"squared stones, a method which I do not approve. What we "want in such a wall is ample weight, and good vertical binding, "and this can be secured by building in stones of from two tons to "six tons in weight, practically as they come from the quarry, "and surrounding them with smaller stones and good concrete well "rammed in so as not to leave any interstices."

He then goes on to say, alluding to dams which he is now building across the Elan River: "We are getting, in the Elan walls, "say nearly 50 per cent of solid blocks, and the whole structure "will weigh when complete 157 to 160 lbs. per cubic foot, and will "practically be monolithic."

And finally, if it be argued that the writer, in assuming stone masonry to be only of double the weight of water, while it is in reality about 20 per cent. heavier, and that he is thus going beyond his own theory of weight of dam equal to twice that of water impounded, he can only urge his theory as rendering assurance doubly sure by thus further increasing the factor of safety.

This subject of dam building is becoming one of vast importance, as all the water powers of the country are being taken hold of for power purposes, or for water works, which are also power problems whereby water may be forced up to a given level without the cost of pumping, and as no one but an engineer can cope with such problems as the harnessing of the rivers of the world to give power to mankind—the truth of the writer's motto, "The Engineer the master spirit of the age," heading an article of his which appeared in the "Canadian Engineer" of July and October last, and reproduced at page 293 of the London "Engineering Times" for September last, is indisputable—for as he truly says in his last paragraph under the above heading:

"There is, however, another and more summary way of judging "of the merits and qualifications of an engineer in comparison to "those of persons exercising other callings. It is this: Of an "engineer or almost any other man of common sense, you can "make an alderman, a mayor, a premier, a president, a king, "or a Kruger; and this at, so to say, a moment's notice; but of "none of these can you make an engineer without years of study, "practice and the keenest of observation."