

No. 5 was merely a small dyke placed at a point 1300 feet above the bridge, to check scour which was found to be taking place at the time of commencement of No. 6.

No. 6, "Weavers Dyke" was commenced on the shore at a point about nine hundred feet above the bridge line; and built for a distance of some nine hundred (900) feet; running downwards and outwards, and striking the current at a more acute angle than in the case of dyke No. 4. The manner in which this dyke was constructed is exactly similar to that of dyke No. 4.

This dyke was intended to act more as a protection to the existing bank than as a means of deflecting the river; although it acted in the latter service to a slight extent.

The channel at this point was about 850 feet in width with depth of 10 to 15 feet; and current, at low water of $3\frac{1}{2}$ miles per hour.

This dyke was completed March 17, 1872; and proved of great service in protecting the bank; and in saving the piling, and other false works of the bridge below.

A large quantity of stone, for rip-rapping the shore, had been piled along the bank, opposite the rear of this dyke.

Nothing was done at this time, on the East bank of the river, in the way of protection. Reliance was placed upon the old works which had been built to protect the city front.

It is well to note, at present, the changes in the low water channel, which had been taking place during the construction of the dykes; during this time the water had been at a low stage; the water at the gauge showing from 815 to 84 feet. At this stage of the river, the greater part of the bars, standing above the level of low water, were visible; and all changes were easily detected.

By the construction of the small dams Nos. 1 and 2, and dyke No. 3, the steamboat channel had been turned entirely out of the course which it had last established along the Kansas shore; and the whole flow of the river was discharged through one channel of 1006 feet in width, with hidden shoals which had rendered it unnavigable. The additional current, caused by the stopping of the principal channel of the river, had the effect of slightly inclining the current of the one remaining channel; and, from a point of some distance above dyke No. 3, to crowd it upon the western face of what is called here the east bar; scouring out the bottom, and, in short time, forming deepwater channel across the river. This current scoured the west shore of this bar, cutting into it; and curving to the right as gradually deflected in that direction. It then, after cutting out a large portion of this bar deserted the east side, and ran as if intending to attack the head of dyke No. 4, as it then existed, following this course until it felt the influence of the lesser current of the water backed up, or retarded, by dyke No. 4; it again curved to the east, and made another attack upon the east sand bar; digging again into it; and, turning suddenly around the head of dyke No. 4, made in direct line for dyke No. 5.