without the town limits. The majority of the settlers at present are Mormons, though the new-comers, especially miners, are chiefly Gentiles. A large number of men are employed in the shops, and the present population of the town is about 800 . Coal is brought by the railroad, several extensive beds lying along the route, and timber is floated down from the mountains. The mining and agricultural interests will develop together, rendering mutual support, and a large and prosperous population will ere many years occupy the valley of Snake River.

## THE CANTILEVER BRIDGE.

The cantilever bridge is described ns one of the greatest triumphs of modern engineering science. The one now just completed at Niagara is 245 feet above the rushing torrent below, and it is not dissimilar in appearance to an ordinary truss bridge, although erected on an entirely different plan. At the water's edge, on each side of the river, excavations were carried down until solid rock was reached, when massive blocks of beton or cement were firmly placed in position. Upon these beton blocks were built pillars of masonry of the most substantina character, carried up fifty feet above the surface of the water. On these rest two steel towers, rising 150 feet above the masonry, and upon these were set the steel superstructures. The design is such that after the arm from the shore to the tower is completed and anchored the river arm may then be built out, one panel or section at a time, by means of great travelling derricks, and be self-sustaining as it progresses, balanced by the weight of the shore end. After one panel of twenty-five feet is built and has its bracing adjusted the travelling derricks nre moved forward and another panel erected. Thus the work progresses, section by section, until the ends of the cantilever are reached, when there still remains a gap of 125 feet to close. Into this will be swung and suspended from the cantilever arms an ordinary truss bridge, forming the connecting link and completing the structure. Compensation for expansion and contraction is provided for by an ingenious arrangement between the ends of the cantilever and fixed span, allowing the ends to move freely as the temperature changes, but at the same time preserving perfect rigidity against the side pressure from the wind. There will be no guys for this purpose, as in the suspension bridge, but the structure will be complete within itself. Neither will there be any of that motion noticed on a suspension bridge as a train moves over it.

The total length of the bridge proper is 895 feet, divided into two cantilevers of 375 feet on the Canadian and 395 on the American side, supported on steel towers rising from the water's edge, as above described. A fixed span of 125 feet is suspended from and connects the river arms of the cantilevers. The clear span across the river is 500 feet, being the longest double-track truss span ever built. In fact, but one bridge on the cantilever plan has been built previously; that across the River Tay, in Scotland-a famous structure-which takes the place of the one that fell on a very stormy night in 1880 , as a train was passing over it.

## STAGING AT NIGHT.

To my youth and even my earlier manhood stages were an unknown quantity. To be sure, such conveyances were occasionally heard of, but the name was generally associated in my mind with the delicate attentions of road agents and Indians. I know more now. We all know more some time. Even the dull wit who has passed successfully through the birchen reign of the village pedagogue, the shower of newspapers and books of information and travel, and even listened for hours to the wise saws of the oldest inhabitant, without learning more than the hours when he must appear at the family table to appease his appetite, finds upon entering the busy world without his little circle a master whose lessons can neither be avoided nor forgoten, and the great teacher is named Experience. My usual faculty for taking hold of the hot end of the poker has kept this instructor constantly busy imparting to me valuable information, but not always in the most agreeable manner. My first introduction to staging consisted of that most undesirable of all stage experiences, a night ride in the mountains, and the opportunity to tench me a lesson was not neglected by the master.

Several years ago I went to California from the Enst, and decided to take an overland trip to Portland, stopping for a time at Yreka, where funds were awaiting me. Arriving at Redding, the northern terminus of the Central Pacific, at nine coclock in the evening, tired and sleepy, I determined to go to bed at once, expecting to be called early in the morning to take the stage for Yreka. Stepping up to the hotel bar I inquired of the proprietor, who was dexteronsly mixing a coektail for an awaiting customer, when the stage left, when it arrived at Yreka and what was the fare. "In fifteen minutes; to-morrow night at nine o'clock; seventeen dollars," he answered, as he shoved the concoction towards his thirsty customer, grabbed a glass with one hand, a piece of ice with the other, put some water in the glass with the ice, and skillfully pushed it toward the drinker. He then spread both hands upon the counter, turned his eyes full upon me and smiled, as much as to say, "Well, what's yours?" I turned awny, but not until I had caught his look of surprise at my not wanting anything to drink. Until I went to California I had always considered the physical essentinls to be food and drink, but I noon learned they were drink and food.

A hasty inventory, taken slyly in the corner, revealed but 819 , cash assets, which left a margin of only $\$ 2$ for meals on the route, and firmly convinced me that this was my stage. The fare was quickly paid, and a big fellow in a red shirt, with a sear on his face and a wreath of tobaceo juice encircling his mouth, took charge of my trunk and strapped it on the stage. He was the driver, and consequently a personage of no small importance, equal, if not superior, to the hotel clerk; so when he asked me if I would ride with him or on the inside, the temptation was great, but I resisted, and said, with the air of one who had owned several stages from boyhood and

