

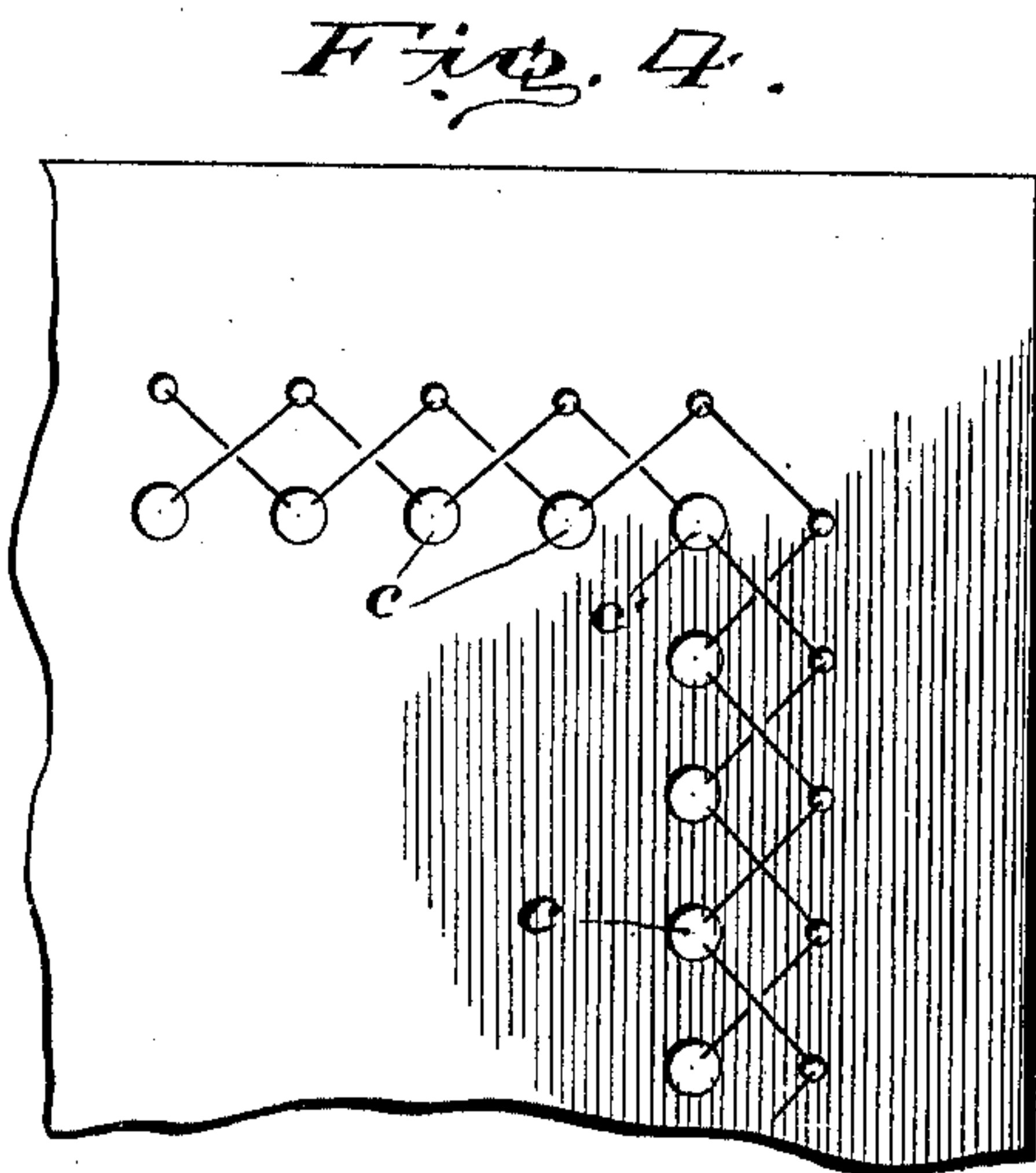
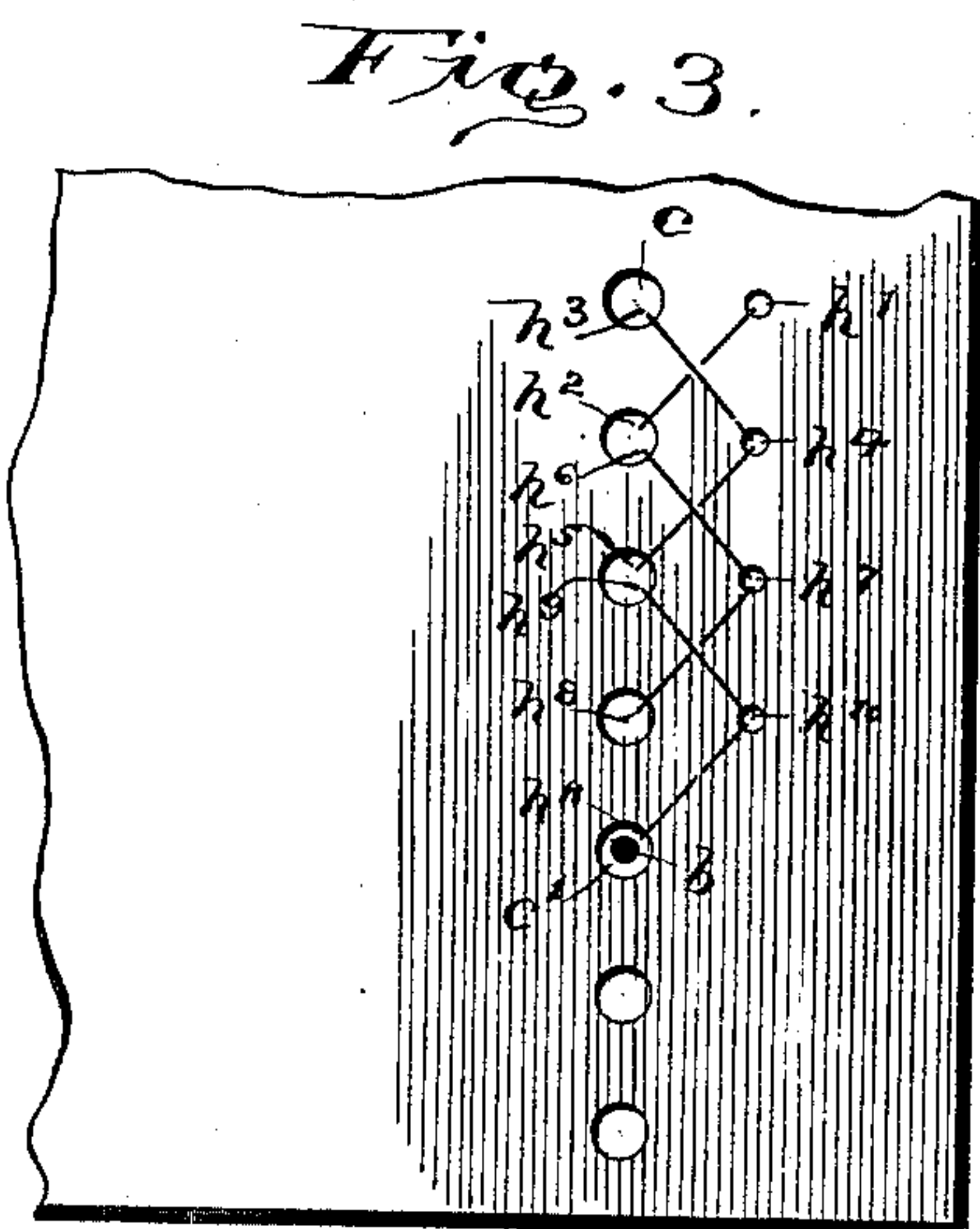
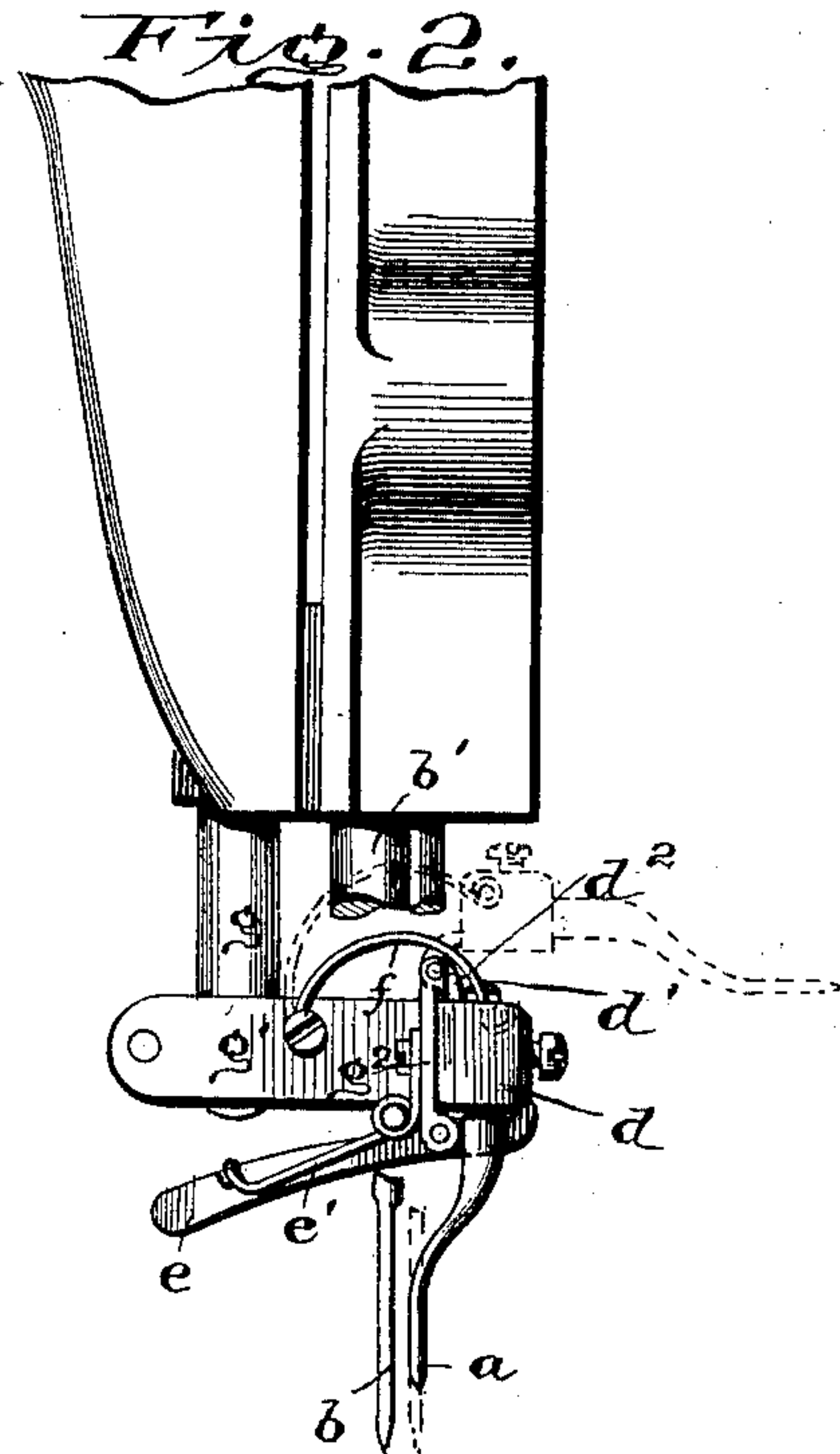
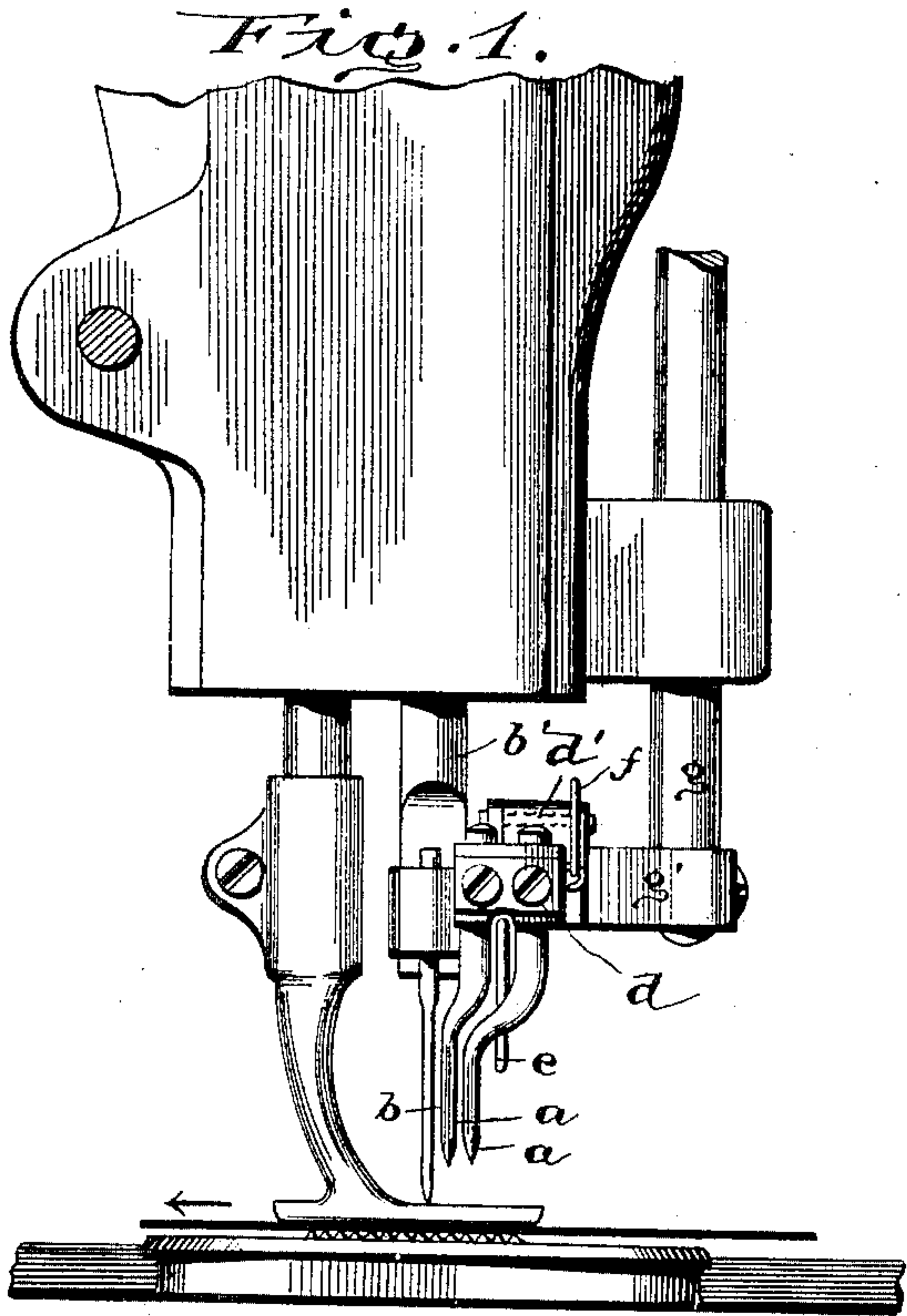
No. 630,099.

Patented Aug. 1, 1899.

A. J. A. OESTERREICH.  
HEMSTITCH SEWING MACHINE.

(Application filed Jan. 25, 1899.)

(No Model.)



Witnesses:  
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# UNITED STATES PATENT OFFICE.

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## HEMSTITCH SEWING-MACHINE.

SPECIFICATION forming part of Letters Patent No. 630,099, dated August 1, 1899.

Application filed January 25, 1899. Serial No. 703,337. (No model.)

*To all whom it may concern:*

Be it known that I, AMANDUS JOHANN AUGUST OESTERREICH, a subject of the German Emperor, and a resident of Hamburg, in the German Empire, have invented certain new and useful Improvements in Piercing Devices for Hemstitch Sewing-Machines, of which the following is a specification.

My invention relates to improvements in piercing devices for hemstitch sewing-machines in which vertically-reciprocating piercers operate in conjunction with an overseaming stitching-needle; and the object of my improvements is to provide means whereby the said piercers may be removed or thrown out of their working position in order to facilitate the turning of the fabric around the needle when it is desired to form an angle in the row or path of the holes made and to be made, respectively, in changing the direction of the hemstitch-seam, as in turning a sharp corner.

In the accompanying drawings, Figure 1 is a partial end view, and Fig. 2 a partial front side view, of a hemstitch sewing-machine provided with my improved piercing device. Figs. 3 and 4 are diagrams illustrating, on an enlarged scale, the manner in which the hemstitches are formed.

Referring to the drawings, *g* denotes a bar to which a vertically-reciprocating movement is to be imparted in the usual manner and which is provided at its lower end with a horizontally-extending arm *g'*, having a small bracket *g<sup>2</sup>*. The piercers *a* are secured by suitable screws in a block *d*, provided with an arm *d<sup>2</sup>*, which is pivoted at *d'* to the bracket *g<sup>2</sup>*, the said block being held in its operative position by a catch lever or latch *e*, also pivoted on the said bracket *g<sup>2</sup>* and having a hooked portion to engage the said block *d*. Pressing on the longer arm of the block *d* is a spring *e'*, which holds the shorter arm of the said catch lever or latch in engagement with the said block *d*.

*f* denotes a spring, one end of which is attached to the arm *g'* and the other end of which is engaged with the block *d* in such a manner as to have a tendency to lift the said block to the position denoted by dotted lines

in Fig. 2, so that when it is desirable to remove the piercers from their working position to get them out of the way it is only necessary for the attendant to press upward on the longer arm of the catch-lever *e*, thus disengaging the shorter hooked arm of said lever from the block *d* and permitting the spring *f* to turn the said block on its pivot *d'*, and thereby lift the piercers out of the way. The needle *b* is carried by the needle-bar *b'*, to which horizontal movements are imparted in the usual manner in machines of this kind, so that the needle will descend at different times in positions as denoted by full and dotted lines in Fig. 2.

From the foregoing it will be apparent that when the machine is in operation the vertically-reciprocating piercers or prickers *a* will make a row of holes *c* in the fabric, as indicated in Figs. 3 and 4, while the needle *b* operates in connection with a feeding device which moves the fabric forward and backward beneath the needle in the usual manner in hemstitch-machines, so as to form the hemstitches *h'* *h<sup>2</sup>* *h<sup>3</sup>*, &c., as indicated in Fig. 3. It will be understood that the lateral movements of the needle-bar are capable of adjustment, so that the stitches at *h'* *h<sup>4</sup>* *h<sup>7</sup>* *h<sup>10</sup>* may be made nearer to or farther from the stitches *h<sup>2</sup>* *h<sup>3</sup>* *h<sup>5</sup>* *h<sup>6</sup>* *h<sup>8</sup>* *h<sup>11</sup>* in the holes *c*, formed by the piercers or prickers *a*. If it be desired to alter the direction of the hemstitch-seam or of the row of holes *c*, as in turning a sharp corner, the attendant merely presses upward on the longer arm of the catch lever or latch *e* and the piercers will then be lifted up out of the way, as denoted in dotted lines in Fig. 2. This operation of turning the work is performed when the needle is in the work, as when it is in the hole *c'*, so that the work may be turned on the needle as a center, and in the continued operation of the machine the hemstitch-seam after the piercers are again lowered to their working position will be formed at a right angle or any other desired angle to the first portion of the said hemstitch-seam.

I do not wish to be understood as limiting my invention to the particular means herein shown and described for enabling the pier-

cers to be removed from working position, as instead of lifting them in the manner herein shown they may be put out of action by being turned aside or may be otherwise removed  
5 from working position.

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

10 In a hemstitch sewing-machine, the combination with the vertically-reciprocating bar *g* provided with the arm *g'*, a piercer-carrying block *d* pivoted to a portion of said arm, the

spring-pressed catch or latch *e* also pivoted to a portion of said arm and the spring *f* connected with said arm and with said block and 15 serving to lift the latter and the piercer or piercers carried thereby when the said spring-pressed catch or latch is disengaged from said block.

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Witnesses:

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