taken from the drum, is now temporarily fastened to the leg, and the loop, formed in this way, hung into a grooved wheel called "traveling sheave," which is firmly attached to an endless rope stretched from anchorage to anchorage. The latter, called "traveling or working rope," passes at each anchorage around horizontally placed wheels which, connected with a steam engine, give motion to it. The traveling sheave with two wires are carried over by the rope. One wire, which is fastened to the leg appears to stand still, while the other, which unwinds from the drum, runs with twice the speed of the working rope. After their arrival at the New York anchorage, the wires are taken from the sheave and laid around the shoe in such a manner, that all standing wires occupy one side of it, and all running wires the other. These two wires are now regulated according to a "guide-wire" which previously has been suspended and adjusted to the desired deflection. The same operation is repeated 166 times,