was in order to teach his chosen subject and to engage in research work in physiology that he had, after dropping his idea of a nautical career, devoted so many patient and laborious years to study. His first research work won for him a gold medal on his graduation as doctor of medicine. Later he added the D.Sc. degree to his other academic distinctions, and was elected a fellow of the Royal Society of Edinburgh. During this period he engaged, partly by himself, partly in collaboration with others, in a large amount of research work, on the cortico-spinal tracts, on the minute structure of the liver, on the body temperature of vertebrates and on temperature regulation in bird and mammals, on the secretion of bile and of pancreatic juice, and on certain aspects of endocrinology. In 1908 he was appointed to fill the reconstituted chair of physiology and biochemistry in Cornell University, where in 1920 he was made World War Memorial professor of physiology.

Simpson had a happy time in Cornell. With his gift for making friends he was very soon at home in his new surroundings. The pleasurable excitement with which he surveyed the field on arrival, the joy he felt in being at last wholly independent, the interest he took in his new university and in his associates, are recorded in numerous letters to his acquaintances. He had now attained the command for which he had schooled himself. He was at last in charge of his ship; and under his skilful navigation and constructional superintendence she became the tight and handy vessel that for eighteen years was to outclass many of her heavier rivals. Simpson dearly loved a race, and whether he was in an actual sailing craft (any one who ever witnessed his control over a sailboat conceived a new respect for him) or whether he was running his laboratory, he spread every stitch of canvas and utilized every inch-ounce of available motive power. His classes increased in numbers and in popularity. He trained and sent out many physiologists, who are attached to him by ties of sincere respect and regard. His laboratory grew steadily in resources and in equipment, until it is now left as a unique heritage to his successor. Above all he brought his department into the forefront of research activity, the Cornell work, especially on thyroid and on parathyroid problems, being now familiar to all physiologists and to a large circle of medical men.

Simpson was the real scientist, but it was not his scientific qualities alone which made him great. If we may number them, he had two outstanding additional characteristics. First of all, he was essentially a scholar, and a scholar of wide range. Despite early handicaps that might have deterred a more timid or more indolent man, he had sought out for himself much of the best and greatest wisdom contained in books. His range included the classics of antiquity, early Icelandic literature, Russian, French and German literature, to which must be added a wholly unusual acquaintance with the greatest writers in our own language. He had, what we scientific people so frequently miss, a historically cultivated mind; and his interest in all these things was to an uncommon degree of that unselfish kind which made him long to share his literary experiences with others. Every one who knew him will remember the eager, almost solicitous, enthusiasm with which he proclaimed his discovery of a new book revealing some striking conception or original outlook. His extensive acquaintance with literature gave him balance and markedly enhanced his other characteristic, which was his *humanity*.

Of this I find it difficult to speak. The man who had spent his life in obstinate battle with difficulties, in resolute domination over circumstance, was the kindliest and most considerate of men, the first to proffer help to others in their discouragements. When he gave help, as he was constantly doing, he gave of his unstinted best. To the end he lost none of his honest and openly expressed contempt for the untruthful or the mean, in whatever guise they might appear, but his judgment of individuals was invariably broad and catholic, never vindictive. I do not believe he had a single enemy, which is a strangely illuminating statement to make of a man of Simpson's strength of character. His life is a great lesson to us, which we can contemplate only with feelings of wonder, of humility and of admiration.

JOHN TAIT

McGILL UNIVERSITY

SUMMER SCHOOLS FOR ENGINEERING TEACHERS

As recently announced, the Society for the Promotion of Engineering Education has undertaken an experiment in the training of college teachers of engineering through the establishment of summer schools to be conducted by the Society at Cornell University and the University of Wisconsin during July, 1927. The purpose of the schools will be the discussion and study of methods of teaching the basic subjects of the engineering curriculum. For the first year the subject of mechanics has been selected because of its fundamental importance and its pivotal position between the work in mathematics and physics and the study of the engineering subjects proper. Mechanics was chosen also because all engineering teachers have a working knowledge of it and consequently will be able to appreciate discussions of

methods of teaching in general when the discussions apply to this particular subject.

The teaching staffs of the two schools include many of the most able and prominent teachers of engineering in the country. Those who have accepted invitations to serve are as follows: Dean Dexter S. Kimball, of the College of Engineering, Cornell University, will serve as director of the Cornell session. Dean Kimball is a past president of the American Society of Mechanical Engineers, is at present president of American Engineering Council, and is an authority in the fields of machine design and industrial management. Lecturers on the subject of mechanics at the Cornell session include Professor J. E. Boyd, of Ohio State University, the author of a standard textbook on mechanics; Professor W. S. Franklin, of the Massachusetts Institute of Technology, whose books on mechanics, physics and mathematics are extensively used, and Professor E. W. Rettger, of the Department of Mechanics of Cornell University.

Teachers of subjects related to mechanics include Professor C. M. Allen, of Worcester Polytechnic Institute, an authority on hydraulic engineering; Professor Vladimir Karapetoff, of Cornell University, an expert in the field of electro-mechanics; Dean Milo S. Ketchum, of the College of Engineering, University of Illinois, author of works on structural engineering; and Stephen Timoshenko, research engineer of the Westinghouse Electric and Manufacturing Company, and lecturer at the University of Pittsburgh.

Professor G. B. Upton, of the Cornell faculty, will serve as lecturer on experimental courses in mechanics, and G. A. Works, Professor of Rural Education and chairman of the University Division of Education, will serve as educational adviser and critic. Professor C. L. Walker, of the Department of Civil Engineering and Secretary of the Faculty of the College of Engineering, will act as secretary of the school and will edit the "proceedings."

The Wisconsin session will be conducted under the directorship of Professor E. R. Maurer, chairman of the Department of Mechanics of the University of Wisconsin. Professor Maurer is an authority on strength of materials and the principles of reinforced concrete construction. Other members of the staff who will deal with the subject of mechanics include Professor A. P. Poorman, of Purdue University, and Professor S. M. Woodward, of the State University of Iowa. Professor Poorman is the author of "Applied Mechanics" and "Strength of Materials," books which have a large circulation in American engineering colleges. Professor Woodward has served as consulting engineer on many important projects including the flood prevention work of the Miami Conservancy District at Dayton, Ohio. Teachers of laboratory courses include Professor H. F. Moore, of the University of Illinois, and Professor W. O. Withey, of the University of Wisconsin. Professor Moore is an authority on the fatigue of metals and on the history and philosophy of mechanics. Professor Withey's best known work is the comprehensive revision of Johnson's "Materials of Construction." He is also an authority on methods of testing materials and laboratory procedure.

Teachers of subjects related to mechanics include Professor Edward Bennett, chairman of the Department of Electrical Engineering at the University of Wisconsin, co-author with H. M. Crothers of "Introductory Electro-dynamics for Engineers"; O. A. Leutwiler, professor of mechanical engineering design at the University of Illinois and author of numerous works on machine design and power plant machinery; C. S. Slichter, Dean of the Graduate School of the University of Wisconsin; Dr. Stephen Timoshenko; and F. E. Turneaure, Dean of the College of Engineering at the University of Wisconsin. Dean Turneaure is an authority on structural engineering, a member of the State Highway Commission of Wisconsin, consulting engineer, and member of numerous technical committees of the American Society of Civil Engineers. Professor E. M. Terry, of the Department of Physics at the University of Wisconsin, will deal with instruction in elementary mechanics and with lecture demonstration methods. Professor Curtis Merriman, of the School of Education of the University of Wisconsin, will act as educational adviser and critic. Leslie F. Van Hagan, professor of railway engineering, will serve as secretary of the conference and will compile the "proceedings."

Applications to attend the schools are being received in large numbers at the New York Office of the Society for the Promotion of Engineering Education, 33 West 39th Street. It has been necessary to close the registration of the Cornell session of the schools since the maximum number which can be accommodated has been reached.

The plan for conducting the schools contemplates two or three sessions daily. Morning sessions will include formal lectures on mechanics and related subjects and on methods of teaching, demonstration-lectures, laboratory demonstrations, and model teaching. The afternoon sessions will be devoted largely to seminars in small groups and to assigned projects on the preparation of class exercises and lectures, the devising of problems, the setting of examinations, and the planning of experiments. These projects will be prepared in written form and transmitted to the entire group for discussion and criticism. The prin-

ciples of education and methods of teaching will be emphasized in all of the work. Lectures will be delivered by prominent speakers during the evening on topics of general interest to engineering educators. These will include a wide range of subjects of current importance. The program also includes a number of recreational features, since both Ithaca, New York, and Madison, Wisconsin, provide exceptional opportunities for pleasant diversions.

The summer schools are being conducted by the Society for the Promotion of Engineering Education under the general supervision of its Board of Investigation and Coordination, of which Professor Charles F. Scott, of Yale University, is chairman, and Dean F. L. Bishop, of the University of Pittsburgh, is secretary, and under the immediate direction of Dr. W. E. Wickenden, Director of the Society's general investigation of engineering education, and Professor H. P. Hammond, associate director of the investigation. The Engineering Foundation, of which Mr. Alfred D. Flinn is the director, is associated with the enterprise and is acting as treasurer for the holding of the special funds under which the present stage of the investigation is being prosecuted. The summer schools are financed by a special appropriation for the purpose made by the Carnegie Corporation of New York.

SCIENTIFIC EVENTS

THE LEEDS MEETING OF THE BRITISH ASSOCIATION[1]

THIS year's meeting of the British Association will be held at Leeds from August 31 to September 7, under the presidency of Sir Arthur Keith. In returning to the county of its origin—the first meeting was held at York in 1831—the association will be in the midst of a district of great scientific interest. Leeds, in fact, is a convenient center from which to visit places rich in archeological, geological and botanical material, and arrangements are being made to enable members to make excursions to the Yorkshire abbeys, the limestone country, and the moors.

The association has met at Leeds on two previous occasions. The first visit was in 1858, when the president was Sir Richard Owen. In these days, when direct speech by wireless across the Atlantic has been achieved, it is interesting to recall that at the Leeds meeting in 1858 the president announced that a telegraphic cable had been successfully laid between England and America, and the first messages of goodwill between the nations had passed only a few days before. The second meeting in Leeds was in 1890, and was presided over by Sir Frederick Abel.

[1]The London *Times*.

The preliminary program of this year's conference shows that the inaugural general meeting will take place on August 31, when Sir Arthur Keith will assume the presidency in succession to the Prince of Wales and will deliver an address on "Darwin's Theory of Man's Descent as it stands To-day." There is no alteration in the number of sections, which remains at thirteen. The sections, with their presidents, are as follows:

A.—Mathematical and Physical Sciences.—Professor E. T. Whittaker, F.R.S.
B.—Chemistry.—Dr. N. V. Sidgwick, F.R.S.
C.—Geology.—Dr. Herbert H. Thomas.
D.—Zoology.—Dr. G. P. Bidder.
E.—Geography.—Dr. R. N. Rudmose Brown.
F.—Economics.—Professor D. H. Macgregor.
G.—Engineering.—Professor Sir James B. Henderson.
H.—Anthropology.—Professor F. G. Parsons.
I.—Physiology.—Dr. C. G. Douglas, F.R.S.
J.—Psychology.—Dr. W. Brown.
K.—Botany.—Professor F. E. Fritsch.
L.—Education.—The Duchess of Atholl, M.P.
M.—Agriculture.—Mr. C. G. T. Morison.

Among the subjects of the sectional presidential addresses will be "The Broadening of the Outlook in Education," by the Duchess of Atholl; "The Englishman of the Future," by Professor F. G. Parsons; "Rationalization of Industry," by Professor D. H. Macgregor; and "Agriculture and National Education," by Mr. C. G. T. Morison. Two evening lectures to members have been arranged, one by Professor R. A. Millikan, of the United States, on "Cosmic Rays," and the second by Dr. F. A. E. Crew on "The Germplasm and its Architecture."

A feature of the meeting will be the extension of the principle of public lectures in Leeds and the neighboring towns. Leeds, as the center of a large number of other towns, gives the association an opportunity of arranging for lectures by leading scientists in towns where they may be desired, and some twenty such lectures will be provided. An innovation will be the inclusion in the program of the meeting of a number of communications on various scientific researches relating to the textile industries. The British Research Association for the Woolen and Worsted Industries, the Department of Textile Industries in the University of Leeds, and the Textile Institute of Manchester have cooperated with the British Association in the arrangement of this part of the program. The laboratories of the Research Association at Torridon and of the university department will be inspected and a special meeting room will be set apart for papers on textile subjects.

The excursions, which have been arranged, will include visits to Byland Abbey, Helmsley Castle, and Rievaulx, which will be conducted by Mr. C. R. Peers,