



three and a half inches, number of strokes sixty, capacity seventeen gallons per minute.

Upon the surface in addition to the power plant, already referred to, there is a large and costly trestle, which had to be built from one side of the creek to the other, 1,000 feet, in order to give access from the workings to the screen house; it has an elevation of thirty feet, with four parallel tracks, and the locomotive runs right up to the dump. There is a large screen house containing a modern equipment of shaking screens, twenty feet long by five feet wide, with a working speed of 100 strokes per minute by six inch stroke. The inclination of the shaker is seventeen degrees dip towards the discharge. The large coal passes over this screen to a travelling picking belt, sixty feet long and five feet wide, which moves at the rate of forty feet per minute and discharges all the large coal into the cars. Nuts pass through the first screen and fine through a second screen, so that there are three divisions of coal; all the fine is taken to the coke ovens. The tippler, which plays an important part in dealing with the whole of this output is a Mitchell. It is capable of dealing with 2,000 tons in ten hours, and is so arranged that the falling cars release the wheel grips of the empty car; after it has

been emptied they run forward down a five per cent. grade for a distance of fifty feet then back on another track, falling five per cent. for the same distance to the side of the tippler. Having reached this point by gravity it is taken hold of by a "creeper chain," which lifts it up a fifteen degrees incline to a sufficient height to permit it again to run forward by gravity to the empty track, ready for attaching to the locomotive. The whole of this plant which is operated by an engine 12 x 12, the motive power being conveyed by chains and sprocket wheels, was manufactured by I. Matheson & Co., of New Glasgow.

The surface tracks are arranged in the "gridiron" fashion being parallel and connected both at the extreme elevation and at the lowest point with the branch line. When a train of empty cars is brought in it is pushed above the top switch and left there; the cars are then allowed to fall by gravity, as required, and are diverted by the switch to whichever track is necessary. Afterwards they fall by gravity also below the screen house to the siding where the out-going train is made up, in this way no mechanical power whatever is required on the surface. The grade of the siding is .75 degrees.

The coke ovens are erected five miles from the mine, at Fernie,