

No. 631,747.

Patented Aug. 22, 1899.

M. B. LLOYD.
WIRE HAMMOCK.

(Application filed Dec. 15, 1897.)

(No Model.)

2 Sheets—Sheet 1.

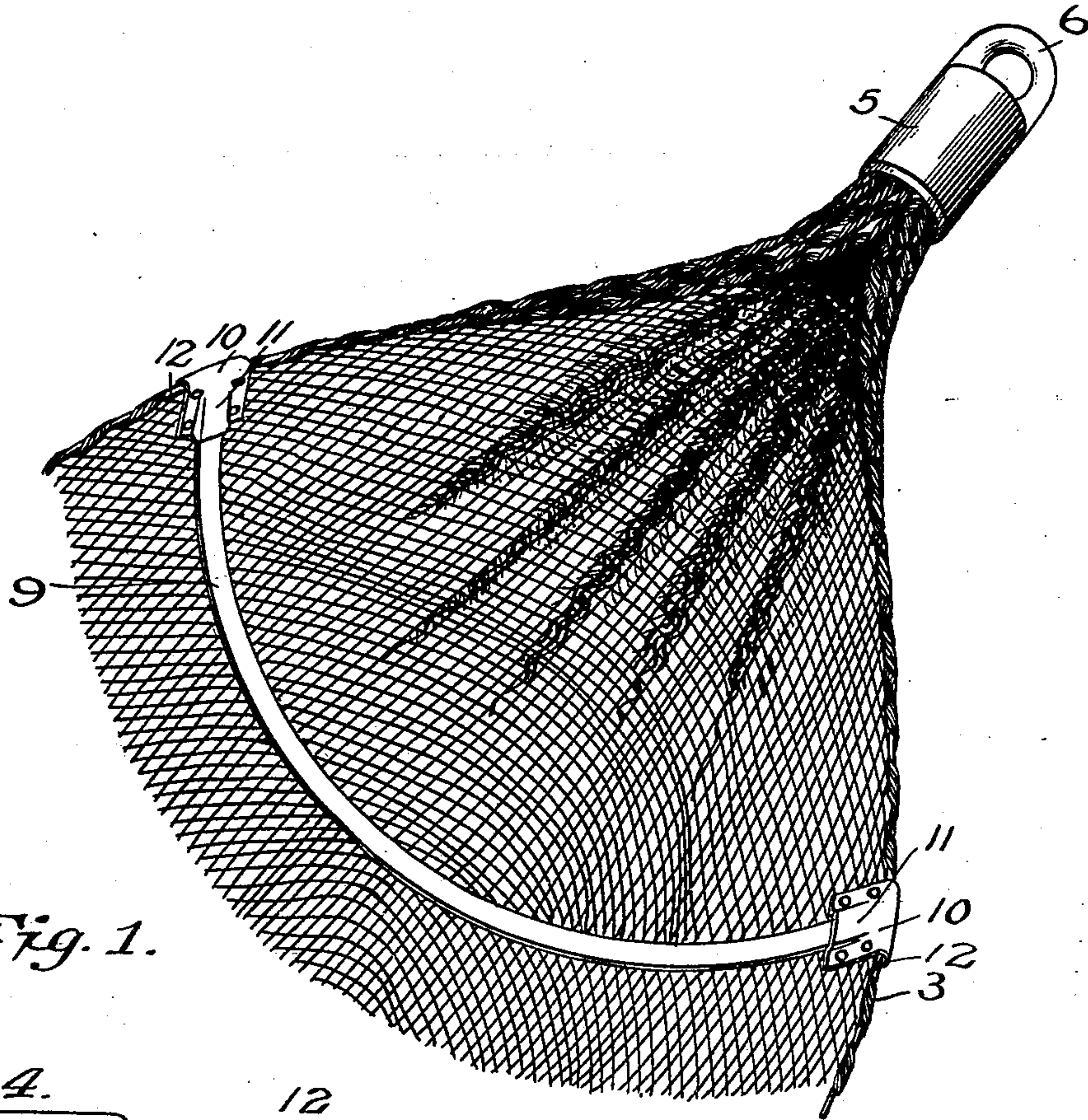


Fig. 1.

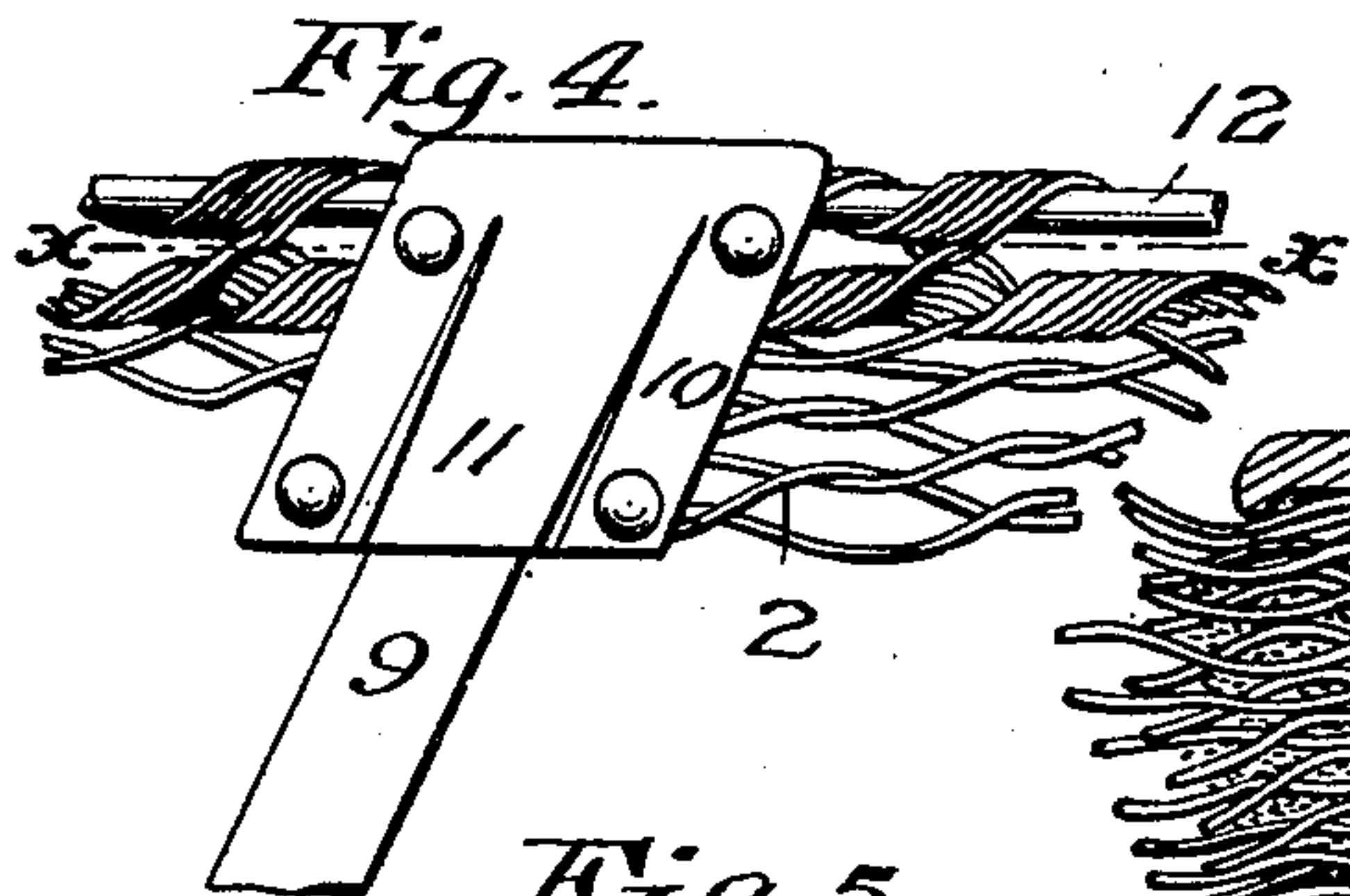


Fig. 4.

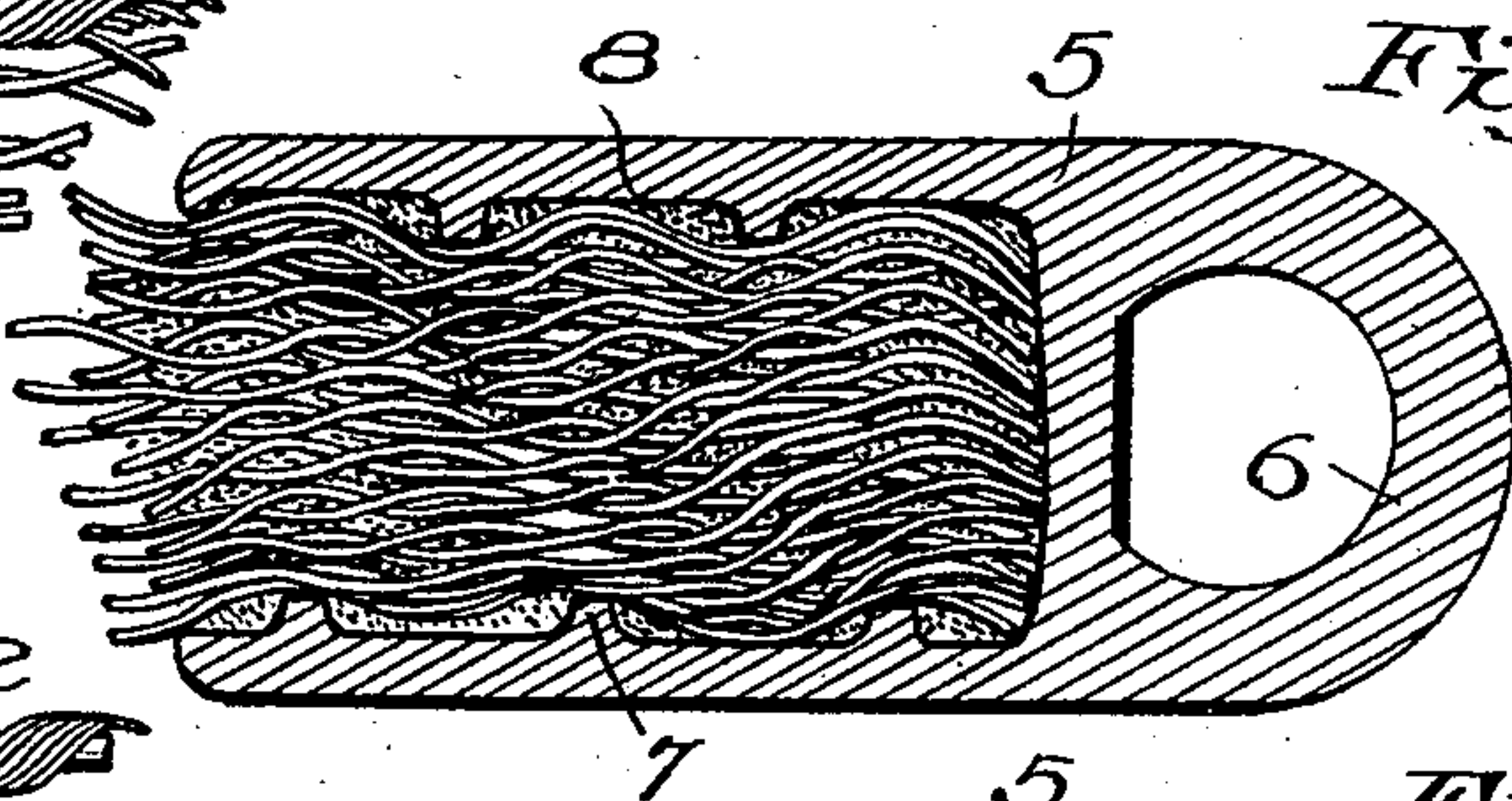


Fig. 2.

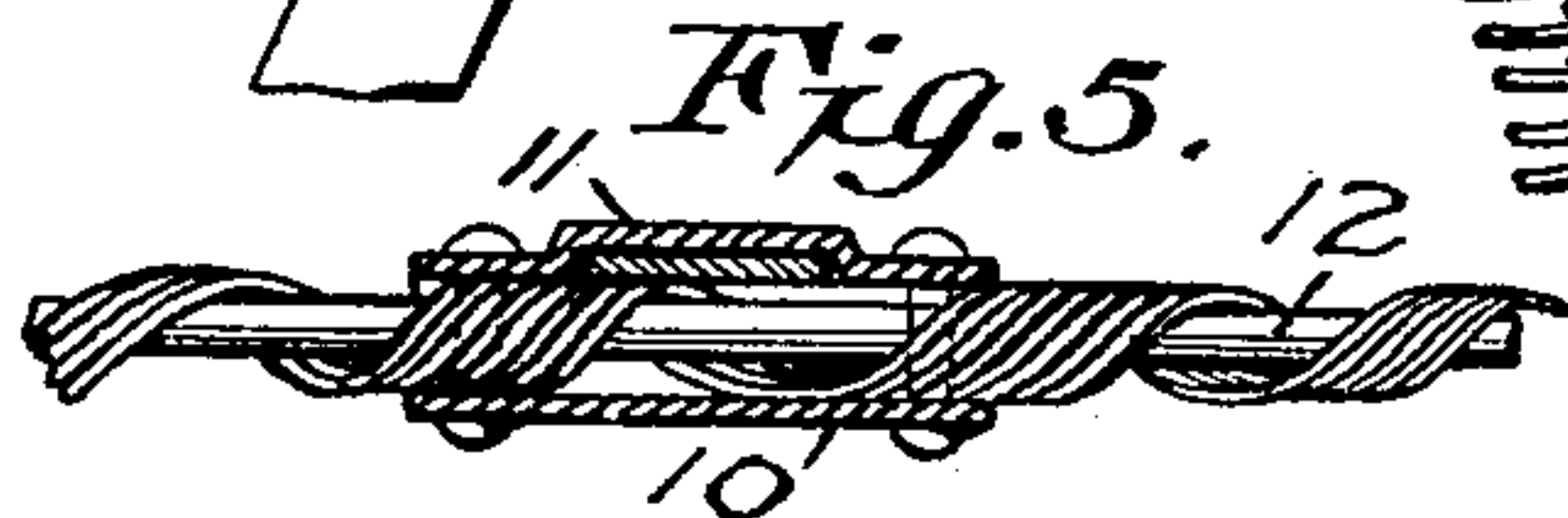


Fig. 5.

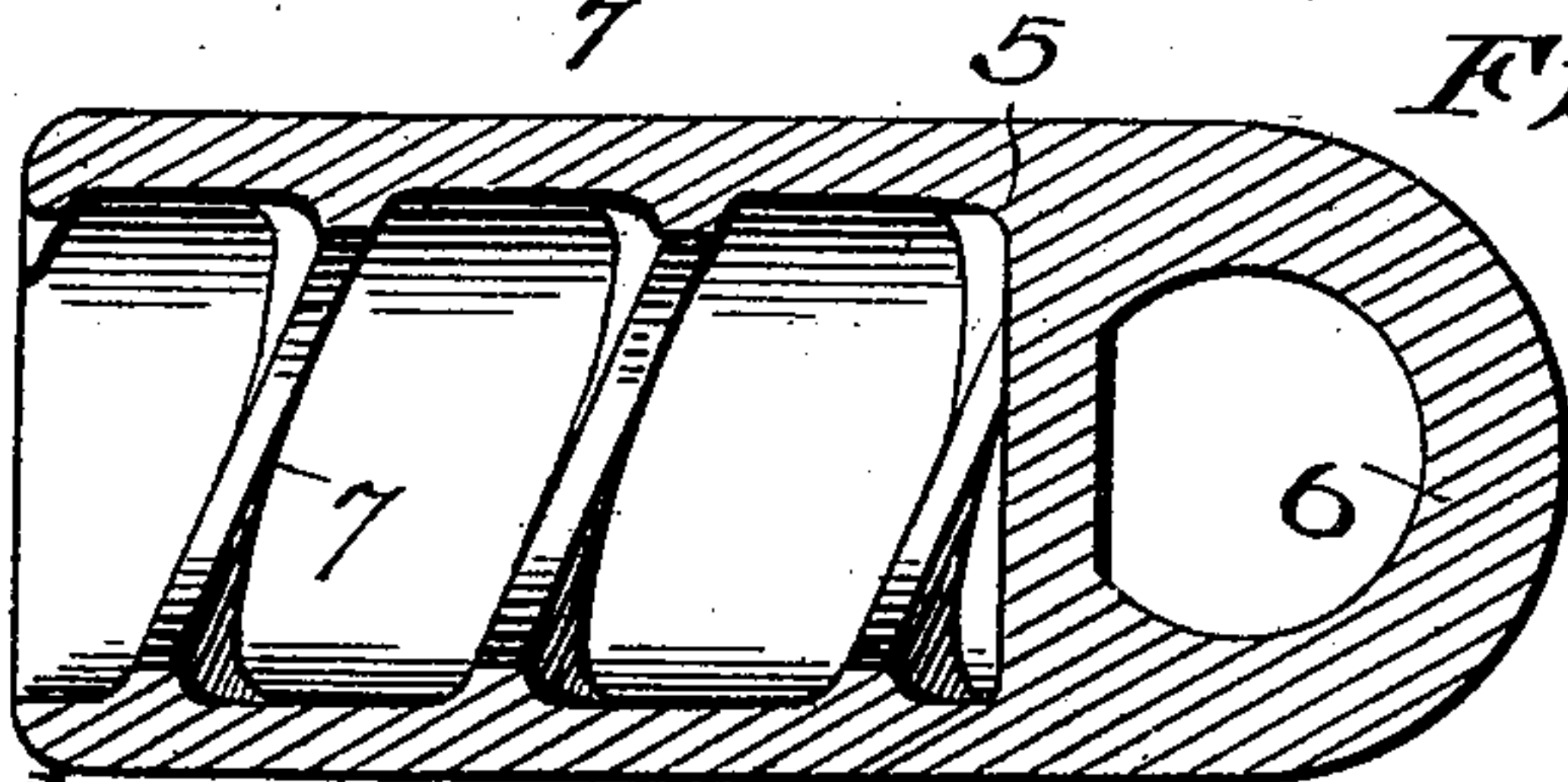


Fig. 3.

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Marshall B. Lloyd.

By Paul Hawley his att'ys.

No. 631 747.

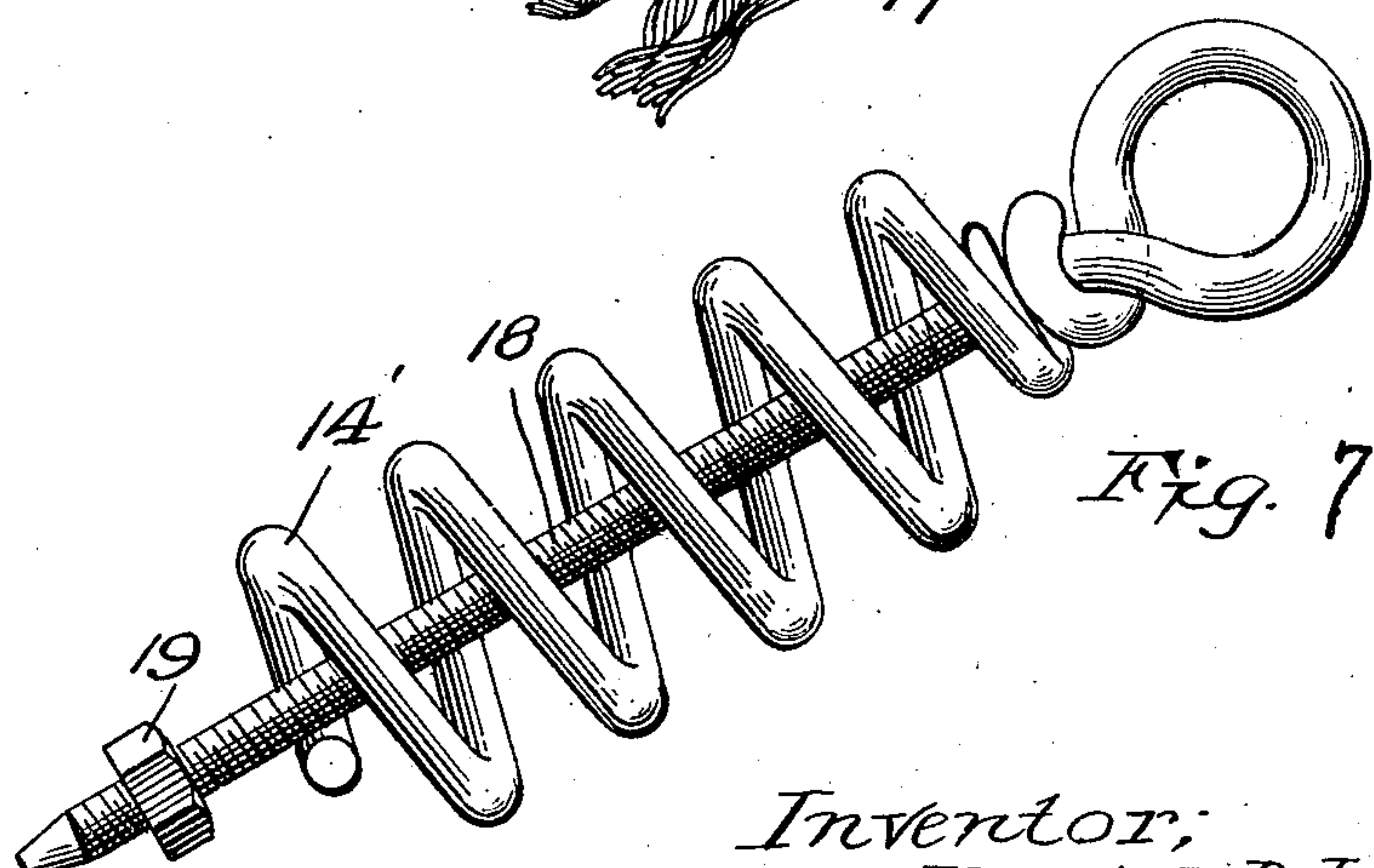
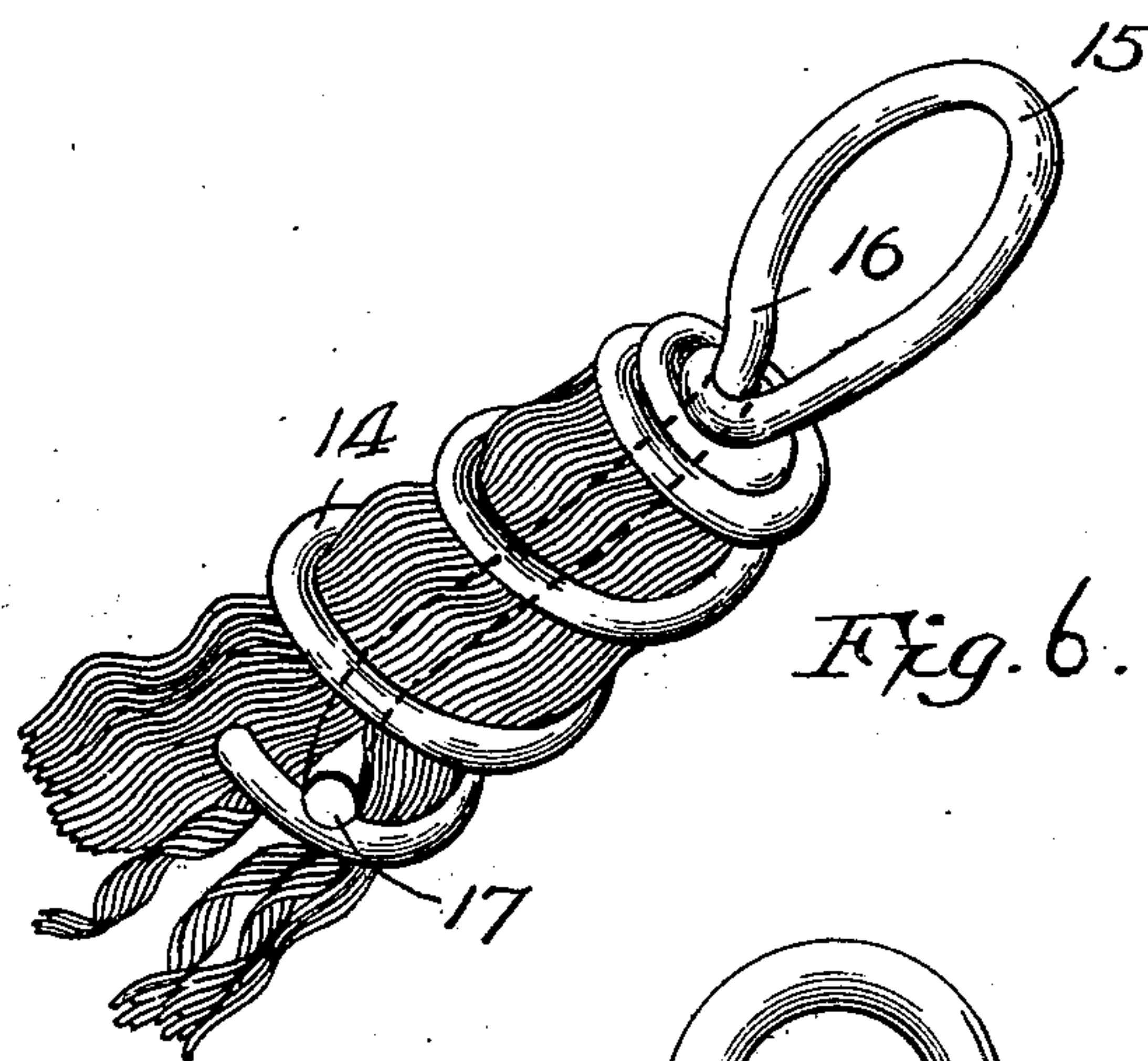
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2 Sheets—Sheet 2.



Witnesses;
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Richard Paul.

Inventor;
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By *Paul Hawley*
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UNITED STATES PATENT OFFICE.

MARSHALL BURNS LLOYD, OF MINNEAPOLIS, MINNESOTA, ASSIGNOR TO
THE WHITE MANUFACTURING COMPANY, OF SAME PLACE.

WIRE HAMMOCK.

SPECIFICATION forming part of Letters Patent No. 631,747, dated August 22, 1899.

Application filed December 15, 1897. Serial No. 661,964. (No model.)

To all whom it may concern:

Be it known that I, MARSHALL BURNS LLOYD, of the city of Minneapolis, county of Hennepin, State of Minnesota, have invented
5 certain new and useful Improvements in Wire Hammocks, of which the following is a specification.

My invention relates to hammocks, and particularly to hammocks made of wire.

10 The object of the invention is to employ coiled wire fabric in the manufacture of hammocks.

Another object of this invention is to provide a wire hammock composed of interlocked
15 coils or spirals extending longitudinally of the hammock and having their ends gathered together and preferably secured in one bunch or close section at each end of the hammock by caps or devices screwed thereon and binding
20 the coils together.

A further object of the invention is to provide a novel spreader to distend the hammock and which will be flexible, so that the hammock will conform to the body of the person sitting or lying therein.
25

The invention consists in a hammock composed of interlocked coils of wire, the ends of which are gathered or shucked together, or collapsed and suitably fastened, and, further,
30 the invention consists in particular constructions and in combinations of parts, all as hereinafter described, and particularly pointed out in the claims.

The invention will be more readily understood by reference to the accompanying drawings, forming part of this specification, and in which—

Figure 1 is a perspective view showing one end of a hammock embodying my invention.
40 Fig. 2 is an enlarged longitudinal section of the end fastening or finish with the wires fastened therein. Fig. 3 is a similar view with the wire removed. Fig. 4 is an enlarged detail of the edge finish of the hammock and the spreader attachment. Fig. 5 is a sectional view thereof, substantially on the line
45 *xx* of Fig. 4. Fig. 6 is a perspective view of a wire cap or fastening for the ends of the coils, which are rolled or bunched together.

Fig. 7 is a modification of the wire device
50 shown in Fig. 6.

As indicated in the drawings, the hammock is made up of a series of interlocked wire coils 2 2, which extend longitudinally of the hammock and make up a wide and flexible
55 fabric, the edges of which are preferably finished by the employment of one or more sets of coils, making what is commonly known as "cords" in the edges of the fabric, as shown in Figs. 1, 4, 5, and 6. At each end of the
60 hammock or piece of fabric of which it is formed the ends of the coils are shucked or collapsed together, and, as illustrated in Figs. 1, 2, 3, 6, and 7, are preferably rolled into a solid round bunch. The gathered or col-
65 lapsed coils may then be secured by a cap or head which may be cast directly thereon, the end of the bunch being inserted into a suitable mold into which the metal is afterward poured; but I prefer to form the cap sepa-
70 rately and afterward secure the same upon the bunch, as illustrated in Figs. 2 and 3. When the ends of the coils are compressed into a round bunch or end, (see Figs. 1 and 2,) the surface of the bunch or end will pre-
75 sent a wide thread extending spirally around the bunch and of considerable width. The cap 5 is cast or otherwise formed with an internal thread 7, corresponding to the natural thread formed upon the wire bunch, and
80 said cap 5 may therefore be screwed or turned upon the end or bunch, and when this is done the bunch is so compressed and tightened that the coils are firmly secured in the cap. In fact no other fastening need be employed;
85 but to make the same sure and firm I preferably either use pins extending through the cap and the bunch of wires or instead run molten lead 8 into the cap and around the wires therein, the lead filling all of the unoc-
90 cupied space, as shown in Fig. 2, and effectually locking the wires against any outward pull. The cap or ferrule 5 is provided with an eye or loop 6, in which the hammock-rope may be fastened. A modification of this
95 structure is shown in Figs. 6 and 7. As there illustrated, I may employ a cap or ferrule made of wire, preferably a spiral coil, fitting

the natural thread upon the bunch of wires at the end of the hammock. In Fig. 6 the coil 14 is shown upon the bunch of collapsed coils. At the outer end of the coil 14 the wire is formed into a loop or eye 15, and the free end 16 of this loop is carried down through the middle of the coil and forced through the bunch of wires and has its end 17 turned out through the side of the bunch to interlock therewith, and thus dispense with any further fastening for the spiral-wire cap or ferrule. Fig. 7 illustrates a modification comprising a short spiral coil or section 14', adapted to be screwed onto the end of the fabric or instead wound and formed thereon, and the bunch or end is additionally secured in the spiral by means of an eyebolt having its stem or shank 18 threaded and extending down through the middle of the bunch, and fastened by a nut 19, which when tightened upon the bolt and against the wires expands the bunch of wires beneath or outside of the end of the spiral 14 and crowds and expands the wires within the spiral. The fastenings shown in Figs. 6 and 7 are light and cheap, but are not as neat and attractive as the cap 5 shown in Fig. 1, and I therefore prefer the latter.

To counteract the tendency to collapse, I preferably extend the hammock at each end by a flexible spreader, preferably a flat spring or steel strip 9. To hold this strip, I prefer to employ metal clips 10, secured to the edges of the hammock. These clips are U-shaped and are provided with raised parts 11, which form the sockets for the ends of the spring or flexible strip 9. The clips 10 are secured on the hammock by riveting the same through and through, and to prevent the forming of a sharp kink or bend in the edge of the hammock and at the clip I preferably strengthen the part of the hammock where the clip is placed by a short piece of spring-wire 12, arranged in the edge coil or cord with the hammock fabric, as shown in Figs. 1, 4, and 5.

It is obvious that my invention admits of various modifications in form and construction, and I therefore do not confine the same to the specific constructions herein shown and described.

Having thus described my invention, I claim as new and desire to secure by Letters Patent—

1. A wire hammock composed of interlocked coils bunched at the ends, and a spiral arranged upon each end to secure the coils and for attachment to the hammock-ropes, substantially as described.

2. The combination with the gathered ends of the wire coils forming a bunch or roll having a natural thread upon its surface, of the spiral or screw arranged thereon in the thread thereof, and additional means to prevent the drawing of the wires from said spiral or screw, substantially as described.

3. The combination, with the gathered ends

of the wire-fabric coils, forming the thread described, with the spiral screwed thereon, substantially as described.

4. The combination, with the gathered ends of the wire-fabric coils, forming the thread described, of the screw-cap thereon, and said cap being filled to prevent the loosening or turning of the cap on said thread, substantially as described.

5. The combination, of a gathered or rolled coiled wire fabric, with an internally-threaded cap or ferrule screwed thereon, substantially as described.

6. The combination, in a hammock, of the hammock fabric, with a flexible spring-spreader detachably and transversely secured to said fabric, and held in place by the resiliency of the spreader and the tension of the fabric, substantially as described.

7. The combination, in a hammock, of the hammock fabric, with a flexible spreader, and slip-sockets for so securing said spreader to the edges of the hammock that it may be readily detached therefrom to permit the collapsing of the fabric, substantially as described.

8. The wire-hammock fabric, in combination, with the clips on the edges thereof, the wires arranged in said edges, and the spreader having its ends in said clips, substantially as described.

9. The combination, of the wire fabric, with the metal clips fastened on the edges thereof and having or forming sockets, and the resilient spreader having its ends slipped into said sockets, substantially as described.

10. The combination, of a wire hammock, with a spreader, and the wires or rods provided in the edges of the hammock at the ends of said spreader, substantially as described.

11. The combination, with the hammock, of the bow spring-spreader having its ends held at the edges of the hammock, by the resiliency of the spreader and readily detachable therefrom, whereby the hammock may be collapsed and, if desired, formed into a coil or ring for shipment.

12. The combination, with the wire fabric having the ends of its coils drawn together and suitably fastened, of the metal sockets permanently attached to the edges of the fabric, and the spring-spreaders extending across the fabric and having their ends slipped into said sockets and easily removable therefrom, substantially as described.

13. The combination in a hammock of the hammock wire fabric with a resilient spreader having its ends detachably held at the edges of said fabric and said spreader being held in engagement with the fabric and held at its ends by the resiliency of the spreader and the tension of the fabric, substantially as described.

14. A hammock composed of interwoven coils of wire forming the hammock fabric, in

combination with means of attachment at the
ends of said fabric, a resilient spreader for
the hammock having its ends held at the
edges of the fabric by the resiliency of the
5 spreader and means for strengthening the
edges of the fabric at the ends of the spreader,
substantially as described.

In testimony whereof I have hereunto set
my hand this 10th day of December, A. D.
1897.

MARSHALL BURNS LLOYD.

In presence of—

C. G. HAWLEY,
M. C. GOOLEY.