

(No Model.)

N. S. HARVEY.
SAW SET.

No. 248,463.

Patented Oct. 18, 1881.

Fig. 1.

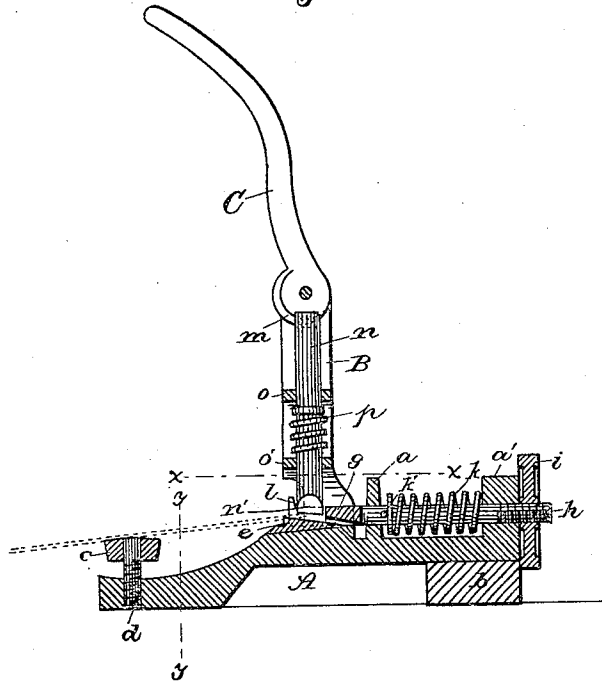


Fig. 2.

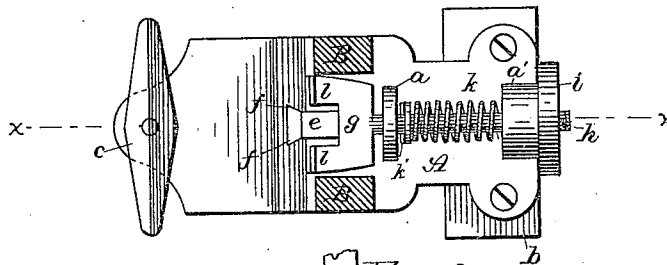
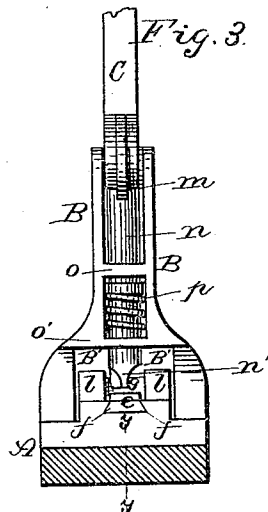


Fig. 3.



Witnesses:

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SAW-SET.

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Application filed June 21, 1881. (No model.)

To all whom it may concern:

Be it known that I, NOAH S. HARVEY, a citizen of the United States, residing at Detroit, in the county of Wayne and State of Michigan, have invented certain new and useful Improvements in a Saw-Set; 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, reference being had to the accompanying drawings, and to letters or figures of reference marked thereon, which form a part of this specification.

My invention relates to an improvement in saw-sets; and it consists in the peculiar construction and arrangement of devices, to be more fully described hereinafter, whereby a cheap, simple, and effective machine is produced, capable of setting the teeth of a saw of any size at any desired angle.

The accompanying drawings fully illustrate my invention.

Figure 1 is a vertical longitudinal sectional view of my invention on the line *xx*, Fig. 2. Fig. 2 is a horizontal longitudinal sectional view on the line *xx*, Fig. 1. Fig. 3 is a front elevation, partly in section, through the line *yy*, Fig. 1.

A represents a bed-plate, which is made in the shape shown in Fig. 1, its rear end being secured to the block *b*, and its front end being sloped or curved so as to be much lower at that point than in the center. Near the front end of this cut-away portion is secured the saw-rest *c*, which determines the angles to which the teeth are to be set, it being provided with the elevating-screw *d*, which passes through the front end of the bed-plate A, whereby the saw-rest may be placed at any height desired. On its upper side, at the rear end of the plate A, is the bearing *a'*, and at a suitable distance from the bearing *a'* is a second bearing, *a*. Through these bearings passes the rod *h*, having a screw-thread at its rear end, and provided with a thumb-nut, *i*.

Upon the forward end of the rod *h* is the adjustable gage *g*. It is provided with forward-extending lugs *l*, having between them a recess which receives the anvil *e*, and through

which the die *n* passes in its descent. The under side of the gage is slotted to admit the anvil *e* when small teeth are to be set, and the gage is adjusted well forward around the anvil.

Placed around the rod is the spring *k*. Its rear end bears against the bearing *a'*, and its forward end against the pin *k'*, which passes through the rod *h* and operates to make the gage *g* adjustable. It will readily be seen that the gage-head can be moved backward or forward by turning the nut *i*.

In the highest portion of the bed-plate A, near its center, is secured the anvil *e*, which is provided with the flanges *f*, which fit into a corresponding groove made in the bed-plate. The anvil *e* is made wedge-shaped, its upper and lower surfaces converging to a point at the rear end, as shown in Fig. 1. The upper side serves to receive the stroke of the die or hammer, and by having its lower surface sloping and fitting into a corresponding groove made in the bed-plate the anvil can be driven in position so as to remain firmly in place, and at the same time be readily removed, when necessary, to replace it by another.

From the center of the upper surface of the bed-plate rises the standard B, the lower portion of which is open at B' and straddles the working devices described, its upper portion being provided with two long slots, and the sides of the standard being connected by the braces *o o'*.

In the upper end of the standard is pivoted the arm or lever C, which is provided with the cam *m*, which fits into a slot made in the upper end of the piston *n*. This piston is normally pressed upward by the spring *p*, and terminates at its lower end in a die or former, *n'*, of any suitable shape to fit the saw-teeth.

The operation of my invention is as follows: The gage *g* is adjusted at a suitable point from the outer edge of the anvil *e* to correspond to the depth of the teeth of the saw to be operated upon, and the saw-rest *c* is fixed at a suitable height, so that the saw will be inclined at the proper angle to the upper side of the anvil *e*, as shown in dotted lines in Fig. 1, after which the operation of setting the teeth of the saw is proceeded with in the ordinary way.

By having the gage and saw-rest adjustable the machine can be adapted to saws of any depth and angle of teeth.

Having thus described my invention, I claim—

1. The combination, with the base *A*, having bearings *a a'*, and the gage *g*, provided with the rod *h*, having pin *k'*, of the spring *k*, placed on the rod *h* and adapted to bear between the bearings *a'* and pin *k'*, substantially as shown.

2. In a saw-set, an adjustable gage, *g*, having lugs *ll*, embracing the anvil *e*, and provided with a recess on its under side adapted to receive the anvil *e*, as and for the purposes set forth.

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Witnesses:

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