54,845 students were enrolled. The number of women students has grown from 211 five years ago to 2,418 this winter. There has been an increase in the number of students of medicine, philology and history, pure science, and Protestant theology, and a small gain in the number of students of Catholic theology, while there has been a decrease in the number of law students and in the students of dentistry and pharmacy. By faculties and groups the students were distributed as follows: Protestant theology, 2,535 (as against 2,320 in the winter semester of 1909-10); Catholic theology, 1,760 (1,698); law, 10,890 (11,317); medicine, 11,240 (10,135); dentistry, 1,146 (1,395); philosophy, philology and history, 15,525 (14,593); pure science, 7,914 (7,349); pharmacy, 954 (1,279); agriculture, 2,546 (2,085); forestry, 171 (129); veterinary medicine, 141 (107).

So far as the individual universities are concerned, those of Prussia show a larger increase than those of Bavaria and Baden, the ten Prussian universities having enrolled 28,675 students as against 27,244 last year, whereas the three Bavarian universities show an increase from 9,042 last winter to 9,342 this winter, and those of Baden from 4.101 students to 4,254 students; the remaining six German universities have increased their clientele from 11,980 to 12,552 students. The three largest universities (Berlin, München and Leipzig) alone enrolled no less than 39 per cent. of the total German student body, Berlin remaining at the top with an enrollment of 9,686 students, as against 9,242 last winter. This is followed by the University of München with 6,905 students (6,537 last year). The remaining universities range in the following order: Leipzig, 4,900 (4,761); Bonn, 3,846 (3,652); Halle, 2,661 (2,393); Breslau, 2,454 (2,405); Freiburg, 2,246 (2,167); Göt-2,233 (2,230); Strassburg, 2,067 tingen, (1,995); Münster, 2,047 (1,906); Heidelberg, 2,008 (1,934); Marburg, 1,981 (1,878); Tübingen, 1,883 (1,760); Jena, 1,637 (1,496); Kiel, 1,439 (1,290); Würzburg, 1,425 (1,424); Königsberg, 1,380 (1,367); Giessen, 1,249 (1,261); Erlangen, 1,011 (1,121); Greifswald, 948 (881), and Rostock, 816 (707).

The figures show that all the universities with the exception of Erlangen, Würzburg and Giessen have increased their attendance, the smallest gains having been made by Göttingen, Königsberg and Breslau, the largest (in percentage) by Halle, Kiel, Jena, Tübingen and Rostock. Since last winter Breslau has been passed by Halle, Göttingen by Freiburg, Heidelberg by Münster, Würzburg and Königsberg by Kiel.

In addition to the 54,822 matriculated students, 3,528 men and 1,772 women are enrolled this winter as auditors, giving a total of 60,122 individuals receiving instruction at the German universities, the largest number in the history of German higher education.

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## MEMORIAL TO CHARLES OTIS WHITMAN

VOLUME 22 of the Journal of Morphology will be a Charles Otis Whitman Memorial This volume was originally intended as a testimonial by former students and colleagues to the founder of the Journal of Morphology, Professor Charles Otis Whit-In view of his untimely death it becomes a memorial volume. In addition to a large number of scientific papers by Professor Whitman's students and associates, illustrated with numerous plates and text figures, it will contain a biographical sketch with portraits of Professor Whitman. The edition of this volume will be sufficient to supply special orders in addition to the regular subscriptions to the Journal of Morphology. The contents will be as follows:

"The Sex Cells of *Amia* and *Lepidosteus*," B. M. Allen.

"Male Organs for Sperm-transfer in the Crayfish, Cambarus affinis, their Structure and Use," E. A. Andrews.

"Vertebrate Cephalogenesis." 3. "Amphiowus and Bdellostoma," Howard Ayers.

"On the Bilaterality of the Pigeon's Egg, a Study in Egg Organization," G. W. Bartelmez.

"The Regulatory Process in Organisms," C. M. Child.

- "Cell-size and Nuclear Size," E. G. Conklin.
- "Oviposition Induced by the Male in Pigeons," Wallace Craig.
- "The Life History of the Scolex polymorphus of the Woods Hole Region," W. C. Curtis.
- "The Transplantation of Ovaries in Chickens," C. B. Davenport.
- "On the Regular Seasonal Changes in the Relative Weight of the Central Nervous System of the Leopard Frog," Henry H. Donaldson.
- "Spermatogenesis in the Arenicolidæ," E. R. Downing.
- "Reproductive Activities of the Squid," Gilman A. Drew.
- "Modifications in the Testes of Hybrids from the Guinea and the Common Fowl," M. F. Guyer.
- "Some Problems of Coelenterate Ontogeny," C. W. Hargitt.
- "Minimal Size Reduction in Planarians through Successive Regenerations," S. J. Holmes.
- "Studies in Fertilization in Nereis." 1. "The Cortical Changes in the Egg." 2. "Partial Fertilization," F. R. Lillie.
- "The Physiology of Cell-division." 4. "The Action of Pure and Calcium-containing Salt-solutions, followed by Hypertonic Sea-water, on the Unfertilized Eggs of Arbacia, with a Theory of the Physics of Certain Features of Mitosis from the Standpoint of the Membrane Theory of Bioelectric Processes," Ralph S. Lillie.
- "Anatomical Illustrations before Vesalius," W. A. Locy.
- "The Growth and Retrogression of Corpus tuteum in the Guinea-pig," Leo Loeb.
- "The Chemistry of Fertilization," A. P. Mathews.
- "The Influence of Inbreeding and Selection on the Fertility and Sex Ratio in *Drosophila*," W. J. Moenkhaus.
- "The Spermatogenesis of the Hempteron Euschistus," T. H. Montgomery, Jr.
- "Further Studies of Ovogenesis and Spermatogenesis in Phylloxerans and Aphids," T. H. Morgan.
- "Studies of Variation and Heredity in the Armadillo," H. H. Newman and J. T. Patterson.
- "Foot Movements of Molluscs," G. H. Parker.
  "The Evolution of the Pearl Organs of Amer-
- ican Minnows and Suckers. A Study in the Factors of Descent," Jacob Reighard.
- "White and Yellow Yolk in Vertebrate Ova," Oscar Riddle.
  - "The Structure and Periodicity of the Develop-

- ing Salpa Chain," W. E. Ritter (With Miss Myrtle Johnson).
- "Physiological Animal Geography," V. E. Shelford.
- "The Olfactory Organs and the Sense of Smell in Birds," R. M. Strong.
- "The Behavior of the Chromosomes in Crossfertilized Echinoid Eggs," D. H. Tennent.
- "Experimental Modification of the Germplasm," W. L. Tower.
- "The Ant-colony as an Organism," W. M. Wheeler.
- "Studies in Chromosomes." 7. "A Review of the Chromosomes of *Nezara* with some more General Considerations," E. B. Wilson.
- "Paramæcium caudatum and Paramæcium aurelia," L. L. Woodruff.
- "Experiments in the Control of Asymmetry in the Development of the Serpulid, *Hydroides dian*thus," Charles Zeleny.
- Titles of papers of the following not received: H. McE. Knower, Jacques Loeb, F. P. Mall.

## SCIENTIFIC NOTES AND NEWS

The congress has passed a bill to retire Commander Robert E. Peary, with the rank and pay of a rear-admiral and to extend to him the thanks of congress.

THE vacancy in the board of consulting scientific experts to the secretary of agriculture, caused by the death of Dr. C. A. Herter, has been filled by the appointment of Dr. Theobald Smith, of Harvard University. The appointment was made by the secretary of agriculture, with the full approval of President Taft.

The Helmholtz medal of the Berlin Academy of Sciences was awarded to Professor van't Hoff shortly before his death.

SIR WILLIAM H. WHITE has been awarded the John Fritz medal for 1911, for "notable achievements in naval architecture," by the board representing the national societies of civil, mining, mechanical and electrical engineering. The first award was made in 1905 to Lord Kelvin, and subsequently to Alexander Graham Bell, Thomas A. Edison, George Westinghouse, Charles Porter and Alfred Noble.

THE gold medal of the British Institution