The orchestra has already enlisted the interest of the school, and deserves every encouragement. There cannot be too much of this kind of thing in the Institute, where so little encouragement is offered for the improvement of the social and artistic faculties. The truest measure of success in life requires something beyond the immediate training of a professional course of study; there must be some collateral development of the broader parts of a man's nature. It is a part of this culture which the musical societies, wittingly or unwittingly, try to introduce among the students here, for this reason they should be aided and fostered by those who can in a great measure make or mar their fortunes.

I Saw.

I saw
A gentle maiden,—aye, so lovely, too,—
A sturdy youth near by, alack! too true.

I saw
Him there; but where on earth's his arm, I wonder?
Where? Round my girl's waist it is, by thunder!

The Mining Laboratory.

During the past summer, the mining laboratory has been entirely reconstructed and greatly enlarged by the addition of the space formerly occupied by the quantitative chemical department, and the wide hallway and most of the partitions separating the old rooms have been torn down. The broad stairway formerly leading to the basement has been replaced by a circular one of iron, and the space thus gained utilized for the supply and toilet rooms. The laboratory now consists of the following rooms: Assay room, 30 x 35 feet; toilet room, 17 x 19 feet; supply room, 9 x 17 feet; furnace room, 40 x 35 feet; and milling room, 28 x 93 feet.

The assay room, on the site of the old third-year chemical laboratory, has been rendered fire-proof by covering the floor with pressed brick and removing most of the woodwork. There are ten crucible or pot furnaces, each being enclosed with a heavy sheet-iron jacket. Of muffle furnaces there are seven, one using petroleum fuel, one charcoal, two coke or hard coal and three soft coal. The latter will accommodate two men each, offering in all furnace accommodation for a class of twenty. An iron table fifteen feet long, divided into five stalls, answers the various purposes of storage for fuels and tools and pouring room for assays. Posts placed at intervals in front, topped with iron plates, serve for separating the metal from slag. Fifty desks furnished with the necessary fluxes and appliances are provided. Arranged around the walls of the room are shelves for the ore samples and pulp balances. The fine button balances are kept in a separate room, away from dust and heat.

The furnace room has been entirely remodelled by lowering the floor to the level of the cellar and destroying all the old furnaces. The old historic brick blast furnace will be replaced by a small water-jacket furnace, and the following furnaces have been built, viz.: one calciner and chloridizing furnace (with about sixteen square feet of roasting surface), one copper refining furnace (capacity five hundred pounds), a lead agglomerating and smelting furnace of about the same capacity, with a lead kettle, a kiln for roasting copper ores, a cupelling furnace, a small roasting and calcining furnace (hearth four square feet), a small cupelling furnace for treating from five to fifty pounds lead bullion, and two large pot furnaces. An amalgam retort, with forge, vise and work-bench, completes the accoutrements of this room.

The milling room extends entirely across the building. A portion of the room, cut off by a glass partition, is utilized as weighing room, private office and private laboratory. In one end of the room is placed the crushing and washing machinery. The former comprises a Blake crusher, a five-stamp battery and crushing rolls, a Bogardus mill, and a Hendrie & Boltoff sampling mill. The latter (washing machinery), on a lower asphalted platform, consists of a Richards separator, four sets of jigs, Evans table and Frue vanner (one half actual size).

Two settling tanks receive the overflow, and rotary pumps supply the water required. There are three steam tables, for drying ores and prod-