

PROPOSED SCRAPER LOADING RAMP

A portable ramp for loading mine cars in crosscuts and drifts with tigger and scraper.

To be built of 2" and 1½" pipe and fittings, 2½" x 2½" angle iron, and 3/16" iron plate.

The following pages of the Engineering & Mining Journal of May 1947 are more or less applicable:- Photo of ramp page 88; "New ways to Apply Scraper Hoists to Mining" pages 60 to 63.

TO SET UP: Assume ramp in position for moving, i.e. - Frame (legs, grizzley, tigger assembly) setting on pieces of plank on top of mine car with legs folded up. Aprons and scraper on timber truck.

1st Clean track to toe of muck pile by hand and set footing blocks (if these are found necessary) at 3, 8, and 12 feet from toe of muck. Push timber truck with aprons and scraper up to muck pile.

2nd Push car, and frame on it, to point where Rear legs will drop down on to block, connect horizontal braces from Rear to Front legs and shove and lift until front legs come down to their footing blocks, and pin the diagonal braces. Adjust leg lengths by screwing adjustable ends until all four legs bear.

3rd Fold down legs of upper section of apron and pin braces. Lift rear end of apron into position so hooks engage pins on frame. Lift lower apron into place so hooks engage. Adjust length of apron legs so the bottom edge of the lower apron rests on floor.

4th Set expansion eyebolt for snatch-block at face (in un-blasted burn-cut hole drilled extra long), or alternatively set horizontal bar at face for snatch-block. Connect ropes to scraper and air to tigger and start scraping.

Tearing down will be the reverse of this, leaving aprons and scraper on timber truck, and "frame" on top of car with legs folded up.

Setting up should take only a few minutes.

If the ramp should tend to move toward the face when in use, clamps holding a bar across the rails in front of the front legs would prevent this.

If there should be a tendency for the pull of the tigger to raise the rear end of the frame, this could be prevented by turnbuckles from rails to rear legs (sketched on Section C-D) or a sprag from the frame to the back of the drift.

Capacity should be mostly dependent on how fast cars could be spotted. Sketches indicate that the ramp will work in a drift 6 feet wide making a maximum turn of 30 degrees in 12 or 14 feet. A sharper turn would require a wider drift.