

into the night. No honorary degrees were granted, although some of the most distinguished engineers in America were present.

At one stride, thanks to the generosity of Sir William Macdonald and the vision of Dean Bovey, McGill had stepped into the first rank as an engineering school. The Department of Architecture was established in 1896, and the Chemistry and Mining Building with its facilities for mining and metallurgical work, became available in 1898; thus rounding out the organization in the general form in which we know it now.

The next twenty-five years was largely a period of natural evolution and growth. The Faculty of Applied Science was away to a good start. Other departments of the University required special attention. To some extent the influence of Balliol was felt over the whole institution. The Faculty of Arts was strengthened by a group of brilliant men who came (and in part went) from time to time. Pure science came into its own, culminating for the time in the golden era of Rutherford. The degree of B.Sc. in Arts was instituted, and the B.A.Sc. formerly awarded in Applied Science was abolished. And, of special importance, the foundations of the Graduate School were laid.

The work of the engineers, although, one trusts, respected, was not always understood in those days by our humanitarian colleagues. The writer, then a very junior member of the staff, was once arguing for the inclusion of economics, or history, or some such study in the engineering curriculum, when the entirely charming dean of another faculty expressed surprise that engineers should be interested in anything but "belts and screws." Perhaps this attitude was partly our own fault, for in the early days our new toys, machines and shops with their very practical appearance, received vastly more publicity than the solid scientific work which could not usually be explained to visitors.

In 1907 the fine old engineering building was burnt. Fortunately most of the more costly equipment remained intact. In the new structure which speedily arose on the same foundations, considerably increased accommodation was provided, more especially for drafting rooms. Laboratories were unfortunately but little enlarged, and for many years the cramped quarters were a source of considerable, and sometimes serious, embarrassment. Just as the new building was being completed, Dean Bovey was called to London to be the first Rector of the Imperial College of Science and Technology. He was succeeded as Dean by Dr. F. D. Adams, whose first great step was a thorough remoulding of the curriculum, so as to bring it into harmony with the broader ideas of engineering training which changing conditions suggested.

Canada was then in the midst of the era of railway building, and the number of students, particularly in civil engineering, rose rapidly. The newer universities of the western provinces, which have since grown to such

imposing proportions, existed for the most part only on paper. Thus McGill received the cream of Canadian students, enriched by the influx of a very considerable number from Britain and other parts of the Empire. The staff was enlarged, additional equipment was crowded into laboratories and workshops, and neighbouring buildings were invaded in the search for classrooms.

Then came the war. Class-rooms and laboratories were depleted to an even greater extent than in other faculties. In the number of men enlisted, in casualties, and in the absolute and relative number of honours awarded, Applied Science led all other departments. It is a proud if sad record, in which graduates, undergraduates and past students share alike.

In the two or three years beginning with 1919, McGill, in common with all Canadian engineering schools, was thronged with those who had returned from overseas, as well as with an almost equally large number of students whose entry had been delayed. Unfortunately, just at the time when all the universities were pouring forth graduates in unprecedented numbers, a severe industrial depression occurred, with the result that there were many disappointed hopes and many difficult readjustments. Engineering societies were alarmed by the number seeking to enter the profession for whom there was no employment, and a note of warning was sounded which no doubt had considerable effect in turning the minds of many young men to other fields.

Although a somewhat discouraging period, it was not a bad time for taking stock of our methods and objectives. Probably no body of University teachers is so self-critical as engineering instructors. At this time, under the auspices of the Carnegie Foundation and the Society for the Promotion of Engineering Education, an international survey of the training of engineers was undertaken. In this survey McGill gladly took part. Amongst other means of obtaining information a very full questionnaire was sent to all our graduates. Many hundreds of replies were received, all of which were carefully noted and analysed, and it was very interesting to note the close correspondence of the information we secured as regards both opinions and facts, with the results of the inquiries of other leading engineering schools. The survey placed at our disposal not only the opinions of our own graduates, but the experience and consensus of opinion of all the leading institutions on the continent.

One point upon which the survey threw considerable light was the relative financial success of McGill and American graduates. The impression, which had gained wide currency, that Canadian graduates in general, and those of McGill in particular, were being lost to this country in large numbers, because of better opportunities elsewhere, received very little support from the facts presented. The median reported incomes of our men upon graduation were almost exactly the same as those