

## UNIVERSITY AND EDUCATIONAL NOTES

By the will of Mrs. Ann M. Swift the University of Chicago and Northwestern University received a total of \$200,000, while the American University of Washington receives \$25,000.

THE *Journal* of the American Medical Association states that the sum of \$2,500,000 has been appropriated by the Dominican Order which controls the University of St. Thomas College of Medicine, Manila, for the erection of a new concrete building, in which will be housed all the colleges of the university, the laboratories, the dispensary, the libraries, the hall, the chapel and its offices, leaving the old building which the university now occupies in the Walled City. The site for this new building will be on the outskirts of Manila. Construction work will be started in a few months. A university hospital for the practice of the students of the college of medicine will be erected on the same site. Dr. José Luis de Castro is dean of the university.

DR. A. A. HAMERSCHLAG, who has been president of Carnegie Institute of Technology, Pittsburgh, since it was established in 1903, has resigned, effective on July 1. Dr. Thomas Stockham Baker, secretary for the past three years, and formerly director of the Jacob Tome Institute at Port Deposit, Md., has been appointed acting president. Dr. Hamerschlag plans to enter business, with offices in Pittsburgh and New York, as adviser and consultant to business organizations.

DR. GEORGE W. CORNER, associate professor of anatomy at the Johns Hopkins Medical School, has been appointed head of the department of anatomy in the new school of medicine and dentistry now being organized at the University of Rochester, N. Y.

THE appointment is announced of Dr. Edwin Bramwell to the Moneriff-Arnett chair of clinical medicine at the University of Edinburgh, in succession to the late Professor Francis D. Boyd. Dr. Edwin Bramwell is a son of Dr. Byron Bramwell, the distinguished Edinburgh physician, and has made his reputation chiefly in the study of diseases of the nervous system.

At the University of Cambridge Mr. F. C. Bartlett, St. John's College, has been appoint-

ed reader in experimental psychology and director of the Psychological Laboratory.

## DISCUSSION AND CORRESPONDENCE

### SOME SIMPLIFICATIONS OF MICROSCOPICAL TECHNIQUE

IN handling large classes in histology and allied biological subjects in which it is desirable to supplement loan series of slides by sections, given out for individual mounting, any means of shortening or economizing the work of preparation is usually welcome. During the past three or four years I have hit upon and practically tested out a number of such short cuts which have proven exceedingly valuable. Others have doubtless used the same or similar methods, but their worth may justify publication here.

Among these are first, the substitution of C. P. Acetone for the usual series of graded percentages of alcohols for the hydration and dehydration of sections when staining and mounting. Each student is provided with three slide bottles, labelled Nos. 1, 2, and 3, and containing C. P. Acetone in two and Absolute Acetone in the third. Through this series the mounted sections are passed to and from the stain, before clearing and mounting as usual. Acetone mixes readily with water and with alcohol, and the absolute acetone with xylene or other clearing agents. It is especially valuable in applying the various blood stains to sections, since it does not extract them, nor affect them in any appreciable manner. It may also be substituted for absolute alcohol as a solvent for celloidin when imbedding in the latter medium. Its high volatility and inflammable nature are dangers against which the student should be explicitly warned.

The second method is the staining of ribbons of sections without removing the paraffine in which the material was imbedded. The paraffine ribbons are cut into convenient lengths, floated upon warm distilled water in a suitable dish until flattened, cooled, and then transferred to the surface of the filtered stain in a flat dish, upon which they are left floating until stained. The correct time of staining can be readily determined by experiment.

From the stain they are transferred by means of a clean lifter or a glass slide to a dish of distilled water, rinsed, differentiated if necessary, suitably counterstained in the same manner, rinsed, and finally floated into place upon the surface of an albumenized slide, dried thoroughly, cleared and mounted.

The majority of our routine histological stains may be used in this way, but few, such as iron haematoxylin, presenting any difficulties. By this method a number of sections of the same tissue or organ may be stained by different methods to bring out special structural features, and then mounted side by side on the same slide for comparative study. For example, Haematoxylin and Eosin, Mallory's or Van Gieson's connective tissue stains, and Para-Carmine combined with Orcein or Weigert's Resorcin-Fuchsin may be used, and a section of each mounted together under the same cover glass. Even the most reluctant student may thus be brought to a comparative synthetic study of the structure of an organ.

In routine work large numbers of sections may be stained by an assistant in a short time, floated upon distilled water in large dishes, and issued to a class, ready for mounting, without the large expenditure of time, labor, reagents and glassware necessitated by the usual method of handling individually mounted sections. If preferred the sections may be issued directly to the students, and each can readily perform the staining for himself, using Syracuse watch glasses or similar dishes. The main points are that the removal of the paraffine from the section, and the consequent use of albumen or other fixative, xylene, absolute alcohol, and the customary series of three to five percentages of graded alcohols are all unnecessary, save in the case of serial sections of considerable extent, and in delicate cytological work. Finally it is not even necessary to remove the paraffine as a final step before mounting in balsam, if the section has been thoroughly dried, the surrounding paraffine in such a mount being entirely invisible, save with a very narrow diaphragm opening.

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#### PROFESSOR KEYSER ON RUSSELL'S "THE ANALYSIS OF MIND"

May a belated reader of Professor Keyser's notice, in *SCIENCE*, November 25, of Bertrand Russell's *Analysis of Mind* dissent from the implication that the book is written by a man specifically competent to deal with psychology? My dissent is not based on the obviously amateur quality of Russell's psychology, for an amateur may be a good observer and many of Russell's psychological passages have genuine significance. Nor do I care to stress the rather eclectic range of Russell's psychological reading. I am concerned rather with his totally non-psychological point of view. In this book, as in all his others, Mr. Russell obviously treats psychology as handmaid of metaphysics—a procedure quite as disastrous to scientific psychology when the metaphysics in question is neo-realism as when it is, say, Wolffian spiritualism. Russell himself declares that he is "interested in psychology not so much for its own sake as for the light that it may throw on the problem of knowledge";<sup>1</sup> and the fact which his reviewer correctly states, that the motive of the book is "primarily logical . . . that of reconciling two tendencies seemingly" inconsistent, "the tendency of the behaviorist to materialize mind and the tendency of modern physicists to spiritualize matter"—this fact alone rouses the suspicion of every scientifically-minded reader. For the competent psychologist writes not in the interest of logical or metaphysical reconciliations but rather with the primary intent to record and to order observed phenomena. The reviewer provides us with many other instances of the author's metaphysical manipulations. Russell's doctrine of desire, for example, as "a mere 'fiction' like force in dynamics," may be (in Keyser's phrase) "a diabolically ingenious analysis" but certainly is not a psychological conception. And assuredly Russell's agreement with the realists in the thesis that (with respect to sensations) the world is composed of a "neutral stuff" would not by anybody be regarded as a contribution to psychology.

I am not here concerned to criticize the argument, or the more plentiful assertions, on which the metaphysical conclusion of *The*

<sup>1</sup> *Analysis of Mind*, p. 15.