

up the canyon—grow small pines, cedars, ferns, and mosses, which, in connection with the gray walls, snow-capped mountains, glistening waterfalls, pure air and golden sun, presents a picture of rare beauty.

Just above, on the left of the station, away up on a projecting cliff, 1,000 feet above the road, stands a granite column which measures $66\frac{2}{3}$ feet in height, from the pedestal-like cliff on which it stands. On each side of this column, and receding from its base, is a little grotto-park, filled with nature's evergreens, and surrounded on three sides and on the top with rocks of every size and shape.

Finding that this granite column has had no name, we name it "Humphry's Peak," in honor of the very gentlemanly superintendent of the road.

At Wasatch we "change cars," taking those of about the size of an ordinary hand-car, fitted up with seats that will comfortably accommodate about nine persons, besides the knight of the whip—who chirrups the "broad gauge mules."

About a half-mile above the station we enter the snow-sheds, which will continue for *seven* miles, to the end of the track at

ALTA—a small mining town, at the head of little Cottonwood Canyon. The end of the track is on the side of the mountain about 200 feet *above* the town of Alta, and about 500 feet *below* the mouth of the celebrated Emma Mine, which is a little further to the east, and opposite the Flagstaff Mine, which is about the same height above the road.

The town of Alta is at the bottom of the canyon 200 feet lower than the end of the railroad surrounded with mountain peaks, which are covered with snow eight months of the year, and at all times surrounded with an eternal mantle of evergreen. It contains about 500 population, all of whom are engaged in mining and kindred pursuits. There are several stores, express, telegraph, and postoffice, besides several small hotels, chief of which is the Adolph.

To the north, over the mountain two miles is the Big Cottonwood Canyon; to the south, three miles, is the Miller Mine, and American Fork Canyon; Forest City is four miles. Three miles east by trail is Crystal Lake, a beautiful sheet of water—the angler's paradise.

The principal mines near Alta are, the Emma, Flagstaff, Grizzly, Nabob, Kate Hays, Consolidated Alta, Laramie, Prince

of Wales, and 1,800 others, located within five miles. The business of the railroad is the transportation of ores and supplies to and from the mines. Hundreds of cars are loaded *daily* with ore that is taken to the valley to be smelted or are sent to San Francisco, the East, or to Swansea, Wales.

For novel methods of hauling ore to the depot, see ANNEX No. 24.

The sheds over the railroad are seven miles in length, and are made in various styles of architecture, more for *business* than beauty, the style being adopted according to circumstances. They are, however, in all places constructed of heavy material, rocks, round or sawed timber, and built in the most substantial manner. In one place they are in the shape of a letter A, sharp peaked; in other places, nearly upright on each side, one side higher than the other, with a sloping roof. Again the lower hillside is built with a little slope toward the up hill side, and long heavy timbers from the top of these uprights slope up onto the mountain side, resting on a solid granite foundation leveled to a uniform grade, for that purpose.

Where the latter plan has been adopted, there is danger of snow-slides which are more likely to occur, in fact, have occurred a number of times since the sheds were constructed, and each time, the snow and rocks passed over the shed into the canyon below, without causing one cent's worth of damage to the road or shed.

The length of this road, where it is operated with mules, is seven miles long. As before stated, the grade is 600 feet to the mile; the curves are in places 30 degrees, and not, as once stated in the "*Railway Age*," 30 curves and 600 foot *gauge*. But we suppose that Col. Bridges, when he wrote that, was thinking about those "broad gauge mules."

Returning, the mule power that took us up is no longer in demand; the knight of the whip now mans the brakes, and away we go around the *Age's* 30 curves, to the valley below, "change cars" at Sandy, and are once more headed for the south, on the Utah Southern railroad. A short distance south, we pass the McIntosh Sampling mill, on the west and another on the east.

Sampling is testing such ores as are presented in quantities sufficient to enable the sampling company to give certificates of their value, and then the ore is sold at the certificate rates. One mile further is the Mingo Smelter of the Penn. Lead Co.