

about five minutes of arc south of the star, but with no evidence of any relationship between the nebulous clouds and the star.

On September 20 Ritchey at the Yerkes Observatory photographed the same region with a more efficient instrument and found that the nebulous cloud was very nearly circular, some ten minutes of arc in diameter, but of varying intensity in its different parts with the new star situated near the middle of the nebulosity.

A recent photograph, secured by Professor Perrine with the Crossley reflector, recorded the principal features of the nebulous cloud. He compared his photograph with the Yerkes photograph of the same object and made the interesting discovery that the brightest portion of the nebula, at least, and perhaps the whole nebula, had moved to the southeast more than one minute of arc in the past six weeks.

This observation is in every respect unique. Motion on this enormous scale or one fiftieth part of this scale has never been observed for any celestial body outside the solar system, and it is morally certain that the observed phenomenon is closely related to the violent disturbances which gave birth to the new star. It is perhaps as wonderful and important as any fact yet determined in connection with new stars.

THE U. S. NAVAL OBSERVATORY.

IN his annual report to the President, Hon. John D. Long, Secretary of the Navy, indorses the recommendation of the board of visitors to the Naval Observatory, that a civilian astronomer be placed at the head of that institution. Mr. Long says:

"Attention is called to the first and very important report of the board of visitors to the Naval Observatory. I earnestly commend its recommendations to careful consideration. This board was created by act of Congress in March last. I believe its visitations will be found valuable in making the observatory efficient and in rank with the best institutions of the land. It appears that no other observatory in the world has the expenditure of so much money, but also that its results are not commensurate with those of some other observatories the expenditures of which are less. Its

head should of course be the best astronomer' who has proper administrative qualifications, that can be found in the country. It is especially desirable that he should have continuity of tenure, and the observatory has undoubtedly suffered from frequent changes in its superintendents.

"While the average term of service of superintendents at Greenwich has been twenty-eight years and at Harvard fifteen, at the Naval Observatory it has been only a little over three. I urgently recommend that the legislation of the last Congress to the effect 'that the superintendent of the Naval Observatory shall be, until further legislation by Congress, a line officer of the navy of a rank not below that of captain,' be repealed, and that on the contrary it be enacted that there shall be no limitation upon the field from which the superintendent is to be selected. As well might the above-quoted statute have provided that the Commissioner of Fish and Fisheries should be selected from the line of the Marine Corps, or the Director of the Geological Survey from the line of the army.

"There is no vital relation between the navy and the observatory. It may happen that some naval officer is preeminently qualified for such a place, in which case he would be appointed to it, but the country is entitled to have unlimited range of selection. The present limitation, which shuts out the whole body of civilian astronomers and even any astronomer in the navy who does not happen to be in the line, or, if in the line, below the rank of captain, is peculiar. Only a very small proportion of naval officers are not below the rank of captain, and as most of them are required for naval services—a requirement which is now increasing—the list from which selection can be made is a noticeably small one. It is evident, too, from the wording of the above quotation from the statute, that Congress in passing it had in mind further legislation in this respect."

SCIENTIFIC NOTES AND NEWS.

THE Council of the American Association for the Advancement of Science will meet at the Quadrangle Club, adjoining the grounds of the University of Chicago, on the afternoon of Wednesday, January 1. Section H, Anthro-

pology, of the Association will also meet at Chicago during convocation week.

DR. L. O. HOWARD, chief of the Division of Entomology of the U. S. Department of Agriculture and permanent secretary of the American Association for the Advancement of Science, will give the annual lecture at the Chicago meeting of the American Society of Naturalists.

THE American Academy of Arts and Sciences has given Professor R. W. Wood, of the Johns Hopkins University, an appropriation of \$350 from the Rumford fund to aid in the continuation of his researches on the anomalous dispersion of sodium vapor. An account of the results obtained thus far will appear shortly in the *Proceedings of the Royal Society of London*.

PROFESSOR FERDINAND FREIHERR VON RICHTHOFEN, who holds the chair of geography at Berlin, has received from the German Emperor the gold medal for science for his services in supplying the German expedition to China with valuable maps.

DR. SETH LOW has resigned the presidency of the American Geographical Society, New York. He was elected to this office a year ago to succeed the late Judge Charles P. Daly.

THE regents of the State University of Iowa have granted Professor C. C. Nutting, the head of the department of zoology, leave of absence for three months, in order to enable him to join the United States Fish Commission steamer *Albatross* on its cruise to the waters of the Hawaiian Islands. Professor Nutting will have charge of the work on marine invertebrates.

MR. STEWART CULIN made a trip during the summer, on behalf of the Hon. John Wanamaker, in the interests of the Archeological Museum of the University of Pennsylvania, visiting Louisiana, New Mexico, Arizona and California. He secured some 6,000 archeological and ethnological specimens, chiefly from the southwest.

MR. YELJI NAKAJIMA, chief engineer of the city of Tokyo, and professor in the Imperial University, with Mr. Rintaro Naoki, and Mr. Shikajiro Hattori, engineers of Tokyo, are at present in the United States studying engineer-

ing works, especially those concerned with water supply.

CAPTAIN WILLIAM CROZIER has been appointed chief of ordnance in the army with the rank of brigadier-general. Captain Crozier was formerly instructor in mathematics at West Point, and was appointed recently professor of natural and experimental philosophy to succeed General Michie, but declined the position.

ASSISTANT-SURGEON JOHN F. ANDERSON, of the United States Marine-hospital Service, has been detailed by President Roosevelt to go to Liverpool to investigate the recent outbreak there of the bubonic plague.

CAPTAIN E. L. MUNSON, assistant-surgeon U. S. A., has recently been appointed assistant professor of military hygiene in the Army Medical School in Washington, D. C.

MR. IRA A. COLLINS, recently a teacher at Ridgewood, N. J., has gone to the Philippine Islands for three years to teach for the United States Government. He will endeavor to introduce visual instruction in the schools, using lantern slides in teaching the history and geography of the United States to the natives. Mr. Collins, being also able to make plaster life masks and photographs, hopes to send some such anthropometric data to the museums of this country.

DR. WALTER HOUGH has recently returned from a five months' exploring trip in north-eastern Arizona, bringing a large collection of archeological and ethnological material for the National Museum. Fifty-four or more sites were examined, and in 18 of these excavations were made, comprising the ruins lying east of Holbrook, Arizona, in the Petrified Forest Reserve; ruins on the north border of the Apache Reserve, and ruins in the Jedido Valley, Hopi Reserve.

DURING the past summer, Mr. Frank M. Chapman, the associate curator of the departments of mammalogy and ornithology, of the American Museum of Natural History, New York City, made an extended trip in the western British possessions. In Manitoba he secured material for groups of cormorants, Wilson's phalarope and the yellow-headed blackbird.

In the Selkirk Mountains he secured the specimens needed for a group of the American dipper or water-ousel.

WE trust that the announcement of the death of Dr. Arthur König, professor of physics in Berlin, published in the New York *Evening Post* and other journals, is incorrect. It seems probable that there is confusion, owing to the recent death of Dr. R. König, of Paris.

MR. THOMAS MEEHAN, the well-known horticulturist and botanist, died in Germantown on November 19. He was born in England in 1826 and came to this country at an early age. Dr. Meehan was botanist of the Pennsylvania State Board of Agriculture, vice-president and one of the curators in charge of the herbarium of the Philadelphia Academy of Natural Sciences, editor of *Meehan's Monthly*, was a fellow of the American Association for the Advancement of Science and a member of numerous other scientific societies. He was the author of valuable papers in botany and horticulture.

DR. WILLIAM FISHER NORRIS, professor of ophthalmology in the University of Pennsylvania, died in Philadelphia on November 18. He was born in that city in 1839, and graduated from the academic and medical departments of the University of Pennsylvania. Dr. Norris was well known for his researches and publications on diseases of the eye. In conjunction with Dr. C. A. Oliver he edited the standard 'System of Diseases of the Eye,' and was the author of a 'Text-book of Ophthalmology.'

DR. ALBERT LEARY GIBON, medical director of the United States Navy, retired with the rank of commodore, died from apoplexy in New York on November 17. Born in Philadelphia sixty-nine years ago, he received his education there and at Princeton College. He was made professor of chemistry and toxicology in the Philadelphia College of Medicine and Surgery in 1853, but resigned to enter the navy in 1855. He had been president of the American Academy of Medicine, of the American Public Health Association and of the Association of Military Surgeons, and was the author of contributions to naval hygiene and public health.

THE American Physiological Society will hold its fourteenth annual meeting in Chicago, on Monday and Tuesday, December 30 and 31, 1901. The sessions will be held at the Physiological Laboratory of the University of Chicago. The headquarters of the Society will be at the Hotel del Prado, 59th Street and Washington Avenue, near the University. Information regarding other local arrangements and railway rates will be furnished later. Members of the Society will please inform the Secretary at their earliest convenience whether they intend to be present and what communications they desire to make. Those who will require apparatus or other necessities for the making of demonstrations may communicate with Professor Jacques Loeb, University of Chicago.

THE steamer *Gauss*, bearing the German Antarctic Expedition, which sailed from Kiel August 11, has arrived at Cape Town.

THE New York Zoological Park has received large accessions of animals from Maine and from Hamburg. They include buffaloes, elks, bears, baboons and other animals. The gelada baboons are said to be the only specimens in captivity.

THE American Museum of Natural History, New York City, has acquired an important collection of mammals and birds from the State of Vera Cruz, Mexico, which contains good series of specimens of several species not before represented in the museum collection. The Museum has also received from the Duke of Loubat a valuable collection of mammals chiefly from the State of Jalisco, which adds much valuable material. A third collection of mammals and birds has been received from Venezuela, collected by Mr. Klages; and a final instalment of birds and mammals of the H. H. Smith collection from the Santa Marta district of Colombia has also come to hand.

THE New York *Independent* publishes an article on the Nobel Foundation by the secretary of the Swedish Nobel Committee, Dr. C. L. Lange, according to which the first distribution of the five prizes will take place on December 10, of the present year, and the amount of each prize will be about \$40,000. The amount that has been deducted from the income for local

uses is said to be one quarter of the whole amount or about \$65,000 a year.

The Journal of the American Medical Association understands that one of the wealthy families of Chicago is arranging to endow, in a most liberal manner, an institution for the study and scientific investigation of infectious diseases. The details and particulars have not yet been made public, but it is reported that it will be second in importance only to that of the gift by Mr. Rockefeller.

THE Publishers' Weekly gives some information in regard to the export and import of books and other printed matter for the first nine months of the present year. The value of the imports is \$2,868,489, and of the exports \$2,592,268. As compared with the same period of last year, the imports have increased about \$360,000, and the exports about \$270,000.

UNIVERSITY AND EDUCATIONAL NEWS.

As a gift of a graduate, whose name is withheld, a new building will be erected at Harvard University at a cost of nearly \$100,000. The building will contain an auditorium having a seating capacity of about 1,000.

DR. GEORGE WOODWARD has made a gift of \$20,000 for the establishment of a Woodward Fellowship in Physiological Chemistry at the University of Pennsylvania.

RECENT contributions to the Oberlin College endowment fund are: C. B. and E. A. Shield, of Chicago, \$10,000; Merritt Starr, of Chicago, \$2,500; Dr. L. C. Warner, of New York, \$3,000 from a fund now held in trust by him.

MRS. L. J. WOOD, of Jamaica Plain, Mass., has given \$1,000 to the Physical Laboratory of the Johns Hopkins University for new apparatus.

It is reported in the daily papers that a recent decision of the United States District Court of the State of Michigan greatly increases the value of the estate of William Lampson, bequeathed to Yale University. By this decision the University comes into possession of land supposed to contain large quantities of copper.

THE building at the University of Michigan devoted to physics and chemistry is being remodeled, and the alterations are now well advanced.

THE list of graduate students in Cornell University for the current year is published. It includes the names of 163 candidates for advanced degrees; of these 96 are for Ph.D., 40 for A.M., 13 for M.M.E., 11 for M.S. in Agriculture, 2 for D.Sc., and 1 for M.C.E. There are 185 graduate students in regular university courses and 15 who are not candidates for any degree. Mr. J. W. Prince (C.M.) holds the Sibley Fellowship in M.E. and Mr. L. D. Crain (Perdue) the university fellowship in the same subject. Of the 15 candidates for no degree, 2 are in M.E. Of the 185 graduates, mainly A.B.'s in the regular courses, 60 are in M.E., 68 in medicine and the remainder in various courses.

THE department of botany, of the Iowa State University, conducted its first summer school of botany at Lake Okoboji during the summer. The session continued from July 27 to August 20, and proved very successful. The summer-school laboratory was located by Professor Macbride near Okoboji post office, a central point with respect to the most diversified botanical region in the State. The work was in charge of Assistant Professor B. Shimek, and consisted chiefly of field excursions and the subsequent elaboration and laboratory investigation of the material so secured.

It is announced that Professor Robert Craik, M.D., LL.D., dean of the faculty of medicine and Strathcona professor of hygiene and public health at McGill University, will resign his position and receive a seat on the Board of Governors. Dr. Craik has been connected with McGill for over half a century.

AT the University of Toronto, Dr. Howard Barnes has been appointed assistant professor of physics.

AT the University of Michigan, Messrs. A. M. Clover, R. F. Sanford and N. F. Harriman have been appointed instructors in the chemical laboratory, and Instructor G. O. Higley has returned from a year's leave of absence in Zurich.