

No. 665,989.

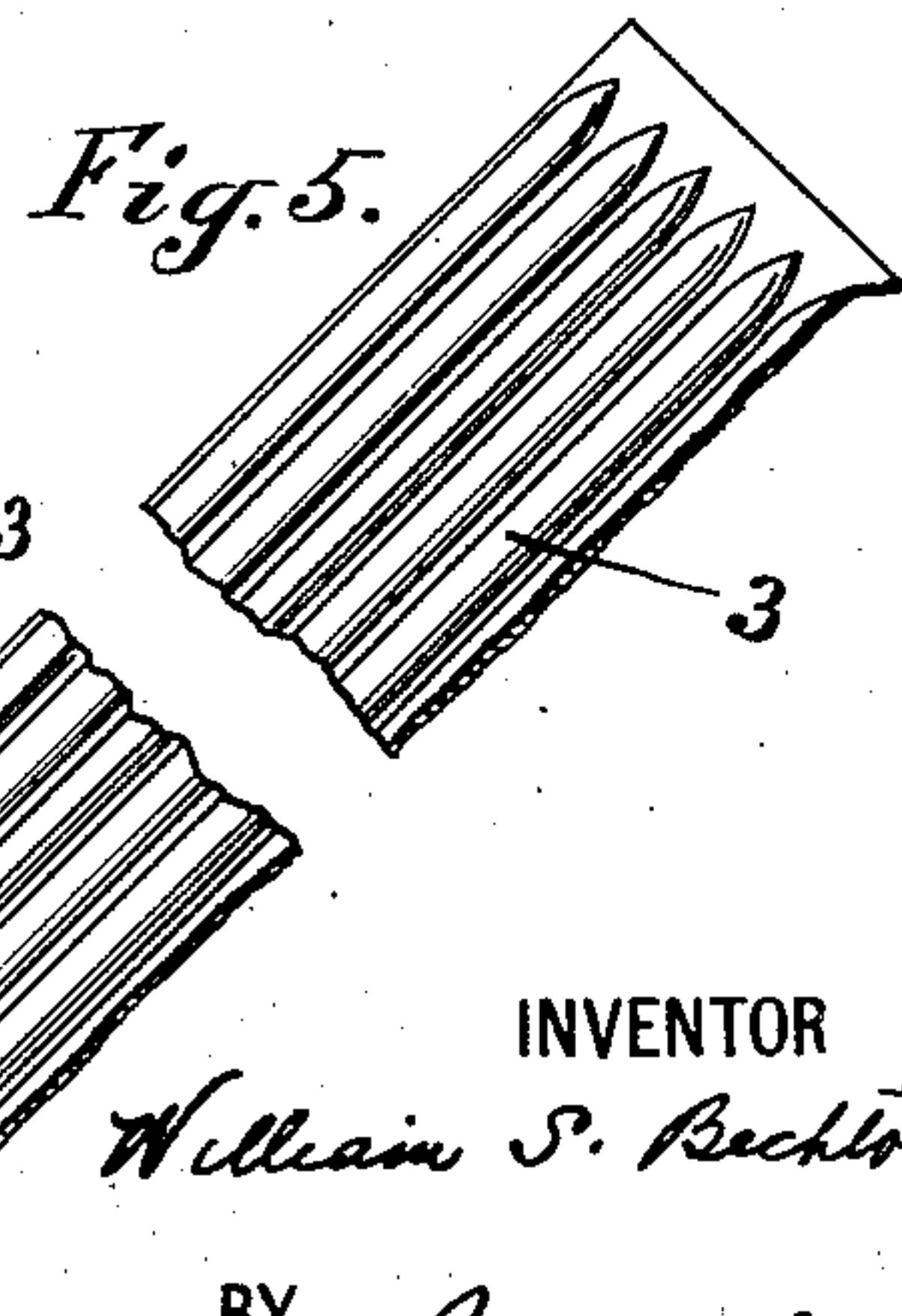
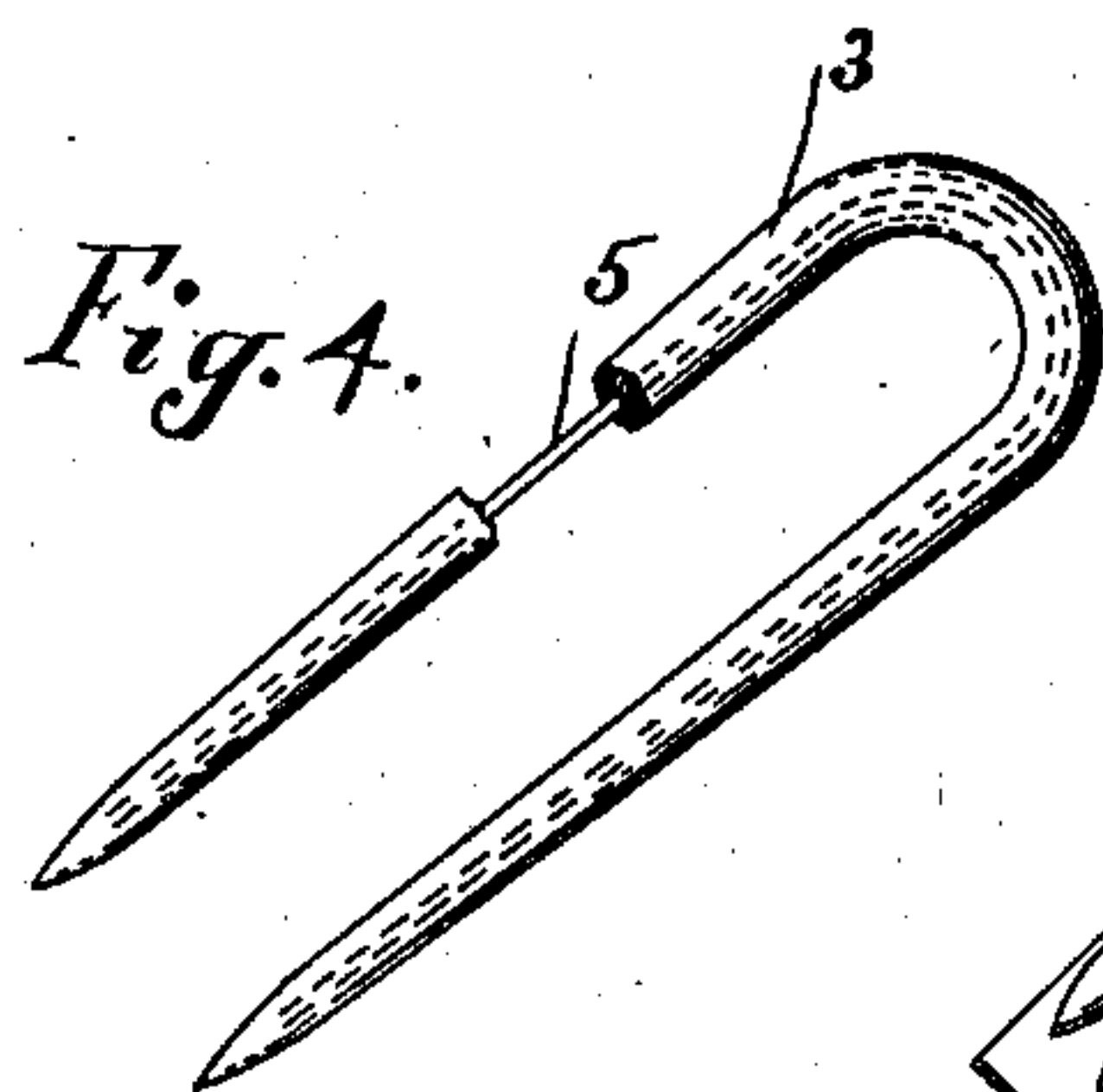
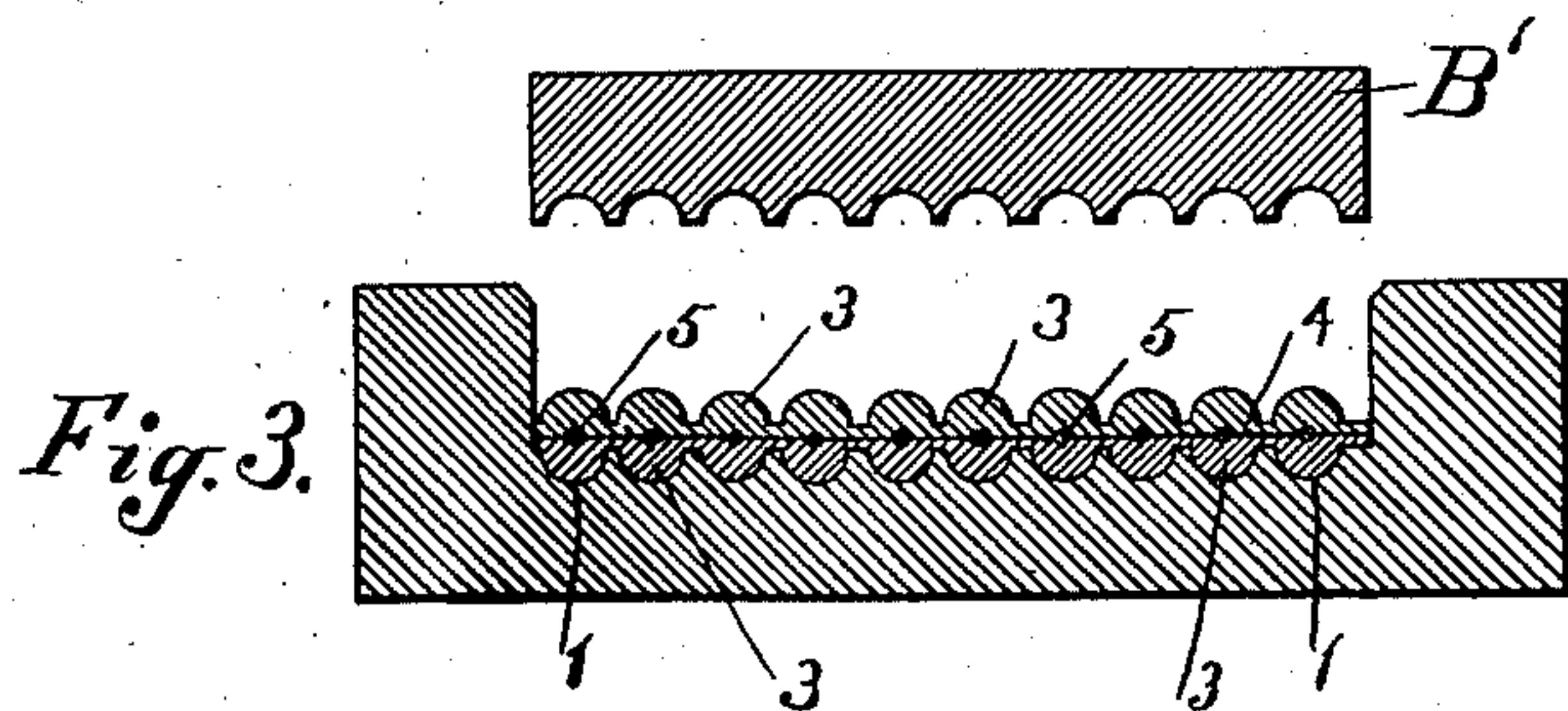
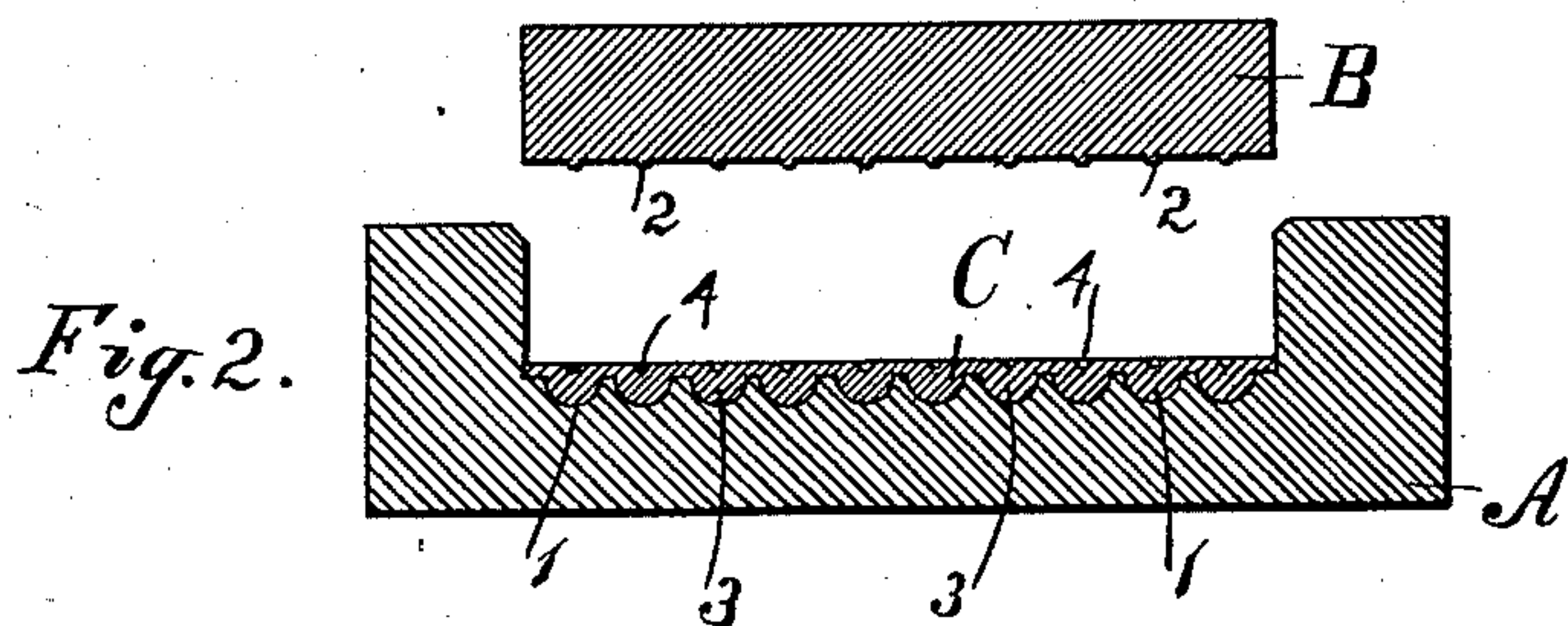
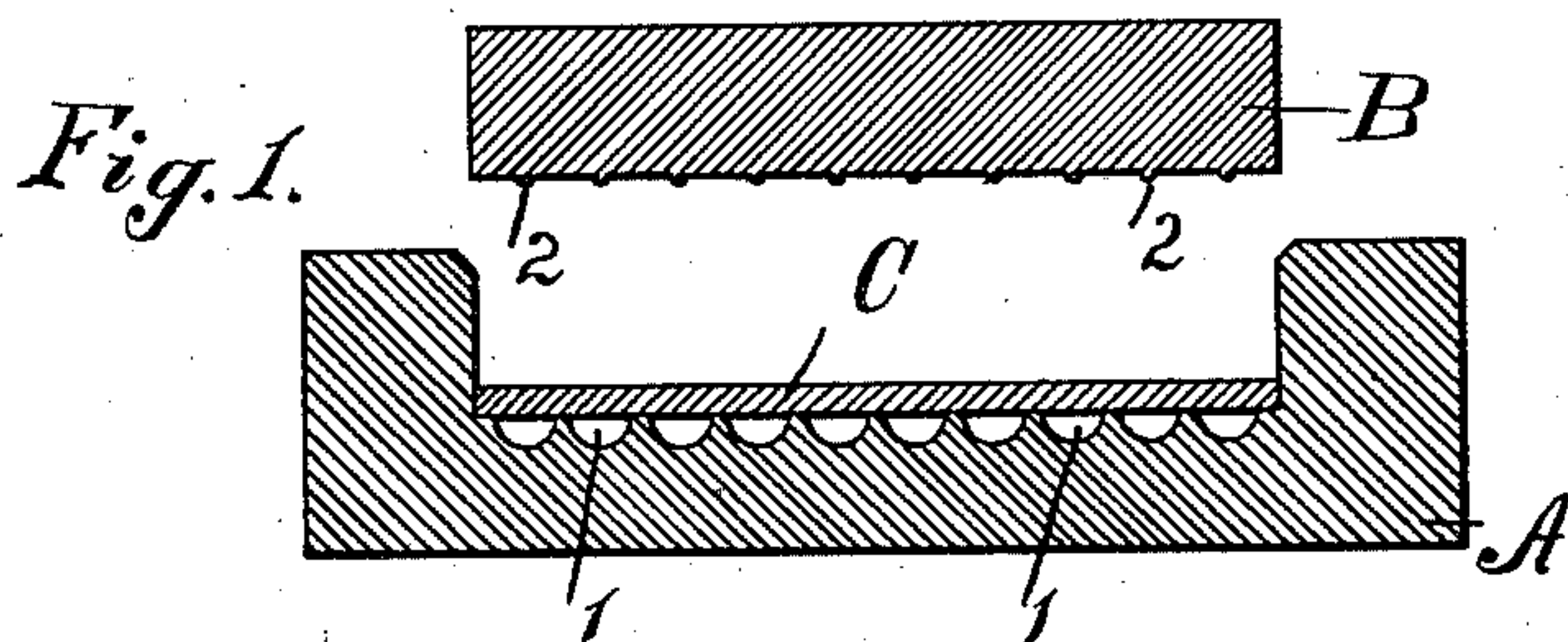
Patented Jan. 15, 1901.

W. S. BECHTOLD.

PROCESS OF MANUFACTURING HAIR PINS OR THE LIKE.

(Application filed Apr. 12, 1900.)

(No Model.)



WITNESSES:

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WILLIAM S. BECHTOLD, OF NEWARK, NEW JERSEY, ASSIGNOR OF ONE-HALF
TO GEORGE W. HILL, OF BOSTON, MASSACHUSETTS.

PROCESS OF MANUFACTURING HAIR-PINS OR THE LIKE.

SPECIFICATION forming part of Letters Patent No. 665,989, dated January 15, 1901.

Application filed April 12, 1900. Serial No. 12,518. (No specimens.)

To all whom it may concern:

Be it known that I, WILLIAM S. BECHTOLD, a citizen of the United States of America, residing at Newark, in the county of Essex and State of New Jersey, have invented certain new and useful Improvements in Processes of Manufacturing Hair-Pins or the Like, of which the following is a specification.

My invention has reference to improvements in the manufacture of hair-pins and the like composed of a combination of material which becomes plastic under the application of heat and of a metallic reinforcing-core adapted to give strength to the pin or like article.

To this end my invention consists, essentially, in first forming blanks of moldable material with longitudinal beads and with longitudinal depressions on opposite sides, inserting wires into the longitudinal depressions, then uniting two sections placed face to face together with the interposed wires, and finally separating and forming the pins or like articles.

The nature of my invention will best be understood when described in connection with the accompanying drawings, in which—

Figure 1 represents a transverse section showing a die and punch with the strip to be molded placed within the die. Fig. 2 is a similar section showing the material pressed into the die. Fig. 3 is a similar view showing the die and punch for closing two strips together. Fig. 4 is a perspective view of a hair-pin manufactured according to my process. Fig. 5 is a perspective of the blank.

Similar characters of reference designate corresponding parts throughout the several views of the drawings.

Referring to Figs. 1 and 2 of the drawings, the letter A designates a die provided with a series of parallel grooves 1, curved at their ends to points, and B is a punch provided with ribs or projections 2, extending longitudinally thereon and arranged centrally with respect to the grooves in the die. The blank C of suitable material—such, for instance, as celluloid or tortoise-shell—in the form of a strip is placed into the die A and subjected

to the action of the punch B while under the influence of heat, as usual, to render it moldable or plastic. The action of the punch and die is to bring the blank into the shape shown in Figs. 2 and 5, the same then having longitudinal beads 3 on one face terminating in points and coinciding recesses or grooves 4 on the other face. The production of these blanks constitutes the first step of the present process. The next step of the process consists in inserting in the recesses or grooves of one of said blanks cores 5, made of resilient wire or other suitable material having the proper strength and then placing upon said blank face to face a similar blank, and then, as the third step, uniting the two. The uniting of the two parts with the interposed wires may be done in the same die before employed combined with a proper punch B', as shown in Fig. 3. The die and punch are of course heated in a suitable manner, as before. The blank as now formed is then cut longitudinally between the beads, and the several strips are finished and bent into pins, as shown in Fig. 4, in the usual manner. In practice I make the wires shorter than the length of the beads, so that the points of the wires will be covered by the surrounding material after finishing.

It is evident that the uniting of the two parts with the interposed wires may be accomplished by the use of a suitable cement.

What I claim as new is—

1. The herein-described process for the manufacture of hair-pins and the like, consisting in first forming under heat and pressure blanks with longitudinal beads on one side and with coincident recesses or grooves on the other side, placing wires into said grooves or recesses, uniting face to face two such blanks, together with the interposed wires under the combined influence of heat and pressure, longitudinally separating said blanks, and finishing to form hair-pins and the like.

2. The herein-described process for the manufacture of hair-pins and the like, consisting in first forming under heat and pressure blanks with longitudinal beads on one

side and with coincident recesses or grooves
on the other side, placing wires into said
grooves or recesses, uniting face to face two
such blanks, together with the interposed
5 wires, longitudinally separating said blanks,
and finishing to form hair-pins and the like.
In testimony whereof I have hereunto set

my hand in the presence of two subscribing
witnesses.

WILLIAM S. BECHTOLD.

Witnesses:

EUGENIE P. HENDRICKSON,
A. FABER DU FAUR, Jr.