

No. 883,806.

PATENTED APR. 7, 1908.

A. JOHNSON.

SAW SET.

APPLICATION FILED NOV. 4, 1907.

FIG. 1.

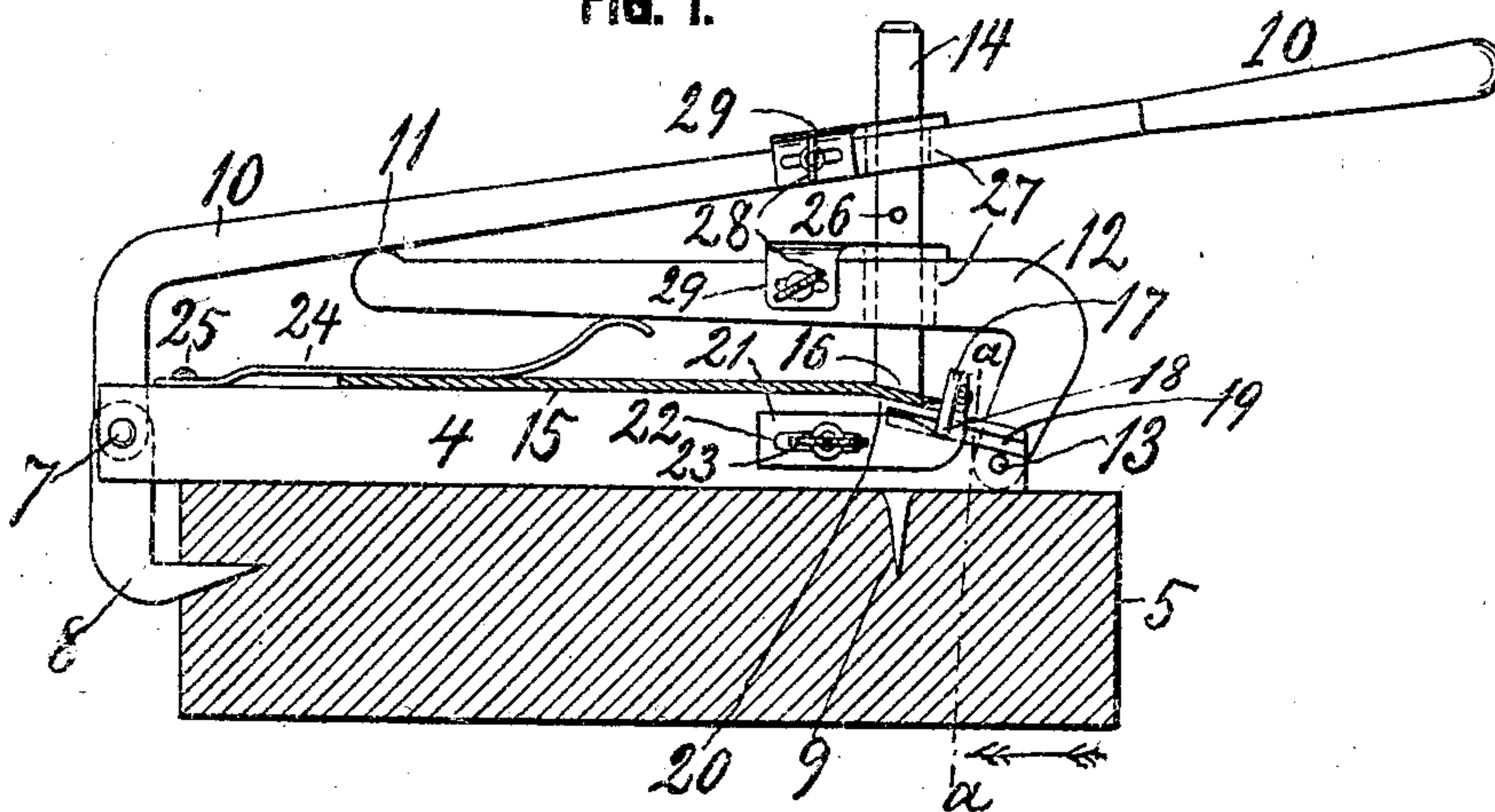


FIG. 2.

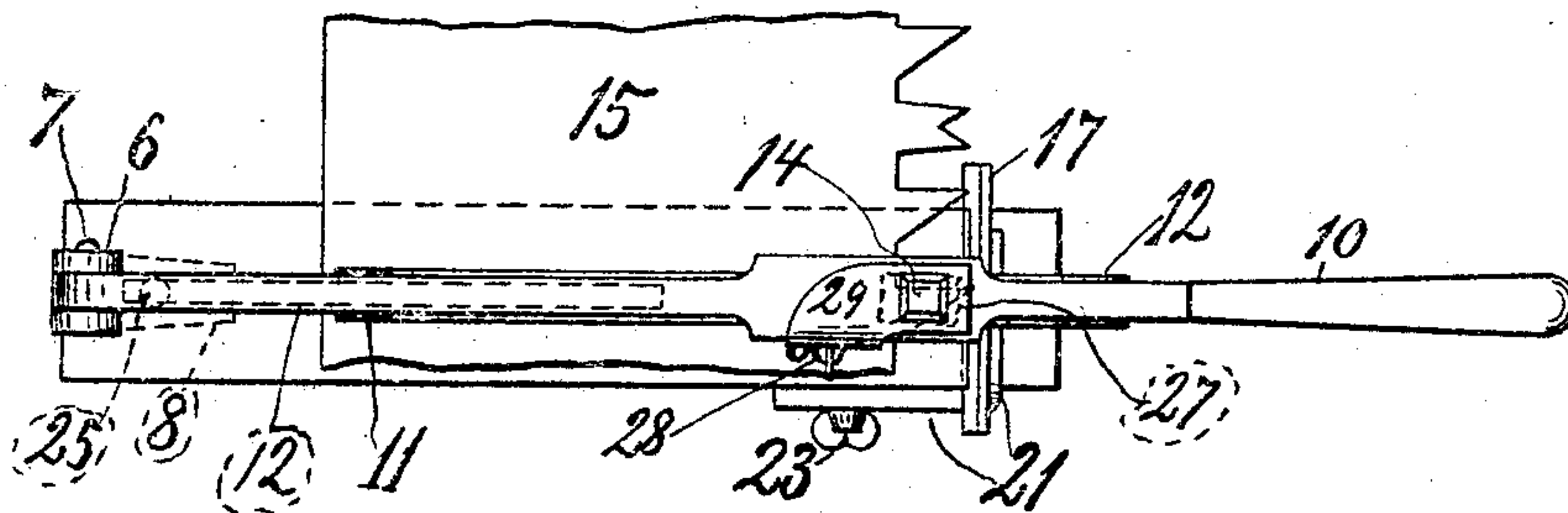
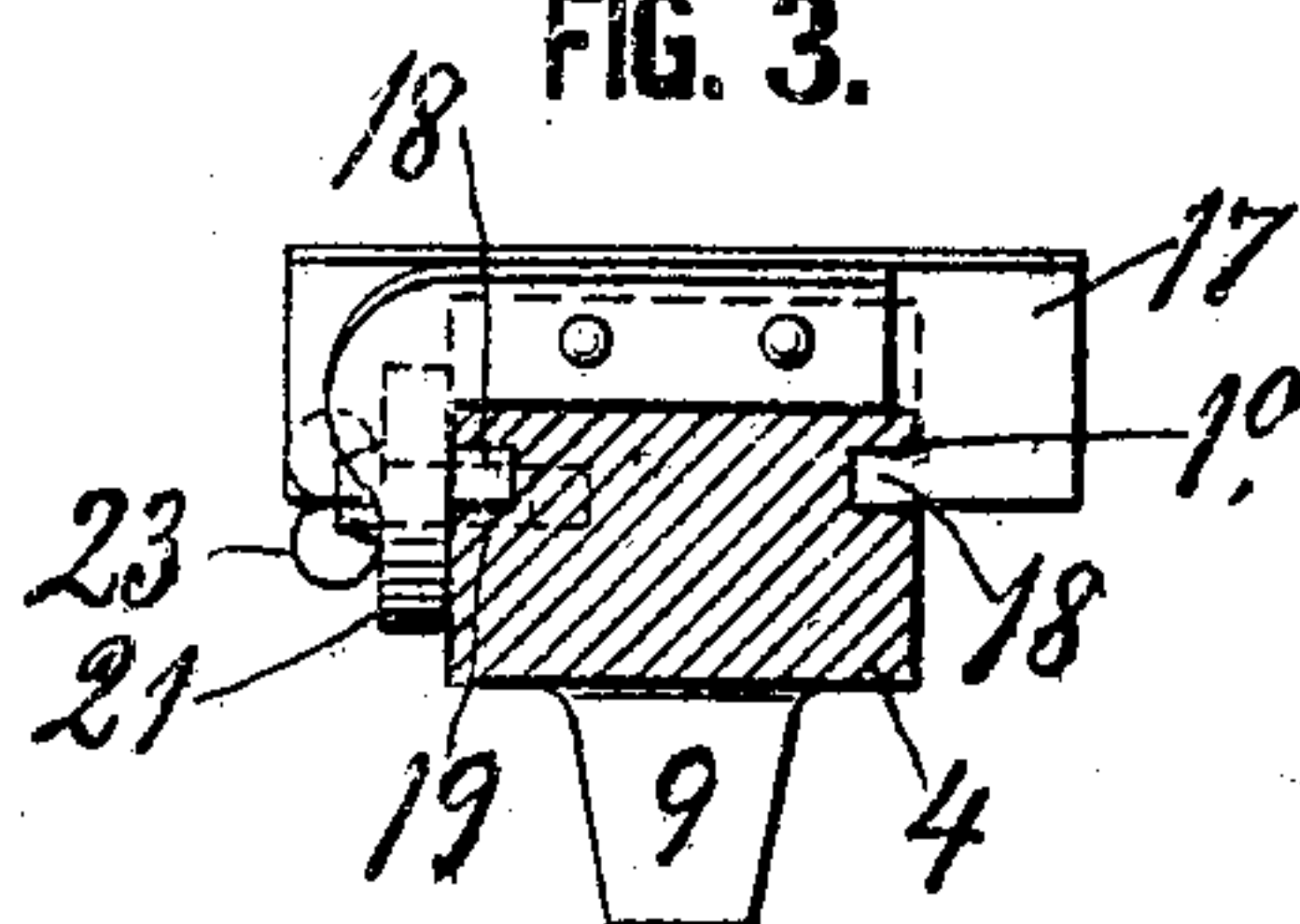


FIG. 3.



WITNESSES:

D. E. Carlsen.
M. M. Carlsen.

INVENTOR:

A. Johnson.
BY HIS ATTORNEY:
A. M. Carlsen.

UNITED STATES PATENT OFFICE.

ARVID JOHNSON, OF DULUTH, MINNESOTA.

SAW-SET.

No. 883,806.

Specification of Letters Patent.

Patented April 7, 1908.

Application filed November 4, 1907. Serial No. 400,442.

To all whom it may concern:

Be it known that I, ARVID JOHNSON, a subject of the Emperor of Russia, residing at Duluth, in the county of St. Louis and State of Minnesota, have invented a new and useful Saw-Set, of which the following is a specification.

My invention relates to improvements in saw-sets; and the object is to provide a saw-set that will be efficient and also convenient for use in lumber camps and like places, for setting the teeth of saws used in felling trees.

In the accompanying drawing, Figure 1 is a side elevation of my improved saw-set mounted upon a piece of lumber serving to support it when in use, and a portion of a saw blade in position to be set by the device. Fig. 2 is a top view of Fig. 1 with the wooden supporting block omitted. Fig. 3 is a transverse section on the line *a-a* in Fig. 1 with the wooden block omitted.

Referring to the drawing by reference numerals; 4 designates the steel block serving as the anvil in the device. It is securable to mostly any kind of wooden support 5 by having in a notch 6 in one end of it pivoted at 7 an angularly bent prong or hook 8 adapted to be driven horizontally into the wood, and near the other end of it a bottom prong 9 adapted to be driven downward into the wooden block, plank or log 5. On the pivot 7 is also attached a hand lever 10, which bears at 11 upon the free end of another lever 12, which is pivoted at 13 in a notch in the front end of the anvil 4. Through apertures 27 in both of said levers is guided to slide vertically the punch 14 by which the saw teeth are set when the punch receives a blow on its upper end. The lower end of the punch and the part of the face of the anvil operated upon are therefore beveled to the extent it is desired to have the saw teeth set, as can be seen in Fig. 1, where 15 is the saw and 16 a tooth operated on after it has been placed against a gage 17. Said gage is guided by having fingers 18 (see Fig. 3) movably guided in grooves 19, which in both sides of the anvil extend parallel to the beveled face 20 thereof. The plate is held in any forward or rearward position by having an arm 21 with a slot 22 in it for a thumb-screw 23 which is threaded in the side of the anvil and thus able to hold the arm clamped thereto in any adjusted position according to the length of the saw tooth or part of it that is to be set. The saw, while operated on, is

held firmly down on the anvil by a spring arm 24 secured at 25 to the anvil and having its front end curved upward so as to receive pressure from the lower lever 12 of the compound levers 10—12; the operator bearing down on the lever 10 with one hand while striking on the punch with a hammer held in the other hand; and when he raises the lever 10 the spring 24 raises from the saw-blade and by the lever 12 and a pin 26 in the side of the punch also lifts the punch, so that the saw blade is free to be moved with the next tooth into position for operation, which is thus repeated until all the teeth are set. The apertures 27 are elongated in longitudinal direction of the levers and upon each lever is held by a thumb-screw 28 a plate 29 having a slotted hole for said thumb-screw and a guiding hole for the punch 14 so that by adjusting the plates by said thumb-screws the punch is adjusted so as to cover more or less of the beveled face of the anvil. From this it will be understood that the guide 17 and punch 14 may be moved rearwardly on the anvil until even the shortest saw teeth may be set by the device.

Having thus described my invention, what I claim is:—

1. The combination with an elongated steel anvil having near one end of its upper side a beveled or inclined face on which to set the saw teeth, a setting punch arranged to slide vertically above said face, a spring arm fixed near the other end of the anvil and extending toward the end having the beveled face, said arm having its body offset from the anvil to permit the saw blade to pass below it, and its free end curved upward higher than the body, a lever pivoted at one end of the anvil and adapted to press upon the end of the spring arm and thus hold the saw firmly upon the anvil, a saw-setting punch slidably inserted vertically in an aperture in the lever and having its lower end beveled parallel to the beveled face of the anvil, and means whereby the lever will engage the punch and elevate it.

2. The combination with an elongated steel anvil having near one end of its upper side a beveled or inclined face on which to set the saw teeth, a setting punch arranged to slide vertically above said face, a spring arm fixed near the other end of the anvil and extending toward the end having the beveled face, said arm having its body offset from the anvil to permit the saw blade to

pass below it, and its free end curved upward
higher than the body, a lever pivoted at one
end of the anvil and adapted to press upon
the end of the spring arm and thus hold the
5 saw firmly upon the anvil, a saw - setting
punch slidingly inserted vertically in an
aperture in the lever and having its lower
end beveled parallel to the beveled face of
the anvil, and means whereby the lever will
10 engage the punch and elevate it; a second
lever pivoted to the other end of the anvil
and adapted to press upon the first men-
tioned lever, said second lever also having an
aperture for guiding the setting punch.
15 3. The combination with an elongated
steel anvil having near one end of its upper
side a beveled or inclined face on which to
set the saw teeth, a setting punch arranged
to slide vertically above said face, a spring
20 arm fixed near the other end of the anvil and
extending toward the end having the beveled
face, said arm having its body offset from
the anvil to permit the saw blade to pass
below it, and its free end curved upward

higher than the body, a lever pivoted at one 25
end of the anvil and adapted to press upon
the end of the spring arm and thus hold the
saw firmly upon the anvil, a saw - setting
punch slidingly inserted vertically in an
aperture in the lever and having its lower 30
end beveled parallel to the beveled face of
the anvil, and means whereby the lever will
engage the punch and elevate it; a second
lever pivoted to the other end of the anvil
and adapted to press upon the first mentioned 35
lever, said second lever also having an aper-
ture for guiding the setting punch, the aper-
tures in said levers being elongated in longi-
tudinal direction of the levers, a guiding
plate adjustably secured on each lever and 40
guidingly engaging the punch, for the pur-
pose set forth.

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

ARVID JOHNSON.

Witnesses:

JOHN WESTERLUND,
OSCAR ANSDAL.