

J. B. HADAWAY.  
 STITCH SEPARATING OR INDENTING TOOL.  
 APPLICATION FILED JUNE 6, 1904.

906,705.

Patented Dec. 15, 1908.

2 SHEETS—SHEET 1.

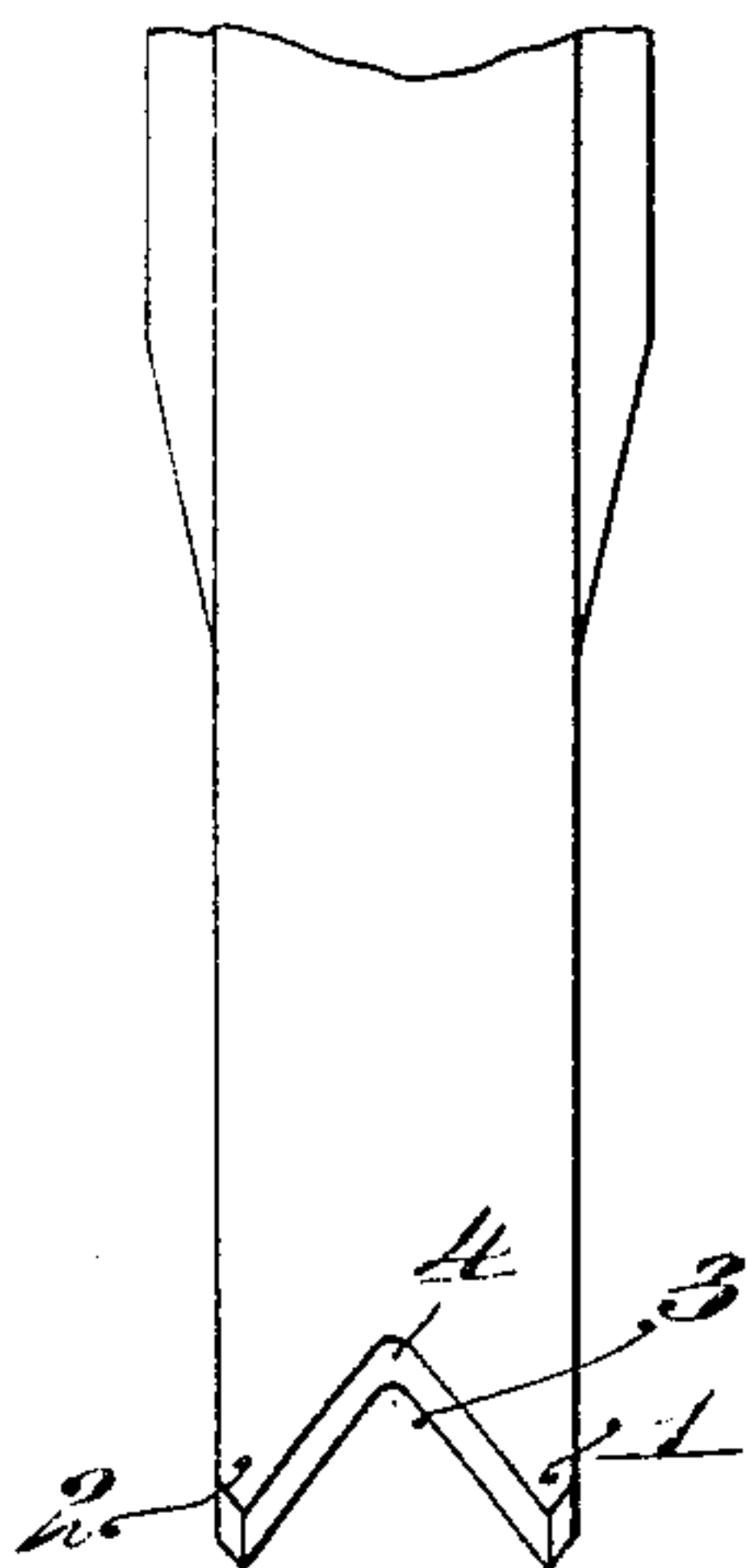


Fig. 1

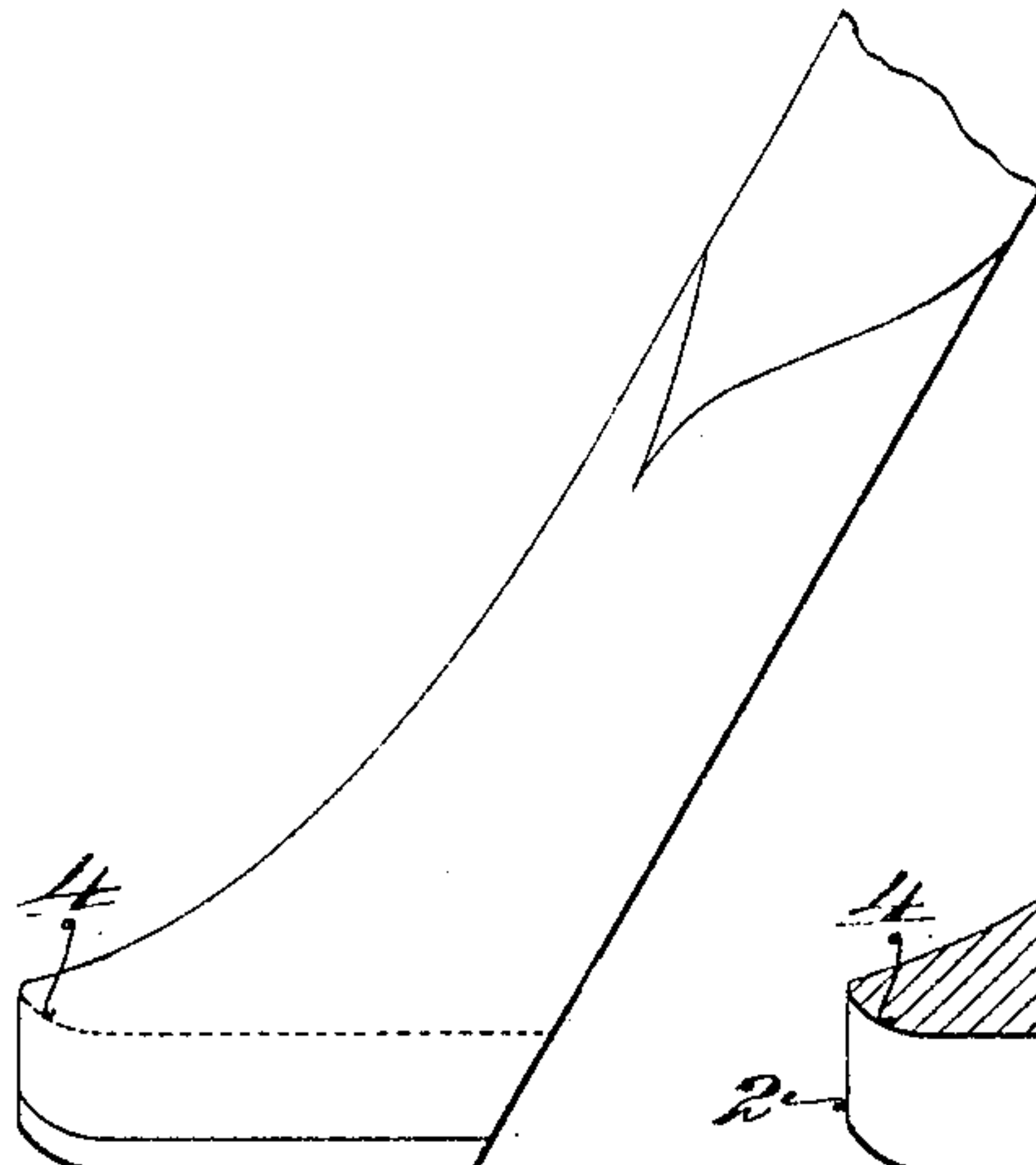


Fig. 2.

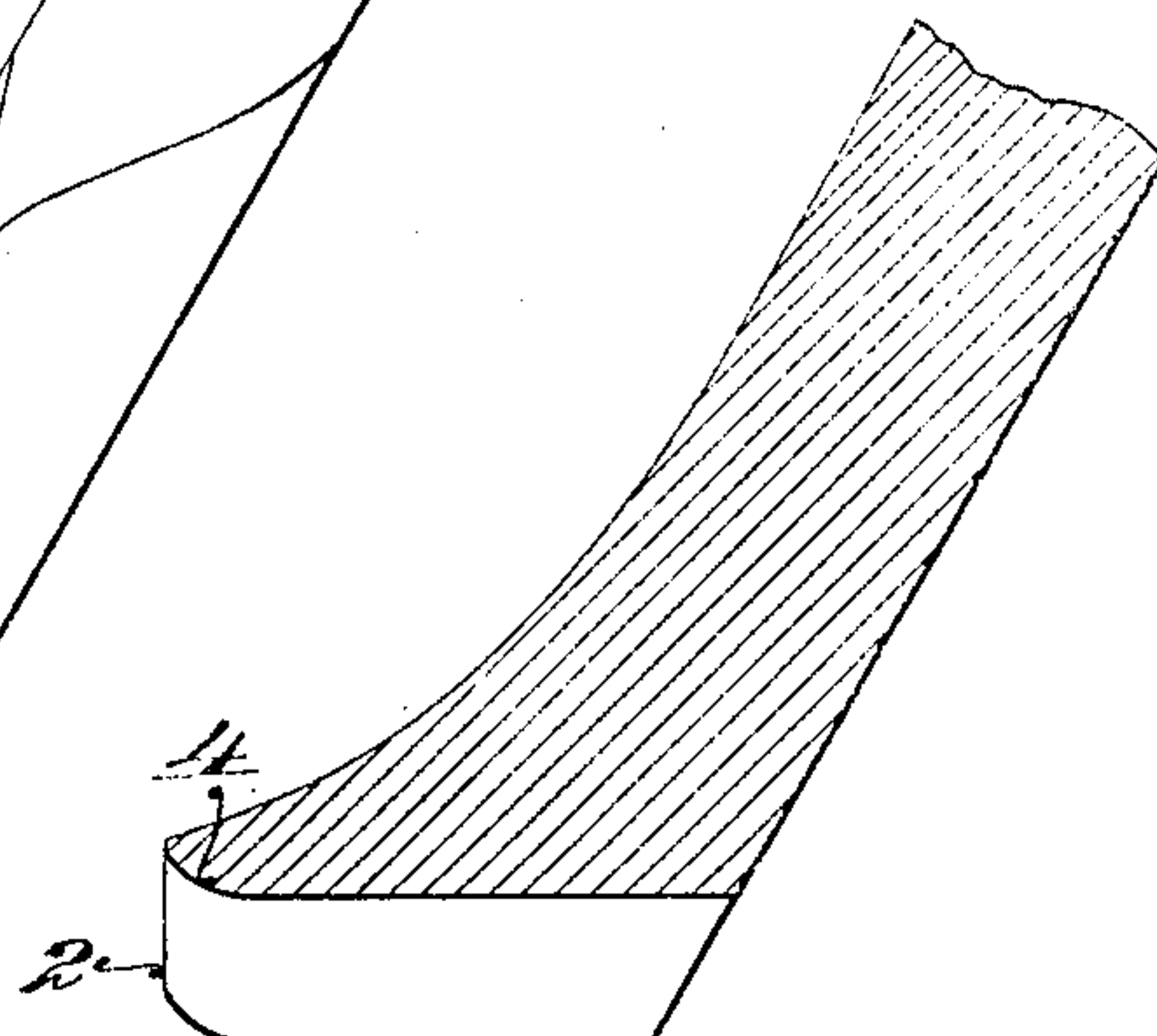


Fig. 3.

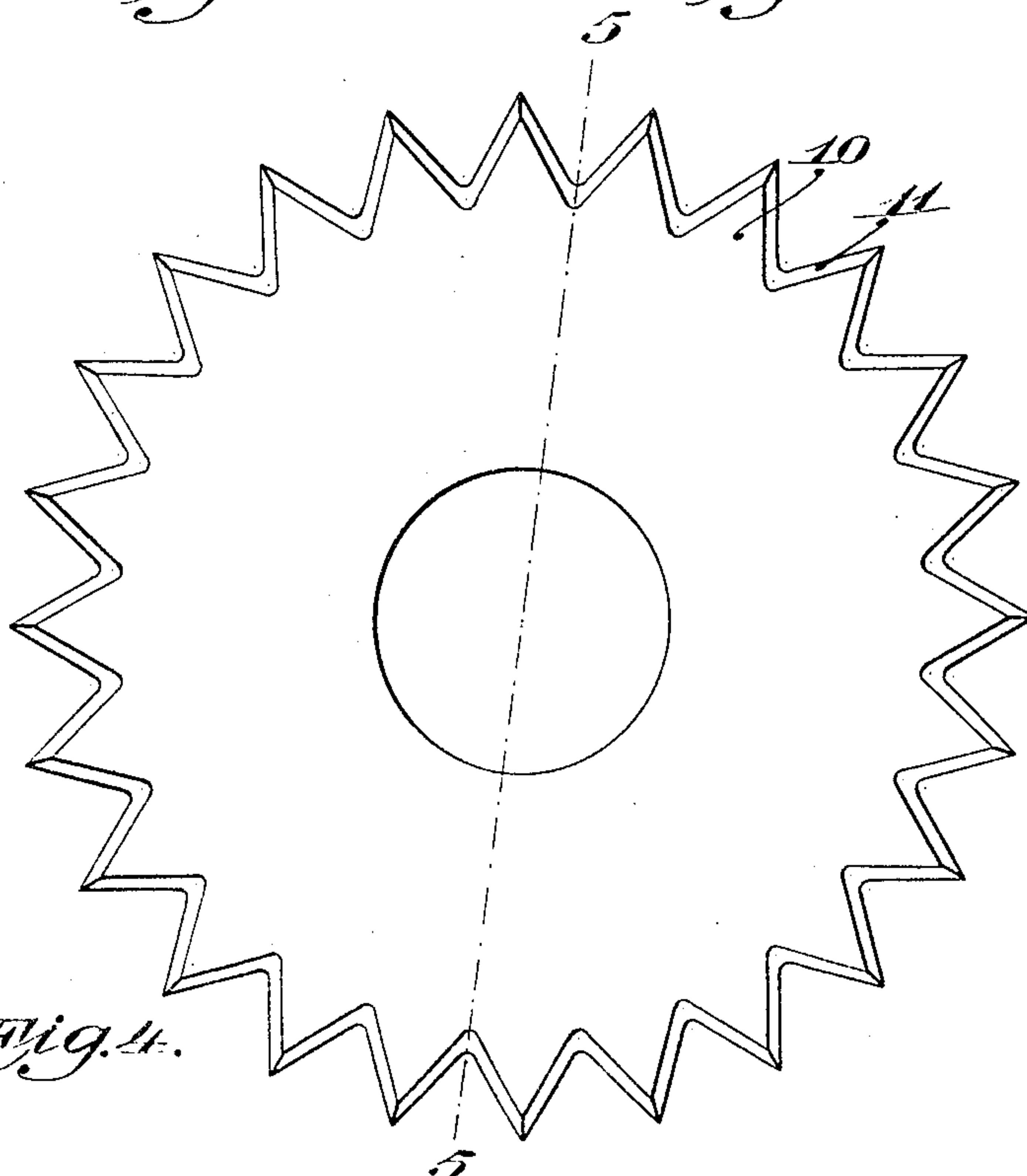


Fig. 4.

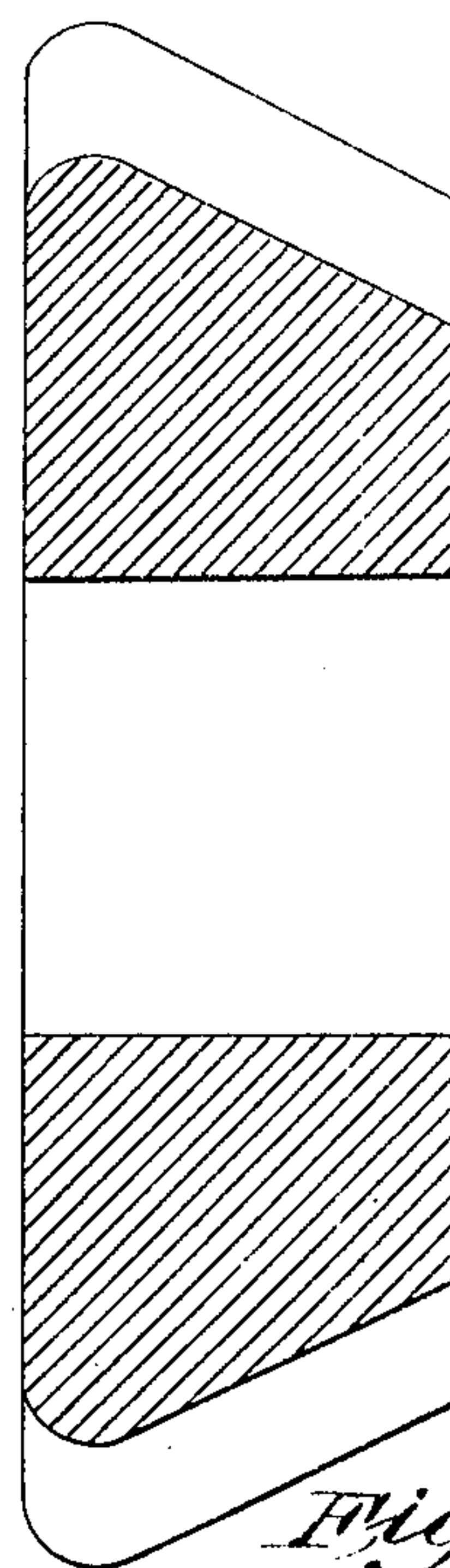


Fig. 5.

Witnesses:  
 John F. C. Printz, Jr.  
 Edward S. Day

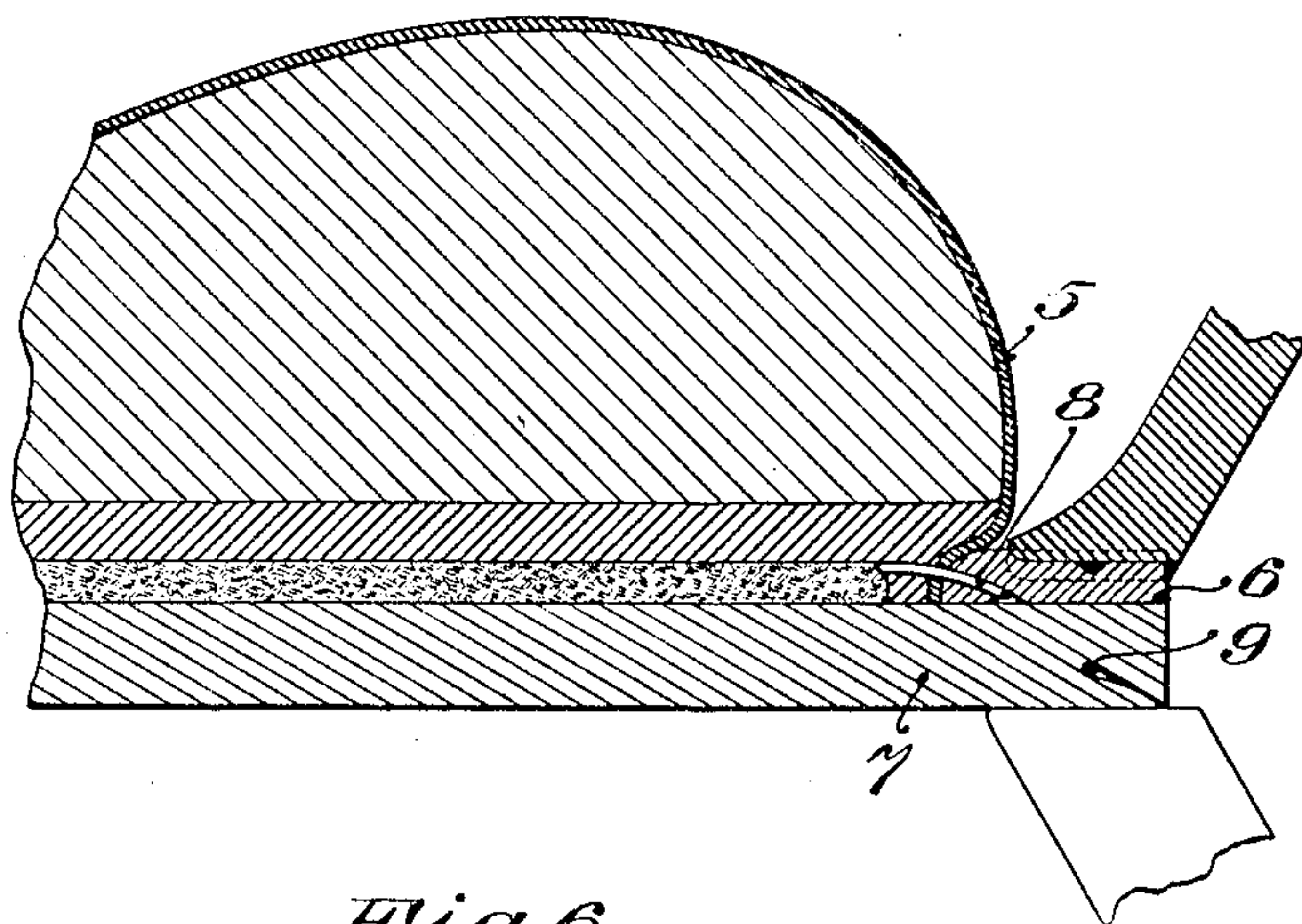
Inventor:  
 John B. Hadaway  
 by his Attorneys  
 Phillips Van Hook & Fish

J. B. HADAWAY.  
STITCH SEPARATING OR INDENTING TOOL.  
APPLICATION FILED JUNE 6, 1904.

906,705.

Patented Dec. 15, 1908.

2 SHEETS—SHEET 2.



*Fig. 6.*

*Witnesses:*

*John F. C. Priukerh*  
*Edward S. Day*

*Inventor:*

*John B. Hadaway*  
*by his Attorneys*  
*Phillips Van Eeren & Fish*



# UNITED STATES PATENT OFFICE.

JOHN B. HADAWAY, OF BROCKTON, MASSACHUSETTS, ASSIGNOR TO UNITED SHOE MACHINERY COMPANY, OF PATERSON, NEW JERSEY, A CORPORATION OF NEW JERSEY.

## STITCH SEPARATING OR INDENTING TOOL.

No. 906,705.

Specification of Letters Patent.

Patented Dec. 15, 1908.

Application filed June 6, 1904. Serial No. 211,237.

*To all whom it may concern:*

Be it known that I, JOHN B. HADAWAY, a citizen of the United States, residing at Brockton, in the county of Plymouth and State of Massachusetts, have invented certain new and useful Improvements in Stitch Separating or Indenting Tools; and I do hereby 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.

In the manufacture of shoes it is customary to form a series of transverse indentations along the upper surface of the projecting sole edge, to give a pleasing and finished appearance to the shoe, these indentations being in effect impression or imitation stitches and serving either to bring into prominence the stitches of the outseam, when the shoe is provided with an outseam, or when the shoe is not provided with an outseam, giving it the appearance of a stitched shoe.

In indenting the sole of a shoe provided with an outseam the stitches of which appear on the upper surface of the sole the indentations are formed in the stitch intervals being spaced apart distances corresponding to the lengths of the stitches and preferably the crowns of the stitches and the leather between the indentations are rounded over or pressed into a predetermined shape. The tool which is usually employed in indenting the stitch intervals of an outseam and in shaping the crowns of the stitches is provided with a groove of the shape which it is desired to impart to the crowns of the stitches, and this tool before being pressed into the work to indent and shape each stitch is first located either on the crown of the stitch or in one of the stitch intervals. In operating upon the sole of a shoe which is not provided with an outseam or in which the outseam is covered by a channel flap, a grooved wheel is usually employed, the grooves of which are spaced at regular intervals around the periphery of the wheel and shaped to give the required shape to the indentations.

In separating and indenting the stitches of a finished seam or in indenting the surface of a sole which is not provided with a seam, it is necessary, on account of the tendency of the leather to return to its original

position, to force the tool into the work a sufficient distance to bring the working face of the tool below the surface of the work. When the tool is so pressed into the work the outer end of the tool cuts into the work so that the work is marred by a line extending along the surface near the upper at the ends of the indentations. In operating on welted shoes the outer end of the tool acts upon the welt close to the inseam and on account of the great pressure exerted upon the welt at this point, tends to weaken the seam and tear the welt from the upper.

The object of the present invention is to remedy this defect in the operation of tools which are used either to separate and indent the stitches of a finished seam or to indent the edge of a sole which is not provided with an outseam and with this object in view the invention contemplates the provision of a stitch indenting tool having a grooved working face which curves upwardly at its outer end. By curving the working face of the tool upwardly at its outer end, this portion of the working face is prevented from marring the work when the remaining portion is forced below the surface of the work, as no sharp cutting edge is formed at the outer end of the tool, as in tools which have heretofore been used, which can cut into and mar the surface of the work. Also the tool can be used to form indentations on welted work extending close to the inseam without liability of tearing the welt from the upper.

The invention may be embodied in any form of tool adapted for operation either upon a sole provided with a finished seam or upon a sole in which no stitches appear upon the upper surface.

The invention will be clearly understood from an inspection of the accompanying drawings in which

Figure 1 is a view in front elevation of a stitch separating and indenting tool embodying the same, Fig. 2 is a view in side elevation of the tool illustrated in Fig. 1, and Fig. 3 is a longitudinal sectional view thereof, Fig. 4 is a view in end elevation of an indenting wheel embodying the invention, Fig. 5 is a sectional view thereof taken on the line 5—5 and Fig. 6 is a sectional view illustrating the tool shown in Figs. 1, 2 and 3 forced into the upper surface of the projecting edge of the sole of a welted shoe.

The tool illustrated in Figs. 1, 2 and 3 is



provided with two stitch separating and indenting blades 1 and 2 and with a groove 3 between the indenting blades, the surface of which is shaped to give the desired shape to the crown of the stitch. This surface constitutes what may be termed the working face of the tool. In accordance with the present invention this surface is curved upwardly at 4 at the outer end of the tool so that the portion of the working face at the outer end of the tool is somewhat higher than the remaining portion. The result secured by curving the face of the tool upwardly at its outer end will be apparent from an inspection of Fig. 6 in which it will be seen that when the tool is forced into the work so as to bring the main portion of

Figs. 1, 2 and 3. This will be apparent to those skilled in the art without further description.

The nature and object of the present invention having been thus indicated and constructions embodying the invention having been specifically described, what is claimed is:—

1. A stitch indenting tool, having a grooved working face the surfaces of which are substantially plane and continuous throughout the working face of the tool and which are curved upwardly at their outer ends to prevent this portion of the working face from marring the work when the remaining portion is forced below the surface of the work, substantially as described.

22 A stitch indenting tool having a grooved working face the surfaces of which are substantially plane and continuous throughout the working face of the tool and the outer end portion of which is higher than the remaining portion, substantially as described.

23 A stitch indenting wheel having its working faces provided with grooves the surfaces of which are substantially plane and continuous throughout the working face of the wheel and which curve towards the axis of the wheel at its outer end, substantially as described.

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

JOHN B. HENDRY.

Witnesses:

WILLIAM J. HENRY,

ANDREW J. HENDERSON.

the working face of the tool so as to bring the main portion of the working face of the tool below the surface of the work, the outer end portion of the working face of the tool being higher than the remaining portion of the working face of the tool, substantially as described.

The indenting wheel 110 is illustrated in Figs. 11 and 12. It is of the well known construction of the exception of the surface of the wheel 110 which corresponds to the working face of the tool 100 illustrated in Figs. 1, 2 and 3. It is curved upwardly, that is, towards the outer end of the wheel, at its outer end. The wheel 110 is secured by two screws 111 the surfaces of which are substantially plane and continuous throughout the working face of the wheel 110, and which curve towards the axis of the wheel 110 at its outer end, substantially as described.