Klinische und Anatomische Beiträge zur Pathologie des Gehirns. Von Dr. Salomon Eberhard Henschen, Prof. der Klin. Med., Director der Med. Klin., An der Universität-Upsala. Ersten Teil, mit 36 Tafeln und 3 Karten. 1890.

This book, the first volume of which has been published, is a thick quarto of 215 pages, and is a work of most valuable matter—one which must have cost the author a great expenditure of time and labour. The work is most useful, not only for the very full way in which the clinical history and the condition of the patient is described, but also for the minuteness in which the post-mortem conditions, both macroscopical and microscopical, are recorded, and not least for the magnificent way in which these conditions are illustrated by a series of illustrations. This last feature in the work will be better appreciated when it is said that there are no less than 36 full-sized lithographic plates, and two pages giving the perimeter charts of cases of hemianopsia, and one page in which are reproduced the fac-simile attempts in writing of a case of aphasia.

The present volume has been devoted to cases in which some part of the visual tract in the brain was affected, and the intimate relations between the clinical condition of the patient, and the anatomical changes causing that condition, are maintained throughout, as in every case, except six, here described death ensued, and the post-mortem changes could be accurately ascertained.

In a notice of an extensive work like this it would be quite impossible to give even a brief account of each case, of which there are 36 described. It will, therefore, be advisable to give a list of the different subjects dealt with, and then to take one or two cases and detail more fully the methods employed.

The first subject is on the secondary changes of the optic tract in a case of bilateral atrophy of both eyeballs.

The first patient was a case of leprosy, which had destroyed both eyeballs, and had ulcerated through the back of the orbits into the optic chiasma. The case is described as one which exhibits the changes produced in the visual apparatus by long-standing atrophy of the eye-balls. The man was blind for 42 years, and on examining the brain, changes were found in the corpus geniculatum externum, the pulvinar of the optic thalamus, the anterior corpora quadrigemina, the optic radiations of Gratiolet, and in the occipital lobe.

The clinical history and condition of the patient is first given, and then the various changes found in the brain are described, both macroscopically and microscopically.

The whole of the occipital lobes were atrophied, and the convolutions were smaller than in other parts of the brain, and this is very well shown by two full-sized lithographic drawings of the median and lateral aspect of one hemisphere. The median surface of the occipital lobe was sunk to a level below the adjacent parietal. The part of the occipital most affected on the surface was the cuneus and the posterior part of the lobulus lingualis, but the greatest atrophy was found in the convolutions bounding the calcarine fissure, where it sinks into the occipital lobe, and especially in the grey matter forming the bottom of the fissure. Here on microscopical examination the cortex was 2-4 mm. thinner, containing less neuroglia; the nerve cells were atrophied close together, and with distended pericellular spaces, and there was a complete absence of pyramidal cells; the fourth and fifth layers of the cortex were most affected. This atrophied part reaches on the surface backwards along the calcarine fissure to the tip of the occipital lobe, and forwards to the internal parieto-occipital fissure, upwards to about the middle of the cuneus, and downwards a few millimetres on to the lobus lingualis. The central white matter of the occipital region was not well stained by hæmatoxylin, and the optic radiations of Gratiolet were atrophied, but the part of this tract most affected was the median portion, *i.e.*, that which ends in the cortex at the bottom of the calcaine fissure. The author, therefore, thinks it highly probable that this cortex is the most important part of the visual centre, and that the rest of the occipital cortex is the seat of visual thought and registration. Contrary to what would be expected from the results of experimental research on animals, the author did not find that the gyrus angularis was appreciably diminished in size, though a few of its cells were atrophied, but generally they were well formed. The corpora quadrigemina anteriora were rather flattened, and the corpus geniculatum externum of either side was wasted, while the corp. gen. internum was normal.

The appearance and position of the atrophied optic radiations is well shown in the lithographic drawings of seven frontal sections of the occipital lobe, taken at distances of from 1 cm. to 7 cm. from the posterior end. The size of the atrophied pulvinar and corpus geniculatum is shown in a

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drawing of them taken from behind and from below. The microscopical appearances of these ganglia are fully described, both as regards the cells and the different fibre tracts, and the changes are beautifully illustrated by six drawings of sections obtained by Weigert's hæmatoxylin process, and magnified two to four times. It would take up too much space to enumerate the changes there found, but it will be sufficient to state that they are most minutely described.

The condition of the optic chiasma with Von Gudden's and Meynert's commissures are described and illustrated by five drawings.

It will thus be seen from the above case, which is taken as an example, that both the clinical condition and the pathological changes are described with great minuteness of detail, and the latter are most fully illustrated by drawings.

The second subject, "On the optic tract in a person with one eye," is represented by seven different cases in which this condition existed. The first case is illustrated by a drawing of the optic chiasma, tract, and basal ganglia, and by ten microscopical drawings of frontal sections of these parts, extending from the optic nerves successively backwards to the corpus geniculatum externum, and stained by Weigert's hæmatoxylin. This case had the right eye atrophied, and in the right half of the tract the atrophied direct fibres were at the upper surface, while in the left tract the atrophied crossed fibres were near the inferior surface; in the optic tract, near to the corpus geniculatum externum, the atrophied direct fibres were in the median part of the right tract, whilst on the left side the atrophied crossed fibres were in the outer part.

The above cases are given to illustrate the minute manner in which the cases are described.

Under the other subjects dealt with in this volume are: "The changes in the optic tract from a lesion of the corpus geniculatum externum," "Hemianopsia after (i.) gummatous basal meningitis; (ii.) after hæmorrhage into the optic thalamus; (iii.) from softening in the optic radiations; (iv.) cortical hemianopsia, contributions to the colour fields in hemianopsia, and a clinical study of cases of hemianopsia. The two latter were not verified by autopsies. On the other hand, there are cases showing the changes after tumours of the optic chiasma; visual disturbances from changes in the optic radiations and the optic tracts after lesion in the same part; and, lastly, tumours in the optic radiations, or cortical

changes of the occipital lobes, without hemianopsia. All the above subjects, with the exception of two enumerated, are illustrated by numerous drawings, as in the two cases already described.

It will thus be seen that Dr. Henschen has produced a most valuable work on the relations of the optic tracts and centres to the various changes in vision, and has done this by a most laborious and minute examination of the conditions of the brain which has never been surpassed, and in addition to the naked eye appearances, the microscopical examination has been most complete, as is testified by the fact that 10,000 sections have been made for the work. We have only one suggestion to make, and that is that in the second volume it would assist the reader if the table of abbreviations be put at the beginning of the plates in place of at the beginning of the work. We can most heartily recommend this book as one of the best works yet produced on the subject.

C. E. Beevor.

Lunacy Act of 1890. By Charles Street, M.R.C.S., Superintendent of Haydock Lodge, Newton-le-Willows. Neill and Co., Edinburgh. 1890.

This is a paper which was read before the Liverpool Medical Institute.

Mr. Street has collected into this essay the chief details of the differences in the working of the new Act and the old, and in a short space gives all that is necessary for the medical man who has to sign a certificate for the reception of a patient into a private asylum. The forms for the friends, the magistrate, and for the medical men are added, as well as certain other forms which, according to the new law, the patient must see as to his rights and privileges.

We may here say that Mr. Street has also had published very artistic mountings with the forms, which have to be posted in every licensed house, informing the patients of their rights.

These forms, which were so strongly objected to, and which in any case must be objectionable, are by means of these mountings rendered ornamental and inconspicuous as far as they can be by artistic surroundings. We believe