

with 25,800 in 1899. The highest point was reached in 1897 with 30,952. It is somewhat interesting to note that, while there has been a falling off in the number of patents granted to citizens in the United Kingdom and also to citizens of Germany and France, the number of applications from the United States increased from 3,002 in 1899 to 3,189 in 1900.

THE English papers state that a complete installation of Marconi's wireless telegraphy, specially suitable for signalling purposes as used in the navy, has been fitted on board the *Elder, Dempster* Beaver liner, Lake Champlain. This installation is the first which has been fitted on any of the Atlantic liners sailing from Liverpool. The *Lake Champlain* left the Mersey for Halifax on May 21, with over 1,000 passengers, and arrangements were made to establish communication between the vessel and the Marconi wireless telegraph station at Holyhead. At 9:37 P. M., when off the Skerries, contact was obtained with the Holyhead station, the vessel being then 13 miles distant. Numerous telegrams were then forwarded from passengers to friends in all parts of the United Kingdom, each message being acknowledged by the receiving operator. Constant communication with the station was continued until 1 A. M., the vessel being then 37 miles distant. Communication was established with the Marconi station at Rosslare, and at 4:30 A. M., a fresh batch of telegrams was forwarded, notifying the vessel's arrival off the Tuskar Light to the owners, Messrs. Elder, Dempster & Co.

ACCORDING to Reuter's Agency the ice-breaker *Yermak* will leave Kronstadt on May 29 for Newcastle, and, after coaling there, will proceed to Tromsø to cooperate in the fresh phase of the Spitzbergen expedition for the measurement of the terrestrial meridian. It is expected that by the end of June next she will be able to return to Tromsø and take on board Vice Admiral Makaroff, who is to direct the projected Arctic expedition. In the course of this expedition she will coast round Novaya Zemlya in order to determine precisely the outlines of that island. The *Yermak* will next inspect the state of the ice on the channel leading to the Yenisei River, in order to ascertain the correctness of the widely held theory that the

passage to the Siberian rivers to the north of Novaya Zemlya is better than that by the Yugor Strait. Lieutenant Isliamoff, the astronomer, M. Weber, the geologist, and M. Vukuloff, the chemist, will take part in the Arctic expedition.

#### UNIVERSITY AND EDUCATIONAL NEWS.

MR. ANDREW CARNEGIE has transferred \$10,000,000 to trustees for university education in Scotland. The trustees include Lord Rosebery, Lord Kelvin, Mr. John Morley and other eminent Scottish citizens. It is expressly stated in the deed of gift that the fund is intended to improve and extend the opportunities for scientific research in the universities of Scotland and to facilitate attendance by paying the fees of students; and it is understood that the income will be divided equally between these two objects. The departments to be strengthened are science, medicine, modern languages, English literature and history.

IN view of Mr. Carnegie's great gift for Scottish universities, the following statistics regarding attendance and fees, published in a British parliamentary paper, are of interest. It will be noted that one-half of the income of the fund would pay all fees. The summer sessions, attended by 431 students, are not included.

Winter Session, 1899-1900.

	Men.	Women.	Total.	Fees.
St. Andrews.....	264	114	378	£2,934 4 6
Glasgow .....	1,604	329	1,933	13,597 10 0
Aberdeen .....	661	107	768	5,169 13 6
Edinburgh.....	2,427	250	2,677	19,889 18 7
Total.....	4,956	800	5,756	£41,591 6 7

THE University of Glasgow has received subscriptions amounting to £38,000 toward an increased endowment. This sum includes an anonymous gift of £5,000 for the department of physiology. Among the donors of subscriptions of £1,000 are Lord Kelvin, Lord Rosebery and Mr. J. S. Kennedy, of New York.

COLUMBIA UNIVERSITY has received an anonymous gift of \$20,000, of which \$10,000 is for the purchase of books, \$5,000 for a historical reading room and \$5,000 for general purposes. Barnard College has received \$1,500 for fitting up the zoological laboratory. Teachers Col-

lege has received an endowment for three fellowships of the annual value of \$500 from Mr. John D. Rockefeller, and one from Mr. John Crosby Brown. These fellowships are to permit southern teachers to carry on advanced work.

MRS. PHILIP D. ARMOUR and Mr. J. Ogden Armour have added \$250,000 to the \$1,000,000 recently given by them to the Armour Institute, Chicago. A building for the Armour Memorial School of Engineering will be erected at once.

CARSON-NEWMAN COLLEGE, a Baptist institution, of Tennessee, has collected an endowment fund of \$60,000, of which Mr. J. D. Rockefeller gave \$45,000.

A BUILDING for the scientific department of the U. S. Grant University, at Chattanooga, Tennessee, will be erected at a cost of \$23,000. Of this sum the Hon. W. M. Banefield has given \$5,000.

ELABORATE ceremonies are this week in progress at Glasgow in connection with the ninth jubilee of the university. Among the events of special scientific interest are an address by Lord Kelvin on James Watt, who carried on his work at the old college, and an address by Professor John Young on William Hunter. The new botanical laboratories were to have been opened by Sir Joseph Hooker on the 13th. Delegates have been sent from the English universities and societies and from a number of American and foreign institutions.

AT the annual commencement exercises of the University of Colorado, held in Boulder, Colo., June 6, 1901, seventy-four degrees were conferred as follows: 11 B.A., 17 B.Ph., 14 B.S., 1 B.L., 4 M.A., 2 M.S., 8 M.D., 12 LL.B., 2 B.S. (C.E.), 3 B.S. (E.E.).

THE School of Pedagogy, of the New York University, has been reorganized. The Chancellor of University, Dr. H. M. McCracken, will act for the present as dean. Dr. J. P. Gordy, professor of education in the Ohio State University, has been called to the chair of the history of education and Dr. Robert MacDougall, of Harvard University, to the chair of experimental psychology. A number of professors of the University have been added to the

faculty of the School of Pedagogy, including Professors J. J. Stevenson (natural history), D. W. Herring (physics), Morris Loeb (chemistry) and C. L. Bristol (biology).

MR. M. N. FENNEMAN has been appointed professor of geology in the University of Colorado. He will begin his work in January next, at which time he will receive the Ph.D. degree from the University of Chicago.

AT Harvard University, J. G. Love has been promoted to an assistant professorship of mathematics, and Albert Sauveur to an assistant professorship of metallurgy.

DR. W. R. STOKES, city bacteriologist at Baltimore, has been elected professor of pathology in the College of Physicians and Surgeons of that city.

DR. FRANCIS H. SNOW has resigned the chancellorship of the University of Kansas, but will retain the chair of natural history.

S. GIST GEE, professor of natural science of the Columbia (S. C.) Female College, has accepted a position in the Chinese University at Soochow.

MR. HAROLD B. HARTLEY has been elected to a science fellowship at Balliol College, Oxford.

M. DÉJERINE has been appointed professor of the history of medicine in the University of Paris. There is some complaint because this chair is used as a stepping stone to other professorships. It is said that M. Déjerine will soon be transferred to a chair of nervous pathology and will be succeeded by M. Ballet who has undertaken to devote himself permanently to the history of medicine.

DR. WILHELM SALOMON, associate professor of mineralogy at the University of Heidelberg, has been appointed director of the Institute of Paleontology and Stratigraphy and his title has been changed to associate professor of paleontology and stratigraphy. Dr. V. Hepperger has been promoted to a full professorship in astronomy in the University at Vienna. Dr. Wolf Müller has qualified as docent in chemistry in the University at Freiburg, i. B.; Dr. Jordis, in inorganic chemistry in the University at Erlangen, and Dr. Kallmann, in electricity in the Technical Institute at Berlin.