

On June 6th my son saw her. She complained of pain in the centre of the right patella, slight pain and swelling on the inside of the left wrist, and pain in the palmar aspect, first phalanx, of the forefinger of the left hand. She looked and felt ill, but there was no constitutional disturbance and the temperature, pulse and functions were normal. He thought the symptoms indicated either rheumatism or gout as their cause. He saw her again on the 7th; the symptoms were then unchanged. On the 8th I visited her and could discover nothing fresh. I inquired about the sanitary condition of her surroundings, and these were thought to be perfect, but she admitted she had felt that the stable in which some pet ponies were kept was in a most vile state and that the stench, when she had been there for ten minutes, almost made her sick. On the 12th she came to Harrogate. She was much exhausted by the long drive and complained of severe pain in various groups of muscles, in the calves, the soles of the feet, the hips and intercostal muscles on the right side. Pulse 72; temperature 98.5°. Any attempt at movement aggravated pain; and on the 14th this was so great that she took to her bed. On closer examination I found the lower extremities much wasted. I could almost wrap the skin of the calf round the shin-bone. This I attributed to trophic nerve disturbance. She was able to take food well. As the ulcer was still unhealed I applied creolin lotion. On the 17th the ulcer had healed, but the nurse called my attention to a slight redness on the left great toe and the dorsum of the foot; this was clearly erysipelas; and on examining the leg I found it greatly swollen, the skin cool but tense, the swelling, elastic and involving the whole leg and thigh, did not pit on pressure. I told the patient she had what is usually called a white leg, and that I had never met with such a case.—18th: Pains more severe than ever.—19th: Much the same.—20th: Slight erysipelas on the back of the left thigh; pulse and temperature normal; taking plenty of nourishment, with brandy and champagne.—21st: Patient worse. I called Dr. Eddison of Leeds in consultation, but told him nothing, as I wished to have his own opinion unbiased by mine. He examined her most carefully, got her out of bed, but as soon as her feet touched the ground the pain was so severe we had to put her back. Dr. Eddison admitted he had never seen or read of such a case. He saw her again on the 22nd, when she was in much the same condition. As to treatment, excepting morphia hypodermically, nothing proved of the slightest use.—30th: The upper and posterior left thigh looked as if pus was forming, the erysipelas had extended, and I put her on solution of perchloride of iron, chlorate of potash and boric acid, and wired for Mr. Jessop, as I wished for a surgical opinion. At 4.30 he saw her, pronounced the case to be one of inflammation of the lymphatics, and thought it most critical.—July 1st: All pain gone from the left limb; also erysipelas abated; but pain and swelling in the right thigh had developed; pulse 84; temperature 100°. I doubled the amount of brandy and continued the iron mixture and morphia.—2nd: Mr. Jessop came again; everything seemed to be going on as favourably as we could expect, so much so that he proposed to meet me on the 4th.—3rd: She had passed a restless night and rambled slightly; still she took plenty of nourishment; pulse 90; temperature 100.3°. At 8 P.M. I found her in the same state, and administered the usual dose of morphia; at 10 she took soup and brandy. At 12 I was called and found her dying. She died ten minutes after my arrival.

What puzzled me was the severity of the pain, the suddenness of its attacks and the total absence of heat, swelling, inflammation or constitutional disturbance. I looked on it as acute neuralgia. Until June 17th there was no local change, and then the mischief showed itself not in the leg where the ulcer had been but in the other. Before coming to any conclusion as to the cause of death I had all the drains of the dwelling-house, out-houses and stables thoroughly examined by Mr. Slater, sanitary engineer, Leeds. He sent me a full report, and added: "In conclusion there appears to be no serious sanitary defect in the system of drainage," which is borne out by the fact that all the inmates of a very large establishment and even the stablemen, who spent hours in the ponies' stable, were in good health. Blood-poisoning we had here without doubt, and I am driven to the conclusion that some pathogenic micro-organisms buried in the gelatine took possession of the denuded surface and so infected my patient. Considering that all sorts of animal refuse are made use of in the manufacture of glues &c.—diseased hoofs, horns, parings of hides &c.—

the wonder is that more cases of infection by such germs have not been met with, and if I am right in my view, a Government inspector should be appointed, so as to prevent the utilisation of diseased animal refuse in the production of articles of commerce which must be brought into contact not only with the skins, but with the lips and mucous membranes of all classes of the community.

Harrogate.

THE PLACE OF ANTHROPOLOGY IN MEDICAL EDUCATION.

BY HAVELOCK ELLIS, L.S.A.

VIRCHOW, who adds to his other claims to fame that of being the first of living anthropologists, has recently confessed that his attention was directed to the science of anthropology by the difficulties he encountered in the study of the insane. Charcot, again, frequently impresses on his pupils the importance of studying the healthy nude, and of an acquaintance with anthropometric canons, as an aid to the diagnosis of abnormal conditions. These utterances of two of the most honoured of our teachers in very different fields suggest that there is a defect in our medical courses, as they exist at present in England, which demands, at the least, some consideration. As evidence of the close relationship between anthropology and medical practice, it is enough to mention that in spite of the difficulties we at present place in the way, with a few exceptions (in which zoology alone led up to anthropology), the chief anthropologists of the last half century have been medical men—in not a few cases very distinguished in the profession; at the least, they have started as students of medicine. It is sufficient to mention in France Broca, Topinard, Lacassagne, Manouvrier, Collignon and Letourneau; in Germany, around and below Virchow, Ranke, Schaeffhausen, Ploss, Bartels and many others; in Italy, Mantegazza, Lombroso, Sergi; in our own country, Galton, Beddoe, Sir Wm. Turner, Flower and Garson, while to a somewhat earlier period belong the great names of Prichard and Thurnam. While every medical man would find a slight acquaintance with anthropology some help in practice, there are certain branches of practice in which some knowledge of anthropology is of especial assistance; for example, practice abroad and asylum practice. No country sends out so large a body of medical men into all parts of the world, but the amount of scientific work done among the races of our great empire by these men is so small that it is scarcely perceptible. French medical men have done far more for their few colonies, and the medico-legal and anthropological studies which have come from the Lyons school, under the inspiring influence of Lacassagne, are especially worthy of honour.

What is true generally of the English medical man abroad is equally true of the English alienist at home, and must be so, since the study of anthropology is largely the study of the manifestations of the brain and nervous systems. In the practical treatment of the insane England stands before every other country; in the scientific study of the insane no leading country is so backward. Elsewhere the exact study of madness is making rapid progress; it is beginning to be recognised that the great truth that knowledge means measurement (*scire est mensurare*) fully applies to the brain and nervous system. But in this country the rule-of-thumb method still reigns nearly everywhere. In the hands of a master in psychiatry the rule-of-thumb method more often than not leads to perfectly reliable conclusions as to the mental status and condition of the subject before him, but it has two obvious disadvantages: it can only be trusted in the hands of a master; while even a master's mere impressions, however trustworthy, add nothing to the common stock of scientific knowledge. In actual practice, with our present knowledge of neurology, it is becoming a great advantage to the alienist to be able to demonstrate that his subject is twisted in anatomical structure and perverted in physiological action; while, so far as science is concerned, in the end it is only accurate observation that counts.

All that can be said as to the state of psychiatry generally in England applies in even a stronger degree to that special branch of it which deals with the criminal. During a period of nearly twenty years no contribution to criminal anthropology of any value appeared in this country, and although of late there may be said to have been some revival of the science among us, it is still in an infantile stage. Of this a striking proof is furnished by the non-appearance of English representatives at the International Congresses of Criminal Anthropology, which have been attended by delegates from all parts of the world. Maudsley and others have, indeed, preached concerning the desirability of an exact study of criminals; but while in Italy Lombroso, Marro, Ottolenghi and Rossi have alone examined according to modern scientific methods over 3000 criminals, English alienists have been content to leave the first tentative practical efforts to a prison chaplain. It would, however, be unjust to put this down merely to apathy. It is largely due to ignorance. My own extensive correspondence with prison surgeons (as well as with medical officers of asylums) has shown that they often possess genuine scientific interest in the phenomena presented to them, but that they do not know how to observe rightly and record the facts that come before them and would gladly receive hints that would enable them to bring forward results of value to scientific medicine. It should be part of the business of medical education to give these hints.

We are often told that the medical student of to-day is overburdened with study; and, although it must be remembered that the period of his studies is now being enlarged, there is no doubt truth in this statement. It becomes the more necessary, on the one hand, to place in a period antecedent to medical studies proper the preliminary scientific courses; and, on the other hand, to cut away without remorse those branches of knowledge which have ceased to possess any close connexion with modern medicine. In certain directions it is probable that the studies of medical students might with advantage be abbreviated or rendered optional. The study of botany, however valuable and fascinating, no longer possesses any special advantage as a preparation for medical practice, now that the physician is very clearly differentiated from the herbalist and "medical botanist." An exact knowledge of the pharmacopœia also, which once embraced almost the largest part of the doctor's work, may now safely be left to the medical antiquarian. If it is necessary to make room for anthropology by the omission or contraction of other preliminary courses, it is not difficult to put one's finger on studies which for the student of medicine have come to possess a value which is merely traditional.

The point at which anthropology comes into medical study is very clear. Human anatomy and comparative anatomy both lead directly up to it. The study of human anatomy we cannot afford to contract. The comparative anatomy course, however, might well be arranged so as to afford a general view of the province of anthropology, while passing lightly over those earlier stages of animal life which have less concern for the medical man. With these lectures should be associated a brief course of practical demonstrations. We can scarcely expect at present that individual medical schools should be at the expense of fitting up laboratories of physical anthropology. This point would be much simplified if the excellent suggestion of Sir Andrew Clark was adopted—namely, that there should be a common centre for the teaching of the non-medical branches of medical education. In the meanwhile there are existing centres which by arrangement might no doubt be utilised. There is Galton's Anthropometric Laboratory in active operation; there is the Anthropological Institute, which might become a centre of work; and, above all, there is the Museum of the College of Surgeons, so rich in objects of anthropological interest, and which has not seldom been presided over by eminent anthropologists.

The time seems to have come when some small preliminary step in the direction here indicated should at length be taken. In Paris the anthropological Musée Broca, with its active laboratory and the anthropological school, has long formed part, as it were, of the medical schools. It is not necessary for the medical man of to-day to know much of the lower animal forms; still less necessary is it that he should have any thorough knowledge of plants. But it is increasingly necessary that he should understand the science of man.

St. Mary's-terrace, Paddington W

THE TREATMENT OF FILARIA SANGUINIS HOMINIS.

BY SURGEON-LIEUTENANT-COLONEL A. CROMBIE, M.D. ED.,
SURGEON-SUPERINTENDENT, GENERAL HOSPITAL, CALCUTTA.

IN the beginning of 1891 Surgeon-Lieutenant-Colonel E. Lawrie¹ reported two cases of filaria sanguinis hominis, in which the immature parasites disappeared from the blood under the use of thymol internally; and in December of the same year Dr. Walsh² of the General Hospital, Calcutta, recounted a case of chyluria in which they disappeared from the urine under the same treatment. Surgeon-Lieutenant-Colonel Lawrie gave one grain, and after a fortnight two grains, of thymol every four hours in one case, and two grains, increased to five grains, thrice daily in the other case; and after two and one month's treatment respectively the filaria could no longer be found. Dr. Walsh followed the treatment adopted in Surgeon-Lieutenant-Colonel Lawrie's second case, and in a fortnight the urine became clear and no filaria could be found in it.

I have recently given this drug in two cases. The first was a young man aged eighteen years, who was sent into hospital for lymphatic varix of the left spermatic cord. A history of periodic fortnightly fever, with lumbar pain accompanying the spermatic enlargement and a recent phlebitis affecting the left basilic vein, led me to suspect that he was infested with the filaria, and three immature worms were found in one preparation of his blood. I began by giving him on Feb. 2nd 5 grains of thymol thrice daily and rapidly increased the dose till on the 18th he was taking 200 grains daily, and this dose he took on Feb. 18th, 19th and 20th. The blood was examined every second or third night, and on the night of the 20th there were seven active and lively worms under one cover-glass. This large dose of thymol produced little or no effect on the patient beyond a little giddiness occasionally during the three days on which he took 200 grains daily.

Another patient, aged sixty-seven, of no occupation, who had resided fifty years in India, was admitted on Dec. 7th, 1891, with a contused wound of the scalp and an old-standing anterior curvature of the spine. Towards the end of February she had fever, accompanied by pain and swelling of the right leg, and on the blood being examined it was found to contain the filaria sanguinis hominis, about four to each drop. The treatment with thymol was begun on the 14th of March in doses of 5 grains thrice daily, rapidly run up to 15 grains four times a day. These doses produced a sensation of heat down the track of the œsophagus after taking the medicine, but she could take 45 grains daily without inconvenience. After a fortnight's treatment the filariæ were found in considerable numbers and very active.

It is evident that in neither of these cases did the thymol, even when pressed to the limit of toleration, have any effect on the filaria. Thymol is so exceedingly insoluble that it is improbable that any appreciable quantity of it left the intestinal canal. As an intestinal anthelmintic I have the very highest opinion of thymol, using it with the greatest success in tapeworm as well as against the smaller worms of the bowel, but I am afraid we must abandon the hope that we had found in thymol a cure for the parasites of the blood. The second patient submitted herself for treatment with other drugs, and she was given in succession for a fortnight at a time the following:—Two minims of creasote three times a day; 2 minims of benzol, gradually increased to 5 minims, three times a day; 2 minims of guaiacol, increased to 5 minims, three times a day; and, lastly, 5 grains of gallic acid, increased to 10 grains, thrice daily, but at the time of writing the nematodes are as numerous and lively as ever.

Calcutta.

¹ THE LANCET, Feb. 14th, 1891.

² Indian Medical Gazette, December, 1891.

THE SEWAGE OF HALIFAX, YORKS.—A report has been issued by the borough engineer of a scheme for dealing with the town sewage at Salterhebble. It is proposed to construct settling and precipitation tanks, also sludge filter beds, and to chemically treat the sewage. The entire estimated cost is £19,683.