direction of the arrows and the two armed ring is turned in opposite direction. The first motion uncoils the wrapping wire, while the second winds it on the cable and at the same time keeps it by the momentum of the counter weight under great tension. As the wire passes through the groove in the steel ring, it squeezes itself, on account of the spiral lay, between the finished wrapping and the barrel and, consequently, pushes the latter ahead for a distance equal to the thickness of the wrapping wire. The ends of these wires are spliced, so that the whole wrapping in one span consists of one continuous wire. When the two wrapping machines meet in the center of the span, they are taken off and the two wires joined. Care must be taken, to wrap in opposite direction, so that the ends of the two last wires are on opposite sides of the cable and can be spliced under tension.

The wrapping wire generally consists of No. 11 or No. 10 annealed iron wire. For the East River bridge No. 10 galva-