

No. 887,770.

PATENTED MAY 19, 1908.

C. A. CHRISTINGER.
METHOD OF FILLING UP HOLES IN DAMAGED BOBBINET.
APPLICATION FILED OCT. 12, 1906.

Fig. 1.

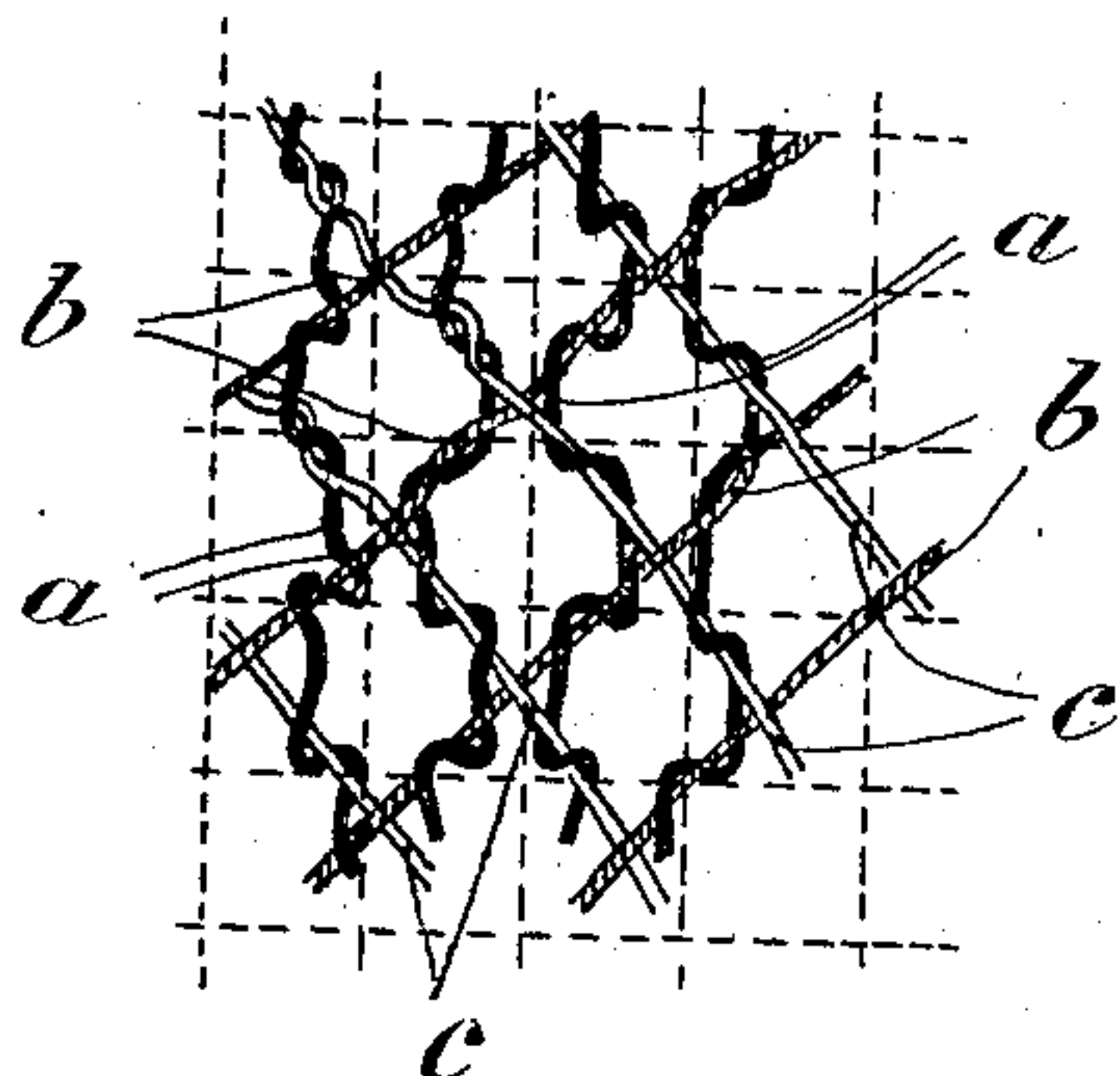


Fig. 2.

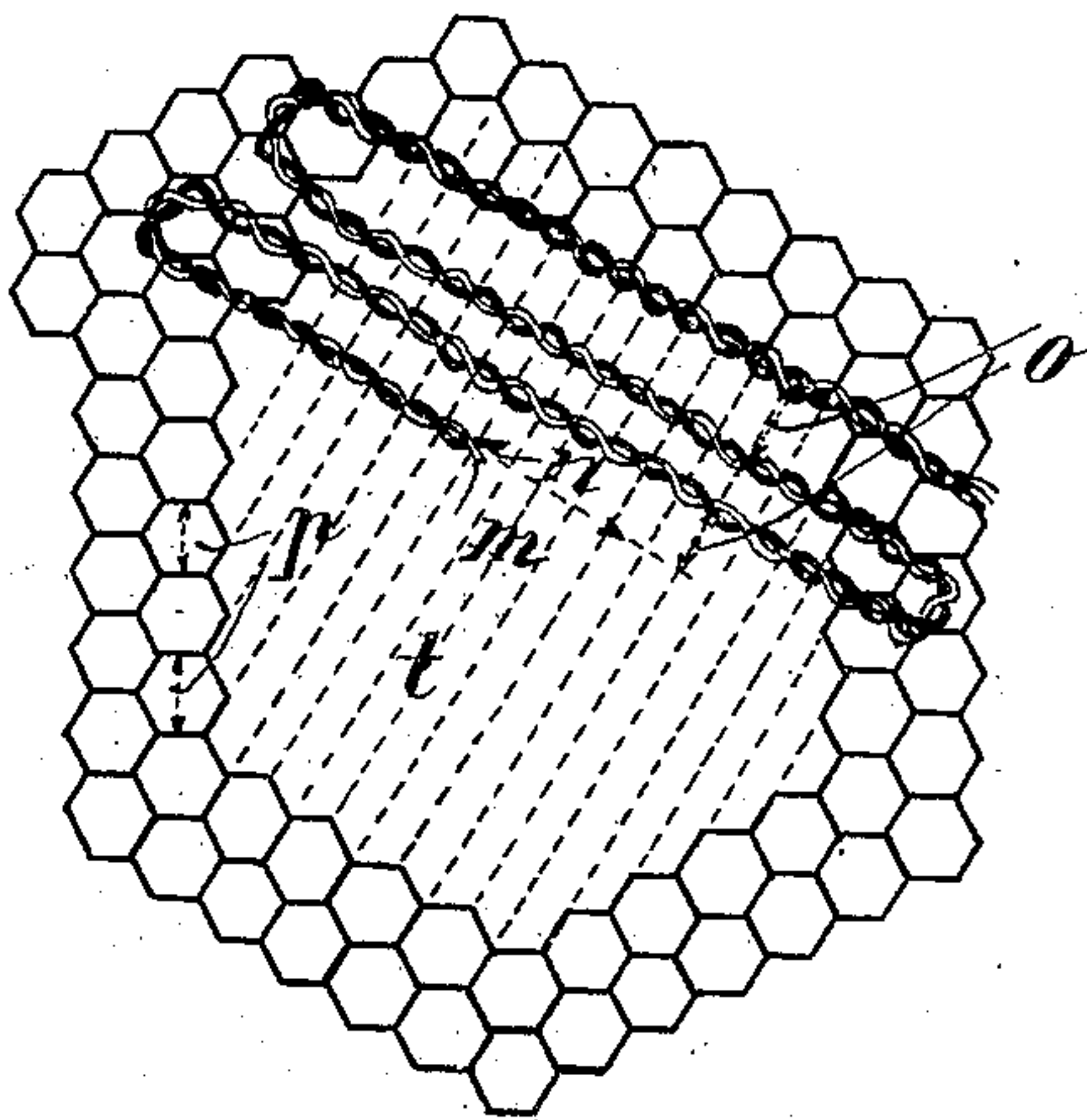


Fig. 3.

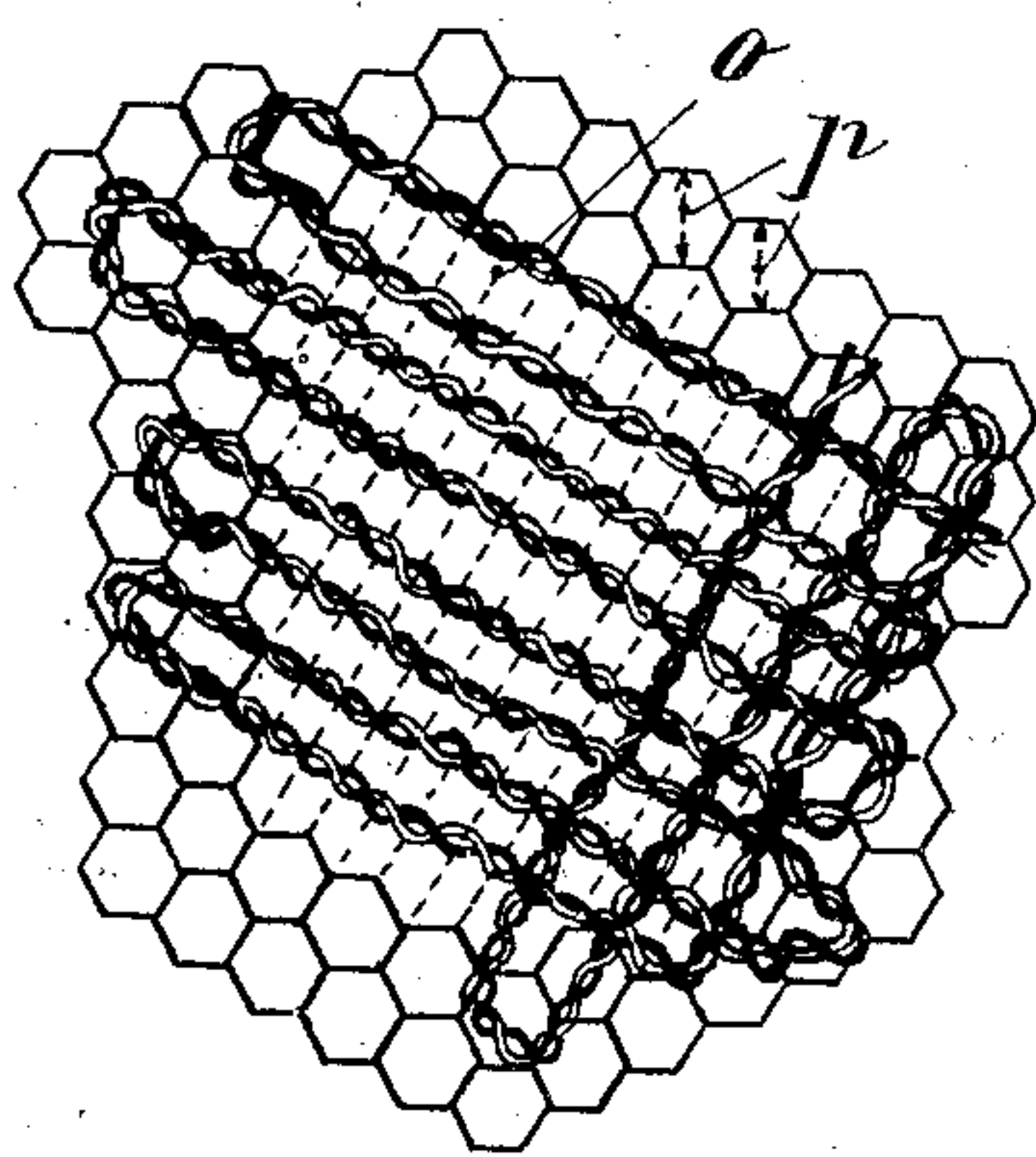
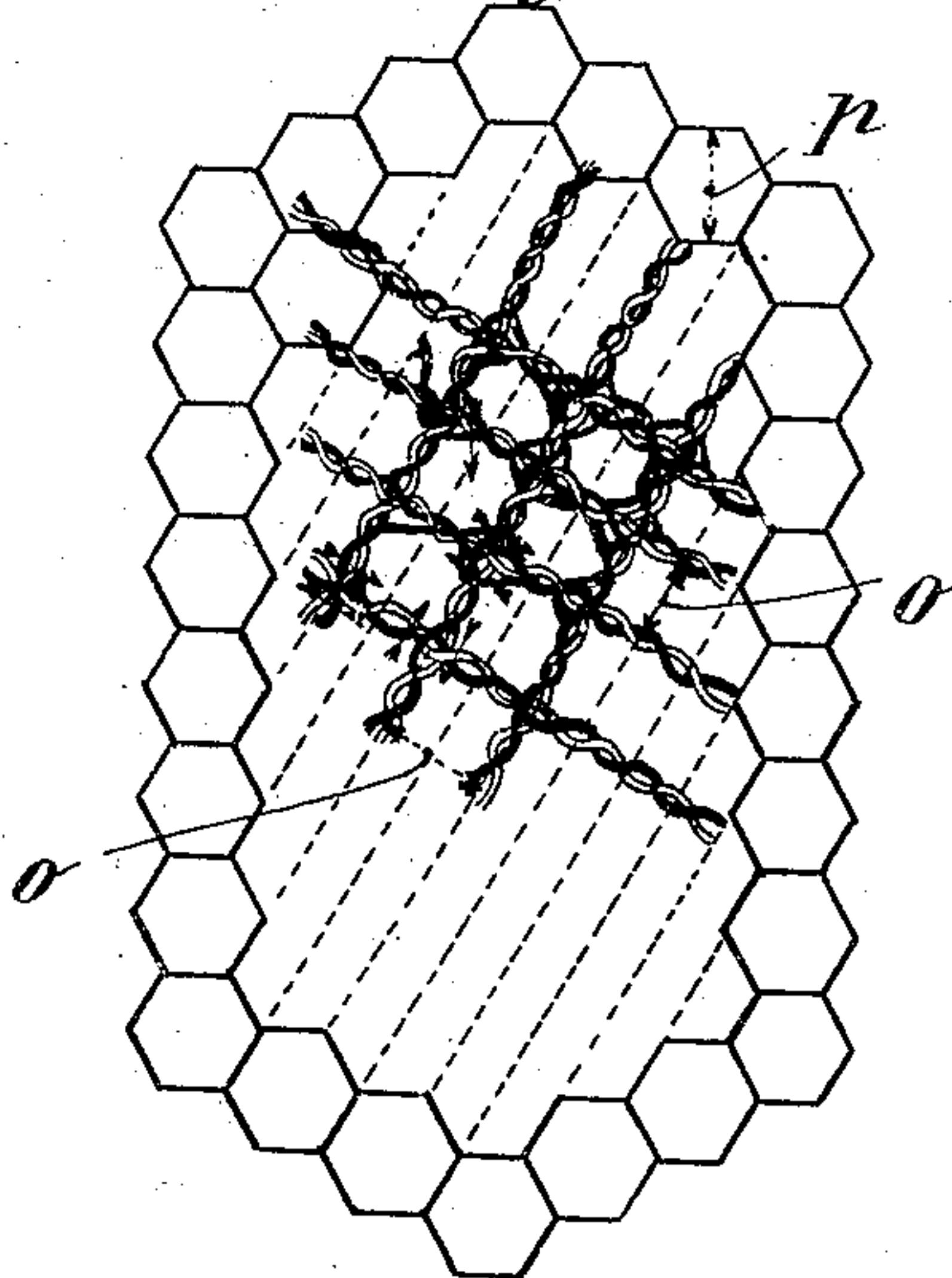


Fig. 4.



Witnesses.

Alfred Bosshardt.

Stanley B. Brauwall.

Inventor.

Carl Alfred Christinger

Per F. J. Bosshardt.

Attorney.

UNITED STATES PATENT OFFICE.

CARL ALFRED CHRISTINGER, OF WYL, SWITZERLAND.

METHOD OF FILLING UP HOLES IN DAMAGED BOBBINET.

No. 887,770.

Specification of Letters Patent.

Patented May 19, 1908.

Application filed October 12, 1906. Serial No. 338,641.

To all whom it may concern:

Be it known that I, CARL ALFRED CHRISTINGER, a citizen of Switzerland, residing at Wyl, St. Gallen, Switzerland, have invented
5 new and useful Improvements in a Method of Filling Up Holes in Damaged Bobbinet or Tulle, of which the following is a specification.

Hitherto bobbinet or tulle could only be
10 mended by very skilled hands at a great expenditure of time by so interlooping with a needle a single thread artistically as to produce a tulle or the like design.

This invention has for its object to provide a method whereby damaged places in
15 bobbinet or tulle can be filled up very quickly by the aid of a sewing machine in which at least two threads are used. I attain this object by the means illustrated in the accompanying drawing, in which—

Figure 1 shows the tulle formation proper, and Figs. 2, 3 and 4 the method of mending the tulle in its various stages.

Similar letters refer to similar parts
25 throughout the several views.

From Fig. 1 will be seen that tulle consists of vertical threads *a* which are interlooped by threads *b* running from the left below to the right at the top, and threads *c* running
30 from the right below to the left above. Superficially it would appear that the formation shown in Fig. 4 consists of adjoining hexagons of regular form, shown diagrammatically in Fig. 2. Now, to make up a hole
35 such as shown in Figs. 2, 3 and 4, by a design similar to the tulle a two thread sewing machine is for instance employed. The damaged tulle *t* is secured into an embroidery frame and by hand guided underneath the sewing
40 machine needle so that at first the looping of the needle-thread with the shuttle thread takes place in the undamaged part of the tulle, so that the two threads *m* and *n* loop around all three tulle threads *a*, *b*, *c* and will
45 at first become securely connected with the tulle next to the damaged part. By means of the said frame the damaged tulle part is then so guided underneath the machine needle, that parallel layers will form from the
50 looped threads *m*, *n* which connect together the opposite borders of the damaged tulle part (Fig. 2.) The distance *o* of these parallel layers corresponds with the distance *p* of two opposite sides of a hexagon. After the

hole has been filled up with the said layers, 55 the damaged tulle piece has to be guided at an angle to the previous direction corresponding with the position of the threads of the tulle, in the present instance approximately at a right angle, Fig. 3 and a second number 60 of parallel layers of threads are thereby formed connecting the respective opposite borders of the tulle together the first loops being also made into the undamaged part of the tulle. The design thus formed with 65 threads crossing each other is neither like fabric nor like tulle as both layers are among themselves interlooped again. The whole comprises a number of squares which is unlike the surrounding part, that is to say, the 70 tulle. To make the design formed like the tulle, it is then so guided zig-zag like to and fro underneath the sewing machine needle in the direction of the arrows, Fig. 4, as to cause the needle-thread and shuttle thread to so 75 loop around the layers of threads formed adjacent to their crossing points and that the said squares are formed into hexagons, Fig. 4, in imitation of the tulle.

A number of threads being used jointly to 80 fill up the holes, the thread used must be thinner than that of the bobbinet or tulle to prevent the mended part looking thicker than the undamaged part of the bobbinet or tulle. 85

I claim:

The method of filling up holes in damaged bobbinet or tulle by means of a sewing machine, consisting firstly in guiding the damaged part underneath the needle and by the 90 looping of the needle and shuttle threads sewing parallel layers of threads across the hole, secondly in sewing over the said parallel layers of threads crosswise a second like layer of threads, the first loops in each case being 95 made in the undamaged part of the tulle and finally sewing zig-zag like over the said two layers of threads adjacent to their crossing points a third layer of threads, all substantially as and for the purpose set forth. 100

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

CARL ALFRED CHRISTINGER.

Witnesses:

CARL MÜLLER,
A. LIEBERKNECHT.