

but this consideration for the most part may be summed up and dismissed—as it is summed up and dismissed in all drawing-rooms—in a single compound word, 'fool-proof.' Making a thing fool-proof, and the engineer, as he sees it, has done his bit. In this direction a few engineers have done a great big bit—automatic machinery in some fields creates wonder and amazement in the on-looker. But these instances have been rare—few and far between—and the work of a very small group of engineering minds. And while the word 'fool-proof'—itself symbolic of the mental attitude of the engineering world toward humanity at large—is a word well understood in engineering circles, yet the human element as a factor in the operating of machinery is not taken into consideration as much as it could be, should be, and will be, in time. . . .

"Out of all this emerges a broad general conviction. It is that the engineering mind, taken collectively, is a narrow mind. If it is a narrow mind—and, personally, I believe it is—it is so by reason of the specialized intensive training given engineers in preparation to pursue their profession. Of all the students in any university, 'engineers' are seen least on the campus, least in the gymnasium, least on the track and field. They haven't the time. It would be better for the profession if this were otherwise. Campus and gymnasium are places where the human side is brought out, and it is the human side that is lacking in development in the average engineer. Anything that would tend to develop this in the man would likewise tend to develop it in his profession. Recognition and knowledge of the foibles of humanity would broaden and soften."

As Francis Bacon, Lord Verulam, said in his essays, grant a false premise and a wonderful argument and new labor can be created. Charles M. Horton, the author of the above-quoted article, writes from a false assumption of the mental balance and intelligence of engineers. Dispute the premise, says Bacon, and the elaborate argument falls apart for lack of actual proof.

### SHAWINIGAN WATER AND POWER CO.

The annual report of the Shawinigan Water & Power Co., Montreal, for the year 1917, says that water conditions throughout the year were above normal. The late spring, heavy rainfalls throughout the summer and general conditions throughout the watershed of the St. Maurice River resulted in a river flow considerably in excess of former years.

A continuance of this satisfactory condition is guaranteed for the coming year by the putting into operation of the La Loutre storage dam. This dam has been completed by the company for the Quebec provincial government. Although the amount of work involved was considerably in excess of that anticipated at the outset, the dam was completed some weeks ahead of the contract date, which was January 1st, 1918. The storage lake should be substantially full at the end of the flood period in June, 1918, and from that date the full benefit of the storage water will be available to the company and its allied interests.

The company also constructed a plant for the Canadian Electro Products Company, and increased the capacities of two other subsidiary companies, the Electrode Company and the Canada Carbide Company. A certain amount of new construction work was also occasioned by the development of the company's power business. The

new work constructed at Shawinigan Falls by the Canadian Aloxite Company, a subsidiary of the Carborundum Co. of America, will require about 12,000 h.p. The work is now practically completed and the equipment is being installed. The plant will be in full operation at an early date.

The new business written by the company has exceeded that of the previous year, which was the record up to that time, and should increase the demand on the company's plants, says the annual report, by 35,000 h.p. The general industrial situation throughout that part of the province of Quebec served by the company, has been one of intensive operation of existing industries, says the report.

Referring to the coal shortage and its effect on some power plants, the report states that "in general it may be said, as regards hydro-electric development, that time is on its side and the future cannot fail to be advantageous to it."

### PERSONALS

S. V. KENDALL, managing director of William Cowlin & Son (Canada), Limited, contractors, has moved his office to 154 Simcoe Street, Toronto.

A. M. MORTON, B.A.Sc. (University of Toronto) and lately with British Forgings, Limited, is in charge of the new chemical laboratory of the Alloy Steel Works, Limited, Toronto.

B. F. HAANEL, B.Sc., chief of the Division of Fuels and Testing, Mines Department, Ottawa, addressed the Royal Canadian Institute, Toronto, last Saturday evening on "The Fuels of Canada."

H. I. ARMSTRONG has been elected managing-director of the Alloy Steel Works Company, Toronto, a new corporation which has been formed to take over and operate the Moffatt-Irving Steel Works, Limited.

A. V. DELAPORTE, B.A.Sc., chemist in charge of the experimental station of the Provincial Board of Health of Ontario, has joined the overseas forces and is now in England qualifying as an officer in the Royal Engineers. He had been attached to the Hydrological Corps with the rank of captain and served at the Toronto Exhibition Camp last winter.

HON. W. J. HANNA, K.C., formerly Ontario provincial secretary and more recently Dominion food controller, has been elected president of the Imperial Oil Company to succeed Walter C. Teagle, president-elect of the Standard Oil Company of New Jersey. Mr. Hanna has been the legal adviser of the Imperial Oil Company since the earliest days of the company's existence and latterly has been one of its directors and vice-president, although his chief activities for several years past have been of a public nature.

### OBITUARIES

Flight-Lieut. ROSS HARRISON, of Kingston, who was for some time inspector on the construction of the Canadian Northern Ontario Railway, and later employed on munitions by the Canada Locomotive Co., Kingston, was instantly killed in a flying accident at Fort Worth, Texas, on December 23rd, 1917.