

of these remarkable results. The late Mr. J. Pierpont Morgan gave me \$24,000 for the work; and, so far as could be foreseen at that time (1900), this sum should have been sufficient, as the plan called for only eight quarto volumes. Unfortunately, however, every contributor far exceeded his estimates as to the amount of text and the number of plates which he would require, and the nominal eight volumes have expanded to fourteen. The additional sums necessary for the publication have been obtained partly from the Carnegie Institution of Washington (\$1,500) and Princeton University (\$6,000), and from sales of the work to subscribers.

Volume I contains the narrative of the expeditions and the geography of Patagonia by Mr. J. B. Hatcher, whose untimely death prevented his taking any further part in preparing the Reports.

Volume II (Ornithology) was mostly written by the late Messrs. W. E. D. Scott, of Princeton, and R. B. Sharp, of the British Museum, both of whom died in 1910, leaving that volume unfinished. Their remaining manuscript was taken by Dr. Witmer Stone, of the Philadelphia Academy of Natural Sciences, and the final part was entirely written by him.

Volume III (Zoology) is due to a number of hands. The late Dr. J. A. Allen, of the American Museum of Natural History in New York, wrote the chapters on the Mammals; Dr. L. Stejneger, of the U. S. National Museum, prepared those on the Reptiles and Amphibia; the late Dean Eigenmann, of the University of Indiana, wrote the report on Fishes; the late Dr. A. E. Ortmann, formerly of Princeton and then of the Carnegie Museum in Pittsburgh, reported on the Crustacea; Professor Calvert, of the University of Pennsylvania, wrote that part on the Leeches, and Professor Moore, of the same institution, was also a contributor.

Volumes IV to VII, inclusive, were devoted to paleontology. Volume IV contains the reports of Dr. T. W. Stanton, of the U. S. National Museum, on the Cretaceous Invertebrates, by Dr. Ortmann on the Tertiary Invertebrates, and finally the report by Dr. W. J. Sinclair, of Princeton, on the Marsupials of the Santa Cruz formation. Volume V was entirely written by myself, and contains the descriptions of the Edentata and Glires (Rodentia) of the Santa Cruz. Volume VI has Dr. Sinclair's chapters on the Santa Cruz Typotheria, and mine on the Toxodontia and Entelonychia. The remaining part of this volume, my report on the Astrapotheria and the monkeys in the Santa Cruz, is now in the printer's hands, and will, I trust, appear in a few weeks. Volume VII contains my chapters on the Litopterna. Dr. M. S. Farr, of Princeton, is preparing the report on the fossil birds of Patagonia, and that will go to the printer as soon as the Astrapotheria are completed. And, finally, is a brief summing up of the Santa Cruz fauna and the Patagonian geology by myself. This will contain nine plates in heliotype reproduction of Mr. Charles Knight's restorations of Santa Cruz mammals, plates which are now being made in Boston by the firm of E. O. Cockayne. I am particularly glad to publish these restorations, because of the great interest which Mr. Morgan took in

them. One of the first things he said, on agreeing to furnish the funds, was that we should immediately turn to Knight for a series of restorations.

Volume VIII, and a supplementary volume, are devoted to botany. The great bulk of this *Flora Patagonica* was prepared by the late Professor George Macloskie, of Princeton, with the most valuable criticism and assistance of the eminent Swedish botanist, Per Dusen, who also wrote the chapters on the Patagonian mosses. The report on the Hepaticae was written by Professor Evans, of Yale University.

I can already give a very close approximation to the number of pages of text and of plates which the finished work will contain, as all the plates are either finished, or in the hands of the engravers. The great majority of the plates are lithographs, which were made by the firm of Werner and Winter, of Frankfurt, in Germany; but some photographic processes were made in this country, partly in New York, and partly in Boston. The water color drawings for the modern birds were done by Mr. Keulemans, who was so long associated with Dr. Sharp in the work of the British Museum. The botanical plates were mostly prepared in London, as Dr. Macloskie, through his connections there, was able to exercise a closer supervision than he could have done in Frankfurt. The total number of pages of text is approximately 4,880, of a preliminary text cvii, and of plates 421, of which latter 37 are colored. Much of the value of the work is derived from its admirable plates and for these the original drawings were principally made by the late M. von Itenson and Bruce Horsfall. The work of Messrs. Knight and Keulemans has already been mentioned.

In this country there are about 100 subscribers, and in addition there are a number of free and exchange copies. I have, as yet, had no report from the European publishers at Stuttgart.

The long delay in the completion of the work has been due partly to the war, and partly to the period of extravagant prices which followed. This inflation affected especially everything connected with the making of books, having more than doubled the cost per unit of the parts which remained to be issued after the war. The end is now in sight; and I can not but esteem myself fortunate in having been able to see the great work thus far on its way.

REORGANIZATION OF THE DEPARTMENT OF ZOOLOGY AT COLUMBIA UNIVERSITY

COLUMBIA UNIVERSITY has announced plans to develop the department of zoology. These include the appointment of Dr. Leslie Clarence Dunn, of the Agricultural Experiment Station at Storrs, Conn., and James Gray, of the University of Cambridge, England, to carry on the experimental work in genetics. This program of expansion also embraces broadening of research, creation of a new professorship and a new lectureship, reorganization of courses, enlargement of equipment and, ultimately, the construction

of laboratories for the biological sciences rivaling those recently provided for physics and chemistry.

Dr. Edmund B. Wilson, Da Costa professor of zoology and executive officer of the department, who has been at Columbia for thirty-seven years, will retire from active service on July 1 with the rank of professor emeritus in residence. With President Henry Fairfield Osborn, of the American Museum of Natural History, he organized the department of zoology at Columbia in 1891. Professor Wilson will continue to conduct research at the university, and will be available for consultation and advice by advanced students. He will not, however, offer any stated instruction leading to a degree. As previously announced, Professor T. H. Morgan will leave the university in July for the California Institute of Technology, at Pasadena, Calif., where he will be the head of the division of biological sciences.

Dr. Gary N. Calkins, who holds the professorship of protozoology, will succeed Dr. Wilson as executive head of the department.

Dr. Dunn, who will occupy the new professorship of zoology, was born in Buffalo, N. Y., in 1893, and was graduated from Dartmouth College in 1915. He pursued advanced studies at Harvard University, taking the degree of doctor of science in 1920. For four years he was assistant in zoology at Harvard.

Mr. Gray, the new lecturer in zoology, is now lecturer in zoology at King's College, Cambridge. He is well known in the younger British group in zoology. He is thirty-eight years of age and was trained at Cambridge, where he received the degree of A.B. in 1912 and A.M. in 1916. Mr. Gray will lecture on experimental zoology and embryology. His researches have been in the field of experimental embryology and cytology, including researches on artificial parthenogenesis, cell division and the development of the lower animals.

SCIENTIFIC NOTES AND NEWS

BOTH branches of Congress have adopted a resolution providing for the striking of a gold medal commemorative of the achievements of Thomas A. Edison and the presentation of the medal to Mr. Edison by congress. Duplicate medals in bronze are to be made and sold at cost.

GOLD medals will soon be presented, under authority of an act of Congress just approved by President Coolidge, to Lincoln Ellsworth, Umberto Nobile and Roald Amundsen in recognition of their joint transpolar flight in the dirigible *Norge*.

CAPTAIN WILKINS, who with Lieutenant Eielson recently flew from Alaska to Spitzbergen, was

awarded the Carl Ritter medal by the centenary session of the Geographical Society on May 24.

THE Imperial Order of the Second Class of the Rising Sun has been conferred by the Emperor of Japan upon Dr. Hideyo Noguchi, the discoverer of the yellow fever germ, who died May 21 while conducting investigations for the Rockefeller Institute on the Gold Coast of Africa.

IN recognition of his work in the study of nephritis, Dr. Thomas Addis, of the Stanford Medical School, has been awarded the Gibbs memorial prize of \$1,000. He will devote it to the Wellington Gregg fund of the school, through which research work in this disease is being financed.

DR. DAVID RIESMAN, professor of clinical medicine at the University of Pennsylvania School of Medicine, was recently made a Knight of the Order of the Crown of Italy.

FREDERICK E. BRASCH, of the Library of Congress (Smithsonian division), has been awarded a grant for research from the American Council of Learned Societies to complete his studies upon the history of astronomy during the Colonial period in the United States.

THE research prize awarded by the Scientific Club of Winnipeg for the best research work done in the University of Manitoba during a period of three years by a recent graduate has been divided between Leonard B. Clark and Charles F. Goodeve, whose work was carried on in the departments of zoology and chemistry, respectively.

DR. W. REID BLAIR, director of the New York Zoological Park, has had conferred upon him on May 28 by McGill University the honorary degree of doctor of laws.

DR. ABRAHAM FLEXNER has resigned as director of Studies and Medical Education of the General Education Board.

PROFESSOR ARTHUR E. SEAMAN, head of the department of geology in the Michigan College of Mining and Technology, is retiring after forty years of service. Dr. C. O. Swanson, of the Michigan Geological Survey, will succeed Professor Seaman.

DR. T. T. QUIRKE, chairman of the department of geology at the University of Illinois, has been relieved of his administrative duties and will continue his work at the University of Illinois as professor of geology. During the summer he will continue his field researches which he has been carrying on for several years in the Precambrian complex north of Lake