return for their money. It is the special advantage of the universities that in them research can in a sense be regarded as a utilization of by-products-not infrequently in modern industry a very important source of real profits. The member of a university faculty can give a return for his salary in the form of teaching-the relatively prosaic, but important work of passing on to the new generation the achieved results of the science, literature and arts of the past with all which that implies of stimulus and moral development. This is his modicum of contribution, but beyond this, the spirit of the university, the environment of young students, the seminar, the scientific conferences, the intercourse with colleagues in related but diversified fields-all these are stimulants to research of the highest efficiency, and constitute at once that free and untrammeled environment which incites to effort in purely ideal lines where no consideration save the intrinsic interest of the work in itself, and the desirability of the solution to be attained need intrude. The universities because of their functions in teaching, are the natural homes for research on problems whose appeal is to the desire of the human mind to understand and control its environment.

I need hardly stop to add that all universities as yet do not furnish in the highest degree possible this sort of environment. It is enough for us that there is no intrinsic reason why they should not all become such centers of stimulation and motive power in research. And for the warning of those who are too much given to reforming that which is already reasonably good, be it said that the tyranny of majorities and of professorial trade unions is quite as likely to meet with passive resistance and the undermining effects of indifference and superior interest in the real work of teaching and research, as the attempts at financial, social, intellectual and executive overlordship which have in the past been regarded as the most insidious foes of our much-prized and too frequently little understood academic freedom.

The further fundamental consideration which confronts us is that after all research is

hard work and that the most important stimulus thereto is the force of example. After the exhibition of the past four years it is hardly necessary to emphasize that man is still very much of an animal. One of the oldest if not the primitive mental trait is imitation. We shall stimulate research in direct proportion as we plunge into it ourselves each on the problems that look large and appeal to him especially. With the socializing tendencies of the present day and the vast emphasis which is being laid on organization it may sound like serious heresy but I am willing to stand for the proposition that in peace times at least no one is justified in assuming executive work or work in the planning and direction of the research of others to the exclusion of his own research work. On those minded to do so I would urge first at least the need of research that the justification of their viewpoint be made more clear than it is at present. With all our present-day divergence of views we can perhaps agree that the advance of knowledge in the future depends most on the possibility of winning the brightest minds of the rising generation for research and for accomplishing this it seems to me the most important factor is that we convince our students by our own examples that research is really an absorbing and satisfying occupation that it is interesting in itself even independently of the immediately obvious value of the results obtained. Not by preaching research or organizing research or talking about the stimulation of research, but by showing a deep, insatiable curiosity about the things of nature and of life, we shall advance and win others to engage in the pursuit and practise of knowledge R. A. HARPER COLUMBIA UNIVERSITY

JAMES M. MACOUN

JAMES M. MACOUN, chief of the Biological Division of the Geological Survey, Canada, died January 8, 1920, aged 58. He was well known as one of the best informed systematic botanists, not only throughout Canada but also in other countries, and was an expert on the fur-seal industry. During the summer of 1919, while conducting botanical field work in Jasper Park, Alberta, Mr. Macoun was taken ill but finished his field work before returning to Ottawa early in October. He became gradually worse and went to a hospital, but was found to be beyond surgical help.

Mr. Macoun was born in Belleville, Ontario, in 1862. The members of the Macoun family are known for their endeavors in scientific lines and as staunch workers for democratic good citizenship. Mr. Macoun was the son of Professor John Macoun, naturalist of the Geological Survey, Canada, now residing at Sidney, Vancouver Island, British Columbia. He was the brother of Mr. W. T. Macoun. Dominion Horticulturist at the Central Experimental Farm, Ottawa. The Macoun name is connected with practically all the botanical research work of Canada, and many of the plant species of Canada bear the name of Macoun. This alone is evidence of their authoritative standing in the botanical world. When young, James M. Macoun attended Belleville High School, and Albert College, where his father was then professor of botany.

In 1881, when nineteen years of age, he accompanied his father to the field on an exploration of the territory between Portage la Prairie, Manitoba, and the head waters of the Assiniboine.

In 1882, when his father, Professor Macoun, moved to Ottawa to take charge of the botanical and other natural history work of the Geological Survey, James came as his assistant, and he became a regular worker as a civil servant of the Dominion Government in 1883. In this service he continued for thirtyseven years, dying in harness. Mr. Macoun specialized in botany from the time he entered the service. He assisted his father in the preparation and publication of his monumental botanical work, and the two editions of the annotated list of the birds of Canada.

Mr. Macoun was appointed assistant naturalist of the survey in 1898. Since 1912, when his father moved to British Columbia, much greater responsibility was thrown on him, and he was appointed botanist in 1917. In 1918, because of his wide knowledge, he was appointed chief of the Biological Division.

In 1891, when the fur-seal industry of the Pacific Islands was a subject of diplomatic concern between Great Britain, Canada, and the United States, he was chosen by Dr. George M. Dawson, then director of the Geological Survey and Behring Sea Commissioner for Canada, to accompany him on a trip of investigation to Behring Sea. His services in the study of the life history and habits of the fur seal were so valuable that he was retained on this work in 1892 and 1893, and was sent to Europe as an expert in connection with the fur-seal arbitration.

In 1896 and in 1914 he was again sent to Behring Sea. In 1911 he spent 10 weeks in Washington as one of the Canadian representatives at the fur-seal conference. For his special international work in connection with the fur-seal he was highly commended by Lord Bryce, then British Ambassador at Washington, and received a C. M. G. for his services.

Mr. Macoun had his full share in the field work of the staff of the Geological Survey, which takes the members to many parts of Canada and mainly to the outlying or least civilized areas. On some of the expeditions he endured very severe hardships; for instance, in 1910, while studying the flora and fauna of the west coast of Hudson Bay, his ship was wrecked and the party had to attempt the return to civilization in a small boat. Fortunately they were rescued and taken to Fort Churchill, from where they made the overland trip to Lake Winnipeg on foot in the depth of winter, reaching the telegraph line after having been almost given up for lost. Mr. Macoun was always the leader in the morning and brought up the rear in the evening to see that no one was left behind to freeze. He always depreciated his own hardships on this trip and the importance of his effort, but it is no small task to bring forty men unacquainted with snowshoe travel, from Hudson Bay to Winnepeg in winter without loss of life or limb.

To Mr. Macoun and his father is due the

National Herbarium of the Geological Survey, containing over 100,000 specimens of the flora of Canada, and about half of the 14,000 ornithological specimens in the museum. Both were among the founders of the Museum of the Geological Survey.

Mr. Macoun was remarkably genial, had great ability as a clever conversationalist, and possessed a faculty to help those in need. He made many friends in all walks of life. "Labor" in particular will miss him greatly. His motto was "Equal opportunity for all," and this he strongly proclaimed through many organizations, whether wholly, in part, or not at all devoted to the interests of labor. Both labor and capital had so much faith in his fairness that they allowed him to act as sole arbitrator between them in the case of strikes. In this service he prevented much suffering among the ranks of labor, loss to capital, and inconvenience to the public. He took an active part in all work for the progress of humanity, engaging especially in work for the blind. During the war he was energetic in aiding relief measures; since then in assisting the returned soldier.

One of the most prominent civil servants of Canada, he did much to place the Civil Service Association on a firm basis, and was always a strong supporter of it. He was one of the founders of the People's Forum of Ottawa, and for a considerable time was its chairman.

He was active in municipal, provincial and Dominion affairs, and his interest in sociological questions took a practical turn. He was unostentatious in his wide philanthropies.

He was an individualist whose chief characteristics were his humanness, and his democratic life. He was affectionately and respectfully known as "Jim" across the continent, and prouder of it than of his C. M. G. He was never too busy to grant a word of advice and offer a word of cheer to any worker in any branch of science, to any one needing help, and to any worker for the common good.

HARLAN I. SMITH

GEOLOGICAL SURVEY, CANADA

SCIENTIFIC EVENTS

THE ANGLO-AMERICAN UNIVERSITY LIBRARY FOR CENTRAL EUROPE

IT is proposed to establish in Central Europe under British-American auspices libraries of recent English books indispensable to university teachers. The work is being organized on a broad, non-political, non-sectarian basis, so as to enlist the widest possble cooperation. These libraries will supply on loan books needed by the faculties of the different universities in Central Europe. They will be under the charge of British and American representatives, and committees of the foreign universities will be asked to superintend the local administration. A committee of the six most important learned societies in Germany and Austria has been formed for the carrying out of the plan which, in addition to the loan library, will include a system of exchange of publications and duplicates between any libraries and institutions willing to cooperate. The preliminary statement of the trustees says:

By thus taking the initiative in extending the hand of fellowship to colleagues in former enemy countries, British and American scholars are seizing a timely opportunity of helping to heal the wounds of the war and of exemplifying in a practical and convincing way the true "international mind."

Viscount Bryce, Lord Robert Cecil and other English public men have expressed their approval of the plan and have promised their cooperation in carrying it out. The supporters of the plan in Great Britain include: Gilbert Murray, Oxford; A. E. J. Rawlinson, Oxford; C. S. Sherrington, Oxford: Walter Raleigh, Oxford: A. E. Shipley, Cambridge; J. J. Thomson, Cambridge; A. S. Ramsay, Cambridge; Joseph Larmor, Cambridge; Horace Darwin, Cambridge; W. B. Hardy, M.A., Cambridge; Alfred Hopkinson, Glasgow; Col. E. H. Hills, Woolwich; Henry A. Miers, Oxford; Alex. Hill, Cambridge; George Paish, London; Rickman G. Godlee, London, and Michael Sadler, Leeds.

University teachers in the United Kingdom and American are requested to give their ap-