

the tower itself, which he operated, was permanently abandoned at this time.

The early machinery used in the tower was primitive, but it served its purpose and remained for the most part unchanged until 1853. At that time steam took the place of the horse-power heretofore used.¹

&c. of the Mineral Point Bank cashed and to put that institution in a way to redeem its liabilities." This was the last seen of either Banks or Knapp.

¹The following description of the machinery and its working is given to me by Clark Hickox, of Dodgeville: The buildings used in making the shot were three. The melted lead was dropped through a shaft, 120 feet of which was excavated in the solid rock. At the top of this shaft, at the edge of the cliff, stood the melting-house, with two kettles, in which mineral was prepared for dropping. A little to the east of this were an arch and a large kettle, protected by a small roof. Here the lead was tempered by the addition of arsenic, and run into pigs for further use, and here also the imperfect shot was remelted. In preparing "temper," two shot-sacks of arsenic were tied in an iron vessel resembling in shape a wash-bowl, and then the whole immersed in the kettle of molten lead by means of an iron handle riveted to the bottom of the bowl. The pigs thus obtained were used to give the requisite brittleness to the lead from which the shot was made. A small portion would suffice to temper a kettle holding 1000 lbs. of lead. The dropping-ladle was perforated with holes of varying size, and when partly full of melted lead would be tilted gently sidewise, forcing the metal out in drops to form the shot, which falling 180 feet would assume a spherical shape and at the same time be cooled. At the bottom of the shaft, the shot fell into the shot-cistern, filled with water which served both to break the fall and cool the shot.

At the mouth of the horizontal shaft stood the finishing-house, at the northwest corner of which, under a low roof, was the horse-power. This resembled an old-fashioned cider-press; a horizontal shaft ran out from a large cogged wheel (itself turning horizontally) moved by the horse. On this shaft, which ran above the horse into the finishing-house, was a windlass drum which could be put in or out of gear by sliding it back and forth on the shaft. When the car at the farther end of the tunnel had been dipped full of shot, the drum was put in gear; in revolving, it wound up a rope to which was attached the car, which was thus pulled up an inclined track to the mouth of the tunnel. Here the shot was taken out, and the car ran down the track of its own weight after the drum had been put out of gear. From the car, the wet shot was put in a hopper that discharged into an inclined conical drum