of the local *Evening Mail* contained two whole columns of news dispatched entirely by wireless telegraphy. The notable event is undoubtedly the germ of an important development of wireless telegraphy in the near future.

THE Duke of Abruzzi is about to issue a book describing his recent ascent of Mount St. Elias. The author's and illustrators' profit upon it are to be devoted to a fund for assisting needy Italian guides.

UNIVERSITY AND EDUCATIONAL NEWS.

IT was announced last spring that $500,000 had been given to the Medical College formed by the professors resigning from the Medical School of New York University and annexed to Cornell University. The gift was at the time made anonymously, but was supposed to be from Colonel Oliver H. Payne, one of those who resigned from the Council of the University after the difficulties. It is now definitely announced that Colonel Payne is the donor and that the gift to the Cornell University Medical College amounts to $1,500,000. Plans for a building to cost $500,000 are being made by McKim, Mead & White, the architects, and work on the structure is to be begun within thirty dys. The plot of land which has been purchased is the entire block on the west side of First Avenue, between Twenty-seventh and Twenty-eighth Streets. It is expected that the new building will be ready for occupancy by October, 1899.

THE late Rowland Hazard, of Peacedale, R. I., has bequeathed $100,000 to Brown University. This sum is not to be paid for three years, and if the estate should depreciate in value the executors are empowered to reduce the amount to not less than $50,000.

MR. GEORGE A. GARDNER has given $20,000 to the Massachusetts Institute of Technology, to be added to the general endowment fund.

DR. D. K. PEARSONS, of Chicago, has offered $50,000 to Fairmount College, Wichita, Kans., on condition that $150,000 can be raised.

MR. H. J. PATTERSON has been elected Director of the Maryland Agricultural Experiment Station, *vice* R. H. Miller, resigned. The State Legislature has appropriated $14,000 for the erection of a Science Hall, to be used jointly by the College and Station. It has also appropriated $10,000 for inaugurating State work in entomology and vegetable pathology, and has provided for an annual appropriation hereafter of $8,000 for its maintenance. C. O. Townsend has been elected Botanist and Pathologist in the College and Station and State Pathologist.

PRESIDENT KELLOGG, of the University of California, has resigned.

MR. J. M. POOR has been appointed instructor in astronomy in Dartmouth College, but we understand that Professor E. B. Frost, now of the Yerkes Observatory, will have supervision of the department and will spend part of the year at Hanover. Dr. G. H. Gerold, of the Dartmouth Zoological Department, has been given a year's leave of absence to be spent abroad, and Dr. H. S. Jennings, last year instructor in the University of Montana, will temporarily take Dr. Gerold's place. Other appointments at Dartmouth are: Dr. C. H. Richardson, to be assistant in chemistry and instructor in geology, and Mr. J. B. Proctor, to be assistant in mathematics.

DR. E. EMMET REID, of Johns Hopkins University, has been elected professor of chemistry and physics in the College of Charleston, S. C.

DR. O. BREFELD, professor of botany at the Münster Academy, has been called to the University of Breslau.

DISCUSSION AND CORRESPONDENCE.

AN UNUSUAL AURORA.

LAST evening (September 11th) I witnessed at this place what I suppose to be an aurora, and which, if such, showed features so unusual as to seem worthy of record. The air was remarkably clear for the climate of this region and no perceptible wind was blowing. At 7^h50^m E. S. T. I walked out to a good point of view, free from artificial lights, to look for the zodiacal light and the 'Gegenschein.' I soon noticed in the south what I supposed at first to be a white cloud, which, however, soon disappeared. Later the supposed cloud repeatedly

reappeared and disappeared in so unusual a way that I watched it more closely. It was oval in form, the longer axis parallel to the horizon, bright in the central part and fading out gradually at the border. It filled the comparatively vacant space to the east of α Capricorni, and was perhaps five or six degrees in length. After some time I satisfied myself that it could not be a cloud from the facts that it did not obscure the stars, one or two of which were on its boundary; that it was, at brightest, twice as bright as the Milky Way; that it brightened up and disappeared again too rapidly, and was apparently almost fixed in position. In the latter feature and in its regularity of outline it also differed from any aurora I have ever seen. Toward the close of the exhibition it moved a little to the west, so that its last appearance was nearly central over α Capricorni. It last showed itself about 8^h30^m. It must, therefore, have lasted in all at least 40 minutes, during which time it brightened up and nearly or quite disappeared again perhaps ten or twenty times. A noteworthy feature was that there was nothing like an auroral streamer and no aurora elsewhere, unless an extremely faint, fixed illumination of the sky along the north horizon was such.

Quite likely it was an auroral beam seen end on. If so, it affords one of the best opportunities that have ever occurred to determine the height and length of such a beam. I, therefore, describe the phenomenon in the hope that it may have been seen and its position noted in other parts of the country.

SIMON NEWCOMB.

HARPER'S FERRY, W. VA.,
September 12, 1898.

SCIENTIFIC LITERATURE.

Essays on Museums and Other Subjects Connected with Natural History. By SIR WILLIAM HENRY FLOWER, K. C. B. London, Macmillan & Co., Limited; New York, The Macmillan Company. 1898. Pp. xv + 394.

Although the Essays on Museums form but a quarter of the bulk of this volume, they not unnaturally are accorded the first place on the title-page and form the opening chapters of the book. As Director in turn of the Museum of the Royal College of Surgeons and of the British Museum of Natural History, Sir William Flower has had an acquaintance with museums accorded to few, while his words have an additional value from the fact that he was practically the first to recognize the duties of a museum to the public and the important educational rôle it should be made to play. As he says: "The idea that the maintenance of a museum was a portion of the public duty of the State, or of any municipal institution, had, however, nowhere entered the mind of man at the beginning of the last century." And he might have added that there are some who still think the principal, if not the sole, object of museums should be the accumulation of material for the use of private individuals.

In this connection it is somewhat surprising to find the late Dr. J. E. Gray quoted as stating that the purposes of a museum are two: "first, the diffusion of instruction and rational amusement among the mass of the people; and, secondly, to afford the scientific student every possible means of examining and studying the specimens of which the museum consists."

"The first consideration in establishing a museum, large or small," says Professor Flower, "is that it should have some definite object or purpose to fulfil; and the next is that means should be forthcoming not only to establish, but also to maintain the museum in a suitable manner to fulfil that purpose. Some persons are enthusiastic enough to think that a museum is in itself so good an object that they have only to provide a building and cases and a certain number of specimens, no matter exactly what, to fill them, and then the thing is done; whereas the truth is the work has only then begun. What a museum really depends on is not its building, not its cases, not even its specimens, but its curator." And great stress is laid upon the fact that the care and administration of a museum, and its efficiency as an educational factor in a community, demands not only especial knowledge and training, but an inborn fitness for the work, and that these in turn are worthy of their due renumeration. In addition to skill, education, manual dexterity and good taste the museum curator should possess various moral qualifications not found in every professional man—punctuality, habits of