

No. 692,408.

Patented Feb. 4, 1902.

W. J. WRIGHT.
APPARATUS FOR WEAVING WIRE.

(Application filed May 9, 1901.)

(No Model.)

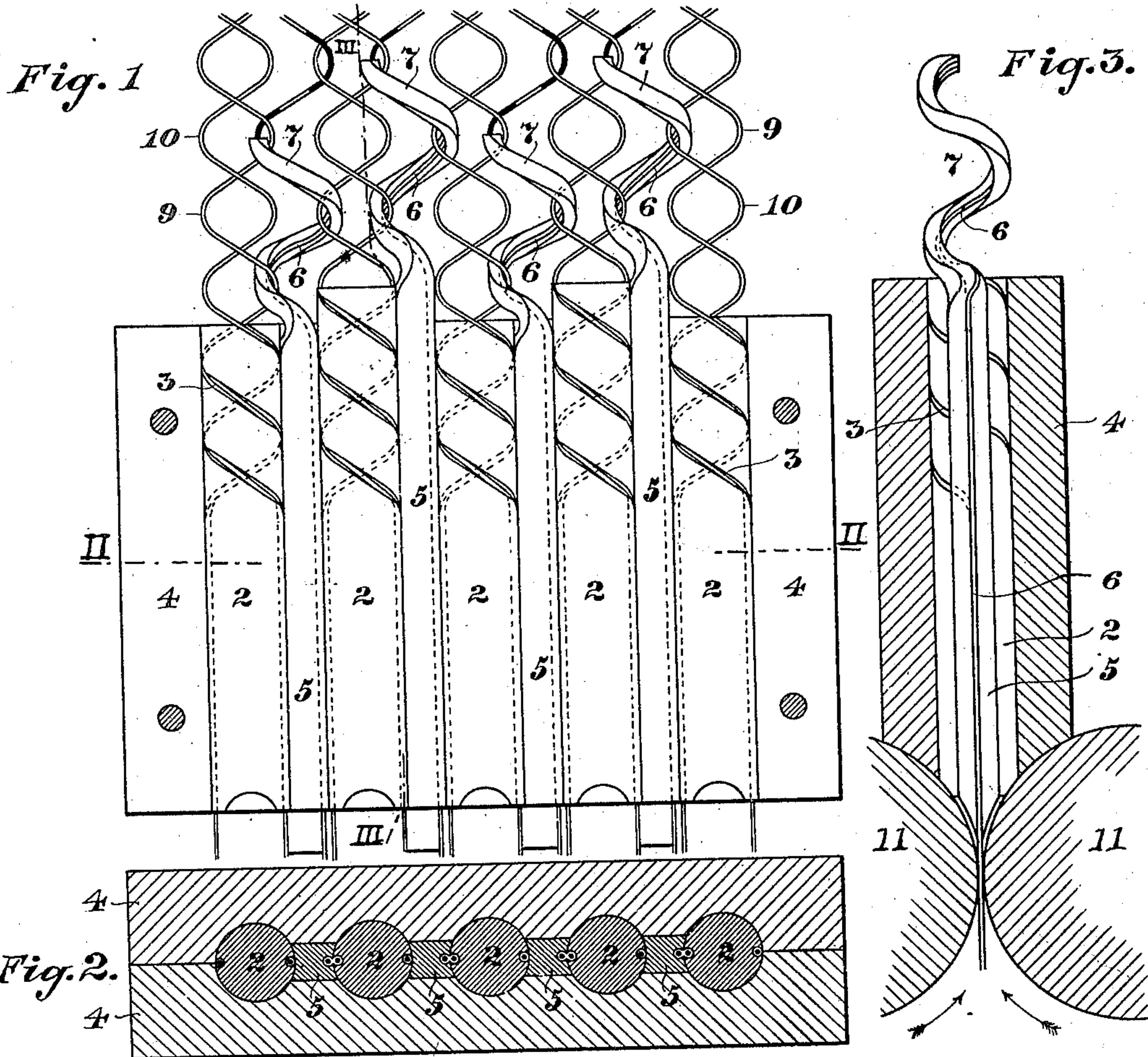


Fig. 6.

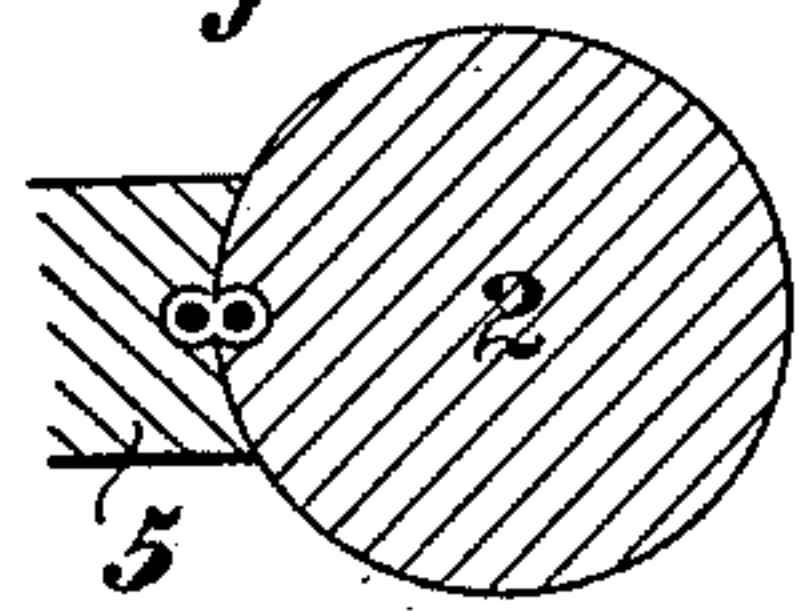


Fig. 4.

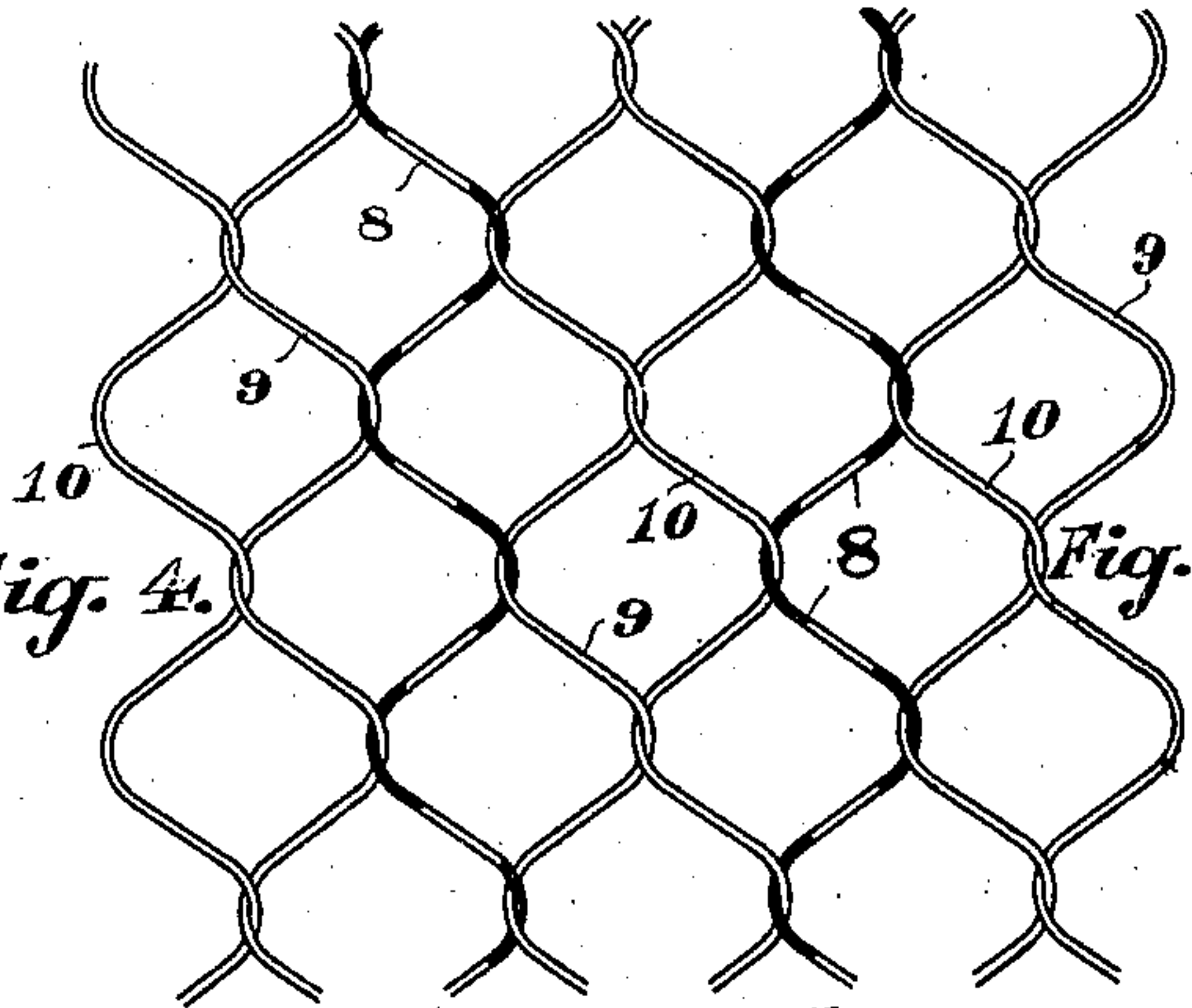


Fig. 5.

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WILLIAM J. WRIGHT, OF PITTSBURG, PENNSYLVANIA, ASSIGNOR TO JOHN S. SCULLY, OF PITTSBURG, PENNSYLVANIA.

APPARATUS FOR WEAVING WIRE.

SPECIFICATION forming part of Letters Patent No. 692,408, dated February 4, 1902.

Application filed May 9, 1901. Serial No. 59,425. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM J. WRIGHT, a citizen of the United States, residing at Pittsburg, in the county of Allegheny and State of Pennsylvania, have invented certain new and useful Improvements in Apparatus for Weaving Wire, of which the following is a specification, reference being had to the accompanying drawings, forming part of this specification, in which—

Figure 1 is a plan view of a number of spindles and spiral coiling-guides assembled in proper relation to produce a continuous woven fabric and showing the same in course of construction. Fig. 2 is a cross-sectional view taken on the line II II of Fig. 1. Fig. 3 is a similar view at right angles on the line III III of Fig. 1, showing the coiling-guides and also the feed-rollers. Fig. 4 is a view of several pairs of interwoven coils as they are delivered from their spindles with the intervening interwoven supplemental connecting-coils. Fig. 5 is a similar view, but showing all of the coils equally arranged. Fig. 6 is an enlarged detail sectional view of one of the spindles and guides.

My invention consists of an improved apparatus for weaving wire into a fabric or netting by means of interfitting spiral coils, whereby the full width desired may be made at one time of any desired number of wires simultaneously and continuously and in one operation. Heretofore in making wirework of this description it has been the practice to form but two interfitting spiral coils upon a forming-spindle and then join each one of such pairs of interwoven coils by a single interwoven separate coil with the next adjacent coil of another similar pair, repeating such operation until the required width was obtained.

In the practice of my invention a plurality of spindles 2, having the usual spiral grooves 3 3, are mounted in suitable housings 4 at such a distance apart as will admit of the location between the spindles of separate guides 5, which for approximately the full length of the spindles are straight. These guides have in one side a groove 6 of sufficient size to admit the wire, but partly closed, so as not to allow the wire to escape outwardly, and at or

about the delivery end of the spindles each of these guides is formed into a spiral 7 of the same pitch and relative position as the spiral grooves 3 of the spindles, the groove 6 thereof being maintained on the inner side, as shown. By reason of the close arrangement of the pairs of spirals to the next adjacent pair it will be seen that the spiral guide 7 may be looped through the alternate opposite spiral loop of such pairs without interference with the forward progress of the coils, whereby when the independent spiral coils 8 are finally delivered from the ends of the guides 7 they will travel forward in the same relation to the coils 9 10 from spindles 2 and will inter-engage with such coils. By reason of the close proximity of each independent pair 9 10 to the next adjacent pair sufficient clearance is allowed for free engagement and interaction, and it will be seen that such assemblage and interaction of the coils will be continued throughout the operation. As delivered from the spindles and spiral guides the interwoven coils will assume the arrangement and relation to each other shown in Fig. 4 of the drawings, while after having been subjected to an equal tension all over the coils will be symmetrically arranged, as shown in Fig. 5.

The forward feed of the wires is accomplished by means of the customary feed-rolls 11, and it will be understood that such other details of construction necessary to embody the invention in practical form in an operative mechanism are properly within the province of the skilled mechanic and do not necessarily form essential parts of the invention.

It will be understood that several wires may be passed through or around the same groove, so as to in effect form one wire, and wherever the term "coil" or other synonymous term is employed it is intended to include such plural wires. It will also be understood that the fabric may be woven in flat form, as in making mattresses, or that the spindles and guides may be arranged in cylindrical form, so as to weave bags or similar articles.

Having described my invention, what I claim is—

1. Apparatus for weaving continuous wire

fabric, consisting of a plurality of grooved spindles, intervening guides terminating in coiled extremities, and means for feeding the wire, substantially as set forth.

5 2. Apparatus for weaving continuous wire fabric, consisting of a plurality of grooved spindles, intervening guides terminating in coiled extremities, adapted to interact with the grooved spindles, and means for feeding
10 the wire, substantially as set forth.

3. Apparatus for weaving continuous wire fabric, consisting of a plurality of multi-grooved spindles, intervening grooved guides terminating in spiral coiled extremities, and
15 means for feeding the wire, substantially as set forth.

4. A device for coiling wire consisting of a

straight grooved guide terminating in a spiral coiled extremity, the groove being located on the inner side of the guide, substantially as
20 set forth.

5. In apparatus of the class described, a device for forming independent coils consisting of a straight grooved guide terminating in a spiral coiled extremity, the groove being
25 narrowed to prevent escape of the wire, and being located on the inner side of the guide, substantially as set forth.

In testimony whereof I affix my signature in presence of two witnesses.

WILLIAM J. WRIGHT.

Witnesses:

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