source. The Trias fossils will form the nucleus of a collection of New Zealand type fossils, which is much needed for the instruction of students in the geological division.

In addition to the above donations, the receipt of a collection of West Australian rocks and gold-ores from Mr. Max von Bernewitz, of Kalgoorlie, and a collection of Victorian rocks and minerals from Mr. O. G. Adams, Director of the Stawell School of Mines, has to acknowledged.

Graduates of Mining School.—The *Australian Mining Standard* of a recent date supplied the following interesting information relating to the present positions occupied by a number of old students of the school in different parts of Australia: W. A. McLeod, Director of the Charters Towers (Q.) School of Mines; O. G. Adams, Director of the School of Mines, Stawell (V.); A. C. Boydell, lecturer on assaying, metallurgy, mineralogy, chemistry, and petrography, Bendigo (V.) School of Mines; Thomas Esdaile, lecturer on assaying, metallurgy, and chemistry at the South Australian School of Mines; A. Purdie, Director, Government Technical School, Perth (W.A.); P. J. McLeod, University and Technical School, Hobart; W. H. Baker, formerly of the Karangahake School of Mines, Director of the Launceston (T.) School of Mines; F. B. Stephens, former Director of the Stawell (V.) School of Mines, but now manager of the Cassilis Gold-mining Company, Gippsland (V.); and Murray Russell, Government Inspector of Mines, Queensland. In addition to these, the following old students of the school hold responsible positions in New Zealand: F. B. Allen, Director of Thames School of Mines; Percy G. Morgan, Director of Waihi School of Mines; D. V. Allen, Director of Coromandel School of Mines; F. T. Seelye, lecturer, Waihi School of Mines; and A. Montgomerie, superintending engineer, Kauri Gold Estates (Limited), Auckland goldfields.

It is also a pleasure to record that Mr. D. B. Waters, our lecturer in assaying and metallurgy, and Dr. P. Marshall, lecturer in geology and mineralogy, are old students of the Otago Mining School. It is further gratifying to note that J. Malcolm Maclaren, an old student, secured the 1851 Exhibition Research Scholarship for 1901. Mr. Maclaren is at present investigating the gold veins of Great Britain and Ireland, and has been favoured with permission to conduct his laboratory research work in the Davy-Faraday laboratory of the Royal Institution in London.

Besides these, many students of the Otago Mining School fill positions as assayers, metallurgical chemists, cyanide managers and operators, mill-managers, mine-managers, and mining engineers in New Zealand, the different States of the Australian Commonwealth, in America, South Africa, and Newfoundland.

Progress of Mining.—The unexampled progress of gold-mining in all parts of the world during the past decade can be traced directly to the introduction and successful operation of the cyanide process of gold-extraction. Many mines that were formerly closed down, or working at a loss, are now paying regular dividends; and piles of tailings, at one time regarded useless sands, are yielding a profitable return through the application of this process.

The cyanide process depends on a series of highly complex chemical reactions, and for this reason is probably the most difficult and technical of present-day metallurgical processes. Its successful introduction in the Australian Colonies and New Zealand, often under the most adverse conditions, is a splendid tribute to the value of the training imparted in our mining schools. The process may truly be said to have revolutionised the art of gold-mining, which now occupies a foremost position among the established industries of the world. In the past twelve years it has already added over £50,000,000 to the wealth of the British and American peoples, and its possibilities in the future seem almost without limitation. And it came most opportunely. It is almost certain that, had the process been invented twenty years ago, its introduction had been well-nigh impossible through the lack of men possessing the high technological skill required for its successful operation. But it so happened that it came when the mining schools were fairly established and in full swing. The schools were called on to supply the men to work the process. In a sense they were placed on their trial, and for the first time since their establishment were required to justify their existence. This period was an anxious and critical time in the history of our New Zealand mining schools, and writing now, ten years after, it is gratifying to record that the reliable and successful work of our students, who were thus suddenly called upon to take the place of the old-time millman and battery-manager, dispelled for all time any lingering doubts of the value of a technical mining education. Since filling all the available positions at the New Zealand mines, the overflow of our certificated students has found its way to responsible positions in connection with the process in all parts of the world, wherever gold-mining is conducted on scientific principles.

If the colonies are to stem the tide of foreign competition, greater facilities must be provided for the acquirement of a technical training in the higher branches of applied science. It is not so much in the manual occupations that we feel the stress of foreign competition as in the domain of mining, metallurgy, engineering, chemistry, electricity, and manufacturing industries. Mining has already afforded a wide field for hundreds of our more intelligent youth, who have discovered not only a remunerative source of employment for themselves, but one in the pursuit of which they contribute largely to the wealth of the nation. Hitherto mining is the only industry in New Zealand in connection with which any serious attempt has been made to introduce technical education. That the results have already more than justified the expenditure is clearly shown in the more systematic development of our mines and the yearly increasing value of our mineral productions. There is, therefore, now no need to go to Germany or America to discover that money spent on technical education is money well invested on behalf of the community.