

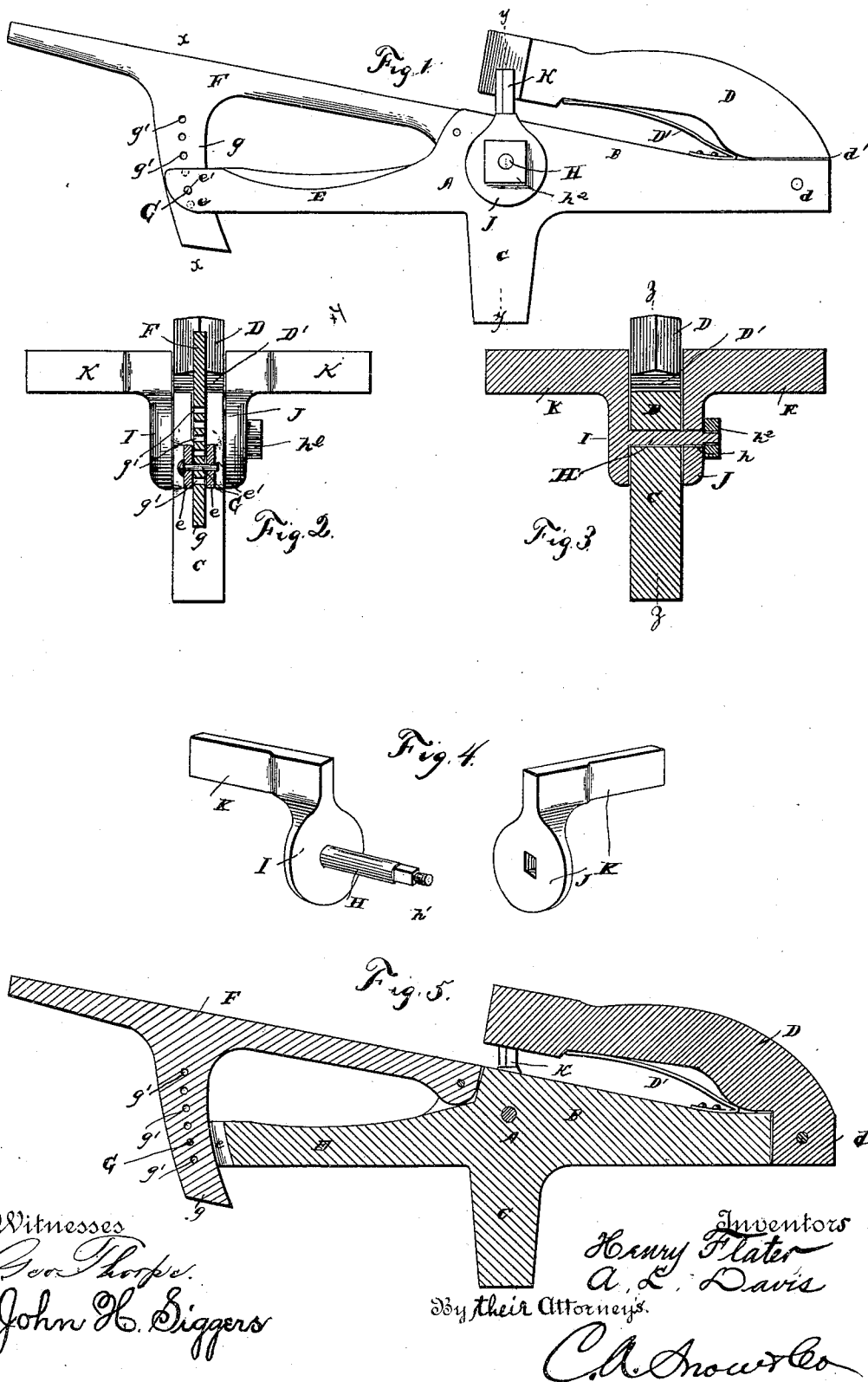
(No Model.)

H. FLATER & A. L. DAVIS.

SAW SET.

No. 356,460.

Patented Jan. 25, 1887.



UNITED STATES PATENT OFFICE.

HENRY FLATER AND ABNER L. DAVIS, OF FINDLAY, OHIO.

SAW-SET.

SPECIFICATION forming part of Letters Patent No. 356,460, dated January 25, 1887.

Application filed October 12, 1886. Serial No. 216,053. (No model.)

To all whom it may concern:

Be it known that we, HENRY FLATER and ABNER L. DAVIS, citizens of the United States, residing at Findlay, in the county of Hancock and State of Ohio, have invented a new and useful Improvement in Saw-Sets, of which the following is a specification.

Our invention relates to improvements in saw-sets; and it consists of the peculiar construction and arrangement of the various parts for service, substantially as hereinafter fully described, and particularly pointed out in the claims.

The invention is especially designed as an improvement upon a saw-set protected by a prior patent issued to Henry Flater on the 5th day of August, 1884, and numbered 302,902. In this device he employs a regulating-screw for holding the pivoted saw-supporting arm or lever at any desired elevation to the anvil of the saw-set; but we have found by practical use of a set having this screw that the threads thereof are liable to soon become worn or broken, owing to the shocks or jars of the hammer upon the saw-teeth on the anvil, and thereby the saw is supported very insecurely and the teeth are not "set" accurately, as is necessary with a device of this class.

The primary object of our invention is to provide a saw-set with improved means which shall firmly and securely support the saw upon the anvil without danger of being slightly displaced, and thereby more accurately effect the setting of the saw-teeth, while at the same time the saw-supporting arm can be easily and quickly adjusted at any angle or elevation, as may be required.

A further object of our invention is to provide the saw-set with improved guards upon or against which the saw-teeth abut, which can be simultaneously and more minutely adjusted than the guards shown in Patent No. 302,902, hereinbefore referred to, to effect the better setting of the teeth; and, finally, to provide improved means for securely holding and supporting the device against movement.

In the drawings hereto annexed, which form a part of this specification, and which illustrate a saw-set embodying our present improvements, Figure 1 is a side elevation. Fig. 2 is a transverse sectional view on the line *xx* of Fig. 1. Fig. 3 is a similar view on the line *y*

y of the same figure. Fig. 4 is a detached perspective view of the guards and the means for operating them; and Fig. 5 is a vertical central longitudinal sectional view on the line *zz* of Fig. 3.

Referring to the drawings, in which like letters of reference denote corresponding parts in all the figures, A designates the horizontal base of our improved saw-set, which is enlarged at one end to form an anvil, B. The base is provided with a vertical leg or extension, C, which depends therefrom at a point beneath the anvil, and this leg or extension is made square or rectangular in form, so that it can be very securely held in a vise or fitted into a square hole in a bench to more securely and firmly hold the set in place.

The base is provided at one end with a pair of vertical ears, *d*, which are formed integral therewith, and between these ears is fitted a corresponding ear, *d'*, that is formed on one end of an inclined hammer arm or lever, D, a suitable pin or shaft being passed through aligned openings in the ears *d d'*, to pivotally connect the base and hammer-arm together. The hammer-arm is arranged to be held above the base in an inclined position by a flat spring, *D'*, which is interposed between the base and the hammer-arm, and the free end of the arm is normally held in an elevated position by the spring immediately over the anvil, so that when the arm is depressed it will strike the anvil and the teeth of the saw thereon.

The base A of the set is further provided with a horizontal integral arm, E, which is bifurcated at its outer end to form two ears or lugs, *e*, which have aligned openings *e'*, formed transversely therein.

The front side of the enlarged portion of the base that forms the anvil B thereon is recessed, as at *f*, and in this recessed portion is fitted and pivoted the inner end of an adjustable saw-supporting arm, F. This arm is thus connected to the base in such a manner that the upper side of the pivoted end thereof lies very nearly in the same plane as the anvil B, so that a saw which is placed on the adjustable arm is properly supported in place on both the anvil and the arm to receive the impact or blow of the hammer-arm. The saw-supporting arm is provided with a vertically-depending leg, *g*, which passes and fits between the parallel lugs

e of the fixed arm E of the base, and this leg is provided with a series of transverse apertures, g', one of which is adapted to align or register with the coincident apertures e' of the ears e, to receive a removable supporting shaft or pin, G.

The base is further provided with a transverse cylindrical opening, h, beneath the anvil thereon, and in this opening is fitted a rock-shaft, H, which extends through the same and projects at its ends beyond the vertical sides of the base. The shaft is provided at one end with an integral flat disk, I, and the other end is externally threaded, as shown, a squared portion, h', being formed to one side of the threaded end which passes through a square central opening in a disk, J, which is removably fitted on the shaft and held in place by a nut, h², which is screwed on the shaft. These fixed and removable disks are adapted to turn with the shaft, and they are arranged on opposite sides of the base, as shown, so that they bear against the same when the nut is tightened, to prevent the shaft from rotating when the device has been adjusted.

Each of the disks I J is provided with a guard, K, which is formed therewith, and these guards are arranged on opposite sides of the base and project above the anvil, so that the teeth of the saw can abut against the same.

The operation and advantages of our invention will be readily understood and appreciated by those skilled in the art from the foregoing description, taken in connection with the drawings.

It will be observed that the securing-pin is located at an angle to the saw-supporting arm, so that there will be no liability of the pin wearing off or becoming loose, as was the case with the screw in the patent referred to.

We claim—

1. In a saw-set, the combination of a base having the anvil and the hammer-arm, the saw-supporting arm pivoted to the base at one end and having the depending perforated leg, the horizontal fixed arm on the base with the ears between which the leg is fitted, and a removable transverse pin passing through aligned openings in the ears and legs, substantially as described.

2. In a saw-set, the combination, with the base having the transverse opening beneath the anvil thereof, of the shaft passing through the base and having the threaded and squared portions at one end, the fixed disk at one end of the shaft, the removable disk fitted on the squared part of the shaft, the guards carried by the fixed and removable disks, and the nut screwed on the shaft and bearing against the removable disk, substantially as described.

In testimony that we claim the foregoing as our own we have hereto affixed our signatures in presence of two witnesses.

HENRY FLATER.
ABNER L. DAVIS.

Witnesses:

F. V. MEAGHY,
J. H. DECKER.