1874, "The Statistical Atlas of the United States"; 1876, "The Wages Question"; 1877, "Money"; 1879, "Money in its Relations to Trade and Industry." From May to November, 1876, he was chief of the bureau of awards at the Centennial Exhibition at Philadelphia. In 1878 he was one of the commissioners representing the United States at the international monetary conference at Paris. In 1879 he obtained leave of absence from Yale College to organize and conduct the tenth census. He resigned his office as superintendent of the census to enter upon his duties as president at the Institute of Technology.

In view of such a record as this, it can only be said that there is every reason to believe that President Walker will be as successful in his new duties as he has been in those of past years; and such being the case, a long and prosperous administration may be predicted.

**Mining and Metallurgical Laboratories.**

MR. WM. LANT CARPENTER, of the London University, in his remarks on "Schools at Ballarat," says, "The mining laboratory of this institution is superior to anything I have ever seen, excepting that of the Massachusetts Institute of Technology, at Boston, U. S. A."

It is with pardonable pride that we read the above; and when a thoughtful observer considers the limited space that the laboratories embrace, the fact of the efficiency of our mining and metallurgical laboratories becomes more and more marked. In the mining laboratory — that is to say, where the washing or concentrating of an ore is done, a room of small compass — are the following pieces of apparatus, all of which have been used during the past year by the class of '82: Blake crusher, a pair of Cornish rolls, a sizing box, four sets of jigs, spitzkasten, an Evans table, a five-stamp mill, and a ball mill. To illustrate the practical working of each of these, and at the same time to show how general the work of the fourth-year miners must necessarily be, a short review of the work of these men for the past year will be given.

To mention a fact that is perhaps well known about the Institute, but of which few away from here are aware, may not be untimely: Every student in mining is required to present an original report upon the investigations made by him, either in some geological research or in the mining or metallurgical laboratories. With this idea, the reader can easily see why so much work is done in the laboratories. In working on a mining thesis, — and these are most generally chosen, — the student under whose supervision the work is done assumes the whole responsibility. With the advice of the head of the department he plans the work, assigning the duties of each of his co-workers, calculating the charges, and being present to superintend the work as far as is in his power. The theses that have been presented by the present graduating miners are indications of good, intelligent work, as well as evidences of hard labor.

**Calumet Copper Sand.** — The work on this subject was the stamping of the ore in the five-stamp battery, allowing the powdered ore to flow out with water through screens of a given size. The fine ore was allowed to settle in pans; from here it was passed over the spitzkasten (a concentrating apparatus by which, by the regulation of an upward current of water, lighter parts of the ore are allowed to pass over an aperture, while the heavier — in this case copper — are allowed to settle, and are thus saved) to the jigs (another sort of concentrating apparatus); the fine stuff from the first settling passes on to the Evans table, where it is again concentrated. The products from the different places were all analyzed, and those containing a sufficient amount of copper were put together and subsequently were smelted in the blast furnace.

**Jewellers' Residue.** — After numerous attempts to agglomerate this fine refuse, — sweepings, etc., containing gold and silver, — success crowned the work by the using of sulphate of soda and lime. This caused the fine mass to