

Australasia	92,648,000 ozs.
United States	89,353,000 "

This probably includes Canada and amply proves that, population and age considered, Australasia is really the richest mining country in the world, unless development in Africa place it in the first place. The idea seems prevalent that Canada is an exceptionally rich mining country. This I hold to be a fallacy. Canada's resources in minerals are large and are capable and worthy of better development. It is, however, in the last degree unlikely it can ever vie with the smallest province of Australia. Canada is essentially an agricultural and pastoral country, and on the vigorous development of these will her future prosperity mainly depend. The produce from these is always an increasing one, while that from mining is always diminishing and must eventually terminate. Of the three kingdoms of nature only one is incapable of reproduction and therefore mortal. The chief and greatest value of gold and gold mines, especially in a new and unexplored country requiring people to work and develop its reproductive resources, lies in its power to attract such people rapidly and in such numbers as no other inducement will succeed in accomplishing, and therefore every Canadian must wish the utmost success to the effort now being made to develop the gold mining industry in the Dominion, but not by the plan of the modern miner who, unlike the ancient miner, begins by opening a broker's office in a leading thoroughfare, instead of a tunnel in a mineralized hill side. Canada in eight years has not produced as much gold as Victoria often in a single year. In 1894 Victoria yielded 673,680 ounces, while Canada, from 1886 to 1893, yielded only 496,896 ounces.

GOLD PRODUCED IN VICTORIA IN QUINQUENNIAL PERIODS SINCE 1851.

	Ounces.
1851-1855.....	11,218,772
1856-1860.....	12,712,946
1861-1866.....	8,341,464
1866-1870.....	7,105,820
1871-1875.....	6,130,962
1876-1880.....	4,136,753
1881-1885.....	4,081,269
1886-1890.....	3,111,373
1887	617,751
1888	625,026
1889	614,839
1890	588,561
1891	576,400
1892	654,456
1893	671,126
Total.....	61,187,518

The deepest mines in Canada have not yet exceeded 700 feet in Nova Scotia, and I believe not 500 feet in Ontario. Now in view of the relative dates of quartz mining in Victoria, and in Canada, and the recorded yield of the quartz, the quantities crushed and the depths obtained are not complimentary to the enterprise and energy of the Canadian mines. As regards Nova Scotia, at least, the conditions are precisely like those in Victoria, and there seems no reason why the veins in Nova Scotia should not be worked to depths as great as those of Victoria. To depths already reached, the average richness of the quartz crushed has been greater than that of Victoria, and the returns should certainly be much greater than they have been. In British Columbia, unlike Nova Scotia, Quebec and Ontario, nature has given you easy access to depths of thousands of feet beneath the surface, and the facilities for mining and mineral development are far greater than they ever can be in the other provinces.

STATUS BY EXAMINATION.*

No profession requires more education, theoretical and practical, and more training of the mind, than the profession of a civil engineer, and to be an associate member or member of the Institution should be a credential of both. Are we quite certain that the present system of gaining these credentials is satisfactory?

You know what the by-laws require. The council carries out their requirements as carefully as possible; but in my opinion, the present system leaves much to be desired, and the scientific education of a candidate must be taken more or less on trust. It seems to me that, if our engineers are to hold their own in the future, we must keep abreast of the training of foreign engineers. In France, Germany, Russia, Belgium and Holland, the state sees that all candidates for employment as engineers are, so far as technical education is concerned, thoroughly equipped for their work. The same results can only be obtained in this country through this Institution, and we should see that any credentials conferred by us are based on undoubted qualifications. Ours is undoubtedly a learned profession, and the study necessary for a young engineer should be, at least, as complete as that for holding a junior brief. We have as instructive a mass of technical literature as physicians and surgeons, and practical training is as necessary for an engineer as for a doctor or surgeon: but every medical student has to pass a whole series of examinations, both theoretical and practical, before he can be admitted to practise his profession. The same remarks apply to the other learned professions.

Why should we be content to accept any lower position for our calling, to take matters of education and training on trust, and to be content with lower standards? It is sometimes said that our great predecessors could not have passed a scientific examination, and that they, as may be the case with future heaven-born geniuses, would thus be kept out of the Institution. Our distinguished predecessors would, I feel sure, have passed such an examination as would have represented the knowledge of their day with the greatest ease; and for the future, with the present possibilities of education, the coming genius will pass with honors any examination adapted to an average man. No doubt technical schools do much for us, but young men leave them, as a rule, soon; and before a man becomes an associate member he should be able to show that he has not only had a distinctly scientific education, but has known how to make a practical use of his education, and to apply common sense to his work. Nor should we be content with a low standard of general education, the recently adopted examinations as to which are a distinctly forward step.

The remarks I have made point unmistakably to our having qualifying (not competitive) examinations for our status of associate member. I think that the admission to the class of full member can be more easily dealt with by the council. It may or may not be desirable to examine for the higher position, but I feel strongly that there ought to be an examination for the lower classification, by which course we shall not only guarantee the public that every member of this body has had a good general, scientific and practical training, but also confer on our brethren very great advantages in all respects. I have conceived it my duty to bring these matters before the Institution from the great interest and affection which I have for my profession, and from my earnest wish that it should advance and prosper in the future as it has done in the past.

* Abstract from inaugural address by John Wolfe Barry, C.B., F.R.I., President of the Institution of Civil Engineers, England.