letics. Last year's list stood, for the same subjects in the same order, 128, 391, 441, 452, 139, 406, 364, 195. History thus shows the greatest advance, and it is a little surprising to find Latin and Greek coming next. Least popular is religion, and there may be a connection between this fact and the wide-spread criticism of the status of religious instruction in the German schools.

New openings in these schools are not appearing as rapidly as was the case a few years ago. For the last four years the numbers are 355, 323, 286 and 222. Thus the new positions created in 1910 were 133 fewer than in 1907.

The higher schools for girls are, as was to be expected, growing much more rapidly, even though the feminist movement has not taken hold of Germany as vigorously as it has seized some other countries. In 1900 Prussia and her cities were maintaining 104 girls' secondary schools. Last year the number had reached 188, and it is now 225. It will be seen that the rapid increase in the number of these schools is a very recent affair. Twelve of the girls' schools are in charge of lady directors.

There are fifteen regular German secondary schools in other countries, located in Antwerp, Barcelona, Brussels, Belgrano near Buenos-Ayres, Buenos-Ayres itself, Bukharest, Cairo, Constantinople, Genoa, Madrid, Milan, Mexico, Rio de Janeiro, Rome and Tsingtau. Twenty-nine directors and instructors with regular positions in Prussia are at work for the year as exchange teachers or lecturers in other countries.

Roy Temple House

EDWIN E. HOWELL

On Easter Sunday Edwin Eugene Howell died at his home in Washington. Geologists, physiographers and educators of our country thereby lost an efficient and appreciated ally.

In the year 1861 the late Henry A. Ward, then professor of geology in the University of Rochester, erected on the college campus a building which he called Cosmos Hall and which was devoted to the assemblage and preparation of scientific material for museums of natural history. The establishment thus instituted grew and developed, and it still flourishes. Its work was performed largely by young men of congenial tastes, who there acquired the practical experience which commended them later to the trustees of larger responsibilities. It thus served incidentally as a training school in the natural sciences and especially in certain branches connected with museums. Among its graduates are Frederic A. Lucas, curator in chief of the Brooklyn Institute Museums; William T. Hornaday, director of the New York Zoological Park; F. C. Baker, curator of the Chicago Academy of Sciences; William M. Wheeler, professor of economic entomology at Harvard University; and Henry L. Ward, director of the Milwaukee Public Museum; and in addition to these the writer, who ranks himself somewhat proudly as senior alumnus. This was Howell's school, his real school despite the fact that the biographies mention only the country schools of his native county and the University of Rochester, which recognized certain special studies by making him a master of arts. He entered it in 1865, at the age of 21, and took his diploma—so to speak—in 1872.

For two years he was a geologist of the Wheeler Survey and then for a year held a similar position in the Powell Survey, his work consisting of geologic reconnaissance in Utah, Nevada, Arizona and New Mexico. Then, having become satisfied that this occupation was not the one for which he was best fitted, he resigned his position and returned to the Rochester Museum, becoming a partner where he had before been an assistant. A few years later he removed to Washington, where he established "The Microcosm," an institution somewhat similar to Ward's Cosmos Hall but devoted more particularly to geologic material and subjects. The modeling of relief maps, in which work he was a pioneer—if not *the* pioneer—for the United States, soon became a specialty; and his monument, for a generation at least, will consist in the plastic representations of physiography, topography and geologic structure which adorn the halls

and walls of museums and schoolrooms throughout the continent.

He was one of the founders of the Geological Society of America and was connected with a number of other scientific associations, national and local, but he rarely contributed to their discussions. Besides the report on his geologic field work, his contributions to scientific literature included only brief descriptions of meteorites.

Personally Howell was quiet, unassuming and sincere. His recognized integrity was an important factor in his business success. If he had enemies or detractors I have not met them. His modeling was not distinguished by its artistic quality, but was realistic whenever the material from which he worked was full. His clients found him ever clamorous for facts and anxious to revise work at any stage if it could thus be made more truthful, and his clients, who were numerous among the investigators and teachers of geology and geography, were also his friends.

He was born March 12, 1845, in Genesee County, N. Y., and passed his boyhood on a farm. In 1880 he married Annie H. Williams, an artist. His wife died in 1893, but a son and daughter survive him.

G. K. GILBERT

HERMAN KNAPP

THE scant space given in the press to the death of Dr. Herman Knapp is but another proof that we have not come to place that value upon great scientists which is characteristic of older countries. Had he lived in Berlin or Paris the passing of Dr. Knapp would have been one of the great topics of the day, for his was a life of singular usefulness to the community, as well as to the science of ophthalmology, and there were few American medical men who rejoiced in wider renown on the other side of the water than did he. He studied at no less than seven European universities. He established a dispensary and hospital for eye diseases which is now a part of the University of Heidelberg, at which he taught for four years. Settling in this city in 1868, he became at once the foremost practitioner in ophthalmic and aural diseases and the founder of the Ophthalmic and Aural Institute, besides being a professor in the College of Physicians and Surgeons. But this is the briefest outline of an enormously busy and useful life. Never was there a doctor in New York who gave more generously of his services to the poor and the needy; to them he would go even late at night after an exhausting day's labor, if no other time was available. More than that, the whole science of medicine is in his debt for the Archives of Ophthalmology and Otology which he founded, as well as for numerous treatises and text-books of permanent value and for his lasting contributions to the treatment of eye diseases.—N. Y. *Evening Post.*

SCIENTIFIC NOTES AND NEWS

DR. FREDERIC A. LUCAS, curator in chief of the Museum of the Brooklyn Institute, and formerly curator of the U. S. National Museum, has been elected director of the American Museum of Natural History.

DR. LEWIS BOSS, director of the Dudley Observatory, Albany, has been elected a corresponding member of the St. Petersburg Academy of Sciences.

PROFESSOR EDWARD L. MARK, director of the Harvard Zoological Laboratory, has been elected a foreign member of the Bohemian Academy of Sciences.

DR. E. B. WILSON has been designated Da Costa professor of zoology in Columbia University, succeeding in this chair Professor Henry F. Osborn, who becomes research professor of zoology.

THE Edward Kempton Adams research fellowship has been awarded by Columbia University to Dr. R. W. Wood, professor of experimental physics at the Johns Hopkins University.

A PORTRAIT of Professor John Cleland, who from 1877 to 1909 occupied the chair of anatomy at Glasgow, was presented to the university on April 26 and a copy to Mrs. Cleland. Before the presentations the senate met and conferred on Professor Cleland the honorary degree of LL.D.