backward, and to avoid a feeling of self-complacency through the rehearsal of past triumphs. All along the line, in the fields of medical education and research, in the study and treatment of disease and injury, in the preservation and improvement of health and the prevention of disease, so much more remains to be done than has been accomplished, the problems awaiting solution are so numerous and pressing, above all, the better utilization of existing knowledge and the need of more knowledge are so obvious and so urgent that our mental attitude should be far removed from satisfaction with existing conditions.

While public health is the foundation of the happiness and prosperity of the people and its promotion is recognized as an important function of government, how wide is the gap between what is achieved and what might be realized, how inadequate is the understanding of the public concerning the means adapted to secure the best results, how small the attractions offered to those entering or who might desire to enter careers in public health through lack of suitable financial recompense, of security of tenure of office, of opportunities for promotion, of standards for eligibility based upon special training and experience and of funds made available for the public promotion of health. Something of the lack of adjustment of the average man to rapidly changing social, economic and political conditions of our complicated modern civilization may be reflected in a certain temporary maladjustment between curative medicine and preventive medicine, which should stand in harmonious relations.

As my immediate and, doubtless, final professorial interest is on the humanistic side of medicine, I may, in closing, be permitted to emphasize the attractions and importance of studies in the history of medicine and of science. We physicians apply the word "humanism" to a period and to a spirit which released the mind from thraldom to authority and contributed mightily not merely to the study of classical antiquity but to the study of nature and of man, leading logically and rapidly to the cultivation of experimental science, between which and humanism, as we understand and use the word, there is no incompatibility whatever.

While nothing can be more hazardous than to attempt to predict the directions of future discovery and progress in the biological and medical sciences, it requires no prophetic gift to be confident that with the widening of the boundaries of knowledge will come increased power to relieve human suffering, to control disease, to improve health and thereby add to the sum of human happiness and well-being. Your presence on this occasion and the wide-spread recognition so conspicuously manifested of the value of services rendered in the field of medical education and medical science are an encouragement to teachers and workers for which I am profoundly grateful and which accentuates the note of hopefulness which I have endeavored to sound.

SCIENTIFIC EVENTS

THE ELECTION OF STATESMEN AS FEL-LOWS OF THE ROYAL SOCIETY¹

THE president and council of the Royal Society have recommended Mr. Ramsay Macdonald and General J. C. Smuts for election into the society under the special statute which permits the election of "persons who in their opinion either have rendered conspicuous service to the cause of science, or are such that their election would be of signal benefit to the society." It should here be said that the inclusion of certain persons not actually engaged in scientific pursuits is a practice sanctioned by long usage. In the society's original statutes of 1663, it was provided that every one of His Majesty's subjects having the title and place of baron, or any other higher title or place, and every one of His Majesty's Privy Council, might be elected. In process of time, such persons formed a panel or privileged class. However, in 1873, there was much discussion on a motion to require in the privileged class, "evidence of ascertained special power and disposition to forward the aims of the so-

1 From Nature.

ciety from exceptionally personal or official advantages of position." Arising therefrom, the privileged class was limited to princes of the blood royal and members of the Privy Council. Statutes enacted in 1902 abolished the clause relating to privy councillors and the basis of qualification remains now as quoted above. Its implications seem clear enough. The opportunities of the chief officer of state in the scientific arena are always at hand; they have nothing to do with political complexities.

In connection with Mr. Macdonald's nomination for election, it is interesting to recall that within the past sixty years four precedents can be recorded for the election of a Prime Minister whilst holding the seals of office. The instances are: Mr. Disraeli, elected on February 10, 1876; Mr. Gladstone, elected on January 13, 1881; Mr. Asquith, elected November 5, 1908; Mr. Baldwin, elected November 3, 1927. The first-named signed the charter book and was formally admitted by Dr. J. D. Hooker, the president, on June 1, 1876—fifty-four years ago—that also being the day fixed for the election of the fifteen ordinary fellows. Amongst

these (and happily still with us) was Professor H. E. Armstrong. Mr. Gladstone was admitted on May 19, 1881 (Mr. Spottiswoode was president), on which occasion William Crookes read a paper, "On Discontinuous Phosphorescent Spectra in High Vacua." It fell to Mr. Asquith, in 1912, as Prime Minister, to propose "The Royal Society" at the Guildhall banquet held in connection with the two hundred and fiftieth anniversary of the Royal Society. Mr. Baldwin was formally admitted by Sir Ernest Rutherford, and a similar act when extended to Mr. Macdonald (following election) will provide the circumstance (we think without precedent) of the admission of two Prime Ministers during one presidency. The only Prime Ministers for more than half a century who have not been fellows of the Royal Society by special election or otherwise are Sir Henry Campbell-Bannerman, Mr. Lloyd George and Mr. Bonar Law.

THE ALASKA AGRICULTURAL COLLEGE AND SCHOOL OF MINES

A STATEMENT in regard to the work of the Alaska Agricultural College and School of Mines for the year 1928-1929 has been issued by the Department of the Interior. It is reported that the Bureau of Biological Survey under cooperative arrangement with the college has made very satisfactory progress with its studies in crossbreeding reindeer and caribou. It is also conducting feeding experiments with reindeer to determine the feasibility of "topping off" reindeer before the slaughtering season during later summer. Carrying capacity studies to determine actual acreage requirements of reindeer on various types of forage and plant studies to ascertain the effect of climate on forage growth have been initiated. In order to determine the digestive reaction of the reindeer to different natural forage types, digestive samples and forage samples are being collected for chemical analysis.

In connection with the projects of the Biological Survey, six pasture areas totaling 813 acres have been fenced with net wire and an additional area of 432 acres is now in process of fencing. A herd of 18 caribou and reindeer was pastured and 7 fawns were born last year. In cooperation with the Alaska Game Commission, 3 buffalo were also pastured in these corrals.

The cooperative work with the U. S. Bureau of Mines ever since the Fairbanks Station of the bureau was moved to the college has been highly satisfactory. Mineral determinations are made free of charge and for assays a nominal charge only is made.

The college is said to be strategically situated for carrying on seismological observations in liaison with other observatories throughout the world. The U. S. Coast and Geodetic Survey designed a seismograph for this service.

During the winter of 1928–29 scientific observations of the aurora were inaugurated. The preliminary observations were conducted by V. R. Fuller, professor of physics. The International Geodetic and Geophysical Union at its general assembly in Prague, Czechoslovakia, in 1927 emphasized the need for auroral observation in Alaska, and during April, 1929, the National Research Council indorsed the establishment of such an observatory at the college. The rapid commercial development of radio communication affords an immediate practical aspect to the investigation. A fund of \$10,000 was recently donated to the college by the Rockefeller Foundation for this work.

Mr. Otto William Geist embarked on a two years' expedition to St. Lawrence Island collecting anthropological and ethnological specimens for the college. Previous collections made by Mr. Geist in the Bering Sea area have enriched the college museum collection by more than 7,000 items. As a result of his work the college will have an exceptional collection of Arctic specimens and in addition there will be much duplicate material for exchange purposes with other museums. Unfortunately this collection can not be properly exhibited until the college secures a fire-proof museum building.

THE UNIVERSITY OF MICHIGAN EXPEDITION TO THE SAN CARLOS MOUNTAINS

An intensive natural history survey of the San Carlos Mountains of Mexico will be undertaken this summer by a party of investigators from the University of Michigan. The region to be studied is an isolated range of mountains situated about eighty miles south of the Rio Grande, forty miles inland from the Gulf of Mexico and twenty-five miles east of the Sierra Madre front. In this area it is proposed to correlate the distribution of the living flora and fauna with the geologic formations. The San Carlos Range is well adapted for this type of investigation, because of its isolation and relief and because of the diverse types of rock formations exposed. Professor Harley H. Bartlett, head of the department of botany, and Professor Lee R. Dice, curator of mammals in the Museum of Zoology at the university, will study the flora and fauna.

The geology of the San Carlos Mountains is varied and therefore offers in a relatively small area an opportunity for intensive study in several branches of earth science. Professor Edson S. Bastin, head of the department of geology at the University of Chicago, will investigate the ore deposits. He will be assisted by Mr. George W. Rust, a graduate student of the de-