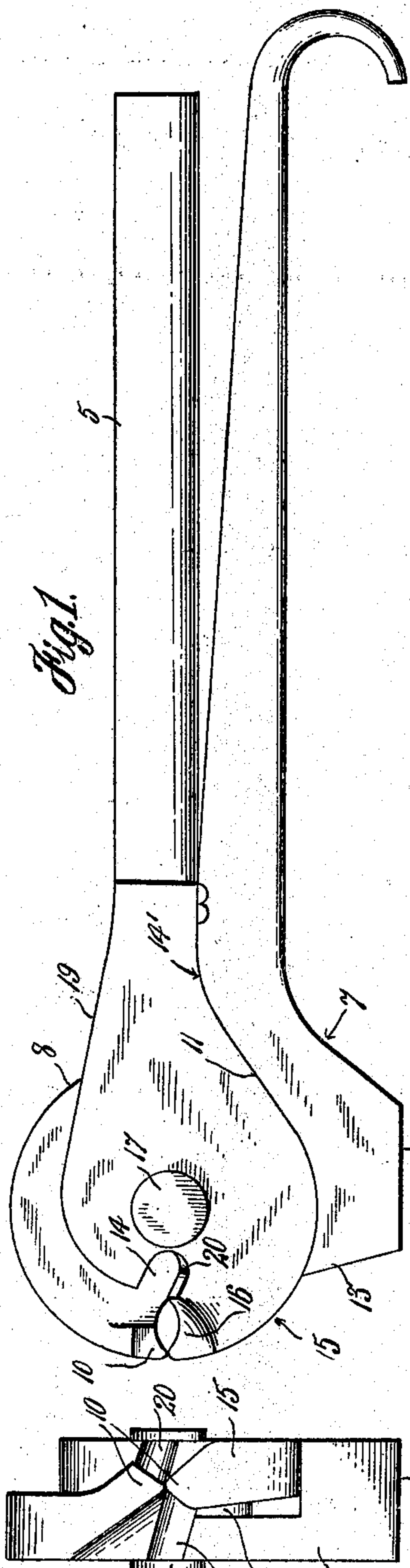


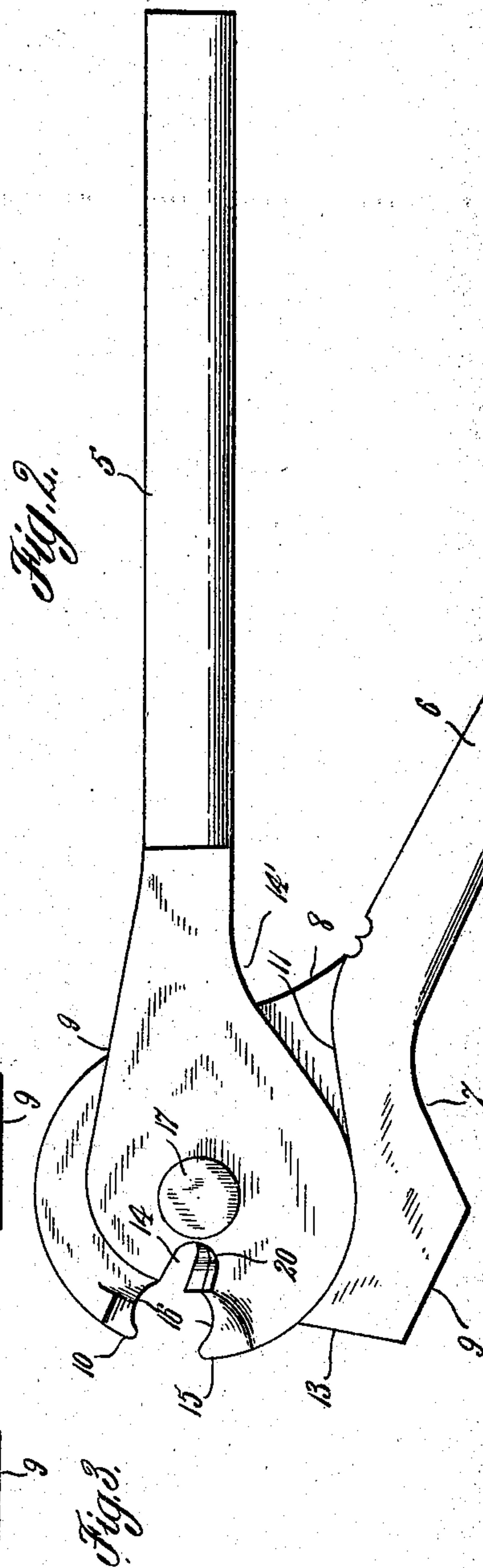
R. C. JOHNSON.  
COMBINATION TOOL.  
APPLICATION FILED APR. 9, 1909.

932,710.

Patented Aug. 31, 1909.  
2 SHEETS—SHEET 1.



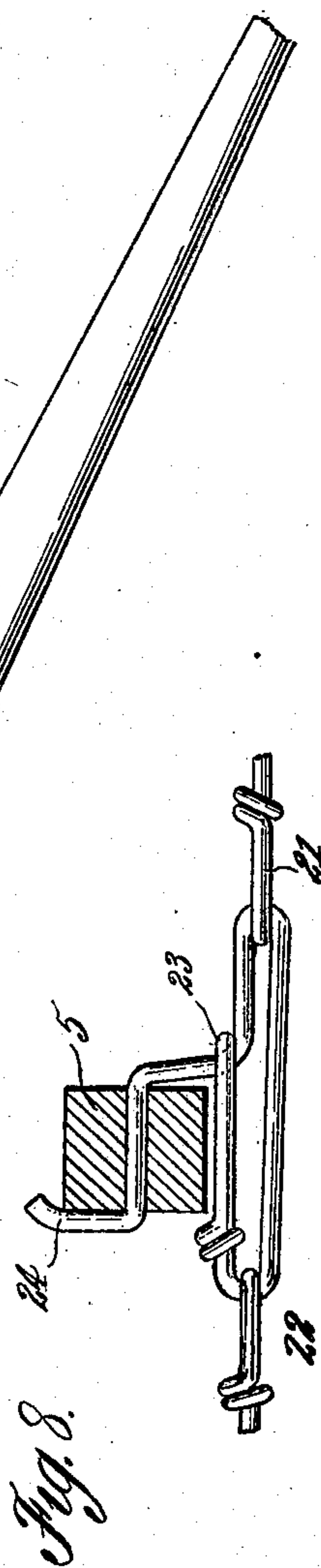
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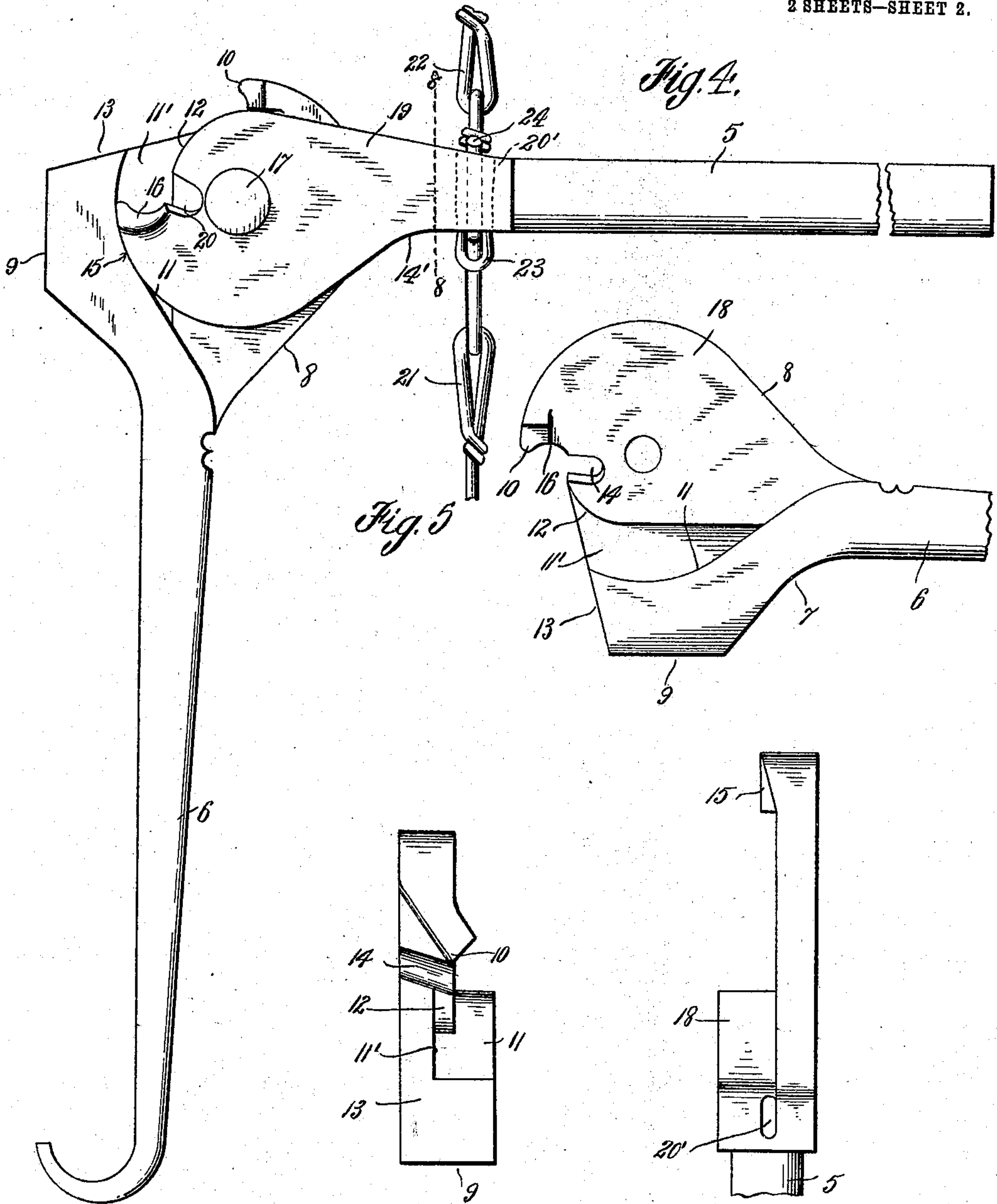


Fig. 6.

Fig. 7.

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# UNITED STATES PATENT OFFICE.

ROBERT C. JOHNSON, OF FORT BENTON, MONTANA.

## COMBINATION-TOOL.

932,710.

Specification of Letters Patent.

Patented Aug. 31, 1909.

Application filed April 9, 1909. Serial No. 488,877.

*To all whom it may concern:*

Be it known that I, ROBERT C. JOHNSON, a citizen of the United States, residing at Fort Benton, in the county of Chouteau, State of Montana, have invented certain new and useful Improvements in Combination-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.

This invention relates to improvements in combination tools and more particularly to the kind employed by wire-fence workers.

It has for its object the provision of a tool embodying a hammer, wire cutter, and staple puller.

Another object is the provision of a construction whereby the tool may be employed as a splicing implement.

With these and other objects in view as will more fully hereinafter appear, the present invention consists in certain novel details of construction and arrangement of parts, hereinafter fully described, illustrated in the accompanying drawings and more particularly pointed out in the appended claims. It being understood that various changes in the form, proportion, size and minor details of the device may be made without departing from the spirit or sacrificing any of the advantages of the invention.

In the accompanying drawings forming part of the specification:—Figure 1 is a front elevation of the device. Fig. 2 is a similar view with the jaws partly open. Fig. 3 is a front end elevation. Fig. 4 is a side elevation showing the jaws fully distended and employed as a splicer. Fig. 5 is a detailed side elevation of one jaw member. Fig. 6 is a detailed end elevation of one jaw member. Fig. 7 is a detailed side elevation of the opposite jaw member. Fig. 8 is a transverse sectional view taken on the line 8—8, Fig. 4.

Similar numerals of reference are employed to designate corresponding parts throughout.

As shown in the drawings the device consists of a pair of handles designated by the numerals 5 and 6. The handles are of convenient lengths and diameters so that when brought together they may be conveniently gripped by the hands of the operator. Each handle terminates at one end in a jaw member, these members interlock and are so formed that they combine a staple puller, wire cutter and hammer. The handle member 6 tapers outwardly from its free end so that its jaw is considerably thicker than the free end of the handle, this jaw in addition to being thickened is extended laterally in opposite directions and on curved lines as shown at 7 and 8. The curvature of the side 8 is compound while that of the side 7 curves downwardly to a point adjacent the horizontal center of the jaw whence it terminates in a forwardly directed straight line 9 which constitutes a hammer head. The compound curvature of the side 8 extends to a point substantially in alinement with the horizontal center of the handle and terminates in a reduced and inwardly directed oblique portion 10 which is sharpened to a point and constitutes the claw of a staple puller. That portion of the jaw beginning at the inner side of the handle 6 is curved downwardly and outwardly, corresponding to the curvature 7 and straight line 9 as shown at 11 and the inner face of the jaw disposed between the curved portion 11 and curved side 8 is reduced in thickness approximately to one half the thickness of the hammer head 9. A longitudinal seat 11' is formed on the inner face of the jaw and at the inner side of the reduced portion the inner side of this seat follows the curvature of the curved portion 11 and extends substantially the entire length of the head while its opposite side is straight except at its outer end portion where it curves outwardly and laterally as shown at 12, the function of which will appear later.

That portion of the head extending from the end of the hammer head 9 inclines upwardly on a straight line as shown at 13 and terminates below the plane of the staple claw 10 and a substantially U shaped socket 14 which extends into the reduced portion of the jaw is formed at the end of the incline 13 and one side of which is in a plane with the sharpened point of the claw 10. The opposite handle 5 terminates in a jaw



which is considerably less in diameter than the jaw just described and corresponds in thickness to the reduced portion of the first-named jaw. This jaw is extended laterally on one side on a curved line 14 which bears on the curved inner side of the hammer head 9, the curvature extending to a point substantially in alinement with the horizontal center of the handle where it is somewhat thickened as shown at 15 and slightly overhangs the inner face of the jaw. This thickened portion has its opposite sides inclined inwardly to a sharpened portion which constitutes the cooperating staple claw and which bears on the sharpened end 10. Owing to the position of the parts when they are connected by a suitable pivot pin 17 which extends through the center of each head the thickened portion 15 on the inner face of the last described jaw will seat in the seat 11' when the jaws are turned on their pivot. The base of the jaw is thickened as shown at 18 and the inner face of this thickened portion is curved so as to form a bearing shoe on the compound curved side 8 of the first-named jaw. The opposite side of the second-named jaw curves slightly outward as shown at 19 for the greater portion of its length and terminates in an inwardly curved portion which ends in a point below the plane of the second-named staple claw 15. An obliquely directed U shaped socket is formed at the end of the inwardly curved portion and corresponds in depth to the U shaped socket 13 and like the latter has one side in a plane with the sharpened point 15 of the second-named claw. The inner face of each of the claws 10 and 15 is concaved as shown at 16 so that an opening will be formed between the jaws when brought together, of sufficient diameter to accommodate the ordinary staple. The U shaped sockets 14 and 20 are so positioned that when the points of the claws 10 and 15 bear one upon another these sockets will be out of registration and owing to this construction they will constitute a wire cutter. Thus it will be seen with the construction thus far described that the device may be used both as a hammer, a staple puller and wire cutter. It will be seen that the staple puller is so constructed that when the claws engage an embedded staple, the curved side 8 will act as a fulcrum for the device whereby the strain will be taken from the pivot 17. It will be further observed when the device is employed as a wire cutter that the strain will be taken from the pivot by virtue of the curved side of the small jaw bearing on the inner curved side 11 of the hammer head.

By referring now to Fig. 4 it will be seen that the device may be employed as a wire splicer. When used in this connection an

elongated opening 20' is formed at the base of the smaller jaw and the thickened portion 18. This opening extends through the outer and inner sides of the base and is of a diameter sufficient to receive a coupling member. When splicing the ends of two wires by means of the device the said ends 21 and 22 are bent and twisted to form small eyes and loops. A splice wire is then employed which wire is also bent at one of its ends to form an eye 23 which is threaded through the eyes of the two wires to be spliced, the opposite end 24 of the splice wire is then threaded through the eye 23, the said opposite end being then extended through the elongated opening 20' and curved around the thickened base portion of the jaw. When the parts are in this position the handles 5 and 6 are opened so as to be substantially at right-angles to each other. The device is then rotated by grasping the opposite handle 6 and swinging it with the handle 5 as an axis. As the tool is rotated the splice wire will be wound upon the handle 5 and will naturally be shortened so as to bring the ends of the wires to be spliced toward each other, as clearly shown in Fig. 8. When the parts become sufficiently taut the free end portion of the splice is then bent and twisted upon itself to form a closed eye and the handle disengaged from the wire. Thus it can be seen that I have provided a device which is comparatively simple in structure and inexpensive to manufacture; which embodies the combination of the ordinary tools employed in building wire fences.

Having thus described my invention what is claimed as new, is:—

1. A combination tool comprising a pair of pivoted jaw members one of which is provided with a curved side which bears upon a thickened portion of the opposite jaw member, each of said jaw members terminating at their outer ends in laterally extending claws, the opposed inner faces of which are concaved and spaced from each other except at their outer ends where they meet when said jaws are brought together.

2. A combination tool comprising a pair of handles each terminating at one end in jaws one of said jaws having a released portion terminating in a hammer head, the other of said jaws having a curved side bearing on said hammer head and each of said jaws being provided with laterally extending claws, the ends of which bear one upon the other, when said handles are brought together one of said jaws being provided on its inner face with a seat to receive the laterally extending claw of the other jaw member when said jaws are opened.

3. A tool of the class described, comprising a pair of cylindrical handle members



having interlocking jaws, one of said handle members being flattened adjacent its jaw and provided through its flattened portion with an opening designed for the reception of the  
5 free end of a splice wire, the other of said handle members adapted to be turned at right-angles to the first-named handle, whereby the members may have a turning

movement with respect to each other as for the purpose described.

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

ROBERT C. JOHNSON.

Witnesses:

EVER NIELSON,  
HELEN SHERRY.

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