

## CHAPTER VI.

### OUTFIT.

THE isolated position of Kansas City, its distance from manufacturing and commercial centres, and the unsettled character of the neighboring country, were most felt at the beginning of the work in the collection of a suitable outfit. The character of the work was also such that the full number of tools needed was only learned as the works advanced, and the greater part of the equipment grew up with the progress of the several foundations. Nearly all the tools, including the boats used for transporting material, had to be built for the purpose, much of the time during the spring and summer of 1867 being occupied in this preparation. The derricks were built of native lumber, which was but poorly suited to this object, though it was made use of as far as could well be done ; the masts and booms were made of cotton-wood, and though of a cheap pattern, the derricks did good service. A machine-shop was fitted up on the bank of the river, two-thirds of a mile above the bridge, where all the smaller iron-work needed, and the lighter pieces of timber-work, were prepared ; this shop was fitted out with a Daniels' planing-machine, circular-saw, lathe, screw-cutter, drill, and such other implements as were required for four blacksmith fires. Though containing a number of tools not usually wanted for bridge works, the outfit was as small as was deemed practicable, and could more properly be charged with inadequacy than with extravagance.

The boats provided were as follows :

A side-wheel high-pressure steamboat, 135 feet long, of the kind in common use on Western rivers ; this boat, "The Gipsej," was built for an Ohio river packet, on which river she was purchased.

Four flat boats, each 53 feet long, 18 feet wide, and 3 feet deep.