

away in the depths of the science; on the contrary, they were organic chemistry itself, and learnt by students on their first introduction to the subject. The lecturer proceeded to give an account of the genesis of some of Kekulé's theories and their relation to the work of other investigators. His memoir on the benzene theory, which was referred to as the crowning achievement of the doctrine of the linking of atoms, was the most brilliant piece of scientific prediction to be found in the whole range of organic chemistry. What Kekulé wrote in 1865 had since been verified in every particular, and not only had the various substitution derivatives been discovered in the number and with the properties required by the theory, but various observations that appeared to contradict it had been proved erroneous. Moreover, it had shown itself capable of boundless development, and there seemed no limit to the fruitfulness of Kekulé's conception of closed chains. Even in the undeveloped state of the subject prior to this theory, the facts were apparently so intricate and so unconnected that few chemists could claim to have mastered them. The theory appeared; the previously unmarshalled facts fell into their proper places, and, further, it became possible to say whether in any given section of the subject the facts were complete or only fragmentary. The debt which both chemical sciences and chemical industry owed to Kekulé's benzene theory was incalculable. As regards the former, three-fourths of modern organic chemistry was directly or indirectly the product of the theory, and as to the latter the industries of the coal-tar colors and the artificial therapeutic agents in their present form and extension would be inconceivable without the inspiration and guidance of Kekulé's fertile idea. By the accuracy of his predictions he had done more to inspire chemists with a belief in the utility of legitimate hypotheses in chemistry, and had, therefore, done more for the deductive side of the science than almost any other investigator. His work stood preëminent as an example of the power of ideas. A formula, consisting of a few chemical symbols jotted down on paper and joined together by lines, has supplied work and inspiration for scientific chemists for an entire

generation and afforded guidance to the most complex industry the world had yet known.

THE scientific work accomplished by the Prince of Monaco, in the *Hirondelle* up to 1889, and since then in the *Princesse Alice*, has developed so greatly that the last named yacht has been found too small for the proper carrying out of these researches. As we learn from *Industries and Iron*, a larger yacht will be built for the continuation of the work. It will be a fast vessel, propelled by engines of 1,000 indicated horse-power, and designed to ensure a speed of 12 knots. She has a length between perpendiculars of 225 feet, with 34 feet beam, a depth of 20 feet, and her tonnage is 1,270 tons. The hull is built of steel, divided into seven water-tight compartments extending the upper deck. The cabin accommodation will be extensive, there being separate cabins for the scientific staff and a large laboratory.

THE *British Central Africa Gazette* states that reports from the West Shiré and Ruo districts give reason to believe that rinderpest has made its appearance among the game in both those districts. Game is said to be dying in numbers in the Elephants' Marsh—one of the game preserves formed by the administration of the Protectorate for the purpose of preventing the extermination of wild animals in this part of Africa. Prompt measures, it is said, have been taken to endeavor to prevent the introduction of the disease into the Shiré Highlands.

#### UNIVERSITY AND EDUCATIONAL NEWS.

THE Executive Committee of the Board of Trustees of the New York City College have accepted the plans of the new buildings presented by Mr. George B. Post. The estimated cost is about \$1,200,000. The plans include provision for a chapel with a seating capacity of over 2,000, a library that will hold 70,000 books, a museum of natural history, laboratories, etc. The building, which will be of the English Collegiate Gothic style of architecture, will stand on a high elevation. It will be on Convent Avenue, St. Nicholas Terrace and 138th and 140th streets.

MR. LEVI BARBOUR, of Detroit, one of the regents of Michigan University, has donated

\$15,000 toward an art building for the university, providing a \$100,000 building shall be erected on the campus within six years.

By the will of the late Susan S. Clark, of Hartford, Conn., just admitted to probate, Trinity College is to receive \$10,000 for the support for two scholarships.

THE library of the University of Missouri has received a gift of about 2,000 volumes, chiefly on physics and chemistry, from Dr. A. Linton, of St. Louis.

A FELLOWSHIP, to be called the Geoffrey Fellowship, of the value of £100 a year for three years, has been presented to Newnham College, Cambridge, and will be awarded in June, 1898. The Geoffrey Fellow will be required to reside at Newnham College, and to pursue independent study in some department of learning, letters or science.

THE committee of the Charing-cross Hospital Medical School has passed the following resolution: "That the committee of the Charing-cross Hospital Medical School respectfully urges the government to introduce, early in the ensuing session, a bill on the lines of the London University Commission Bill, 1897. Further, the committee hopes that on this occasion the government will give sufficient time and support to the bill to insure its passing through both Houses of Parliament."

AN election to the Isaac Newton studentship of Cambridge University will be held in the Lent term, 1898. The studentship, which is of the annual value of £200, is for the encouragement of study and research in astronomy (especially gravitational astronomy, but including other branches of astronomy and astronomical physics) and physical optics. The persons eligible are Bachelors of Arts of the University who will be under the age of 25 years on January 1, 1898.

THE University of Zurich has 713 students, of whom as many as 333 are foreigners. 135 of these are from Russia. There are more women than men in the medical department.

THE Quain professorship of physics in University College, London, will be vacant at the end of the present session by the resignation of

Professor Carey Foster. Candidates for the chair should send their applications by Tuesday, March 1st. 'The Curators of Patronage' of the University of Edinburgh announce that candidates for the chair of moral philosophy, vacant by the death of Professor Henry Calderwood, must send in their applications not later than March 31st.

#### DISCUSSION AND CORRESPONDENCE.

##### WATER SURFACE TEMPERATURES OF LAKE TITICACA.

TO THE EDITOR OF SCIENCE: A few observations of the temperature of the surface waters of Lake Titicaca, made during a recent trip across the lake, may be of interest to the readers of SCIENCE.

Lake Titicaca lies on the elevated plateau of Titicaca, partly in Peru and partly in Bolivia, at an altitude of 12,505 feet above sea-level. Its large size, its altitude, and the climatic conditions of the region in which it is situated, together with the historical associations connected with it, combine to make it in many respects the most interesting lake in the world. The following observations—unfortunately very incomplete—were made during the steamboat trip from Puno, situated on the Bay of Puno, at the western end of the lake, to Chililaya, a small village near the southern extremity of the lake. Chililaya, the landing place for passengers and freight going to La Paz, is about 100 miles from Puno, and 36 miles by carriage road from La Paz.

The steamer left Puno at 8 a. m., November 26th, and reached Chililaya at 7:30 p. m., the same day. At 8 a. m., before leaving the wharf at Puno, the air temperature was 56.0° and the water 60.9°. There were at that time scattering cirrus clouds, and a gentle breeze from NE. The air and water temperatures during the remainder of the day were as follows: 9 a. m., air, 50.0°; water, 59.5°. 10 a. m., air, 53.2°; water, 59.0°. 11 a. m., air, 51.8°; water, 57.2°. 12 m., air, 51.2°; water, 57.7°. 1 p. m., air, 50.9°; water, 57.9°. 2 p. m., air, 54.2°; water, 58.2°. 3 p. m., air, 54.8°; water, 58.3°. 4 p. m., air, 54.1°; water, 57.9°. 5 p. m., air, 49.8°; water, 57.9°. 6:15 p. m.,