

No. 612,497.

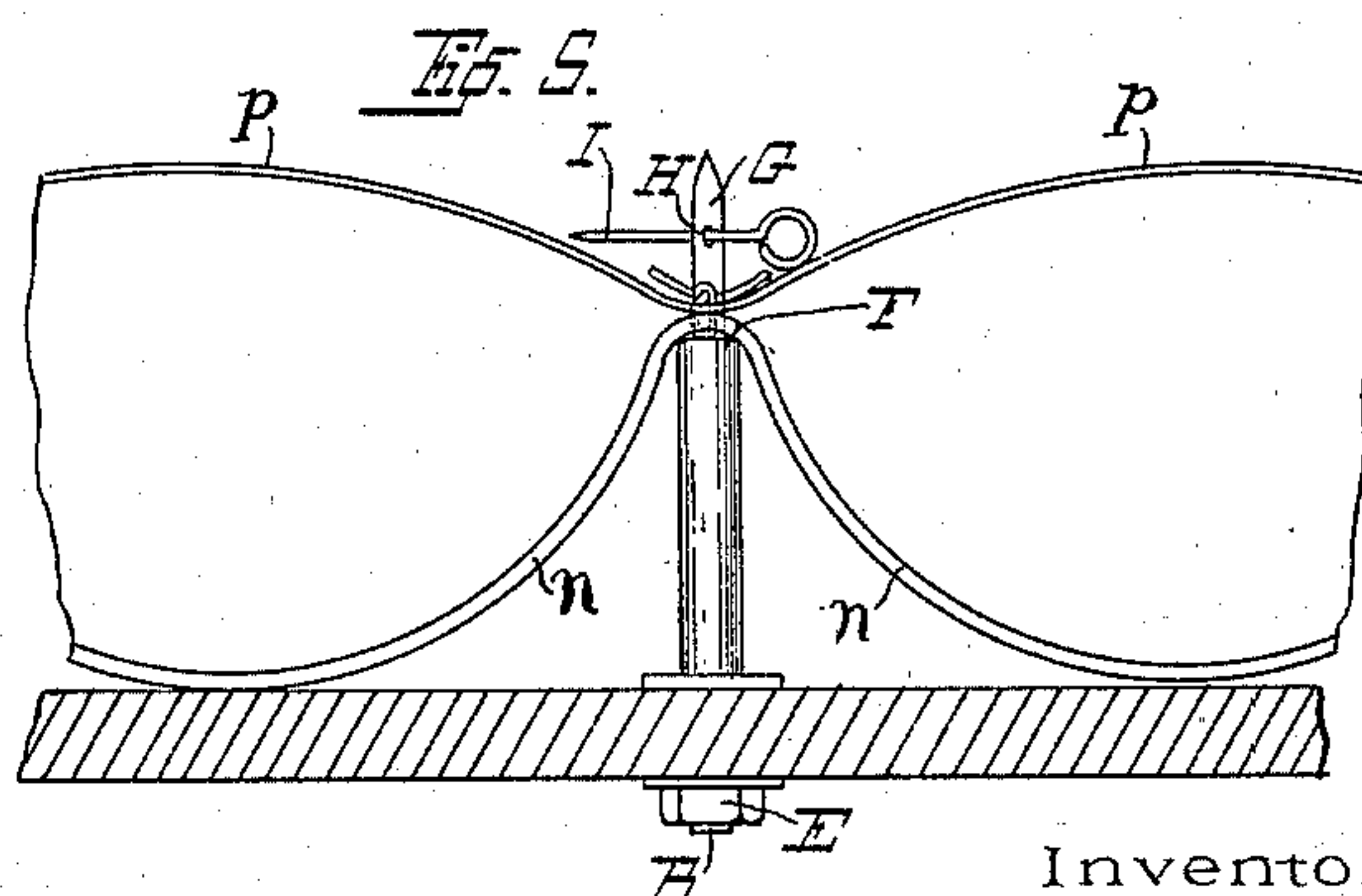
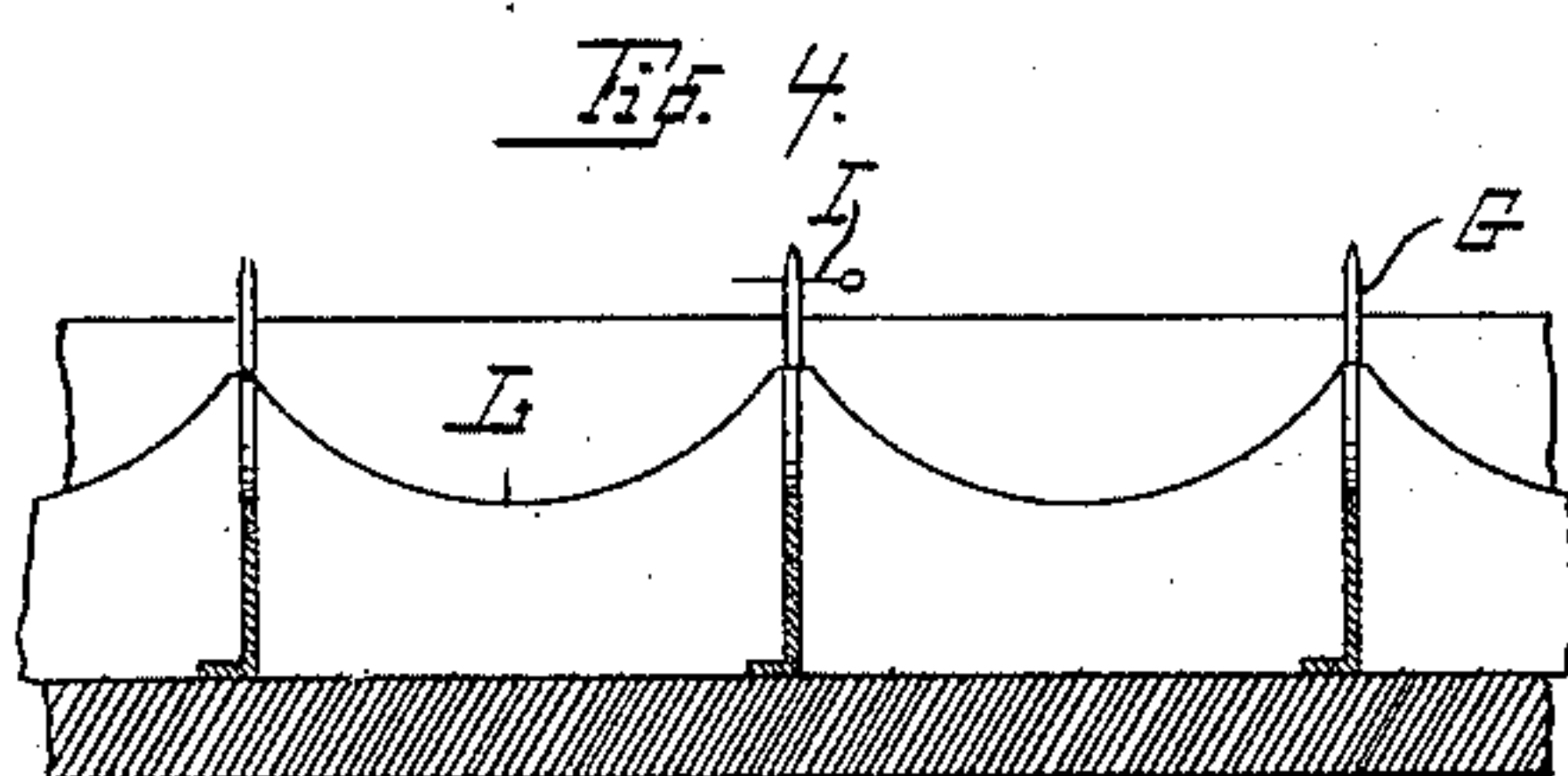
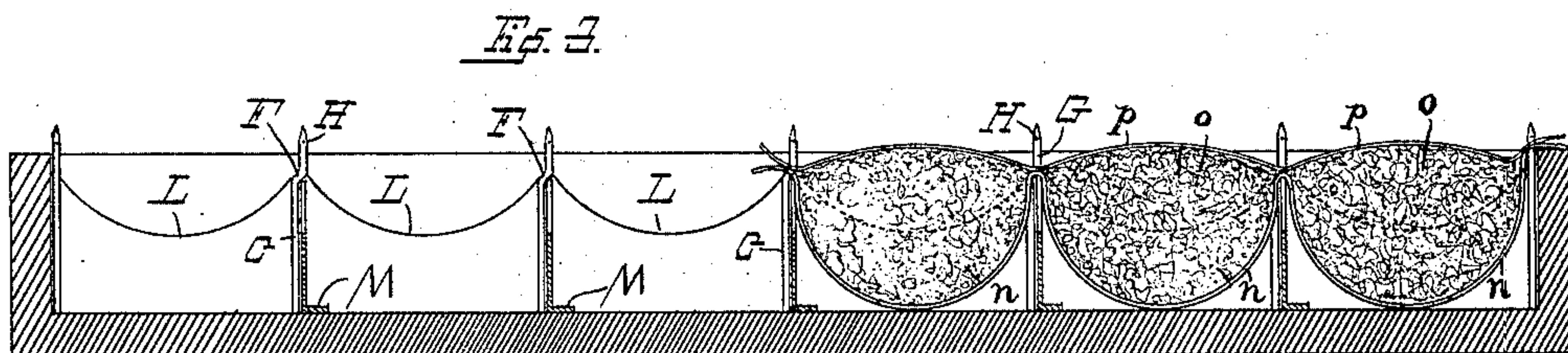
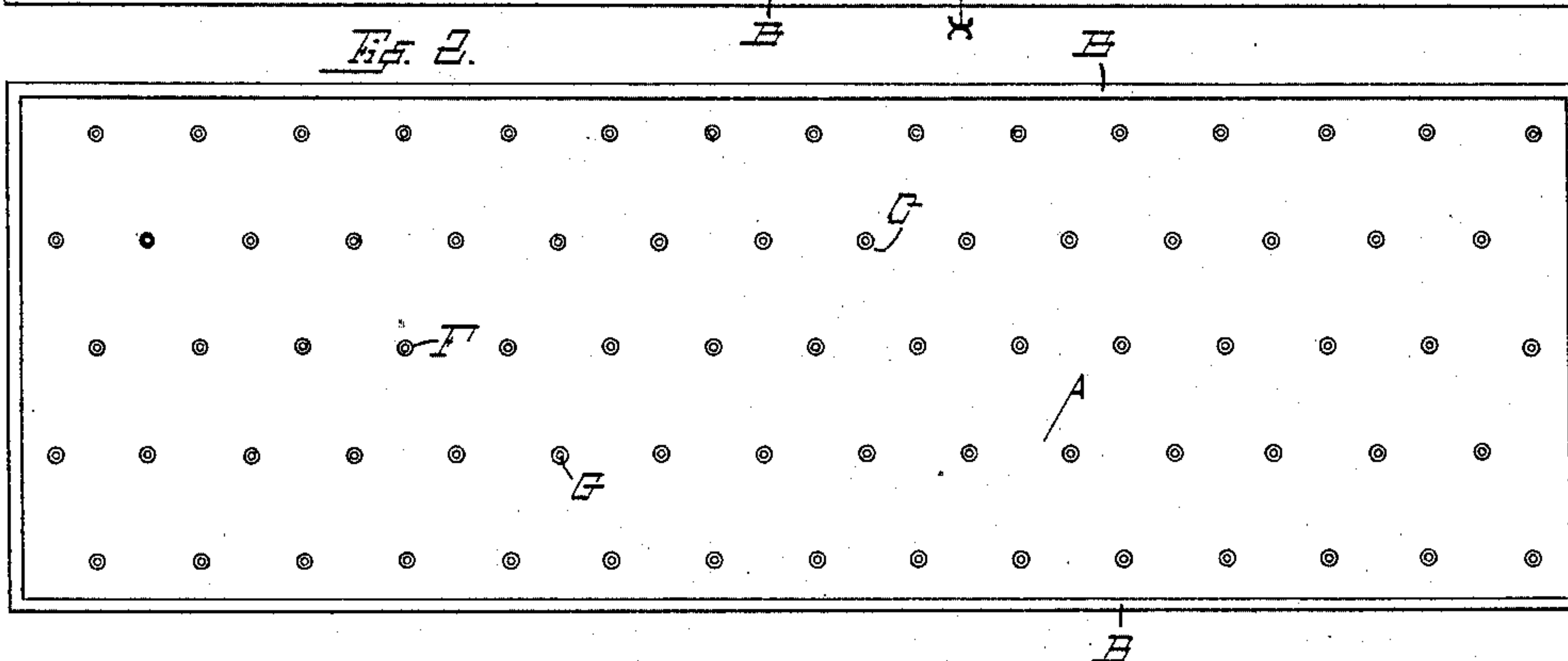
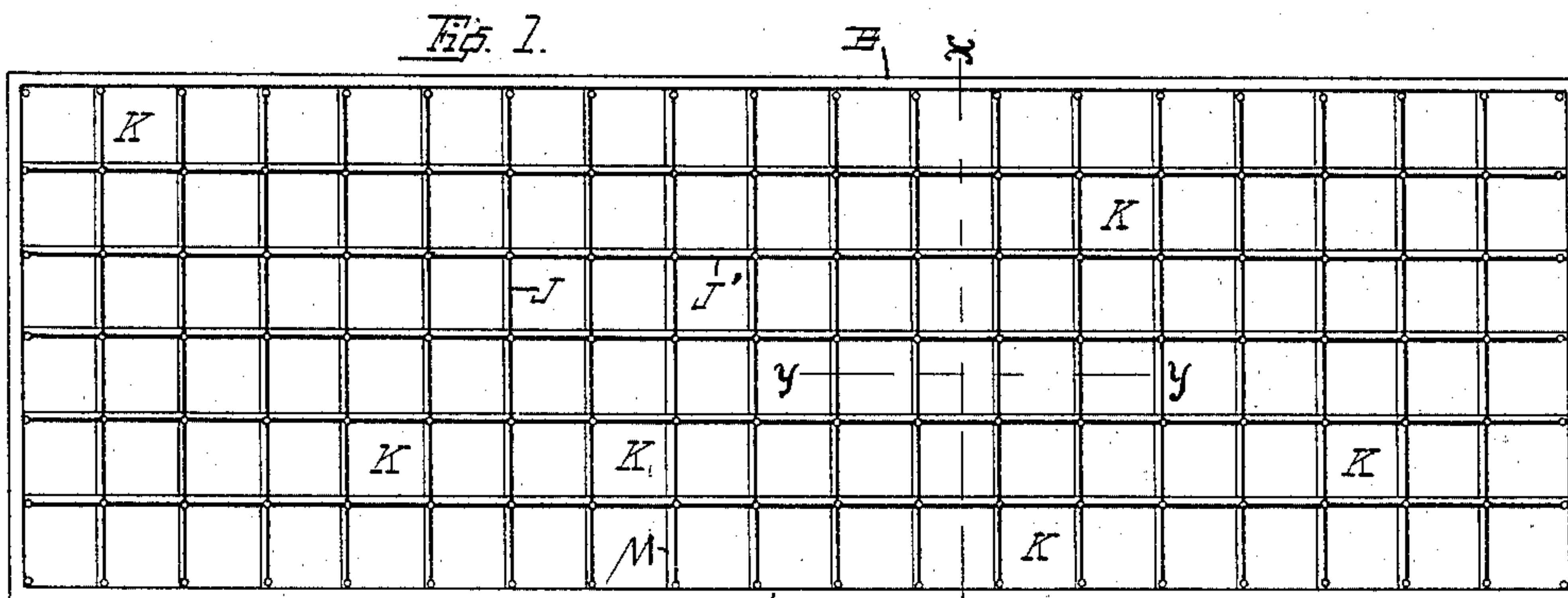
Patented Oct. 18, 1898.

E. H. HEBENSTREIT.

APPARATUS FOR FORMING TUFTED UPHOLSTERY.

(Application filed Feb. 10, 1898.)

(No Model.)



Witnesses.

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# UNITED STATES PATENT OFFICE.

EMIL H. HEBENSTREIT, OF MILWAUKEE, WISCONSIN.

## APPARATUS FOR FORMING TUFTED UPHOLSTERY.

SPECIFICATION forming part of Letters Patent No. 612,497, dated October 18, 1898.

Application filed February 10, 1898. Serial No. 669,773. (No model.)

*To all whom it may concern:*

Be it known that I, EMIL H. HEBENSTREIT, a citizen of the United States, residing at Milwaukee, in the county of Milwaukee and State of Wisconsin, have invented new and useful Improvements in Apparatus for Forming Tufted Upholstery, of which the following is a specification.

My invention relates to improvements in apparatus for forming tufted upholstery.

The object of my invention is to facilitate inserting the filling and securing the front and rear coverings.

In the following description reference is had to the accompanying drawings, in which—

Figure 1 is a top view of my invention as it appears when provided with partition-walls. Fig. 2 is a similar view showing a construction in which the partition-walls are omitted. Fig. 3 is a section view drawn on line *x x* of Fig. 1. Fig. 4 is a section view drawn on line *y y* of Fig. 1. Fig. 5 is an enlarged detail view of one of the needles shown in Fig. 2, and showing the material as it is being held thereby.

Like parts are identified by the same reference-letters throughout the several views.

A box-frame A, having sides B B, is provided at intervals with upwardly-projecting spines C, preferably formed with a reduced screw-threaded portion D at their lower ends, which is adapted to be inserted through a hole in the bottom of the frame and secured in place by means of a nut E. The spines are provided near their upper ends with a shoulder F and a needle-shaped extremity G, having an eye H therein near its point, through which a holding-pin I is adapted to be inserted, as shown in Fig. 5.

For some classes of work I prefer to provide the frame with partitions J J', which divide the frame into compartments K, as shown in Fig. 1, the spines being located in the corners formed by the partitions and offset to form the shoulders F, so that the needle extremities are supported in a position directly over the partitions at the points where the partition-lines cross, and the upper edges of the partitions being cut away between the spines along the curved lines L. The partitions are conveniently formed of

sheet metal, with a base, flange M, by means of which they may be readily secured to the frame by tacks or equivalent means. I prefer to make the partition-walls J of continuous strips and the walls J' of short strips inserted separately between the strips J; but it is obvious that the partitions may be formed in a variety of ways, as may seem most convenient to the manufacturer.

The method of forming the upholstery in which I utilize the apparatus above described is as follows: The material which is to constitute the cover or front surface *n* of the upholstery is marked off with chalk or equivalent substance on the under side to indicate the division-lines of the tufts to be formed, making due allowance for the bulges of the material when the filling is inserted. The cover is then laid upon the frame with the surface side down and the needle extremities of the spines inserted through the material at the points where the marked lines cross. A filling *o*, of hair or other suitable material, is then inserted in the space between the spines, pressing the cover down in such spaces to form pockets for the reception of the filling, and a suitable backing *p*, of cloth or similar flexible material, is then stretched flat over the spines and pressed downwardly to force the needle-points therethrough, the backing and cover being brought into contact or nearly in contact over the shoulders of the spines. The pins I are then inserted through the eyes H to prevent the backing from being thrown off by the pressure of the filling. In applying the backing I commence on one side of the frame and press the backing successively upon the needles, shaping or bunching the filling in the meantime to produce neatly-formed tufts. After the backing *p* has been applied and secured by the pins I it may easily and quickly be secured by suitable stitching to the cover *n*, near the needles, by means of a curved needle, such as is commonly employed for this and similar purposes.

If the cover is of cloth and it is desired to form square or so-called "biscuit-tufting," I prefer to use the partitioned frame shown in Fig. 1, as the partitions give better shape to the cloth; but for leather upholstery the



so-called "diamond-tufting" is common, and for this I prefer to use the frame without partitions; as shown in Fig. 2.

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

1. An apparatus for forming tufted upholstery, comprising a supporting-frame, a series of upwardly-projecting spines located in said frame and provided with shoulders adapted to support the material, and needle-shaped extremities projecting upwardly from the shoulders and provided with eyes for the reception of holding-pins, and holding-pins adapted to be removably inserted through the eyes in said needle-shaped extremities, substantially as described and for the purpose set forth.

2. An apparatus for forming tufted upholstery, comprising a supporting-frame, a series of partition-walls dividing the frame into compartments, needle-shaped projections at the corners of said compartments provided with eyes for the reception of holding-pins, and holding-pins adapted to be removably insert-

ed in said eyes, said partitions being cut away between the corners on a downwardly-curved line, substantially as described and for the purpose set forth.

3. An apparatus for forming tufted upholstery, comprising a supporting-frame, a series of partition-walls dividing the frame into compartments, with the upper edges of said walls cut away on a downwardly-curved line between the corners of said compartments, upwardly-projecting spines located in the corners of said compartments and offset into the angles of said partitions, and provided with needle-shaped extremities having eyes for the reception of holding-pins, and holding-pins adapted to be removably inserted in said eyes, substantially as described, and for the purpose set forth.

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

EMIL H. HEBENSTREIT.

Witnesses:

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F. A. OTTO.