

atrophied nerve-cells, the nerve-trunks "showed no well-marked pathological change."

But in the present unsettled state of our knowledge of the course of the motor-fibres in the cord speculation of a different order may be permissible. The fibres of each pyramid of the medulla may proceed to their destination not only by way of the direct pyramidal tract of the same and the lateral pyramidal tract of the opposite side, but also through the direct tract of the opposite and the lateral tract of the same side; and they may favour a particular tract or tracts; possibly may be distributed amongst the four tracts, proceeding to their termination by way of cross-connections. One might, therefore, in seeking an explanation of the present case, entertain the supposition that the nerve-fibres connected with the affected limbs, being scattered in the manner suggested, failed, though individually shrunken, to attract that attention which would have been drawn to them had they been collected together in a single tract of the cord.

OCCASIONAL NOTES OF THE QUARTER.

Koch's Lymph as a cause of Mental Disorder.

In a special number of the "Berliner Klin. Wochenschrift" is the report of a contribution to the discussion on Koch's treatment by Prof. Jolly, the well-known alienist, who has succeeded Prof. Westphal at the Charité. Prof. Jolly's contribution is on the development of certain psychoses as an after-effect of the injections by Koch's method. We feel inclined to exclaim "Et tu Jolly!" for of all recent impeachments of the "cure" surely this was the least to be expected. Prof. Jolly must, however, be read, for we shall then find that what he says is, in all respects, most reasonable, and that his statement may be said to amount to an impeachment of some degree of seriousness. He first points out the well-established fact that pyrexia does not affect the mind, during its presence only, in the form of the delirium of fever, but that any and every kind of fever is liable to be followed by certain psychoses. He then states that it was most reasonable to expect that the fever artificially excited by Koch's method would not prove an exception to this rule, and proceeds to detail three cases in which as a sequel to the injections a definite insanity arose.

The first case, a man of about 35, was admitted under Prof. Leyden for the new treatment. He was suffering from an obstinate pleurisy, together with slight apical signs on the right side, but bacilli were not found in the sputa. Between November 23rd and December 8th he received five injections, beginning at the dose 2mgr, and mounting up to 7.5mgr. The highest temperature recorded was 104°, the lowest 101°. On two occasions the injection was followed on the next day by a return of the fever. From the end of the last febrile reaction the temperature remained normal, therefore during the whole period of the symptoms about to be detailed. There was for each febrile reaction, corresponding to each injection, considerable heaviness of intellect, with confusion of thought. On the second day, after the last injection, the psychosis began in the form of a delusion as to a statement in a letter. Thereupon followed distinct ideas of persecution, and in the end the patient became so excited that he could not be kept in bed, and he was then transferred to Prof. Jolly's wards. On several occasions whilst in this department of the Charité he required isolation on account of the excitement. The whole period of insanity lasted about 14 days, and then suddenly ceased.

The second case was that of a workman, aged 27, the subject of phthisis, the signs of which, including numerous bacilli in the sputum, were quite distinct. This patient was slightly weak-minded, and, moreover, he stammered and was dull of hearing. Four injections were given within the space of eight days, the dose rising from 2mgr. to 1cgr. Very little rise of temperature followed each injection, but on the other hand very severe headache resulted each time, and for this reason the injections were discontinued for the time. Subsequently, at the patient's request, they were resumed, and within the space of four weeks 15 injections were given, the dose rising from 1cgr. to 1dgr. Again the temperature effects were slight, the highest record being about 102.4°, but again the intense headaches occurred, and the patient lost weight. On discontinuing the injections, Delusional Insanity with ideas of persecution, set in, and, though apparently abating, this state persisted at the time of Prof. Jolly's communication. In this instance, as the Professor points out, the subject was strongly predisposed to mental aberration. It is to be further noted that the actual fever was but slight.

In the third case, a woman, a neurotic subject, developed phthisis with pyrexia, and as a result of the fever, the natural

product of the disease, there occurred delirium on several occasions, the delirium lessening with the fall of temperature. By injections the pyrexia was now started artificially, and a delirious state resulted, for which the patient was admitted into hospital. The injections were not repeated, but the fever, once started, continued, and during 3-4 weeks the above mental condition persisted; then it ceased. The fever latterly was, of course, that due to the tuberculous process.

It is but too clear, as Prof. Jolly states, that these results will almost certainly be again witnessed, although they may occur in only a small minority of patients treated by "Koch's method"; that when they do occur they will probably be of temporary duration—the prognosis in febrile psychoses being favourable—but that there will always be the *danger* of a permanence of the mental aberration; that such accidents are to be guarded against by carefully administering the drug, both as to quantity and as to interval, and by further avoiding all cases that are mentally predisposed to Insanity.

We have little to comment on, but much to commend in Prof. Jolly's communication. It is essentially a reasonable and temperate caution, and suggests the frame of mind we should bring to the examination of this much-extolled and much-defamed—wholly trusted and as wholly distrusted—remedy. *In medio tutissimus ibis*. If, as some hint, a like danger attends the use of Hypnotism, it is very desirable that the same frame of mind should be brought to bear upon its study.

There is another and entirely different psychological aspect of Koch's remedy for tuberculosis which we cannot pass over in silence. It is quite certain that a very considerable allowance must be made for the beneficial effects of Suggestion, in estimating the apparent benefit which has been witnessed in many cases after the injection of the new remedy. It is surprising to us that English physicians have in their reports of Koch's cases, seen by them in Berlin, taken no account of the influence of expectant attention and the sanguine hopes suggested by the enthusiasm generated by Koch's famous announcement. It has been left to the acute mind of Virchow to perceive and point out this potent source of fallacy in estimating the improvement in the symptoms and the supposed cure of cases of Phthisis. If these good effects follow the injections, and are, in some instances, due to Suggestion, it is a very happy circumstance, but let the true element in the process of treatment be recognized in a certain proportion of cases and a possible factor in most.

There is a third aspect of the remarkable excitement following Koch's announcement of an antidote for tuberculosis. Whatever degree of success may eventually attend the employment of the bacillary lymph, the flocking of so many thousand persons to Berlin, medical and non-medical, from all parts of the world, will form the subject of another chapter in the history of Epidemics, not unlike those of the Middle Ages, which the psychologist cannot fail to study with interest.

Plea of Insanity in Criminal Cases.

The most effectual mode of bringing the knowledge of mental experts to bear upon the plea of insanity and alleged consequent irresponsibility has from time to time been brought before, and considered by, the Medico-Psychological Association.

So far back as 1868, Professor Laycock read a paper at the annual meeting, entitled "Suggestions for the Better Application of Psychological Medicine to the Administration of the Law," and moved the appointment of a committee to consider the subject. The proposal was carried, and the following members were placed on the committee:—Dr. Laycock, Dr. Rhys Williams, Dr. Christie, Dr. Sankey, Dr. Lockhart Robertson, and Dr. Maudsley, with power to add to their number.

The report was presented at the annual meeting of 1869.* The incompetency of a jury to understand scientific evidence was pointed out. "It is impossible to believe that a jury can, even under the guidance of the best judge, who has not special knowledge, be instructed to the requisite point within the short period of the trial." The proposal made by the committee was to pursue the course adopted in Admiralty cases, in which "the judge is assisted by assessors of competent skill and knowledge in the technical matters under consideration." It was further urged by this committee that a Royal Commission should be appointed to inquire "into the relations of mental science to the administration of justice, with a view to a revision of the existing system of criminal jurisprudence in its relation to insanity." The result was that the Government replied that they saw no necessity for taking any steps in the direction indicated.

* See "Journal of Mental Science," Vol. xv. No. 71.