

considerably. The flat curve, in which the wires are suspended, facilitates the tying together, and the separate attachment of the shoe gives ample working room for laying the wires into it. But the main advantage is derived from the fact that the tension in the wire is nearly doubled, amounting to about three quarters of the maximum tension to which it ever will be subjected in the finished bridge. This tests the wire to a certain extent, takes out all waves and bends, and leads to the easier detection of a defective wire or splice. It gives, therefore, to the engineer more or less assurance that all wires, worked in the cable, come up to the requirements and that the latter will obtain its calculated strength.

The running out of the wires takes place from the Brooklyn anchorage, where all wire rings are received. A number of them, spliced together, are wound on wooden drums, which are large enough to contain about 12—14 wires of the length of the whole cable. The end of a wire,