

it is claimed that they will not differ greatly from those of the preceding year, when they showed a falling off. One hundred and twenty-one stock companies, having a combined capital of about \$83,000,000, paid in 1900 an average dividend of 12.33 per cent., as against 13.32 per cent. in 1899. Nineteen companies paid no dividends in 1900; 20 paid less than 5 per cent.

As will appear from the following figures, the gain in imports in 1901 was marked in certain articles, particularly in coloring matters:

Article.	Gain in Imports in 1901.
Ammonium sulphate	\$1,071,000
Peruvian bark	238,000
Iodine.....	178,500
Chile saltpeter	178,500
Superphosphate	476,000
Cyanide of potassium.....	357,000
Chloride of lime.....	178,500
Explosive materials.....	238,000
Alizarin	476,000
Aniline.....	952,000
Zinc, white.....	238,000

As is well known, the manufacture of dye-stuffs, and especially of coal-tar products, has been a specialty of the Germans. This branch of chemical industry has shown a marvelous growth and has apparently yielded good returns on the money invested.

The exports of aniline colors for the past six years have been:

Year.	Quantity.	
	Metric tons.	Value.
1901.....	25,029	\$19,213,000
1900.....	23,781	18,402,000
1899.....	22,705	17,839,000
1898.....	19,712	17,131,000
1897.....	17,639	15,969,000
1896.....	16,232	15,460,000

The German manufacturer of chemicals is dependent upon foreign countries for most of his raw product and for an outlet for his goods; he is also hampered by the high price of fuel and freights, and he realizes that his main reliance is the supply of trained chemists in Germany. A summary of the statistics of this industry in the United States, taken from the recently published census returns, has been published somewhat widely in Germany; and the certainty of vigorous and in-

creasing competition on the part of the United States in this important branch is admitted.

SCIENTIFIC NOTES AND NEWS.

WE have noted that four men of science—Lord Kelvin, Lord Lister, Lord Rayleigh and Sir William Huggins—have been included in the new order of merit founded by King Edward at the time of his expected coronation. Attention should further be called to the fact that in addition to these four men of science there are in the order three generals, two admirals, two men of letters and one artist. Science consequently appears to be in advance of any other department in the number of those selected as especially noteworthy, and to represent one third of the most eminent men (excluding statesmen) in Great Britain.

It is said that Captain Willard Herbert Brownson, now commanding the battleship *Alabama*, has been selected as superintendent of the Naval Academy at Annapolis, to assume his duties in October. Captain C. H. Davis, superintendent of the Naval Observatory, will, it is understood, succeed Captain Brownson in command of the *Alabama*.

DESPATCHES from Germany report that Professor Virchow has had another fall and is very seriously ill.

A TITLE of nobility has been conferred on the Asiatic explorer, Dr. Sven Hedin.

MR. GIFFORD PINCHOT, chief of the Bureau of Forestry, is at present in Minnesota conducting experiments on reforestation. He will later go to the Philippine Islands to prepare a report on the forest conditions.

DR. WHITMAN CROSS, of the U. S. Geological Survey, will spend part of the year in the Hawaiian Islands studying volcanic phenomena.

MR. J. A. L. COOLIDGE, instructor in mathematics at Harvard University, has been granted leave of absence, and will spend two years in study abroad.

THE centenary of the establishment of the Paris Council of Hygiene was celebrated on July 7. On this occasion gold medals were presented to Professor Proust and M. Schloesing.

PROFESSOR A. W. EVANS, of Yale University, and Mr. Percy Wilson, of the New York Botanical Garden, have gone to Porto Rico to make some further investigations and collections of the flora of that island for the New York Botanical Garden.

LEOPOLDO BATRES, the conservator of national monuments, has returned to Mexico City, after his winter's archeological excavations among the ruins of Zapotecan cities in the State of Oaxaca.

DR. ANTON WEDDIGE, professor of chemistry at Leipzig, has retired.

MR. E. B. BAILEY has been appointed a geologist on the Geological Survey of Scotland.

DR. GRUBER, professor of hygiene in the University of Vienna, has been called to the presidency of the Munich Institute of Hygiene.

A STATUE of Pasteur was unveiled at his birthplace, Dôle, Jura, on August 3.

THE centenary of the death of Bichat, the celebrated anatomist and physiologist, was commemorated on July 22, under the auspices of the French Society of the History of Medicine. An address was made by Dr. Albert Prieur, and a commemorative tablet was placed on the house in the Rue Chanoinesse in which Bichat died. A portrait medal, struck in honor of the occasion, may be obtained from Dr. Prieur, Place des Vosges, Paris.

MAJOR JOSIAH R. PIERCE, a well-known civil engineer, died at Washington on July 31. He was born in 1861 and had been connected with the Coast and Geodetic and Geological Surveys, and had been professor of civil engineering at the Columbian and Catholic Universities. He served as a major of engineers in the Spanish war and had been engaged in a number of topographical surveys.

PROFESSOR SAFARIK, who held the chair of chemistry and later of astronomy at the University of Prague, died on July 2, at the age of seventy-three years.

WE also regret to learn of the deaths of Professor Gerhardt, an authority on the diseases of children and professor at the University of Berlin, who died at the age of sixty-nine years; of Mr. Benjamin Martell, a British engineer, at the age of seventy-seven years, and of Dr.

Alexander Kowalski, an astronomer at the observatory at Pulkova, at the age of forty-four years.

THE French Minister of Agriculture has established an office for agricultural information, the object of which is to act as a bureau of correspondence and a means of popularizing scientific agriculture.

A YEAR ago M. M. Bischoffsheim presented the astronomical observatories of Nice and Mt. Mounier to the French Government. The anniversary of this event was recently celebrated by a dinner to M. Bischoffsheim, at which a number of the most eminent French astronomers were present.

THE Council of the British Medical Association is prepared to receive applications for a scholarship of £200 for the study of some subject in the department of State Medicine in memory of the late Mr. Ernest Hart.

A BACTERIOLOGIST is wanted for the Scottish National Antarctic Expedition. The conditions may be learned by application to W. S. Bruce, 21 Hill Place, Edinburgh.

THE French Surgical Association will next meet at Paris beginning on October 20. The association meets under the presidency of Dr. Jacques Reverdin, professor at the University of Geneva and foreign associate of the society.

THE Royal Institute of Public Health will hold its next annual congress in Exeter, August 20 to 27. The work will be arranged in five sections: (1) Preventive medicine and vital statistics; (2) chemistry, climatology and bacteriology; (3) engineering and architecture; (4) municipal and parliamentary hygiene; (5) veterinary and farm hygiene.

IT is announced that in the autumn a new journal, entitled *Electrochemical Industry*, will commence publication, with Dr. E. F. Rober as editor.

QUEENSLAND has given up its weather bureau, and the services of Mr. C. L. Wragge and others have been dispensed with. It is hoped that an arrangement may be made by which the service will be continued by the federal government.

THE directors of the meteorological observa-

tory on Ben Nevis have decided to close the institution in October.

THE Berlin correspondent of the *Medical News* describes the recent exposition of the Berlin Medical Society which, it appears, was arranged in six different groups: (1) Anatomical and pathological model preparations; (2) Phantoms and plastic models; (3) Tables and Charts, including Photography and Radiography; (4) Microscopy in all its branches; (5) Apparatus for Demonstration; (6) Projection Apparatus. In addition lectures were provided for on eight consecutive nights by the following eminent men: (1) Professor v. Bergmann on the means of medical instruction; (2) Professor Doyen, of Paris, upon the development of surgical technic and methods; (3) Professor Jolly on the pathology of brain and spinal diseases; (4) Professor v. Leyden, demonstrations of diseases of the heart; (5) Professor Wassermann on bacteriology and serum therapy; (6) Professor Liebreich on pharmacology; (7) Professor v. Michel on tuberculosis of the eye; (8) Professor Olshausen on diseases of women and obstetrics.

PROGRESS of the topographic mapping of Kentucky by the United States Geological Survey is indicated by the instructions recently given to Mr. W. L. Miller, one of the topographers of the Survey, to assume charge of a party and conduct the mapping of the territory surrounding Harrodsburg, bounded by latitudes $37^{\circ} 30'$ and 38° and longitudes $84^{\circ} 30'$ and 85° , as far as the length of the field season will permit. Mr. Miller's party will consist of Messrs. F. F. Frank and W. C. Palmer, levelmen; F. Moorhead and J. F. Howard, rodmen, and R. Berry and J. W. Craig, field assistants. Mr. Miller will later be joined by Mr. Hersey Munroe, topographer, who will have general supervision of the work; he will be accompanied by an assistant, Mr. G. T. Ford.

THE daily papers report that the French government has adopted the automatic telephone invention of a Russian engineer. The apparatus does away with 'Central' girls. The subscriber turns five disks, each numbered from 0 to 9, to form the number wanted, whereupon the correspondent is called auto-

matically. If he is absent a sign soon appears saying: 'Rang one minute; no answer,' while the caller's number is registered at the other end, so that he may be called after the person sought returns. When the number desired is already 'busy,' a special buzz is immediately heard. In order not to dismiss all the telephone girls together, which might disturb the labor market, the new system will be introduced gradually. Three towns of moderate size are being equipped now—Limoges, Nîmes and Dijon.

UNIVERSITY AND EDUCATIONAL NEWS.

THE will of the late Charles Kendall Adams, president of the University of Wisconsin, gives most of the estate to Mrs. Adams for life. The property is then to go to the University of Wisconsin to establish fifteen fellowships of the value of \$10,000 each.

PRESIDENT BUTLER, of Columbia University, has offered to establish two fellowships for American students to study in France if the French government will establish at Columbia University two fellowships for students from France.

THE enrollment at the summer session of the University of California, including the Marine Biological Laboratory at San Pedro, is 829, an increase of 30 over last year.

THE Academy of Münster has been made a University.

DR. EDMUND JAMES will be installed as president of the Northwestern University, October 21. The exercises will cover three days, and formal invitations are to be sent to prominent European and American colleges and universities and learned societies to send delegates.

DR. O. VOGT has been made assistant director of the physiological laboratory of the University of Berlin.

PROFESSOR DAVID HILBERT, professor of mathematics at Göttingen, has declined a call to the University of Berlin.

DR. JOHANNES HARTMANN, astronomer in the Astronomical Observatory at Potsdam, has been made professor.