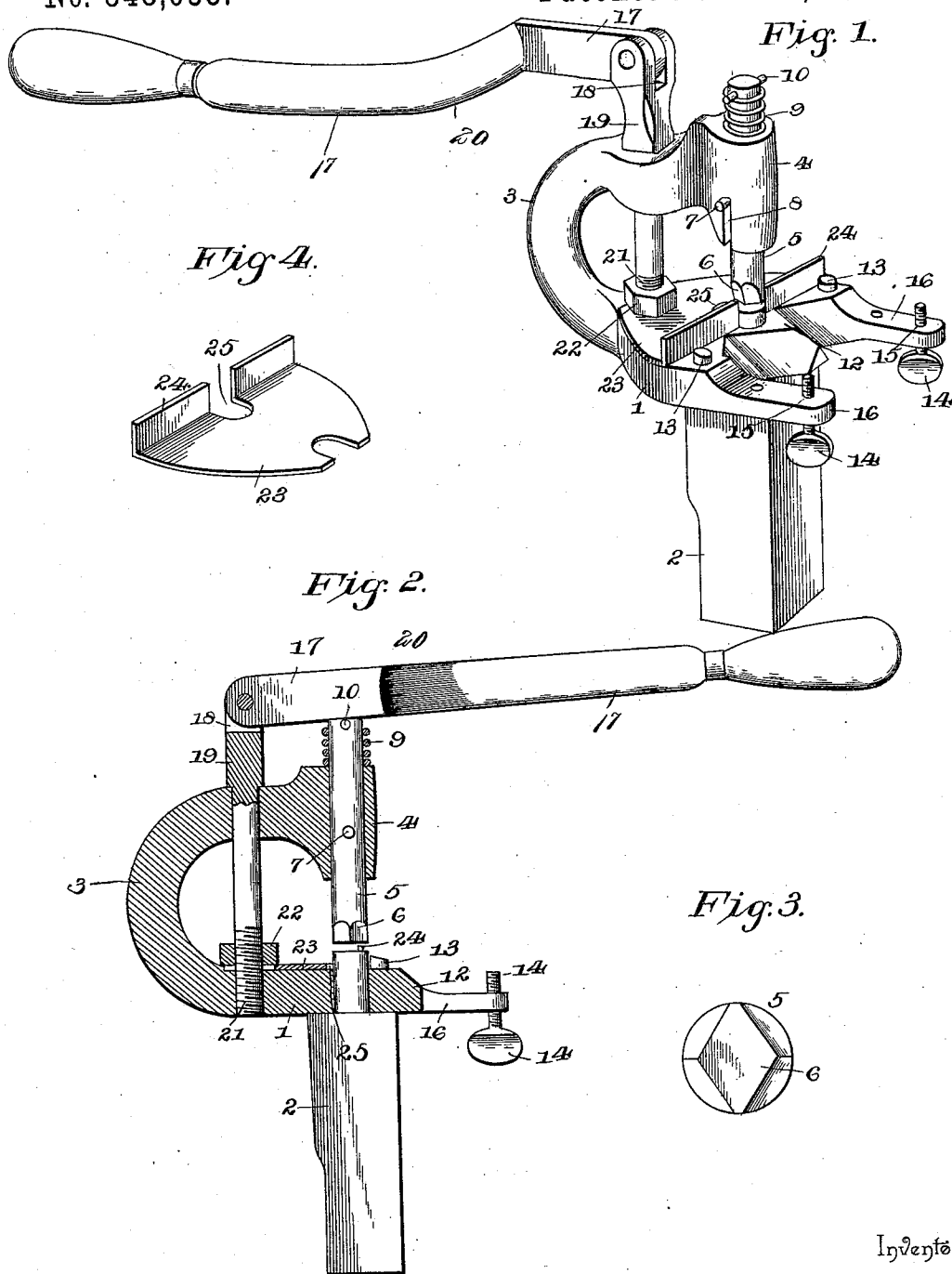


(No Model.)

J. A. CAMPBELL.
SAW SET.

No. 548,033.

Patented Oct. 15, 1895.



Inventor

John A. Campbell,

Witnesses

Chas. A. Ford.

J. H. Piley

By his Attorneys.

C. A. Snow & Co.

UNITED STATES PATENT OFFICE.

JOHN A. CAMPBELL, OF ASOTIN, WASHINGTON, ASSIGNOR OF TWO-THIRDS
TO J. O'KEEFE AND L. B. HOWARD, OF SAME PLACE.

SAW-SET.

SPECIFICATION forming part of Letters Patent No. 548,033, dated October 15, 1895.

Application filed September 17, 1894. Serial No. 523,245. (No model.)

To all whom it may concern:

Be it known that I, JOHN A. CAMPBELL, a citizen of the United States, residing at Asotin, in the county of Asotin and State of Washington, have invented a new and useful Saw-Set, of which the following is a specification.

The invention relates to improvements in saw-sets.

The object of the present invention is to provide a simple and efficient saw-set capable of being readily adjusted to operate on saws of different sizes, and adapted to effectually set the teeth thereof without breaking or scarring a tooth.

A further object of the invention is to enable the teeth of a saw to be given a uniform set and to permit the punch to be adjusted for conveniently setting wide or narrow teeth.

Another object of the invention is to prevent a saw from rocking while being set and to afford a clear view of the teeth during the operation of setting.

The invention consists in the construction and novel combination and arrangement of parts hereinafter fully described, illustrated in the accompanying drawings, and pointed out in the claims hereto appended.

In the drawings, Figure 1 is a perspective view of a saw-set constructed in accordance with this invention, the handle being swung back to show the parts more clearly. Fig. 2 is a vertical sectional view taken longitudinally of the lever. Fig. 3 is a detail plan view of the lower end of the punch. Fig. 4 is a detail perspective view of the adjustable gage.

Like numerals of reference indicate like parts in all the figures of the drawings.

1 designates a bed-plate provided with a depending rectangular shank 2, adapted to be arranged in a socket or opening of a bench or other suitable support, and the bed-plate is provided at its rear side with a curved arm 3, extending upward and forward and terminating over the center of the bed-plate in a vertical eye or socket 4. The vertical eye or socket 4 of the curved arm receives a vertically-movable punch 5, provided with a diamond-shaped lower end 6, and retained in the eye or socket 4 by a transverse pin 7, which passes through the punch and projects therefrom, and has its terminals arranged in ver-

tical slots 8, which limit the upward movement of the punch. The punch is normally held elevated by a spiral spring 9, disposed on its upper end and seated on the arm 3 and engaging a transverse pin 10 of the punch. The pin 7 is removable, and is adapted to be taken out to permit the punch to be arranged to suit the length of a tooth, the diamond-shaped end 6 being adapted to be turned at right angles to bring its greatest length transversely or longitudinally of the bed-plate.

The bed-plate is provided with a centrally-arranged anvil 12, and has oppositely-disposed lugs 13 located at the sides of the bed-plate for supporting a saw-blade, and the latter is held at the desired elevation by adjustable screws 14, mounted in threaded perforations 15 of forwardly-extending arms 16 of the bed-plate. These screws are disposed vertically and have their heads at their lower ends for the convenience of turning, and the arms 16 may be provided with two or more perforations to enable the screws to be adjusted to suit a narrow or wide saw-blade.

The punch is operated by a lever 17, fulcrumed in a bifurcation 18 of a vertical standard 19 and provided at its outer end with a handle, and it is laterally offset or curved at 20 beyond the punch, in order to afford a clear view to the operator of the tooth being operated on.

The standard is fitted in perforations of the curved arm 3 and is reduced to form a shoulder, which rests upon the arm, and its lower end is threaded at 21 and receives a nut 22, located above the bed-plate and arranged to engage an adjustable gage-plate 23 to secure the latter in its adjustment. The gage-plate is substantially semicircular. Its front edge is bent upward to form a flange 24, and it is provided with central recesses 25, in order to fit around the standard and the anvil, which are circular. The gage-plate may be instantly adjusted, and it is quickly secured in its adjustment by the nut 22.

It will be seen that the saw-set is exceedingly simple and inexpensive in construction, that it is adapted to be readily arranged to receive different sizes of saws, and that it affords a view of the tooth operated on.

Changes in the form, proportion, and the

minor details of construction may be resorted to without departing from the principle or sacrificing any of the advantages of this invention.

5 What I claim is—

1. In a saw set, the combination of a bed-plate provided at its back with an arm extending forward over the bed-plate, a punch mounted on the arm, a standard depending
10 from the arm and having a lower threaded end, a lever pivoted to said standard, an adjustable gage-plate mounted on the bed-plate, and a nut arranged on the threaded portion of the standard and engaging the gage-plate
15 and securing the same in its adjustment, substantially as described.

2. In a saw set, the combination of a bed-plate provided at its back with an arm extending forward over the bed-plate and terminating in a vertical eye, provided with slots,
20 a vertically-movable punch mounted in the eye and provided with a removable pin located in the slots, said punch having an oppositely-tapered lower end, a standard mounted in the arm and depending therefrom and having its
25 lower end threaded, a lever fulcrumed on the standard and engaging the punch, a gage-plate arranged on the bed-plate and adapted

to be adjusted forward and backward, and a nut arranged on the threaded end of the standard and engaging the gage-plate, substantially
30 as described.

3. In a saw set, the combination of a bed-plate having a central anvil and provided with
35 opposite lugs, arms extending forward from the bed-plate and provided with adjusting-screws, an arm extending upward from the back of the bed-plate and terminating over the anvil in a vertical eye or socket, a punch mounted in the eye or socket, a standard
40 mounted on the upward-extending arm and depending therefrom and having its lower end threaded, a lever fulcrumed on the standard and engaging the punch, an adjustable gage-plate provided at its front with flanges and
45 having a recess arranged opposite the anvil, and a nut arranged on the threaded end of the standard and engaging the adjustable gage-plate, substantially as described.

In testimony that I claim the foregoing as
50 my own I have hereto affixed my signature in the presence of two witnesses.

JOHN A. CAMPBELL.

Witnesses:

GEO. W. BAILEY,
E. C. MEANS.