both sides of the body of concentrated ore. In this way, in some places, several acres were worked over. When a pit was first opened, horses and carts were used to haul the ore to the washer, but as the mine became deeper, inclined tracks were laid, up which the ore was hauled in small cars. In the open-cut mines of the limestone regions the limestone floor was very irregular. The rock came within twenty-five feet of the surface in many places, but elsewhere it was not reached at the greatest depths. In general, the ore is concentrated to a greater degree where the decomposition of the rocks has proceeded to a great depth, as the ground waters that followed the most open passageways accomplished both the decomposition of the rocks and the segregation of the ore.

In shaft mining the veinlike ore bodies were followed in drifts run at different levels, and stopes were raised to the levels above. Most of these bodies of ore are approximately parallel to the strike of the enclosing rocks, especially in the Cambrian quartzites, where certain layers were more easily replaced than others. Where the ore that was being followed became lean or disappeared, crosscuts were made to either side, or the direction of the drift changed in a haphazard manner. In the operation of some mines it was assumed that more ore would be found by drifting in a certain direction, and if this surmise proved incorrect efforts would be made to find ore in another direction. Pockets of good ore were thus likely to be located after several attempts, and at the same time a few lumps and small fragments of ore would be found while driving the exploratory drifts.

The loose clay through which the shafts and drifts were driven may be said, with little exaggeration, to have been in constant motion from the time mining started until all the openings were filled by caving after mining ceased. Shafts were abandoned on account of squeezing, which pushed them out of plumb, and drifts tended to close through the pressure, which at times became so great that large timbers were broken or shoved out of position. In most mines it was necessary to timber both shafts and drifts very carefully, and the close timbering prohibited any examination of the occurrence of the ore except at the working face.

In most mines there were no ore chutes or loading pockets, as the activity of the mines was of too short duration to warrant their construction and also the great amount of clay present would have prevented the ore from running through them. In some mines the ore was loaded in buckets that were placed in a small car, which was then pushed to the bottom of the shaft and hoisted. In other mines small cars were used without the buckets.