Rostock; Casimir Kostanecki, professor of anatomy, Cracow; Hugo Kronecker, professor of physiology, Bern; Sir Francis H. Laking, Bart., G.C.V.O., physician in ordinary to His Majesty the King and the Prince of Wales; Commandatore Rodolfo Lanciani, professor of ancient topography, University of Rome; Charles Rockwell Lanman, professor of Sanskrit, Harvard University; Gustavus Mittag-Leffler, professor of mathematics, Stockholm; Oscar Liebreich, professor of pharmacology, Berlin: Sir Norman Lockyer, K.C.B., director of Solar Physics Laboratory, South Kensington; Sir Oliver Lodge, Kt., principal of Birmingham University; Friedrich Löffler, professor of hygiene, Greifswald; Donald Macalister, president, General Medical Council; A. B. Macallum, professor of physiology, Toronto; Sir John Macfadyean, principal of the Royal Veterinary College, Camden Town, London, N.W.; Lord M'Laren, vice-president, Royal Society of Edinburgh; Jinzo Matsumura, professor of botany, University of Tokyo, Japan; His Serene Highness Albert Honore Charles, Prince of Monaco; Wilhelm Ostwald, professor of chemistry, Leipzig; Edmund Owen, vice-president, Royal College of Surgeons of London; W. M. Flinders Petrie, professor of Egyptology, University College, London; Rev. George E. Post, professor of surgery in Johanite Hospital, Beirut: Sir Richard Douglas Powell, Bart., K.C.V.O., president of the Royal College of Physicians, London; Salomon Reinach, professor of archeology, Paris; Guglielmo Romiti, professor of anatomy, Pisa; Sir Henry E. Roscoe, late professor of chemistry, Owens College, Victoria University; Major Ronald Ross, C.B., Liverpool School of Tropical Medicine; Vladimir Scheviakoff, professor of zoology, St. Petersburg; Jakob Schipper, professor of English philology, Vienna; Dukinfield Henry Scott, hon. keeper, Jodrell Laboratory, Kew Gardens: William Napier Shaw, director of the Meteorological Office, London; Joseph J. Thomson, Cavendish professor of experimental physics, University of Cambridge; Frederick Trendelenburg, professor of surgery, University of Leipzig; Sir William Turner, K.C.B., principal of University of Edinburgh; Gius-

eppe Veronese, professor of analytical geometry, Padua; Hugo de Vries, professor of physiological botany, Amsterdam; J. William White, professor of surgery, Pennsylvania University; J. W. van Wijhe, professor of anatomy, Groningen, Holland; Sir John Williams, Bart., K.C.V.O., late professor of midwifery, University College, London.

## THE FRANCO-AMERICAN EXPEDITION TO EXPLORE THE ATMOSPHERE IN THE TROPICS.

The third cruise of the Otaria, the steamyacht sent by M. Teisserenc de Bort, director of the private meteorological observatory at Trappes, near Paris, and by Mr. Rotch, director of the similar observatory at Blue Hill, near Boston, to explore the atmosphere over the tropical Atlantic has ended, and the yacht has returned to Havre after a very successful voyage of three months and a half.

Atmospheric soundings with balloons and kites were executed over the central part of the North Atlantic, the equatorial regions and the South Atlantic as far as Ascension Island. The soundings southwest and northwest of the Canaries confirm the conclusions reached during the two preceding cruises of the *Otaria*, namely, that the upper anti-trade blows from southeast or southwest, not only within the tropics but generally as far north as latitude 30°, and is found above the open ocean as well as above the Canaries. Farther north it is transformed into a westerly wind.

The observations with ballons-sondes revealed this new and important fact, that in summer over the equator, very low temperatures (reaching — 80° C.) exist in the upper air above 12 kilometers, being analogous to those occurring in winter at the same height in our own latitude.

## SOCIETY FOR THE PROMOTION OF IN-DUSTRIAL EDUCATION.

A PUBLIC meeting will be held at Cooper Union on Friday evening, November 16, at eight o'clock, under the auspices of the national Society for the Promotion of Industrial Education.

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Mr. Milton P. Higgins, president of the organization committee, will introduce Dr. Henry S. Pritchett, president of the Massachusetts Institute of Technology, who will preside, and the following speakers will address the meeting:

Mr. Frank A. Vanderlip, vice-president of the National City Bank, 'Competition of the United States in the Markets of the World.'

Mr. Frederick P. Fish, president of the American Telephone and Telegraph Company, 'Industrial Education as a Means of Developing the Industries of the United States.'

Miss Jane Addams, Hull House, Chicago, 'The Importance of Industrial Education from the Social Standpoint.'

Dr. Nicholas Murray Butler, president of Columbia University, 'The Place of Industrial Education in the American System of Education.'

Mr. Frank P. Sargent, U. S. Commissioner-General of Immigration, formerly chief of Brotherhood of Locomotive Firemen, 'The Importance of Industrial Education to the Workingman.'

An address will also be made by Mr. Alfred Mosely, of London, and a letter from President Roosevelt upon the subject of the meeting will be read.

A meeting for the purpose of effecting a permanent organization will be held in room 19, Cooper Union, at 4 P.M., on the same day. All interested in the purposes of the organization are invited to attend this meeting as well as the evening meeting.

## SCIENTIFIC NOTES AND NEWS.

ADVANTAGE will be taken of the twentieth anniversary of the isolation of fluorine to present a gold medal to M. Moissan.

In acknowledgment of his work in metallurgical research, Professor Henry M. Howe, of Columbia University, has received from the Russian emperor the order of the Knighthood of St. Stanislas. The honor was conferred by Baron Rosen, who gave the patent of knighthood, together with the star and cross of the order. PRESIDENT ROOSEVELT has reappointed Dr. Robert M. O'Reilly to serve a second term of four years as Surgeon-General of the United States Army.

A FAREWELL banquet was given recently in honor of Sir David Gill, the astronomer royal at the Cape, who left for England on October 3.

THE University of Durham has conferred the degree of D.Sc. on Sir William White, lately director of naval construction and assistant controller of the royal navy; on Professor G. A. L. Lebour, professor of geology and vice-principal of Armstrong College, Newcastle-on-Tyne; on Mr. Charles A. Harrison, engineer to the Northeastern Railway Company, and on Mr. G. B. Hunter, shipbuilder.

Captain Amundsen, who has recently returned from navigating the northwest passage, is at present in this country. He has been entertained recently by the Geographical Society of Chicago.

DR. HENRY S. PRITCHETT, president of the Carnegie Foundation for the Advancement of Teaching, will give the address at the decennial founder's day exercises of the Thomas S. Clarkson Memorial School of Technology, Potsdam, N. Y.

A NEW wing of the Acland Home, Oxford, containing operating, sterilizing and anesthetic rooms, with open-air balconies, was opened by Professor Osler on October 13.

DR. CH. WARDELL STILES, of the Public Health and Marine Hospital Service, has been withdrawn from the commission which has been appointed to make a new commercial treaty with Germany.

M. Henri de Rothschild has given 20,000 fr. to Professor Poirier for the study of cancer.

Professor W. Somerville (M.A. Cant.), Sibthorpian professor of agriculture at Oxford University, has been elected to a fellowship at St. John's College.

THE Gedge prize, Cambridge University, has been awarded to Mr. P. P. Laidlaw, for an essay entitled 'Some Observations on Blood Pigments.'

Dr. M. I. Pupin, professor of electromechanics at Columbia University, was a can-