

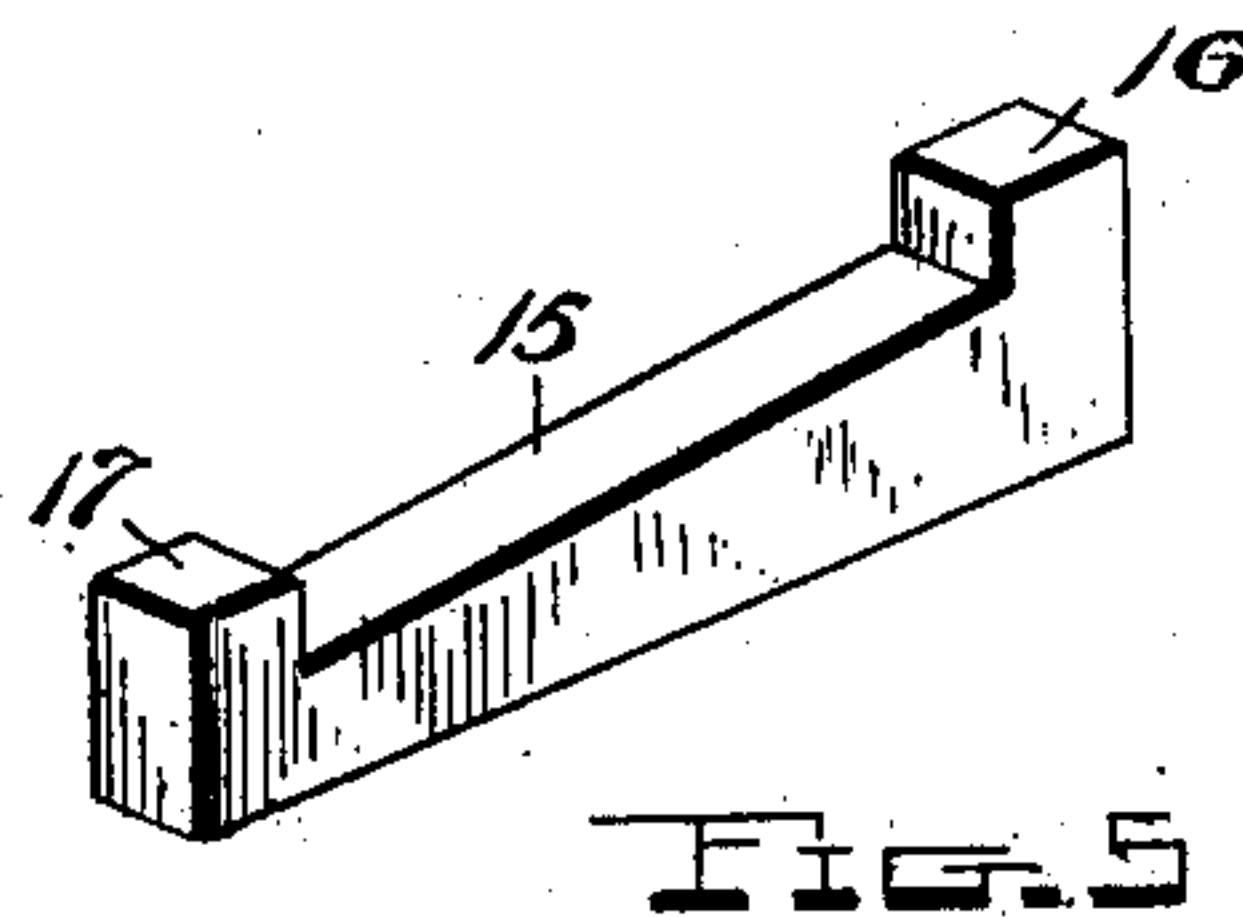
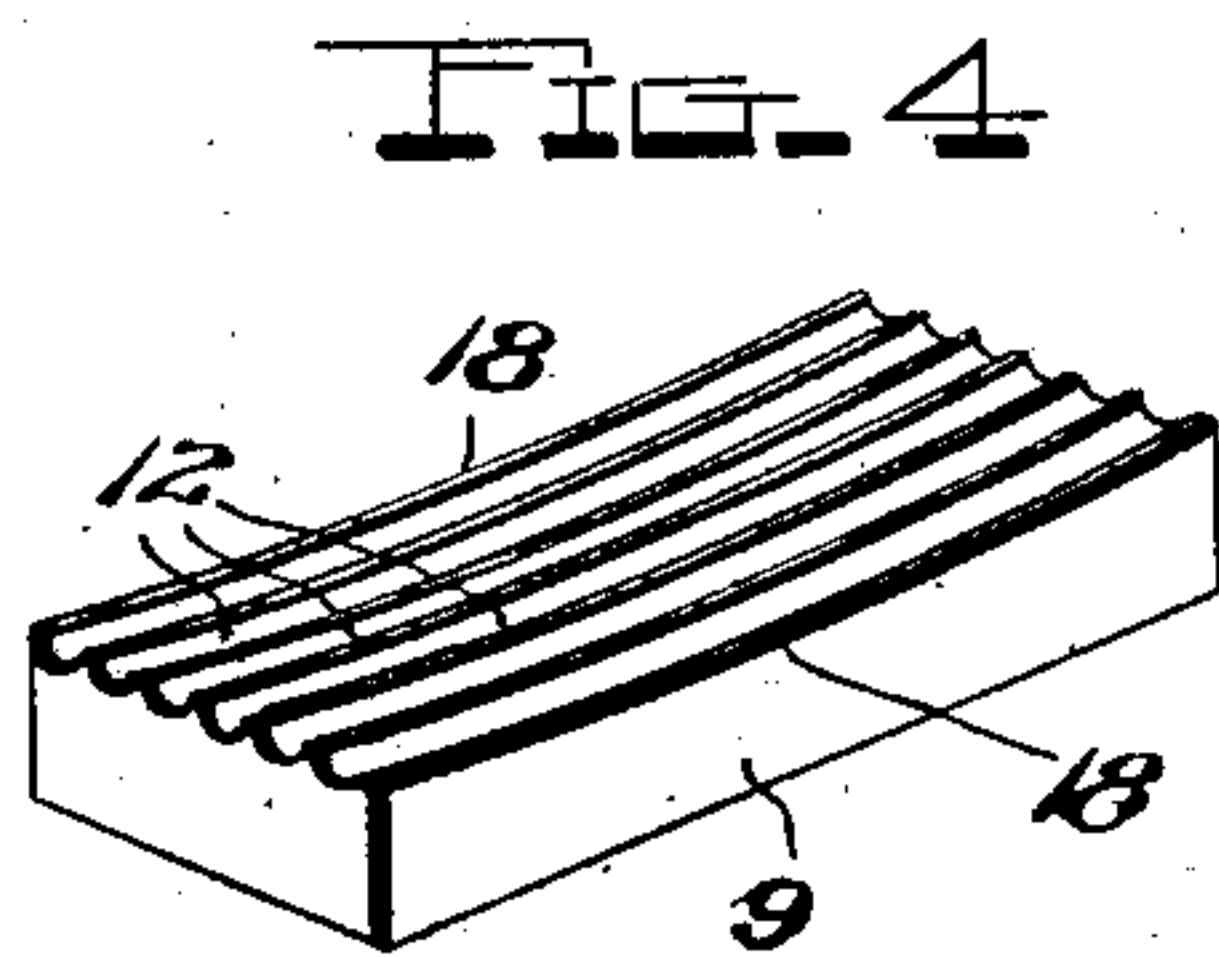
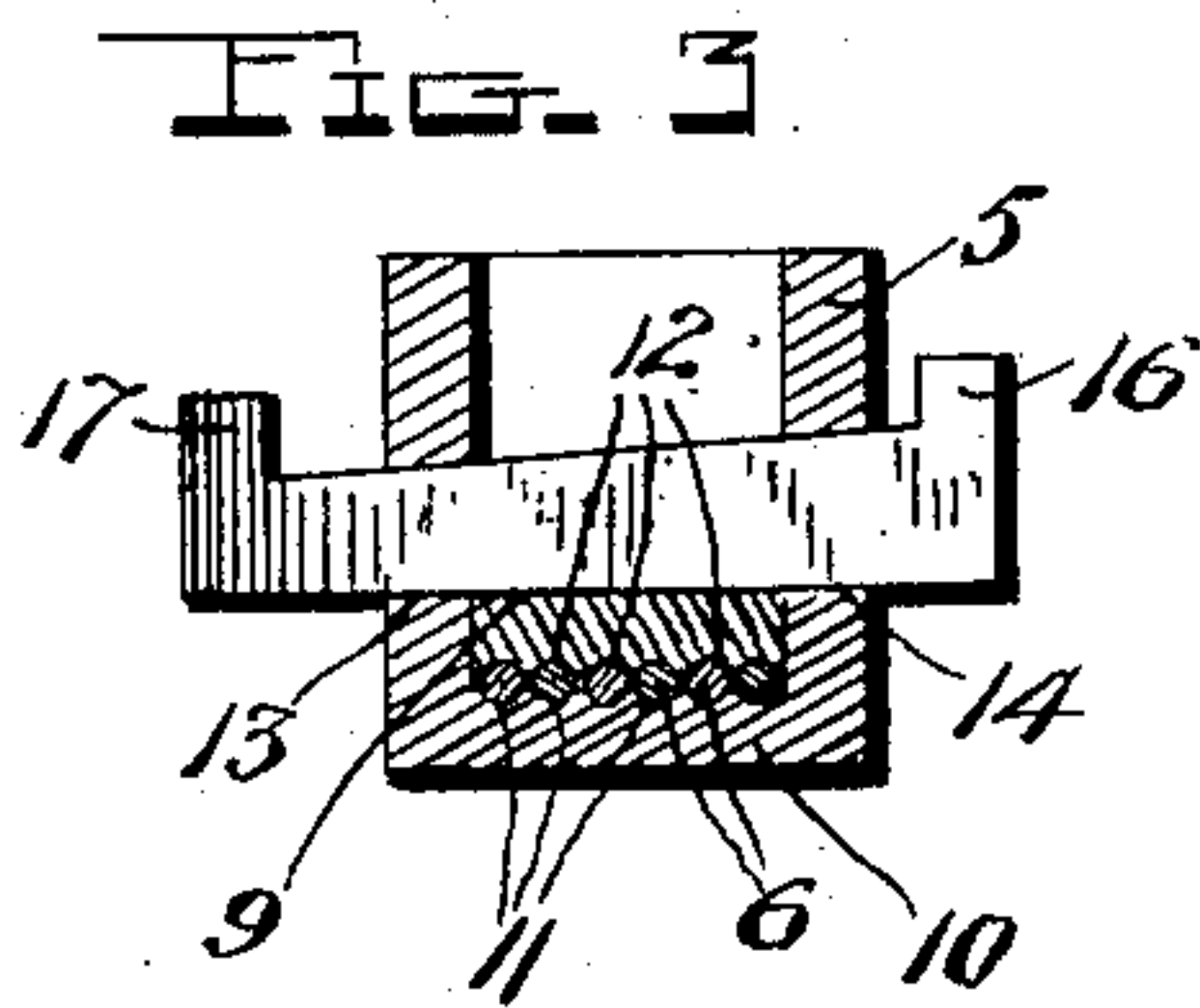
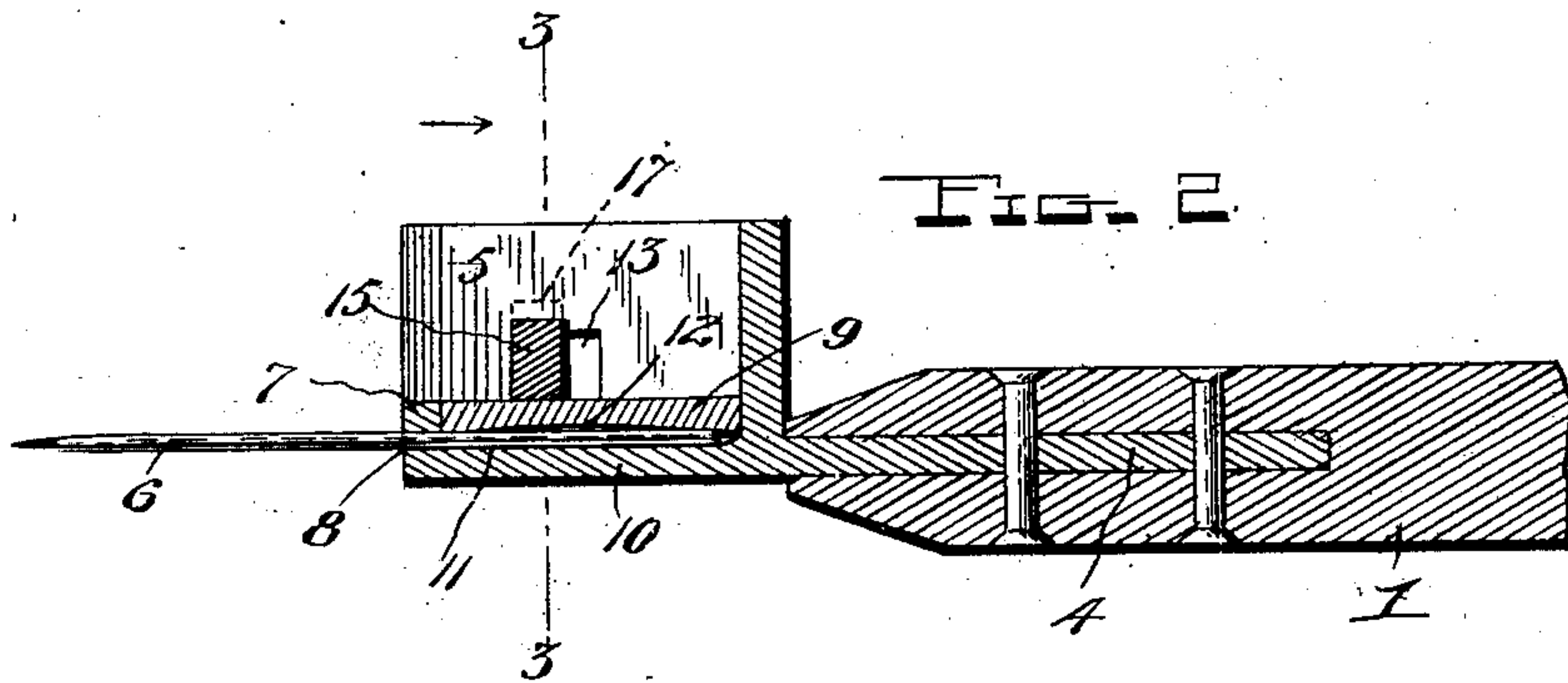
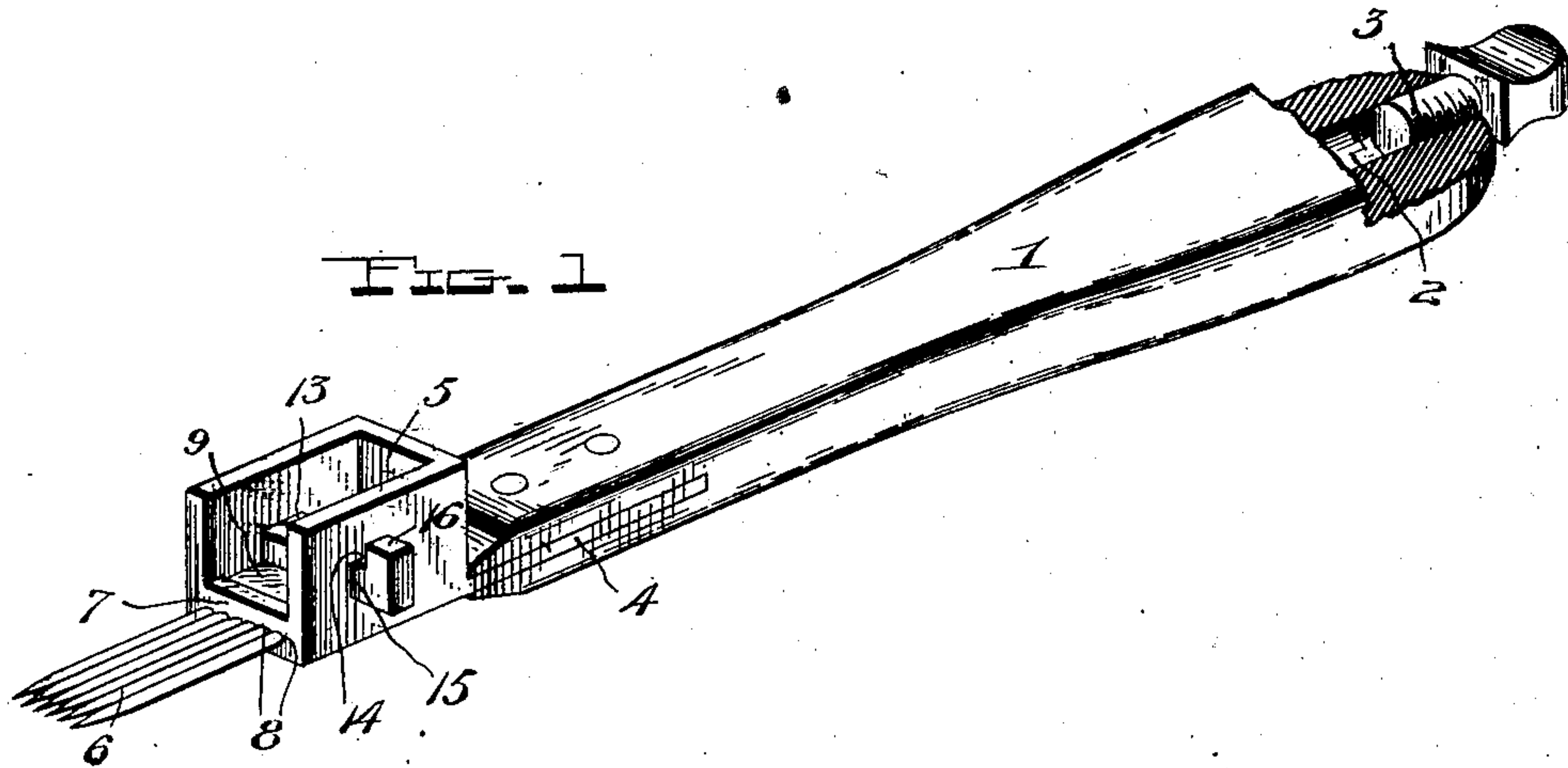
No. 731,535.

PATENTED JUNE 23, 1903.

W. J. BELL.
FELT PICKER.

APPLICATION FILED JAN. 30, 1902. RENEWED DEC. 20, 1902.

NO MODEL.



Inventor
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Witnesses

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UNITED STATES PATENT OFFICE.

WILLIAM JACKSON BELL, OF TYLER, TEXAS.

FELT-PICKER.

SPECIFICATION forming part of Letters Patent No. 731,535, dated June 23, 1903.

Application filed January 30, 1902. Renewed December 20, 1902. Serial No. 136,072. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM JACKSON BELL, a citizen of the United States, residing at Tyler, in the county of Smith and State of Texas, have invented certain new and useful Improvements in Felt-Pickers; and I do declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

This invention relates to an improved felt-picker for the use of piano-workmen in making flexible the felts in piano-actions and for general analogous uses.

The object of the invention is to provide a picking implement which shall be simple of construction, durable, convenient, and efficient in use, and adapted to clamp the needles firmly and securely; and a further object is to provide fastening means which will permit of the ready removal of a broken needle and the substitution therefor of a new needle while retaining the remaining needles against displacement.

With these and other objects in view, which will readily appear as the nature of the invention is better understood, the same consists in certain novel features of construction and combination and arrangement of parts, which will be hereinafter fully described, defined in the appended claims, and illustrated in the accompanying drawings, in which—

Figure 1 is a perspective view of a felt-picker embodying my invention, a portion of the handle being broken away to show the needle-chamber. Fig. 2 is a detail longitudinal section, on an enlarged scale, through the box or socket and the needle-clamping devices. Fig. 3 is a cross-section of the same on the line 3 3 of Fig. 2. Fig. 4 is a detail view of the clamping block or plate. Fig. 5 is a similar view of the tapered key.

Referring now more particularly to the drawings, the numeral 1 represents the handle of the implement, which is provided at one end with a chamber or receptacle 2 for additional picking-needles, the said chamber or receptacle being closed at its outer end by a screw cap or plug 3, which prevents entrance of dust and dirt to the chamber and confines the needles. The opposite end of the handle is slotted to receive a tang 4, which

is suitably secured thereto and which is formed upon a rectangular box or socket 5, in which are clamped needles 6.

The box or socket 5 is open at the top and partially open at the front, being provided with a short front wall 7, having openings 8 for the insertion of the needles, the open space above said wall serving, in conjunction with the top opening, as a passage-way for the insertion and removal of a block or plate 9, which clamps the inner ends of the needles against the base or bottom wall 10 of said box. The inner ends of the needles lie in grooves 11 and 12, formed in the meeting faces of the plate 9 and wall 10, the said grooves being made of such size as to receive different sizes of needles without impairing the clamping action of the plate. The purpose of inserting the needles through the front wall 7 is to adapt said wall to serve as a bearing or reinforce to increase the stability of the clamping means and to hold the needles properly assembled, so that either needle when broken may be removed and a new one substituted therefor without disturbing the other needles.

The box or socket is provided in its side walls with openings 13 and 14 for the reception of a tapered key 15, which is provided to bear against the clamping-plate 9 and adjust said plate to clamp the needles against the bottom wall 10 of the box. These openings are of sufficient size to enable the key to be passed horizontally through them when the clamping plate or block is removed from the box, which key is provided at its opposite ends with lugs 16 and 17, the lug 16 being located at the larger end and serving to limit the adjustment of the key and the lug 17 at the reduced end and serving normally to hold the key against withdrawal. When the key is fitted into the openings, it is adjusted longitudinally to the proper extent to cause the clamping block or plate to hold the needles firmly in position. In order to secure a firm and effective clamping action, the clamping block or plate 9 is made sufficiently thin to give it some elasticity or resiliency, and said plate is concaved, as shown at 18, on its under side, so that its front and rear end portions will form gripping or pinching points, which when the central portion

of the plate is forced or sprung down under the action of the tapered key will bear or impinge with great force against the needles and hold them firmly and securely against withdrawal.

When it is desired to remove the plate and all or any one of the needles, the key is loosened and elevated to its greatest extent, and the plate is then lifted from the box or socket over the front wall 7, leaving the needles free to be removed through the openings 8. Should either of the needles be broken, the broken needle may be removed without withdrawing the plate 9 and a new needle substituted therefor without disturbing the remaining needles, as the plate will retain the same in their proper relative positions.

From the foregoing description, taken in connection with the accompanying drawings, it is thought that the construction, operation, and advantages of my improved felt-picker will be readily apparent without requiring an extended explanation.

Various changes in the form, proportion, and the minor details of construction may be resorted to without departing from the principle or sacrificing any of the advantages of the invention.

Having thus described the invention, what is claimed, and desired to be secured by Letters Patent, is—

1. A felt-picker comprising a handle having a guide provided with a plurality of independent passages, needles extending through said passages, and means for clamping the needles in rear of the guide, substantially as described.

2. A felt-picker comprising a handle, a box or socket carried thereby, needles seated in said socket, a bowed or concaved spring clamping-plate for holding the needles, and means for adjusting and holding said clamping-plate, substantially as specified.

3. A felt-picker comprising a handle having a box or socket at its forward end, said box or socket having a front wall provided with a plurality of independent guide-passages, needles extending through said passages into the box or socket, and means for

clamping the needles against the bottom wall of the socket in rear of said front wall, substantially as specified.

4. A felt-picker comprising a handle, a box or socket carried thereby and provided with a front wall provided with a plurality of independent guide-passages, needles extending through said passages into the box or socket, a plate seated in the socket and clamping the needles against the same, and means for adjusting and holding said clamping-plate, substantially as set forth.

5. A felt-picker comprising a handle carrying a socket open at the top and having a short front wall formed with apertures, a clamping-plate seated in said socket and insertible and removable through said open top and the space above said front wall, needles extending through the apertures and clamped by said plate, and a tapered key for adjusting and holding the plate, substantially in the manner set forth.

6. A felt-picker comprising a handle, a box or socket carried thereby and provided with a front wall provided with a plurality of independent guide-passages, needles extending through said passages into the box or socket, a bowed or concaved spring clamping-plate seated in the socket and clamping the needles against the same, and means for adjusting and holding said clamping-plate, substantially as described.

7. A felt-picker comprising a handle carrying a socket open at the top and having a short front wall formed with apertures, a clamping-plate seated in said socket and insertible and removable through the space above said front wall, needles extending through the apertures and clamped by said plate, and means upon the socket above the plate for adjusting and holding said plate, substantially as set forth.

In testimony whereof I have hereunto set my hand in presence of two subscribing witnesses.

WILLIAM JACKSON BELL.

Witnesses:

TRAVIS FLEISHEL,

JNO. T. BONNER.