

valuable service by making pharmaceutical preparations, pharmaceutical chemicals from raw materials furnished by the government, and in testing the identity and purity of drugs, chemicals and other medical supplies bought by the government in the middle west.

CHINA has instituted a geological survey under the direction of V. K. King, a graduate of the University of Glasgow.

WM. MASON TOWLE, professor of industrial engineering at Clarkson College of Technology, Potsdam, N. Y., retires from active service at the close of the present academic year. The trustees have appointed him professor emeritus of industrial engineering.

MR. FRANCIS C. SHENEHON, for the past eight years dean of the College of Engineering of the University of Minnesota and head professor of civil engineering, has opened offices and will give his entire attention to his practise as a consulting hydraulic engineer.

PROFESSOR C. K. LEITH, of the University of Wisconsin, has recently completed a six weeks' course of lectures on "Metamorphic geology" at the University of Chicago.

DR. JUAN D. AMBROSETTI, director of the Ethnographic Museum at Buenos Aires, died on May 28. He was a delegate to the Pan-American Scientific Congress held in Washington in 1915.

DR. F. F. ULRİK, of Copenhagen, who took the leading part in the movement to provide more hygienic homes for the laboring classes in Denmark, has died at the age of ninety-nine years.

ARRANGEMENTS have been made for meetings of the Council of the British Association for the Advancement of Science, the General Committee and the Committee of Recommendations to be held in London on July 6, in order to make appointments, receive the report of the Council for the year, and transact other necessary business.

THE Spanish government has appropriated the sum of \$600,000 for the establishment of a hospital for infectious diseases at Madrid.

AT the annual general meeting of the Institution of Civil Engineers of Great Britain,

held on April 17, the result of the ballot for the election of officers was declared as follows: *President*, Mr. W. B. Worthington; *Vice-presidents*, Mr. J. A. F. Aspinall, Mr. H. E. Jones, Sir John P. Griffith and Mr. J. A. Brodie; *Other Members of Council*, Dr. C. C. Carpenter, Dr. Dugald Clerk, Colonel R. E. B. Crompton, Mr. M. Deacon, Sir Archibald Denny, Bart., Mr. W. H. Ellis, Sir R. R. Gales, Mr. A. J. Goldsmith, Sir R. A. Hadfield, Brigadier-General B. H. Henderson, Mr. R. W. Holmes, Professor Bertram Hopkinson, Mr. G. W. Humphreys, Mr. Summers Hunter, Dr. W. H. Maw, Mr. C. L. Morgan, Mr. Basil Mott, Sir H. J. Oram, Mr. F. Palmer, Captain H. P. R. Sankey, Sir J. F. C. Snell, Mr. E. F. C. Trench, Mr. W. F. Tye, Sir Philip Watts, Mr. E. J. Way and Sir A. F. Yarrow, Bart. The council has made the following awards for papers read and discussed during the session 1916-17: Telford gold medals to Messrs. G. W. Humphreys and J. B. Ball; George Stephenson gold medals to Messrs. P. V. O'Brien and John Parr; Telford premiums to Messrs. P. V. O'Brien, J. L. Hodgson, W. Brown and P. M. Crosthwaite, and a Crampton prize to Mr. F. J. Waring.

UNIVERSITY AND EDUCATIONAL NEWS

ANNOUNCEMENT is made that next year a course in the elements of law, will be given by a professor of the law school of Columbia University to a limited number of qualified students of Barnard College. Certain courses in international law will also be open to specially qualified women.

BEGINNING with next autumn the Tufts medical school will require two years of regular college work for admission.

WE learn from the *American Medical Journal* that fellowships in ophthalmology and otolaryngology in connection with the University of Minnesota have been established by Dr. Frank C. Todd, of Minneapolis, and Dr. Frank E. Burch, of St. Paul, both of the school of medicine. These fellowships carry with them the same stipend that is paid by the University of Minnesota to the university fellows, namely,

\$500 the first year, \$750 the second year, and \$1,000 the third year. Such fellows will spend half their time in the private clinic of Dr. Todd or Dr. Burch, and the other half in laboratory and clinical work and in pursuit of certain courses for specialists in ophthalmology and otolaryngology at the university. For work done in these private clinics, credit will be given toward the degree granted by the university in the course of ophthalmology and otolaryngology given at the University of Minnesota, to accepted doctors of medicine covering a period of three years which prepares the physician for the specialty of ophthalmology and otolaryngology.

THE department of architecture of the University of Illinois is planning to take a leading part in rebuilding storm-stricken Mattoon. Sixteen architects of this department are to draw up sixteen standard plans for houses, the cost of which will range from \$800 to \$1,400. This work is being done in line with the school for city planning now being arranged for the coming summer. Officers of the university have expressed the hope that the institution may have an opportunity to duplicate on a larger scale in France what is now being done in the city of Mattoon.

PROFESSOR G. H. CLEVINGER, of Stanford University, has been appointed research professor in metallurgy and has been released from elementary and routine teaching.

PROFESSOR JOHN R. ALLEN, head of the department of mechanical engineering of the University of Michigan, has been offered the deanship of the college of engineering and architecture of the University of Minnesota.

MISS PAULINE H. DEDERER, instructor in zoology at Barnard College, has resigned to become assistant professor in biology at the Connecticut College for Women, New London.

DR. P. G. H. BOSWELL, lecturer in geology at the Imperial College of Science and Technology, London, has been appointed the first holder of the George Herdman chair of geology in the University of Liverpool. The establishment of a chair of geology in the university has been long delayed, and is now

possible owing to the generosity of Professor and Mrs. Herdman, who have endowed the chair as a memorial to their son, the late Lieutenant George Herdman.

DISCUSSION AND CORRESPONDENCE

THE PHYSIOGRAPHY OF THE LOWER AMAZON VALLEY AS EVIDENCE BEARING ON THE CORAL REEF PROBLEM

THE recent revival of the discussion of the origin of coral reefs¹ has raised many questions which involve not only the coral islands, but also the displacements of the strand lines of the continents throughout the tropics, for the changes in level of the tropical seas invoked by Daly must have been recorded on the continents as well as on the islands. It seems, therefore, that a thorough investigation of at least a considerable number of critically situated continental strands of the tropics must be made before the evidence for or against the acceptance of the glacial control theory may be considered complete.

Recently, in his reading, the writer found an account of the physiography of the lower Amazon valley² to which it seems worth while to call attention for the benefit of any who may undertake an investigation of the evidences of strand-line displacements in the tropics.

A brief abstract of a portion of Smith's paper follows: All of the larger rivers entering the lower Amazon from the south, and the Trombetas entering from the north, have lake-like expanses in their lower courses into which the Amazon, at times of flood, is pouring silt which is gradually filling them up. Meanwhile the upper ends of the estuaries are being filled by their own rivers. Some of the latter, which are muddier than others, have already trans-

¹ Daly, R. A., "The Glacial Control Theory of Coral Reefs," *Proc. Am. Acad. of Arts and Sciences*, Vol. 51, 1915, 157-251. Davis, W. M., "A Shaler Memorial Study of Coral Reefs," *Am. Jour. Sci.*, 4th ser., Vol. 40, 1915, 223-271. Vaughan, T. Wayland, "The Platforms of Barrier Coral Reefs" (abs.), *Am. Geog. Soc. Bull.*, Vol. 46, 1914, pp. 426-429.

² Smith, H., "Physical Geography of the Amazon Valley," *Am. Nat.*, Vol. XIX., 1885, 27-37.