Livermore Pass. On the new road there are no grades; on the old, there is 740 feet altitude to overcome, which, in the transportation of freight, is an important item.

Ellis—is 5.2 miles from Bantas, west, situated in the midst of a beautiful valley, which is rapidly settling up. The coal mines of Corral Hollow are fourteen miles distant from this station to the southeast, connected a portion of the way by railtrack. The "Central" Co. use large quantities of this coal—besides transporting it to San Francisco, and other cities and towns. Since leaving the last station we have gained altitude, this station being 76 feet elevation. Another engine will be attached here, as the grade increases rapidly after leaving this station until we get to the summit of the mountain.

Midway - formerly called "Zink House," is 5.7 miles from Ellis; elevation, 357 feet. Soon after leaving the station, we enter the bluffs, pass through deep cuts and over high fills, our two iron horses puffing and blowing furiously as they labor up the heavy grade. These bluffs are heavy sand, and almost destitute of vegetation. To our right can be seen the old wagon road, but now almost deserted. Still upward and onward, the long train thundering around this jutting point, and over that high embankment, twisting and turning, first to the right, and then to the left, like some huge serpent, while the bluffs seem to increase in height, and the canyon is narrower and darker atevery turn, until, at last, we are plunged into total darkness, and the tunnel of Livermore Pass; elevation, 740 feet. This tunnel is the only one on the road from Sacramento to San Francisco; is 1,116 feet long, supported by heavy timbers. (See illustration, page 207.)

Passing through the tunnel, our descent is rapid, through a narrow canyon, down into one of the loveliest little valleys in the whole country, and 7.9 miles from

Midway our train stops at

Altamont—This is a small station at the foot of the mountain. Speeding to

the westward 8.1 miles, brings us to

Livermore—a thrifty town of about 1,200 inhabitants, most of whom are engaged in agricultural pursuits. The town is the center of Livermore Valley—one of the most fertile in the State—is about 20 miles long and fifteen miles wide, surrounded by the Contra Costa Mountains, and their numerous spurs. To the north, oaks, some with long, drooping moss-

away above the head of the valley, rises Mt. Diablo, the meridian center of the Pacific coast.

At the station are several very large warehouses for storing grain—as this is a productive grain valley—several large hotels, some stores and many fine, costly residences. Here are particularly noticeable the eucalyptus, or Australian blue gum tree; we have seen it in a few places before, but from this time forward they will be found numerous, in some places comprising immense groves. These trees are planted along the sides of the streets, around public buildings, in the grounds of private residences, and by the Railroad Company, in immense quantities. The latter had 300,000 of these trees growing beside their road and around their stations in the year in 1877, and we understand 500,000 more are to be set out as soon as they can be procured. One peculiarity of this tree, besides its being an evergreen and unusually thrifty, is, that it will grow on the most sandy, alkaline, dry and barren soil, and it is said to be a sure preventive against chills and fever, where it is grown in profusion. Some claim that it is fire-proof, and that shingles or plank sawed from these trees will not burn, and for that reason they are very much esteemed in Australia—its native country—and from which the first on this coast were imported. There are 125 known species of the eucalypti, about 50 of which are to be found in California.

Leaving Livermore, the ground is covered very thickly in places with white, water-worn pebbles, from the size of a mustard seed to that of a bird's egg; when the ground is bare of grass or grain, they show very plainly.

Pleasanton—is reached 6.1 miles west of Livermore, after crossing a long bridge over Alameda Creek. The town contains about 600 population and is beau-

tifully situated on the western edge of the valley, and is a thrifty, substantial town.

Leaving the station, the mountain again looms up directly ahead, and it looks to be impossible this time to get through it; but soon the train passes around, or through several mountain spurs, and emerges into a narrow canyon, down which ripples the sparkling Alameda Creek. The bluffs on each side are steep, and covered with scrub oaks, wild oats, and bunch grass. Sycamore trees are to be seen, also white and live