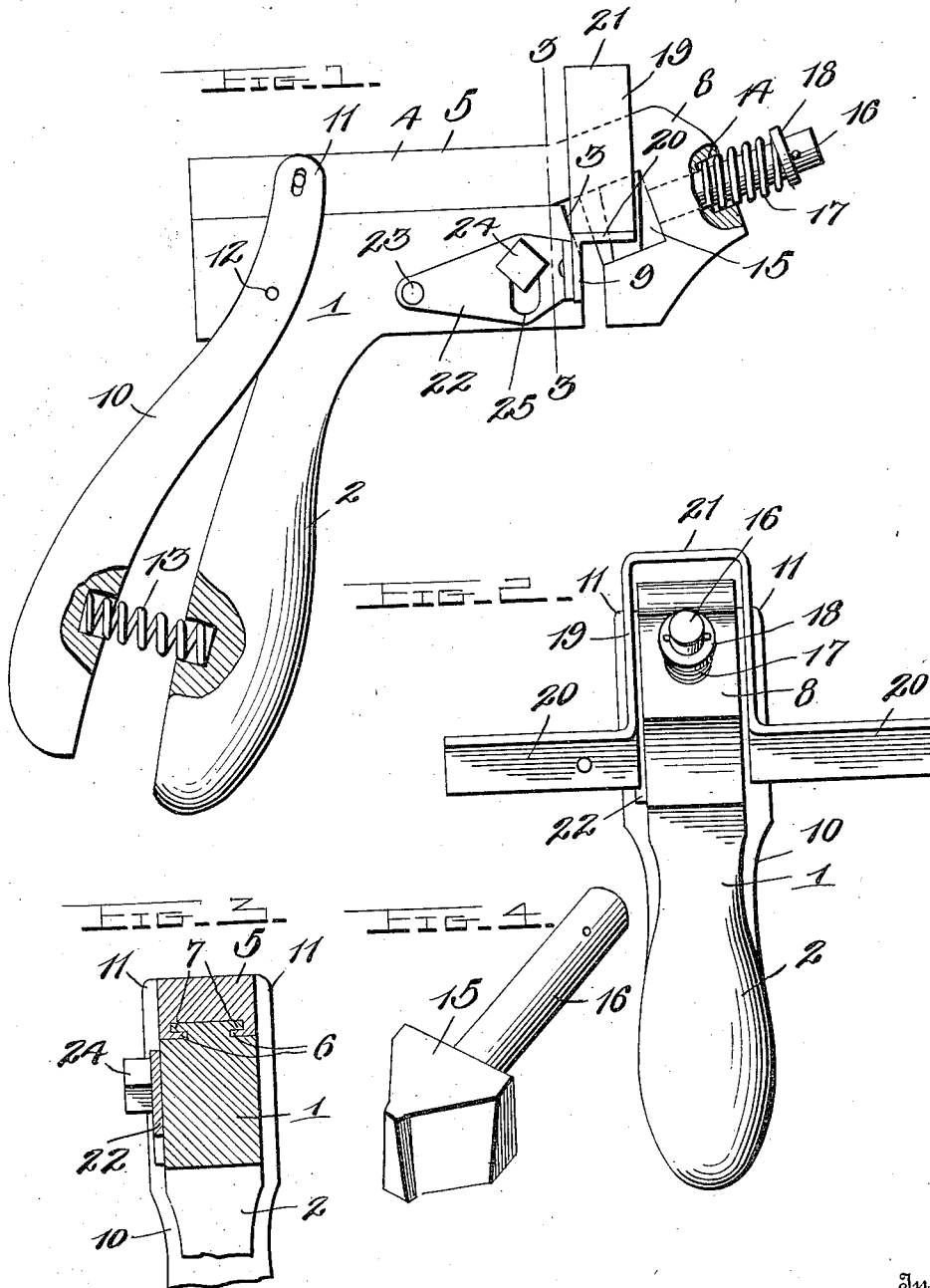


M. O. YERKEY.  
SAW SETTING TOOL.  
APPLICATION FILED MAR. 30, 1912.

Patented Nov. 26, 1912.

1,045,491.



Inventor

M. O. Yerkey,

Witnesses

Chas. L. Griebauer.

A. B. Norton.

By

Watson E. Coleman

Attorney

# UNITED STATES PATENT OFFICE.

MARION O. YERKEY, OF COWEN, WEST VIRGINIA.

## SAW-SETTING TOOL.

1,045,491.

Specification of Letters Patent.

Patented Nov. 26, 1912.

Application filed March 30, 1912. Serial No. 687,473.

*To all whom it may concern:*

Be it known that I, MARION O. YERKEY, a citizen of the United States, residing at Cowen, in the county of Webster and State of West Virginia, have invented certain new and useful Improvements in Saw-Setting Tools, of which the following is a specification, reference being had to the accompanying drawings.

This invention comprehends certain new and useful improvements in saw setting devices, and the invention has for its primary object a simple, durable and efficient construction of tool of this character, the parts of which may be cheaply manufactured and readily assembled and which will not be liable to get out of order.

The invention also has for its object an improved saw setting tool which may be operated either as an anvil set or as a lever and clamp set, according to the particular requirements of the case.

A still further object of the invention is a saw setting tool embodying an improved construction and arrangement of gage, whereby the device may be easily and quickly adjusted according to the particular set desired. And the invention also aims to generally improve devices of this class and to render them more useful and commercially desirable.

With these and other objects in view, as will more fully appear as the description proceeds, the invention consists in certain constructions, arrangements and combinations of the parts that I shall hereinafter fully describe and claim.

For a full understanding of the invention, reference is to be had to the following description and accompanying drawing, in which,

Figure 1 is a side elevation of a saw setting tool constructed in accordance with my invention, parts being broken away. Fig. 2 is an end view of the device. Fig. 3 is a transverse sectional view on the line 3—3, of Fig. 1, and, Fig. 4 is a detail perspective view of the plunger employed.

Corresponding and like parts are referred to in the following description and designated in the accompanying drawing by like reference characters.

Referring to the drawing, the numeral 1 designates the head of my improved saw setting tool, said head being formed with an angularly disposed handle 2 which is pref-

erably integral therewith and which, with the head is preferably formed of tool steel. The head 1 is formed at one end with an inclined anvil face 3.

4 designates a clamping member. This member is formed with a shank 5 provided on one face with under cut flanges 6 designed for interengagement with longitudinally disposed flanges 7 formed on the adjoining face of the head 1, whereby the clamping member is mounted for a longitudinally sliding movement relative to the head. At one end of the shank 5, a jaw 8 is formed, said jaw being designed to co-act with a jaw face 9 formed on one end of the head 1, whereby to securely clamp the saw in position. In order to operate the clamping member 5, I provide a lever 10 which is formed with a forked end 11 pivotally connected to the rear end of the shank 5, said lever being fulcrumed, as at 12, on the head 1 and extending down along the handle 2. A spring 13 is interposed between the handle 2 and lever 10 so as to return the lever, and consequently, the clamping member 4, to their outer inoperative positions, after each actuation.

The clamping member 4 is formed in one end with a recess 14, in which the head of a plunger 15 is mounted, said plunger being formed with a stem 16 working in an opening formed in the clamping member. A spring 17 is coiled around the outer end of the stem 16 and bears against the clamping member and also against a collar 18 secured to said stem, whereby to retract the plunger after each actuation, so as to permit the saw to be easily slid forward for operation upon the next succeeding tooth. I also provide a gage 19. In the present embodiment of the invention, the gage embodies two laterally extending members 20, preferably angular in cross section, as shown, whereby to form downwardly facing shoulders, against which the ends of the teeth are adapted to engage, so as to hold the saw steady and in the required position for the desired set of the teeth. These laterally extending members 20 project outwardly from opposite sides of the head 1 and clamping member 4 and are connected together by a yoke 21, as clearly illustrated in the drawing. An arm 22 is connected to one of the laterally extending members 20 of the gage 19, said arm being pivotally connected, as at 23, to one side of the head 1 and being designed for

engagement by a set screw 24 which is received in a slot 25 formed in said arm and which works in the head, whereby the gage may be held in different adjusted positions.

5 From the foregoing description in connection with the accompanying drawing, the operation of my improved saw setting tool will be apparent. In the practical use of the device, after the gage 19 has been adjusted to the required position, the toothed edge of the saw is slipped up in between the jaw 8 and the jaw face 9 with the teeth of the jaw projecting the required distance over the anvil face 3 of the head, and the lever 10 and handle 2 are pressed tightly together, whereby the saw is clamped and a tooth set, either by the pressure exerted thereon by the plunger carried by the clamping member 4 or by the blow of the hammer upon the outer end of the stem 16 of said plunger. As soon as one tooth has been set, pressure upon the handle 2 and lever 10 is removed, whereupon the spring 13 will be permitted to act to carry the clamping member outwardly away from the adjoining side of the saw, whereupon the saw may be easily slipped forward for a subsequent operation upon the next succeeding tooth. It will be understood that the teeth of the saw contact with the downwardly facing shoulders of the laterally extending members 20 of the gage 19 in this operation, whereby the teeth of the saw may be uniformly set. Preferably, the gage is formed of polished steel so that the saw teeth may slide easily thereover without becoming dulled, and the plunger 15 is preferably of tool steel and the clamping member 4 and lever 10 of malleable iron, although it is to be understood that my invention is not limited in this regard, and that furthermore, it is not limited to the precise construction, arrangement and proportions of the parts shown and described, as various changes may be made without departing from the scope of the invention, as defined in the appended claims.

What I claim is:—

1. A saw setting tool, comprising a head provided with a handle, and formed at one end with an anvil face, a clamping member embodying a shank having a sliding connection with said head and formed with a jaw adapted to co-act with the head to clamp a saw blade, an actuating lever fulcrumed on the head and pivotally connected to said clamping member, and a spring retracted

plunger carried by the clamping member and adapted to co-act with the anvil face of the head, for the purpose specified.

2. A saw setting tool, comprising a head formed at one end with an anvil face and a clamping jaw face and provided at its opposite end with an angularly disposed handle, a clamping member having a sliding connection with the head and embodying a jaw adapted to co-act with the jaw face of the head to clamp a saw therebetween, said clamping member being formed with a recess disposed opposite to the anvil face of the head, a plunger mounted in said recess and provided with a protruding stem, and an actuating lever fulcrumed on the head and extending along side of the handle, said lever being pivotally connected at one end to the clamping member.

3. A saw setting tool, comprising a head formed at one end with an anvil face and provided with a handle, said head being formed with longitudinally disposed flanges, a clamping member embodying a shank formed with flanges having an interengaging sliding connection with said flanges of the head, a lever fulcrumed on said head and extending along side of the handle and pivotally connected at one end to said shank, an expansion spring interposed between the handle end of said lever and the handle, the clamping member being provided with a clamping jaw and formed opposite the anvil face of the head with a recess, a plunger head mounted in said recess, the clamping member being formed with an opening leading to the recess, and a spring encircled stem connected to said head and movable through said opening to the exterior of the clamping member, as and for the purpose set forth.

4. A saw setting tool, including a head, a clamping member mounted thereon, means for actuating said clamping member, and a gage embodying laterally extending members on opposite sides of said head, a connecting yoke, a supporting arm pivotally connected to one side of the head, and means for securing said arm to the head in different adjusted positions.

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

MARION O. YERKEY.

Witnesses:

S. W. SHAVER,  
J. F. GIFFEN.