examined under a dust-and draught-proof glass frame, and large Stauffer lubricators fitted with wire gauze are used to prepare brain mashes aseptically. A high-speed Couprie centrifuge has been installed. Anaërobic technique is that published by Ford Robertson. Fildes medium is now used for the cultivation of Pfeiffer bacillus, trypagar for meningococci and hæmoglobin agar for streptococci.

Experiments are in process to determine the effect of brain-tissue in inhibiting or accelerating the growth of certain organisms. The specific gravity of organisms is being determined by special methods.

Histological.—Post-mortem examinations have substantiated our previous findings of a large proportion of cases with macroscopic changes in the sphenoidal sinuses and antra. Adhesions are often found in the region of the middle fossa between the pia arachnoid and dura-mater, from which it is supposed that previous mild sepsis has extended *viâ* the fifth nerve to the brain membranes. We have also collected a number of specimens illustrating extradural hæmorrhages chiefly in cases of general paralysis. Many cases show adenoids as distinct remnants even in elderly people, and a septic condition is often found, in which beads of pus can be expressed from the tissues in the neighbourhood of Rathke's pouch. The investigation of the spread of actual organisms to the brain membranes is being continued, and in the study of this condition a number of experiments with animals are in progress.

Chemical.—The oxygen capacity of patients' blood has been compared with the total hæmoglobin content in order to find out whether forms of hæmoglobin useless for respiratory purposes occur. A special form of the Haldane apparatus has been devised for greater accuracy and reliability, and the hæmoglobin was determined by Stadie's cyano-hæmoglobin method, the hæmoglobinometer, and micro-titration of the iron. 130 specimens from 100 cases have been examined and deficient oxygen capacity recognized in 28 cases—the maximum difference being 12½%. The presence of this inactive pigment can be correlated with evidence of blood infection by intestinal organisms as shown by a positive Widal agglutination. The permeability of blood-corpuscles to various salts has been determined. It has been gound that bromide penetrates easily and sulphate hardly at all. The work is being continued. Also the absorption of sulphate has been studied in animals. Suitable technique resulted in a raising of the blood-sulphate by 100% and of the sulphate of the C.S.F. about 40%. In one case of artificially induced aseptic meningitis the C.S.F. sulphate was increased 80%. Sulphate disappeared rapidly from the blood. 58 specimens of C.S.F. have been examined for chloride content: 3 were below 700 mgrm. per 100 c.c. blood; 25 = 725 mgrm.; 22= 725–750 (the normal limits); and 8 were above this figure. The chloride is low in meningitis, and low-grade chronic meningitis is suspected in many of these cases.

SCOTTISH ASYLUMS PATHOLOGICAL SCHEME.

Thirty-third Annual Report for the Year 1929.

(Abstract.)

Report of the Board.

The Board would direct special attention to the most important of the publications from the Laboratory during the year, namely, the results of Dr. Reynolds's research on the pathways of infection of the brain from neighbouring foci of infection. All those who are dealing with mental patients will realize the extreme importance of this work in view of recent theories of the causation of mental disorders, and will welcome the knowledge that Dr. Reynolds's thesis has gained for him from the University of Edinburgh the degree of Doctor of Medicine and the rare distinction of a Gold Medal. The Board heartily congratulate Dr. Reynolds on his well-earned honour.

The Board are pleased to report that the Medical Research Council have continued their grant of approximately £200 to the funds for the current year, that the Moray Fund of the University of Edinburgh has granted £20 towards the cost of apparatus, and that, as noted in their last Report, a special grant of £75, of which £40 remains unexpended, has been made by the Carnegie Trust. The Carnegie

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Trust have made an additional special grant to Dr. E. Gilchrist in connection with work done by her in the Laboratory of the Scheme. Apart from those grants the Board report with unanimous gratification and approval that the Medical Research Council have seen fit to signify their high opinion of the value of Dr. Reynolds's work by making him a personal grant of £200 per annum for three years.

The Committee now consists of Dr. R. B. Campbell, *Chairman;* Prof. J. Lorrain Smith, F.R.S., Drs. Buchanan, McRae, Ronaldson, Sir Robert King Stewart, K.B.E., D.L., Dr. Shaw, and Dr. W. D. Chambers, *Honorary Secretary and Treasurer*.

The Report of the Pathologist.

Research.—Several cases of disease of the central nervous system, which have been worked up during the past year, have proved of especial interest. Cases of cerebral neoplasms have occupied attention, and a large amount of material has been collected and studied, illustrating different aspects of "gliosis."

Dr. Elizabeth Gilchrist has been engaged on an experimental study of the relationship of the lymphatic system of the peripheral nerves to the central nervous system. This work is nearing completion, and results which are significant and suggestive will be published in due course.

Dr. J. A. Hannah has been carrying out an experimental study on the degeneration and regeneration of peripheral nerves, and is at present preparing it for publication.

NOTICES BY THE HONORARY LIBRARIAN.

The following journals are circulated from the Library:

American Journal of Psychiatry.
The Psychological Review.
Journal of Neurology and Psychopathology.
L'Encéphale.
International Journal of Psycho-Analysis.
Journal of Abnormal Psychology.
Mental Hygiene.
Journal of Nervous and Mental Diseases.
Revue Neurologique.
Archives of Neurology and Psychiatry.
Journal of Comparative Psychology.

Members are requested to return all long-outstanding books to the Library as soon as possible for the purpose of cataloguing.

Members are invited to make gifts to the Library to assist in building up a historical collection of psychiatric works from the seventeenth century onwards. In selecting books for presentation, members are advised to consult the Hon. Librarian to see what books the Library possesses and those it is desirable it should possess.

The new accommodation for the Library at the B.M.A. House is available for use. There is now ample room for the expansion of the Association's collection of books.

Any communications concerning Books, Journals or Library matters should be addressed "Librarian, Royal Medico-Psychological Association, 19b, Tavistock Square, London, W.C. 1."

Bronze Medal and Prize for 1931.

Dissertations for the Association's Bronze Medal and Prize must be delivered to the Registrar by April 30, 1931.

Divisional Prizes for 1931.

Papers certified as eligible for this competition must be forwarded to the Registrar not later than April 30, 1931.

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