

Wilson; Modern buildings in Cambridge and their architecture, by T. H. Lyon; The coming of age of long-distance wireless telegraphy and some of its scientific problems (Sir Henry Trueman Wood Lecture), by Professor J. A. Fleming; and The preservation of stone, by Noel Heaton.

AN inter-allied exhibition of hygiene will take place in Strasbourg on May 1, 1923, on the occasion of the centenary of Pasteur's birth. The commissioner general is Professor Borrel, the secretary general M. Emile Henry.

A SENATE joint resolution by Senator Heflin of Alabama would authorize that \$50,000 be spent in the erection of a monument in the city of Washington to Major-General William C. Gorgas, former surgeon-general of the army, in commemoration of the services rendered by him to humanity.

RAYNER M. BEDELL, electrical engineer, brother of Professor Frederick Bedell, of Cornell University, died of tetanus on November 5, at Montclair, N. J.

DR. MERWIN PORTER SNELL, a member of the scientific staffs of the Smithsonian Institution and the Bureau of Fisheries in the years 1881-1889, died at his home at Stamford, Connecticut, on September 23, 1921, at the age of fifty-eight years.

THE death is announced on October 29 of William Speirs Bruce, the oceanographer and polar explorer.

DR. FRANCIS ARTHUR BAINBRIDGE, university professor of physiology at St. Barthomew's Hospital, died on October 27th at the age of eighty-six years.

ETIENNE BOUTROUX, professor of philosophy at the Sorbonne since 1885, died in Paris on November 22, at the age of seventy-six years. During 1910 M. Boutroux delivered a series of lectures at Harvard University.

THE death is reported from Paris, at the age of seventy-two years, of the French engineer, M. Albert Sarpiaux, who had long been connected with the scheme for the construction of a tunnel under the English Channel.

DR. PIERRE HENRI SOILLIER, honorary professor of the Lyons Medical Faculty and corresponding member of the Academie de Médecine, has died at the age of eighty-eight years.

OUR attention has been called to the fact that Dr. Emil A. Budde, whose death was announced in the issue of SCIENCE for November 18th, was president of the Electrotechnical Commission and not of the Electrochemical Commission as there stated. The succession of presidents of the Electrotechnical Commission has been Kelvin, Mascart, Elihu Thomson and Budde.

THE Royal Astronomical Society of Canada will meet in Toronto with the American Association for the Advancement of Science, and will join in the program of Section D of the association.

DISCUSSION AND CORRESPONDENCE FUR SEALS OFF THE FARALLONS

So little is known regarding the whereabouts of the Alaska Fur Seals during the period of their absence from their breeding grounds on the Pribilof Islands, that the following definite record will be of interest.

The observations here recorded were made by Mr. John Kunder, at that time keeper of the Farallon Light Station, and communicated to me by Captain H. W. Rhodes, superintendent of lighthouses, 18th district, San Francisco.

Mr. Kunder states that on or about March 4, 1920, at 9 A.M. a herd of seals appeared about two miles due south of the Farallons. They presented a compact front line about three miles in length. They were about two miles away when first observed and were moving toward the island. They appeared to stop for a moment to gaze at the object at their front, then their left wing slowed down and the right moving rapidly, the seals jumping out of the water, the line veered around in regular military formation and a new line was formed which moved off in a west-northwest direction. After completing the new formation the herd moved very fast. The line was well-formed at all times, there being few or no stragglers.

When first seen approaching, Mr. Kunder

says the commotion in the water was like a line of breakers coming from due south toward the island, but with field glasses it was easy to determine the real cause of the disturbance. Mr. Kunder estimated the number of seals in the herd at 8,000 to 10,000.

On March 10, 1917, Mr. Kunder witnessed a similar phenomenon. This herd appeared at about five o'clock in the evening, in the same locality, and its movements, appearance, and course were about the same as with the 1920 herd. The 1917 herd was, however, considerably larger than that of 1920, the number of seals in it being estimated by Mr. Kunder at 15,000. Mr. Kunder says he has never seen any single fur seals or small groups in the vicinity of the island.

So far as I am aware this is the first record of the occurrence of the fur seals in large compact herds anywhere in the open sea; they have hitherto been observed or reported only in more or less scattered numbers.

BARTON WARREN EVERMANN

CALIFORNIA ACADEMY OF SCIENCES

THE PHYSICAL MUSEUM OF THE UNIVERSITY OF WISCONSIN

So much interest has been shown in this little museum that a brief description of it in the columns of *SCIENCE* seems worth while. It is the outgrowth of an attempt to build up on a small scale, for the benefit of our students, a collection of simple demonstration experiments such as is exhibited in, say, the Urania of Berlin. When our new laboratory was built some four years ago we arranged for a room, in size about 18×40 feet, parallel to the main corridor and separated from it by a glazed partition. In this we have gradually accumulated some forty "exhibits," each with an explanatory card setting forth the theory as simply as is consistent with scientific accuracy. While many of the exhibits are of the fixed variety, *e.g.*, the parts of an ammeter, various stages of lamp bulb construction, transparencies and the like, the most interesting demonstrations, needless to say, are those which "work."

First and foremost, of course, is the Fou-

cault pendulum, which in this case is 1440 cm. long and occupies a special well. It is started every morning at 8 o'clock and swings over a card graduated in hours (for this latitude). It is accompanied by a small rotating table of the usual demonstration variety with a miniature Foucault pendulum. A large electrically driven gyroscope mounted in a box which may be wrestled with, gives a striking demonstration of gyroscopic reactions. A loop-the-loop model, ball on stream of water, probability board (shot), Kater pendulum and simple air-pressure demonstration are among the other mechanics exhibits. There is also a conservation-of-angular-momentum rotating platform (contrived with the aid of a Ford front-wheel bearing) on which one may stand with a dumbbell in each hand and perform this somewhat startling experiment.

The Melde experiment, various Foucault current phenomena and certain magnetic effects are all susceptible of easy demonstration, as are also simple thermo-electric effects. One of the most interesting and simple optical arrangements is a pair of plane mirrors set at a right angle. In these one may—possibly for the first time—"see himself as others see him," while reflected printed matter is readable. The explanation is almost obvious. Our two most recent and pretentious exhibits—an oscillating audion circuit and a vacuum discharge demonstration—have attracted considerable attention.

The interest shown in the museum has been very gratifying. Just now, although this is its third year, the attendance is in the neighborhood of two hundred visitors a day. It is very unusual to find less than half a dozen trying the experiments and sometimes the room is literally crowded full. The wear on certain pieces of apparatus shows graphically the thousands of times they have been handled. While drawn mostly from the student body the visitors frequently include the casual outsider who comes to take a "one-hour course in physics."

It is very difficult to estimate just what good "results" may be claimed for such a