

FIGHTING THE COLORADO RIVER

A MIGHTY STRUGGLE OF ENGINEERS TO SAVE A CALIFORNIA VALLEY FROM DESTRUCTION



GOVERNOR GEORGE C. PARDEE



THE break in the bank of the Colorado river has assumed such proportions and the damage already done is so considerable that it has become a matter of national concern. President Roosevelt has been especially interested in the matter and has more than once expressed a willingness to cooperate with the California local authorities in putting a stop to the overflow. The Southern Pacific railroad, which traverses a portion of the flooded territory, is one of the chief sufferers from the break, and the president has finally induced Mr. Harriman to undertake the job of turning back the river into its original channel.

The break, it seems, is in Mexican territory. Before anything radical can be done it will be necessary to obtain the consent of Mexico, and national cooperation in the reclamation of the flooded district will require the authorization of congress.

To comprehend the magnitude of the business it will be necessary to make a brief study of the Colorado river. It is really one of the longest streams in the world, having a length exclusive of



VIEW OF THE LOWER COLORADO REGION



SCENES ON THE SOUTHERN PACIFIC



SENATOR F. FLINT

its branches of more than 1,000 miles. It is formed by the union of Green and Grand rivers in the Rocky mountains of Utah. After it enters Arizona it runs for 300 miles through a chasm which is one of the most wonderful natural objects in America. This great canyon of the Colorado consists of nearly vertical limestone rock from 3,000 to 6,000 feet in height. After it emerges from this canyon the river runs southward and forms the boundary between Arizona and California, finally entering the gulf of California in Mexico.

The trouble began more than fifteen years ago, in the summer of 1891. The earliest manifestation occurred at Salton, a station on the Southern Pacific, about 100 miles from Yuma and 150 miles from Los Angeles. It is in a basin 250 feet below the sea level, and there was originally a salt lake in the immediate vicinity. Salt works were carried on, and a spur of the railroad ran out to them. There was always a little water in the salt lake, but not enough to fill the basin which held it.

One fine hot day in July the water began to rise. It kept rising until the whole face of the country was covered

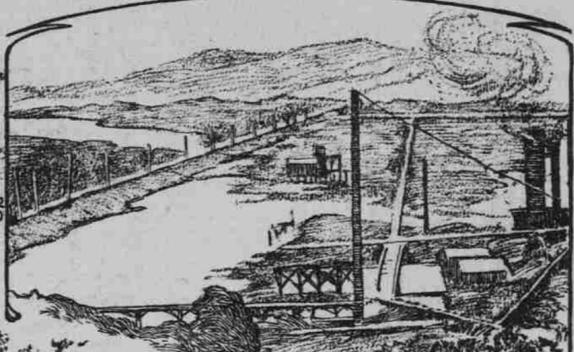
and nothing but water and sky was visible. The railroad company organized a crew to explore the situation and to find, if possible, the source of the new water supply. A boat was launched on the lake, which had expanded to a length of seventy miles and a width of twelve.

At first there was great diversity of opinion as to the origin of the flood. One of the explorers picked up a smelt, which is a salt water fish, and was convinced thereby that the water was the result of a cloudburst. Some believed that the water came from the gulf of California through a subterranean passage opened by seismic agency. Others insisted, they knew not why, that it came from the Colorado river. The water was tested, and it went about 18 per cent salt. The water in the pool had averaged about 26 per cent while that of the ocean is

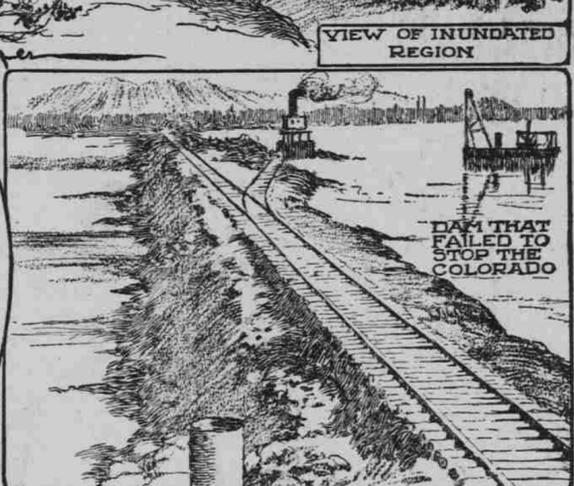
8 per cent, so they could not determine whether the newly arrived fluid was salt or fresh.

These explorations were continued several days. Finally, at a point fifteen miles southeast of Salton, the party struck a current a mile in width and flowing like a mill race. That discovery practically settled the question. The water must come from the Colorado river, and the party returned and made a report to that effect. This theory was confirmed soon afterward by reports received from the country in the vicinity of the river to the effect that the stream had overflowed its banks and filled many basins and the new river which had been dug for irrigating purposes.

Since then the engineers have had their hands full in keeping the flood



VIEW OF INUNDATED REGION



DAM THAT FAILED TO STOP THE COLORADO

from submerging the entire Imperial valley, which under irrigation has become one of the garden spots of the world. Frequent breaks have occurred, and great sums of money have been expended both by the railroad forces and by the civil authorities in attempts to curb the onrushing Colorado. Sometimes these efforts have succeeded for awhile, but in the end the torrent has resumed its unrelenting. The Southern Pacific has expended over \$2,000,000 in six attempts to dam the river, all of which have been ineffectual. It is now engaged on the seventh trial.

At the present time not a drop of water of the Colorado river reaches the gulf of California. The river bed is perfectly dry below the great break. The Salton sea, into which the river

has been pouring its entire volume for almost two years, now covers about 270 square miles of land and is 90 feet in depth in some places. Fully 8,000 persons are affected by the last inundation. Irrigation has been made practically impossible in many places.

The present serious condition, it is stated, was caused by efforts on the part of the reclamation company to lead part of the water of the Colorado river into the Imperial valley for irrigating purposes. In 1901 ten miles of the so called Alamo river channel were dredged, and by a series of canals 100,000 acres of land were irrigated and made so fertile that 12,000 persons are now engaged in profitable farming on it.

In time the mouth of the diversion channel became choked with silt car-



ried down by the swift Colorado. Then the irrigation company excavated a new channel, which was finished in November, 1904. Originally this ditch was fifty feet in width, but a flood in the river quickly widened and deepened it. More water flowed into the canal than could be used. The surplus flowed into the old Salton basin and eventually spread over the surrounding country. Finally the entire irrigated district of the fertile Imperial valley was threatened with overflow and consequent ruin.

Some of the measures employed to throw the river back in its proper channel were very ingenious, but none of them was entirely successful. First an attempt was made by means of a light jetty of piling and brush to form a sand bar and thus divert the flow of the river. This proved to be a failure. Then the Southern Pacific engineers built a pile dam across the channel, but at high water the brush and foundations were undermined. It was then determined to throw a massive rock and gravel dam across the channel.

This last operation was conducted with great skill and attention to detail. Branch railroads were laid, and 1,100 piles, 2,200 cords of willows for mattresses, forty miles of steel cable and 70,000 tons of rock were assembled. Half a million yards of earth were made ready to be dumped into place, and eight locomotives, an army of mules and horses and more than 1,000 laborers were employed. The dam was advanced from both banks simultaneously. Long trains of gravel and rock were drawn out over trestles and their contents dumped into the torrent. Finally the passage was closed and the river went back to its original bed and on no more flowed down to the gulf of California.

But not for long. A month later a sudden rise in the river undermined the poorly constructed levees south of the former break, and the water resumed its course into the Salton sea. President Roosevelt, however, is convinced that the Southern Pacific company is best prepared to undertake the final subjugation of the Colorado and has incorporated his belief in a message to congress. Governor Pardee of California and Senator Flint have been active in their appeals for immediate action, and although the problem has become an international one it is quite likely to be solved by Edward H. Harriman.

SILAS O. WOODSON.

Charles Curtis, New Senator From Sunflower State

WHEN the writer landed in North Topeka, Kan., in the summer of 1870, the first person to whom he spoke was Charles Curtis, who has been elected recently to the United States senate from Kansas. He wasn't much of a personage in those days. An undersized and very slender lad of ten, clad in an unbleached muslin shirt and a pair of jean trousers suspended by a single homemade "gallus," his tawny skin showing through numerous rents in his scant garments, his legs and feet bare, his long black hair uncovered and his small eyes a glimmer—such was the future senator from the Sunflower State at that period of life.

"I want to go to Silver Lake," I said, stepping up to him as he stood on the platform as motionless as the Indian I recognized him to be. I hardly expected him to speak, but he did without a moment's hesitation.

"Then why didn't you stay on the cars?" he demanded in a shrill childish treble.

"But I didn't know. I thought the road stopped here," I stammered.

"It goes on to Wamego now," he explained loftily.

"When is the next train?"

"Tomorrow."

It did not look promising. I proceeded to make a few further inquiries of the boy, who was all the time regarding me with a look of the most imperturbable gravity.

"How shall I manage it?" I asked.

"I reckon you'll have to go over to the south side and put up at the Gordon House if you've got the nickel to pay your bridge fare," he said. "If you ain't, I reckon Cap Dowdell will give it to you. Cap keeps a saloon."

"I'd rather get to Silver Lake," I said helplessly.

The lad shrugged and made a slight grimace. "If I wanted to get to Silver Lake mighty bad I know what I'd do—I'd foot it, you bet. It's only twelve miles. I've walked it many a time."

It was midday, very hot and the dust in the roadway along the track was black and almost foot deep. I shook my head.

"I guess I'd rather hire some one to carry me out," I said. "Do you know anybody who would like the job?"

"I'd like it mighty well," he declared, with an eager look in his glittering eyes, "if my grandfather'd only let me have the team. He wouldn't, though."

"Suppose we go and ask him," I suggested, glad of any possible way out of the difficulty.

The lad agreed, and we proceeded on our way to consult his grandfather. The Curtises lived in a big brick house, then in an unfinished state, on the north bank of the Kaw river, only a short distance from the great new iron bridge which spanned that broad and very shallow stream. Old Mr. Curtis and his wife received me with the cordiality that is a feature of the western temperament and insisted that I should remain until the next day. When I mentioned that I was expected in Silver Lake on that very day to close a land deal Mr. Curtis promised that if I would remain until after supper he would see that I reached my destination. At supper I was introduced to the daughter, a good looking bride of a few weeks, and her husband, Charlie La Tourette, who afterward took me and my bag out to Silver Lake. At my special request the little Indian lad was permitted to accompany us. It did not occur to me at the time that he belonged to the family. He was in no way like any other member of it that I met on that occasion.

Later on I saw a good deal of the boy. When I went to live in Topeka I found that the La Tourettes were my next door neighbors. Their little Indian nephew visited them frequently, and it was then that I learned his history from the lips of his Aunt Emma (Mrs. La Tourette). Her brother, Captain Jack Curtis, the ne'er-do-well of the family, had married a well to do Kaw half breed woman who was both cultivated and beautiful. Her husband had conducted himself so shamefully that she died of a broken heart, leaving two children, Charlie and a little girl, who was one of the most attractive creatures I have ever known. There was no suggestion of Kaw origin in her appearance. She was blue eyed, with regular features and light brown hair that hung in long curls.

Captain Jack Curtis was what was known as a "holy terror." He was a combination of "bad man," broncho buster and fire eater. He made short work of his wife's estate and had succeeded in reducing his father to very straitened circumstances. He was a frightful handicapper to his family, especially to his children, who were accustomed to hide themselves in fear



CHARLES CURTIS, SENATOR FROM KANSAS.

and trembling whenever he made his infrequent visits to the house on the Kaw river. The grandparents were old and discouraged and could do little for the children. The La Tourettes eventually took charge of the girl, Elizabeth, and Charlie was left to look out for himself.

That is precisely what he did. Left to his own resources, he proceeded to grow up with the country. At that time the capital had a scant 5,000 population, but it was growing rapidly and there was abundant opportunity to distinguish oneself.

He began as a jockey—a nonpro-

fessional, daredevil little rider of any half broken specimen of horsetflesh whose owner was anxious to exploit for all he was worth. That the small son of Captain Jack Curtis made a success of this avocation is true only in a very limited sense. He could ride absolutely anything in the shape of

horsetflesh. His tiny bare legs clung to the sides of a mount with a tenacity that nothing could dislodge. He was entirely without fear and in the mad excitement of a finish would take the most thrilling risks. I saw him ride several races at the state fair grounds in Topeka, and for abandon I have never since seen his equal.

Only once in his career as a jockey did Curtis meet with disaster. It was at Kansas City in the days of the old Interstate Fair association. The horse which the boy was to ride had a bad reputation, and he was warned repeatedly as he entered the ring to look out for himself. This particular horse, it seems, always bolted at a certain point of the track. For that reason he had always been ridden by the same jockey, a man who understood his peculiarities and governed himself accordingly. Off at the signal, the dark skinned lad and his outlaw mount took the course and held it until the bolting place was reached. At that fatal spot the beast assumed his usual tactics and a fearful struggle ensued, and the spectators shut their eyes and shuddered. When the dust faded the little jockey was picked up senseless and covered with blood and dirt. He bears the marks of that contretemps to the present day.

He was a hustler. There was not a suggestion of the traditional Indian in his mind, but he was a hustler. His unflinching and almost perpetual industry is a tremendous blow to the so-called law of heredity. His remarkable abstinence from and even aversion for the vices that have brought ruin to his race are quite as wonderful under the circumstances. His environment was not conducive to the inculcation of a temperate disposition, yet he never manifested the slightest inclination to swerve from the path he must have laid out for himself when he was very young. He seemed to be proof against the demoralization of frontier life and immune from the common temptations of unrestrained youth.

How did he do it? Nobody knows—nobody but himself. It is still and ever will be a mystery to those who remember the dissolute life of his father, the helplessness of his aged grandparents, the almost impenetrable murkiness of his environment. La Tourette, the handsome young Indian

who married his amiable Aunt Emma, became proprietor of a notorious drinking and gambling resort known as the Wallapus and met with moral and financial shipwreck. This boy whose Indian blood was so evident and his lovely sister who showed no trace of it were thrown on their own resources. They met the issue with the divine courage of ambitious youth and came forth triumphantly.

But not without a struggle, at first for very existence. Young Curtis turned his hand to anything that offered. For years he rode at races during the summer season and peddled newspapers and fruit at the station during the winter. Finally he was offered a chance to drive a hack on shares. It was a cheerless makeshift, but he made the best of it. It gave him leisure to study, which was the one thing he craved. He had made up his mind to acquire an education, and nothing could swerve him from the determination.

By the time young Curtis had reached the age of sixteen he had qualified himself to begin the study of the law. Two months later he was trying cases in the justices' courts, and in two years he was admitted to the bar. In 1884 he was sent as a delegate to a political convention, and the same year was elected county attorney of Shawnee county. He served two terms in this office and made a record. Although he had been elected on the anti-prohibition ticket he closed every one of the eighty-five saloons in Topeka and kept them closed four years. During his official career he prosecuted and convicted a hundred saloon keepers and never lost a whisky case. Twelve years after his admission to the bar he was sent to congress and has been in Washington ever since, having been a member of the lower house for fourteen years.

Curtis' career in congress has been that of a busy man, a man of deeds. He is remarkably loyal to his state and has accomplished much for the Indians. His political enemies—he has hosts of them—declare that he has made friends of the mammon of unrighteousness in the form of railroad corporations and the trusts. However that may be, he will ever remain to those who have known him from the beginning the most remarkable example of the self made man now living on the great round earth.

JAMES E. SAFFORD.