

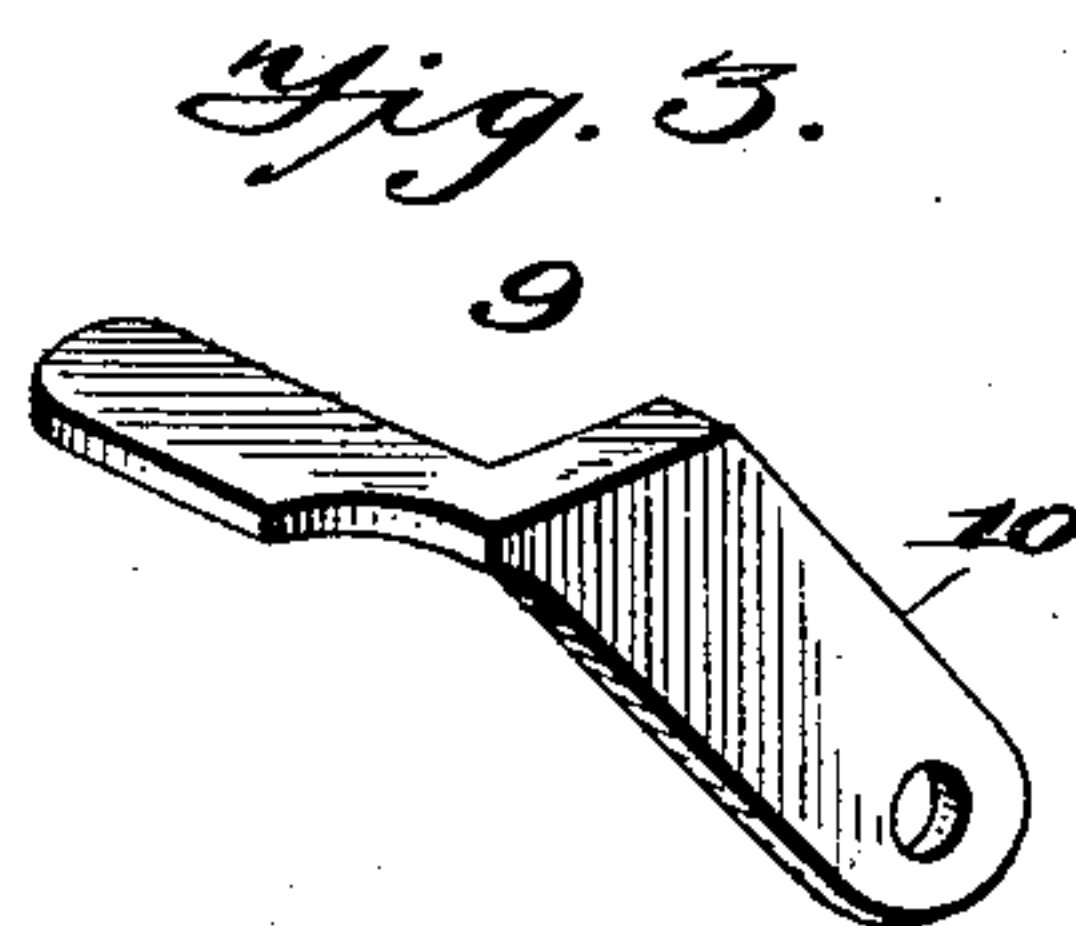
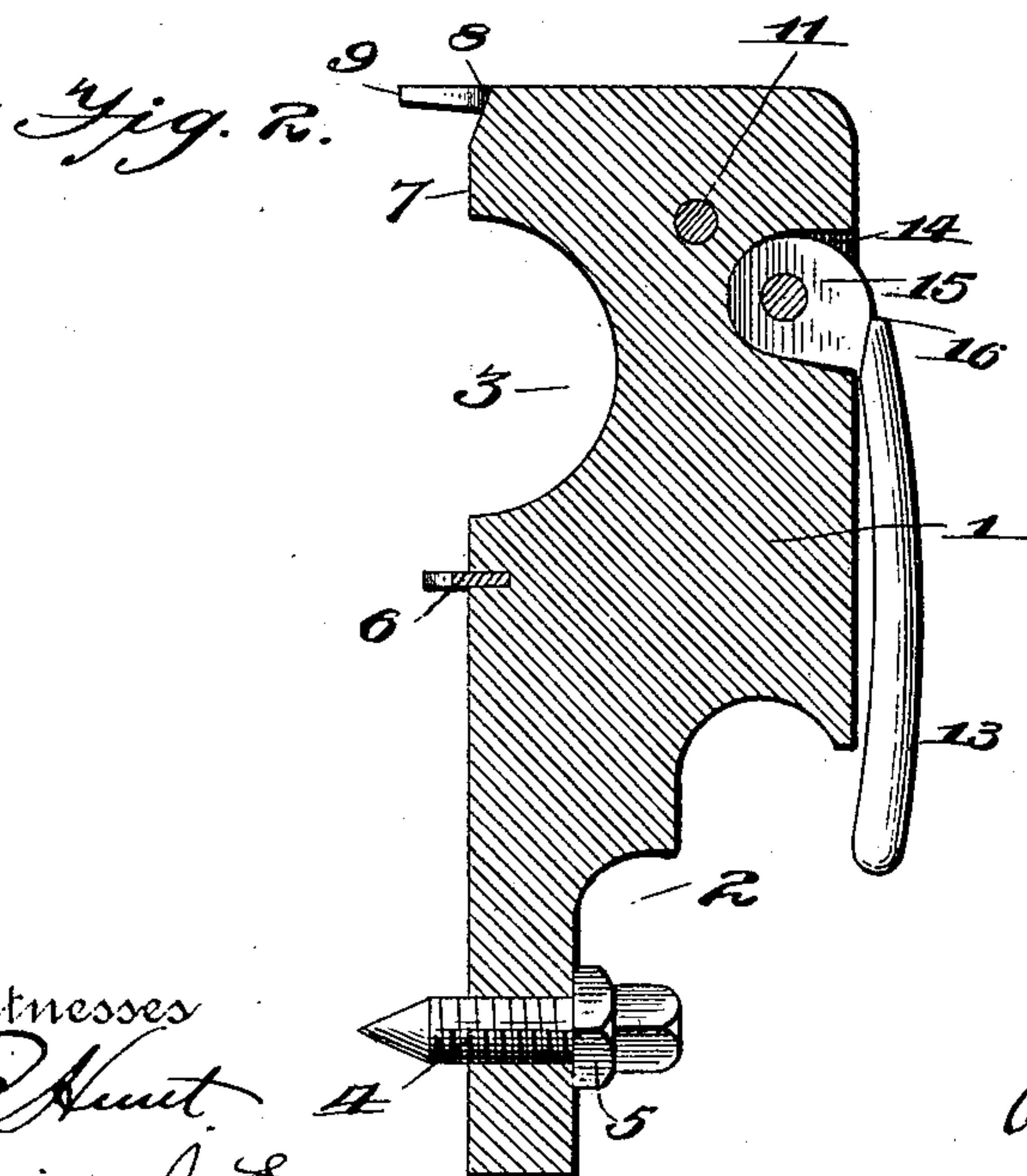
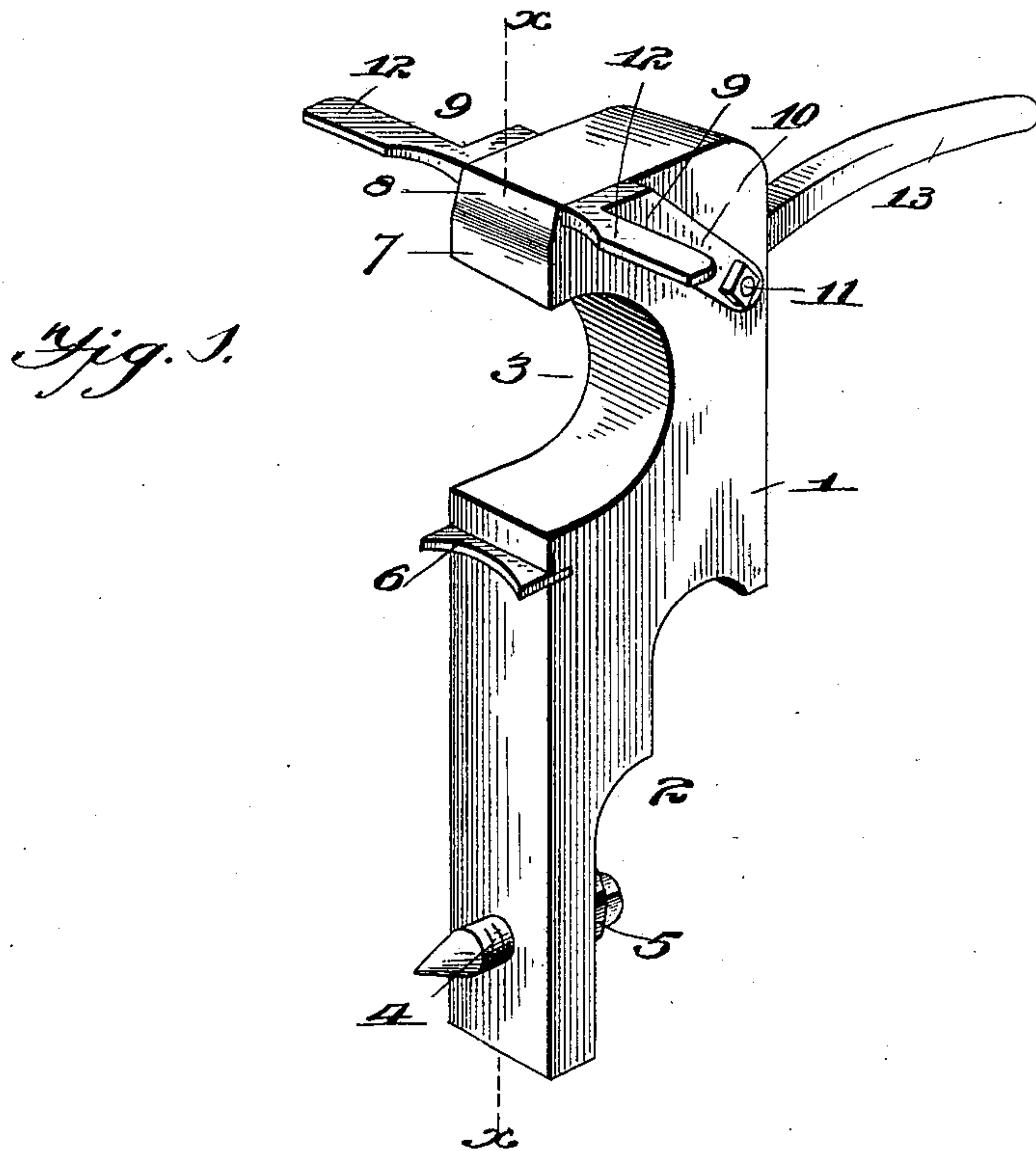
No. 613,817.

Patented Nov. 8, 1898.

J. S. HENDERSON.
DEVICE FOR SETTING SAWS.

(Application filed Nov. 24, 1897.)

(No Model.)



Witnesses
E. C. Hunt
Victor J. Evans

Inventor
James S. Henderson,
by *W. S. Shackbridge*
his Attorney.

UNITED STATES PATENT OFFICE.

JAMES S. HENDERSON, OF DURHAM, CALIFORNIA.

DEVICE FOR SETTING SAWS.

SPECIFICATION forming part of Letters Patent No. 613,817, dated November 8, 1898.

Application filed November 24, 1897. Serial No. 659,697. (No model.)

To all whom it may concern:

Be it known that I, JAMES S. HENDERSON, a citizen of the United States, residing at Durham, in the county of Butte and State of California, have invented certain new and useful Improvements in Devices for Setting Crosscut-Saws; 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.

This invention relates to saw-sets; and it consists of the construction and arrangement of the several parts, which will be more fully hereinafter described and claimed.

The object of the invention is to provide a convenient device of this class which can be used in distant places from a workshop or other point where saws are usually set and one which can be reduced to a compact form and carried in a small space, the parts being simple and effective in their construction and operation, strong and durable, easily and readily operated and understood, and comparatively inexpensive in the cost of manufacture.

In the accompanying drawings, Figure 1 is a perspective view of a saw-set embodying the invention. Fig. 2 is a section on the line $x\ x$, Fig. 1. Fig. 3 is a detail perspective view of a part of the device.

Referring to the drawings, wherein similar numerals of reference are employed to indicate corresponding parts in the several views, the numeral 1 designates the body of the set, which has an under rear reduced portion 2 and an upper front curved throat 3. In the rear reduced portion of the body 1 a pointed gage-bolt 4 is adjustably mounted and is formed with screw-threads and also the opening in which it is adjustably mounted. The said gage-bolt is formed with an angular head and has a jam-nut 5 surrounding the same to sustain the adjustment thereof, as will be readily understood. On the upper edge of the body 1, slightly in the rear of the throat 3, a center rest 6 is positioned and extends transversely across the body, being concaved to provide opposite upwardly-projecting engaging corners, which bear against the flat surface of the saw resting thereon and materially assist in holding the latter. In

advance of the throat 3, at the upper portion of the body 1, is an anvil 7 with a front bevel 8 to regulate the degree of set of the saw-teeth and against which the latter are placed in operating upon the same. On opposite sides of the anvil 7 top rests 9 are adjustably secured, and comprise obliquely-arranged shanks 10, engaged by a transverse bolt 11, which is adapted to be secured to and hold the said top rests in their adjusted positions. Extending outwardly from each of the shanks and at an angle thereto is an arm 12, which is curved at its inner corner or cut away to clear the adjacent portion of the anvil and facilitate the setting of the saw-teeth. To vary the set, the said top rests 9 can be adjusted relatively to the anvil 7. To the under side of the body 1 a hand-grip or handle 13 is movably pivoted in a socket or recess 14 in the underside of said body. This handle or grip is provided with a head 15, located in said socket or recess, and has an outer limiting-shoulder 16, and when not in use it can be folded against the under side of the said body and provide a compact arrangement to adapt the set as an entirety to be carried in a small space when not in use. As previously noted, the top rests 9 regulate the degree of set in the saw, and in operation the saw is placed upon the upper end of the gage-bolt and the latter is adjusted until the intermediate rest has the upwardly-projecting corners thereof also bearing against the flat blade of the saw. When the parts are thus arranged, the teeth of the saw will rest upon the anvil 7, and by taking a small hammer in the hand and striking the teeth a sharp blow the degree of set desired is obtained, the beveled surface or bevel 8 to a greater or less degree regulating the same. The angle or position of the saw on the body 1 is regulated by the gage-bolt 4, and in the operation of setting the saw-teeth the entire device may be held steadily and firmly by means of the handle 13.

When the set is used in connection with the saw, it is placed against the latter in the manner set forth, and in striking the teeth a light sharp blow is delivered to accomplish the desired result. In the event that the teeth of the saw are found to be set at too great an angle or degree the device as an entirety will

rock back and forth and sidewise, and the center rest will have one of its corners first strike one part of the saw-blade and then another corner strike another portion of the same. To counteract this irregularity, the set is held firmly and the saw-teeth are struck, or one of the same is struck, until all three of the bearing-points on the saw-blade, including the gage-bolt, the intermediate rest, and the anvil, will bear equally against the adjacent blade of the saw.

The advantages of a set of the character specified will be that every tooth will be arranged in perfect line irrespective of the similarity or equality of length, and which might arise from inequality of wear upon the saw-teeth by use in certain woods having parts of varying degrees of hardness. To increase the set in the saw, the top rests are raised upward and the gage-bolt is moved outward or withdrawn from the side of the gage on which the intermediate rest is positioned to a certain degree. The set is then regulated until the point of the tooth passes below the bevel on the anvil, and while holding the saw in this position the gage-bolt is turned until the three points comprising the anvil-head, the intermediate or center rest, and the gage-bolt all rest squarely and firmly against the saw. To reduce the set, the reverse operation is carried on. By use of a device of this character it does not require the work of a mechanic or a machinist to set a saw, nor is it necessary to take a saw to a bench to perform this operation, as it could be done anywhere or at any point where the saw is being used in a very short time.

The proportions and dimensions of the set can be varied at will to set large or small saws, and it is obviously apparent that many minor changes in the details of construction and arrangement of the several parts might be made and substituted for those shown and

described without in the least departing from the nature or spirit of the invention.

Having thus described the invention, what I claim as new is—

1. A saw-set comprising a body having a gage-bolt projecting from one side thereof and extending inwardly through the same and provided with a pointed engaging end, the said body being formed with a throat intermediate of the ends but nearer one end than the other and opening out through the edge from which the end of the gage-bolt projects, a center rest adjacent to one termination of the throat and in line with the gage-bolt, an outer anvil with a bevel on the opposite side of the throat, top rests on opposite sides of the said anvil, and an adjustable handle movably attached to the edge of the body opposite to that in which the throat is formed.

2. A saw-set comprising a body having a curved throat opening out at one side thereof, and an adjustable handle on the opposite side, an anvil being located beyond one termination of the throat, an intermediate center rest adjacent to the opposite termination of the throat and having a concave exposed edge, the said center rest extending entirely over the transverse width of the side of the body to which it is applied, a gage-bolt with a pointed end extending outwardly from the body on the same side on which the center rest and anvil are located, and top rests adjus- tably secured to the body adjacent to the anvil and comprising obliquely-arranged shanks engaged by a transverse bolt and having arms extending outwardly therefrom with inner cut-away portions.

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

JAMES S. HENDERSON.

Witnesses:

F. C. WILLIAMS,
J. V. WILLIAMS.