where it passed around two 4 foot wooden shieves, like those in Cincinnati. The motive power was applied by a belt and pinion from the steam engine at the Cincinnati anchorage.

There were two other shieves, about 3 feet in diameter, with light wooden arms and tin rims, shaped like the letter V. These were known as "traveling shieves." They worked easily on iron spindles, attached to a wooden arm, which in turn was fastened to the endless rope by an iron shaped something like a goose's neck, after which it was named. These shieves were attached to opposite sides of the endless rope, one in Cincinnati and one in Covington.

To run out the wire, one end was taken from a drum and made fast to the "shoe," mentioned in our description of the anchorages. The "bight" or loop of wire, was then passed around the traveling shieve, while the other part remained wound upon the drum. This being done, the machinery was thrown into gear, by means of a lever and clutch.

The big wheel and shieves, with the endless rope, began to move, and away went the traveling shieve, revolving as it went, like some great spider, and drawing after it the thread of wire from off the drum, which also began to turn. Away it went across the river and over the towers, to the Covington anchorage, where it stopped, and ready hands relieved it of its burden, which was at once transferred to a "shoe." Meanwhile the other shieve, which had gone over empty to Cincinnati, was filled, and by a reverse motion of the machinery started back to Covington; while its fellow, now empty, returned to Cincinnati to be again filled.

While these spiders are crossing and recrossing the river, and adding two threads to the cable warp at each trip, let us see how the regulating is done, for this is another very important part of cable making. Forty feet above the footbridge and resting on two wire ropes, which are stretched over the towers and fastened to the anchor piers, like the cables of the footbridge, is a wooden machine, 40 feet long by 4 feet wide, called a "cradle." We know by personal experience, that there were winds "in those days," which made this rock like that nursery fiction in the tree top. A man was stationed at each end of this machine, to attend to regulating the wires when they were run over. The cables were laid in 7 strands of 740 wires each; and in the centre at the cradle they were 30 feet above the present position of the cables. This was done to facilitate the operation of laying the wires.