be installed in the near future and will be equipped with Snyder automatic samplers, crushers, rolls, grind-



Track Leading to Ore Piles.

ers and screens, the fuel being delivered from the ore track on the west side of the sampler. Cnalmers Company of Chicago, Ill., U.S.A., and provided with fourteen 6-inch Tuyeres and all the latest appliances known in the profession. In front of the furnace stands a large water jacketed receiver, into which the matte and slag run from the furnace, the slag overflowing into a second settler from which the slag runs into a jet of water under a sufficiently strong head to granulate it and flume it into the lagoon; the matte being tapped from the large settler at intervals and cast into slabs 3x2 feet and 2 inches thick. When cool it is roughly broken and shovelled to one side, ready for shipment.

In the smelter shed on the east are two matte bins, each of a capacity of 40 tons, bucket elevator, matte sampler, one 7x10 Blake crusher, sample grinder and hoist elevator.

The engine and boiler house on the east of the smelter shed and 60 feet distant, is 70×50 feet. In the rear of the boiler is the coal bunker 20×20, over which a spur from the E. & N. Ry. track runs for the delivery of coal for power purposes. An 80-horsepower boiler of the returned tubular type supplies the power for the Allis-Chalmers (Corliss) engine, which drives



A General View of the Smelter.

The water supply for the works has been provided by the E. & N. Ry. Co., who have constructed a storage tank on the west side of the track, 60x30x8 feet deep, which is supplied by a flume one mile in length from the head of Rock Creek. This gives an ample supply of water for the furnaces and for the shotting of the slag at the smelter. A six-inch water main connects the water tank with the smelting works. The smelter building is 81 feet in length by 51 feet in breadth. The charging platform covered with steel plates being 14 feet above the furnace floor is carried on cast iron columns with concrete foundations. ventilator 6x10 feet extends the full length of the building and gives ample ventilation. The building is constructed in a most substantial manner, the framework being of 12-inch squared timber, sided with rustic and provided with windows of ample dimensions. Towards the west end of the building stands the water jacketed furnace, 42x120 inches, built by the Allis-



The Assay Office.
the No. 7 Connersville blower, crushers and elevators