

several months ago, and Part II., it is announced, 'will be published on April 15, 1902.' The work is edited by 'J. Stanley Gardiner, M.A., fellow of Gonville and Caius College and Balfour student of the University of Cambridge.' The part issued contains, besides the introduction, excellent reports on the physiography of the archipelagoes in question and on the Hymenoptera, Land Crustaceans and Nemerteans. The work will be more fully noticed when completed.

#### SCIENTIFIC JOURNALS AND ARTICLES.

THE *Journal of Comparative Neurology* for December. 1. Shinkishi Hatai, 'On the Mitosis in the Nerve Cells of the Cerebellar Cortex of Fœtal Cats,' shows: (1) The germinal cells of the nervous system of the fœtal cat present a modified form of the heterotypical mitosis of Flemming, (2) the number of the chromosomes represented by internodes of segmental filaments is 16, (3) all of the 'Halospindel' and a part of the central spindle are derived from the nucleolar substance, the central spindle containing the linin in great abundance. 2. Alice Hamilton, M.D., 'The Division of Differentiated Cells in the Central Nervous system of the White Rat.' The number and position of the dividing cells in later developmental stages (at and near birth) are described and compared with the results of other workers. Regarding the nature of the dividing cells, the author concludes: (1) There are at least two kinds of dividing cells in the central nervous system of the white rat, one small the other large, (2) neuroglia cells are derived from the small cells, nerve cells from the large ones, (3) dividing cells found in the gray matter and fiber tracts of the brain and cord are not indifferent cells, but are partly differentiated and it is possible to tell which are to become neuroglia cells and which nerve cells, (4) mitotic figures are occasionally found in multipolar nerve cells and in spongioblasts. 3. C. H. Turner, 'The Mushroom Bodies of the Crayfish and their Histological Environment.' A description of the supra-œsophageal ganglion of the crayfish, in the course of which it is shown that the mushroom bodies and the central bodies of the brains of crayfish and in-

sects are homologous structures and that both of these organs are also present in worms. The first article is illustrated by one plate, the second by two, and the third by four.

PLANS have been made for a new engineering quarterly, which is to be known as the *Harvard Engineering Journal*. The first number, which will appear on March 1, will consist largely of a description of Pierce Hall, the new engineering building, and of the engineering department.

THE two journals devoted to geographical education that have hitherto existed in this country have been merged, and will appear, beginning with January, as the *Journal of Geography*, devoted to the advancement of geographical education. The new journal will be edited by Richard E. Dodge, professor of geography, Teachers College, Columbia University, and hitherto editor of the *Journal of School Geography*; Edward M. Lehnerts, professor of geography, State Normal School, Winona, Minn., and formerly editor of the *Bulletin* of the American Bureau of Geography, and Dr. J. Paul Goode, instructor in geography, University of Pennsylvania, Philadelphia, Pa. The *Journal of Geography* will appear ten times a year, with 480 pages to the volume. It will be 7 x 10 inches in size, and extensively illustrated. The editors will be aided by a large number of associate editors, representing different phases of geography. The journal will be published by the J. L. Hammett Co., Boston and New York, and will be printed at Lancaster, Pa.

#### SOCIETIES AND ACADEMIES.

##### AMERICAN MATHEMATICAL SOCIETY.

THE eighth annual meeting of the American Mathematical Society was held at Columbia University on Friday and Saturday, December 27-28, 1901. A single day's sessions no longer suffice for the extensive programs of the Society's more prominent meetings. In providing for a two-day meeting it was hoped to gain ample time for the presentation of papers, but the long program completely filled the four sessions. Fifty-nine members were in attendance, a number exceeding all