

most all faro—there was some roulette, chuck and the like, but the 'gams' in the old days wanted faro or poker. That was the time when there were real sports, too. What do you think of a man with \$2,000, no shoes on his feet and a deep snow on the ground. Well, one time there was a gambler named Cotton went broke. He was in the hardest kind of luck and couldn't raise a stake. He loafed around the gambling house till his clothes got sleek and fringy and his shoes were full of holes.

"He was in the old Senate, down near the police station. A friend came along and lent him \$10. Cotton bought a stack of chips and went at the faro layout in dead earnest. Luck was with him and he stacked up the chips higher than a cat's back. He played fast and furious all night. At one time he had nearly \$2,000 in front of him on the table. There was snow on the ground, it was cold outside. Cotton didn't own an overcoat and there were holes in his shoes that you could throw a cat through. His luck switched, but he never stopped. He lost that \$2,000 and bet the last dollar of it on a turn, just as game as if he had a million in his pockets. Then he got up and yawned, borrowed fifty cents to get a breakfast and walked out into the snow. This Cotton was a sport for you."

"Great times, eh," said a man who had bought a ticket on the next race and sat down near Findley.

"I should guess yes. Police never bothered us then. They have eighteen policemen on the force and I've seen half of them in a gambling house at once. And that reminds me. One time I was turning a roulette wheel in Fourth street near Main. Eight big coppers were sitting around the table betting like a house afire. All of a sudden the door opened and Tom Speers stepped in. Those coppers raised like a flock of blackbirds and began to talk about arresting me. The chief spat several times very rapidly, took a good look at the policemen and walked out the door. Then there was a great rustle among the policemen. They ran out every door. Next morning when Chief Speers went to his office he found half of the boss politicians in town waiting there to make a talk for the policemen. These coppers got a lecture that they never forgot, but that was all."

"Some big plays came up in those times, I suppose," suggested the man who had edged in to listen.

"Yes, the heaviest player who came around was 'Texas' Thompson the killer. He used to bet everybody to a standstill. Once Thompson came into the Senate and pulled a chair up to the faro layout. He didn't sit down in the chair, he got up on the back of it and planted his high heeled boots on the seat of the chair and began to set the chips around. He sat on the back of that chair fourteen hours and when he got down he was \$4,500 winner."

A man handed Findley a cigarette, but he gave it back. "I don't smoke," he said and he went on:

"Nowadays we have got nothing but pool rooms and craps. Why, do you know a pool room pays \$9,000 every month to the telegraph company and it all goes to New York. That don't do a town any good. I guess we'll never see any more of the good old days."

Among the cluster of men who sat listening to Findley was William H. Christie, the veteran bookmaker and sporting man.

"Billy" Christie knows more about the history of sporting men and gamblers than nearly any man in town. He was in partnership in a pool room with Frederick Remington, the artist, before Remington became famous. He

worked in the old Marble Hall on Main street, as far back as '72, and those days he knew every gambler of prominence in the West.

"I remember when big games were plentiful here," said Christie. "Such fellows as Canada Bill, Van Triplett, who we called 'Old Trip,' Charley Rose, Dutch Charlie and Alex Porter used to make the Marble Hall their hang out. Canada Bill was the most unique character I ever knew. He was a great hand at three card monte; he could handle three cards, I guess, when he was born, because I don't think any man could have learned anything to the point of perfection that he handled monte. Bill was an English gypsy. He had little beady eyes, and always dressed like a farmer. He won fortunes and gave his money away. He knew or cared nothing about the value of money and his favorite game was old fashioned casino. I've seen Bill and Dutch Charlie play casino for \$1,000 a game. Bill always slept in a chair; he never had a room. One time he took a notion that he would dress up and stun all the flashy sports in town. He appeared at the Marble Hall dressed in a short, black bombazine coat, a broad brimmed plush hat, plush vest and blue jean trousers. He looked like a Rube made up for the stage."

"These gamblers used to have some great fun around the Marble Hall. 'Spence' Rogers, the Westport sport, used to be bragging all the time about the fox chase that he took part in. One time, just to show that he was a fox hunter, he brought in a fine silver fox and had it stuffed and put it over the bar. Canada Bill had acquired a breech-loading shot-gun somewhere. It was the first one of the kind any of us has ever seen. He was showing how it was loaded and handled and 'Old Trip' took it up. 'It ain't loaded,' said Trip, and he pointed it at Roger's stuffed fox. Billy Carroll, the variety man, was standing near with a high hat on. 'Trip' let both barrels go and scattered Roger's fox all over the house. Carroll thought he was shot and fell over on the floor."

Another race was on. The caller's shouts and the jingle of money drowned the voices of the gamblers, but they talked on about the old days when there was plenty of "big games."

#### A TOUGH ENGINEERING PROBLEM

The Coolgardie project proposes the delivery of 5,000,000 gallons of water per day at a point in the mining regions of Australia, 328 miles from the reservoir in the mountains near the coast, where it is impounded. To force water through a pipe line for this long distance not only must its friction be overcome, but it has to be actually raised a total verticle distance of 1,320 feet. Further, the district through which the pipe line passes is a desert whose soil is impregnated with salts, which are said to be so corrosive to iron that it is deemed safest not to bury the pipe in the ground at all.

Another reason for having it exposed is that in a pipe line of such great length, avoidance of leaks is essential. In an ordinary pipe line leaks a thousandth part of its flow in a mile, the loss may be a trifling matter; yet even so small a loss in a pipe line of this length would amount to nearly a third of its flow. In the arid desert through which this pipe line passes, it is thought that the soil might absorb small leaks, so that they would not show at all on the surface of the ground if the pipe were buried. Facility of inspection, therefore, is another important reason for keeping the pipe above ground instead of burying it.

Besides this, the ordinary reasons for burying water pipes—to get them out of the way and keep them from freezing

in the winter—do not obtain at all in the region over which this pipe line will pass, and as the cost of excavation and back filling a trench 328 miles long will be saved by placing the pipe on the surface, the decision not to bury it seems, on the whole, a wise one.

The one great difficulty which is to be involved in keeping the pipe on the surface is the necessity of providing for expansion and contraction. In an ordinary continuous steel conduit, buried in the earth in a temperate climate, the extremes of temperature of water passing through it all will probably not exceed 35 degrees.

Turning now to the Coolgardie conduit, to be laid unprotected on the surface of the ground, and with a distance between pumping stations as great as seventy-five or eighty miles, it is evident that the water confined from evaporation and exposed in a steel pipe to the fierce rays of the Australian sun may reach a high temperature in its passage from one pumping station to the next, which in the case of the longest conduits will require nearly three days. The English engineers estimate the range of temperature which will occur in the pipe line at 75 degrees, and we should think this rather an underestimate. It will be seen at once that with such a range of temperature, internal strains would be set up in the pipe which might become so great as to cause movement and leakage at the circumferential joints.

Expansion joints, therefore, are essential to the safety of the pipe, and the English engineers propose that such joints shall be placed at intervals of about 120 feet for the whole length of the conduit, which would make a total of about 15,000 expansion joints in the length of the conduit.

The engineering problem presented, then, and one which we need hardly say is without precedent, is the design of an expansion joint for a pipe of from twenty-six to thirty-one inches diameter, which shall provide for a motion reaching five-eighths of an inch, which shall sustain pressure reaching 200 pounds per square inch, which shall be and remain tight, with little or no attention, and which shall be as nearly as possible a permanent part of the pipe line.

#### DECEMBER WEATHER FORECAST.

The following data, covering a period of twenty-four years, have been compiled from the Weather Bureau records at Salt Lake City, Utah:

Month December for twenty-four years. Mean or normal temperature, 33 degrees.

The warmest month was that of 1889, with an average of 40 degrees.

The coldest month was that of 1876, with an average of 27 degrees.

The highest temperature was 61 degrees on December 1, 1874.

The lowest temperature was 10 degrees on December 25, 1879.

Average date on which first "killing" frost occurred in autumn, October 12th.

Average date on which last "killing" frost occurred in spring, April 1st.

Average for the month, 1.64 inches.

Average number of days with .01 of an inch or more, 7.

The greatest monthly precipitation was 4.37 inches in 1889.

The least monthly precipitation was 0.11 inches in 1878.

The greatest amount of precipitation recorded in any twenty-four consecutive hours was 1.38 inches on December 14-15, 1888.

The greatest amount of snowfall recorded in any twenty-four consecutive hours (record extending to winter of 1884-85 only) was 10 inches on December 5, 1892.

Average number of clear days, 9;

partly cloudy days, 10; cloudy days, 12.

The prevailing winds have been from the southeast.

The highest velocity of the wind was 44 miles from the north on December 28, 1895.

Station: Salt Lake City, Utah.  
J. H. SMITH, Weather Bureau.