subsist, especially in winter, entirely on polenta and water. Those who are a little better off add such other nutritious food as their means will permit.

2. The quantity of Indian corn consumed by the poor, who subsist exclusively on it, is almost always less than their needs; in many families no adult can afford to use, during a great part of the year, more than 500 grammes daily, and very few families can get one kilogramme per person.

3. In 1881 none of the many pellagri visited admitted having eaten damaged maize, but all remembered the terrible winter 1879-80, in which many had been obliged to subsist on nothing else.

4. The plan of keeping the maize in damp, ill-ventilated houses must facilitate its deterioration, yet the visitors never found any decidedly spoiled.

5. The polenta is frequently badly prepared and cooked, with the addition of very little salt, as it is very dear.

6. In the low districts pellagra is frequently associated with scurvy and malarial fevers.

7. The dwellings of the pellagri are generally in the worst possible hygienic condition.

8. The relief afforded by the Communes to the poorest sufferers is totally inadequate.

Prof. Spallanzani adds that on analysis the samples of maize did not show any signs of decomposition, but a diminution of the nutritive qualities, owing to an increase of the fat-producing elements and a decrease of the albuminoid.

As a means of combating the disease, Dr. Sacchi, medical superintendent of the asylum at Mantua, recommended :—

1. Home relief.
2. The early admission of pellagri into general hospitals.
3. The institution of special hospitals (pellagrocomio).

For home relief the province of Mantua had granted 50,000 lira a year, but it has not answered as well as might have been expected. Many pellagri have not sought relief; others have even refused it, fearing that they might lose what little work they had through their employers learning that they were diseased. Besides, in many families where relief was given, it was not reserved for the sufferers alone, but was applied to the relief of the whole family, so that the genuine pellagri hardly derived any benefit from it.

The second proposal, which is certainly a very good one, is unfortunately limited by the number and size of local hospitals in the rural districts, which are sadly disproportionate to the large number of pellagri.

No special hospital has as yet been erected.

Prof. Balletti's recommendations for the prevention and cure of pellagra are :—

1. The institution of a permanent committee to direct all the preventive work in the province.
2. The institution of committees in the various Communes to aid the central committee.
3. The establishment in the Communes of co-operative ovens, cheap kitchens, and similar institutions for providing cheap, wholesome food, even in times of special poverty.
4. The providing of work, especially during winter.
5. Facilitating the admission of pellagri into hospitals at the very beginning of the disease.
6. The abolition of the salt tax.

Table of questions sent by the Committee to the Medical Officers of the province of Reggio, to be filled up by the pellagrous families, and by any of the poor who have been affected at any time.

Family

Residing at

1. What is the food of the family? Exclusively Indian corn, or mixed with other substances; if so, which?
2. What is the average daily quantity of Indian corn consumed by each individual in the various seasons, either when used as sole article of diet, or when supplemented by other food?

3. Whether used exclusively or not, has the Indian corn always been undoubtedly sound, or has it always, often, or occasionally (especially during severe seasons or during scarcity of work) been of inferior quality or really bad? In the last case indicate degree and reason of badness.

4. Does the family buy the corn ready ground or not? In the latter case inquire if the quantity they get ground lasts a short or a long time, and if they keep the flour in a dry or in a damp place where it may easily spoil. In the former case inquire into the state of the corn when bought, and for this reason examine also the sellers.

5. Is the corn cooked daily into polenta, or is it made into cakes and bread to last several days?

6. When the flour is kept some length of time, inquire if it loses its flavour and becomes difficult of digestion.

7. Is pellagra hereditary in this family?

8. Are the members of the family afflicted with pellagra also affected by other diseases, such as scurvy, malaria, or have they been?

9. What are the hygienic conditions of the dwelling, the drinking water, the state of the soil, &c., where the family lives?

10. Do there exist, to the certain knowledge of the medical officer, any individuals who, without any hereditary tendency to pellagra, have yet shown undoubted signs of it without ever having lived on Indian corn damaged in any degree?

11. Do there exist any individuals who, without hereditary tendency to pellagra, and who never, or at least not recently, lived on Indian corn in any form, have yet exhibited signs of it?

According to the latest ministerial statistics, which, however, are not entirely reliable, there has been a great increase of pellagra in the last two years—from 97,855 in 1879 to 104,048 in 1881. This is entirely owing to the enormous increase in the Venetian provinces (from 29,836 to 55,993). In all the other provinces except Liguria there has been a marked reduction. But Dr. Tamburini thinks this extraordinary difference may be due to great inaccuracy. He is able to state as a fact that in Reggio this decrease is not real, for the pellagri admitted to the lunatic asylum during 1879-81 have not diminished. There were 53 admissions in 1879 and 80 in 1881.

4. *German Retrospect.*

By W. W. IRELAND, M.D.

“Tödtung des Dienstherrn im Zustand Krankhafter Bewusstlosigkeit (Friedreich's Blatt für Gerichtliche Medicin,” 4 Heft, 1881).

“Tods Schlag im Affect, Zweifelhafter Geisteszustand (Epilepsie und dadurch bedingte Krankhafte Gemuthsreizbarkeit) des Thäters. Separatabdruck aus der Zeitschrift für Psychiatrie.” Band xxxvii., von Professor v Kraft-Ebing in Graz.