

C. T. SHOEMAKER.

Saw-Setting Devices.

No. 134,320.

Patented Dec. 24, 1872.

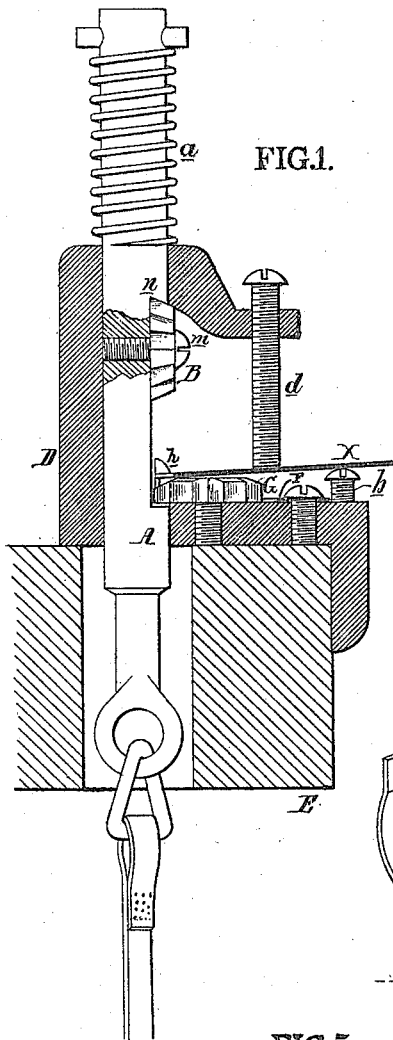


FIG. 1.

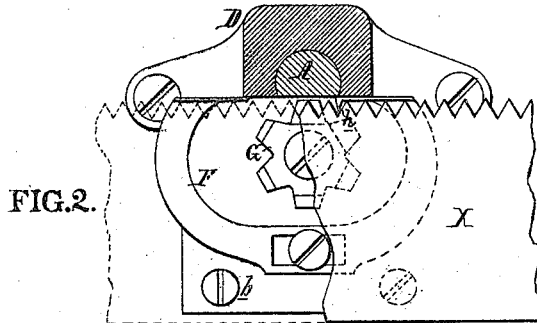


FIG. 2.

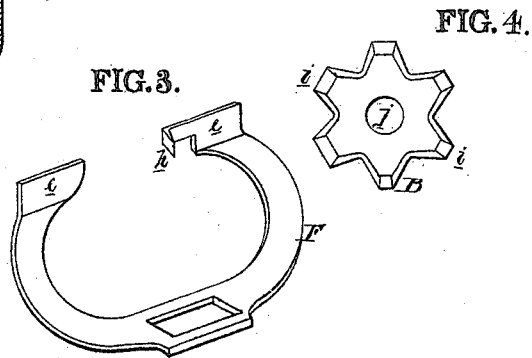


FIG. 3.

FIG. 4.

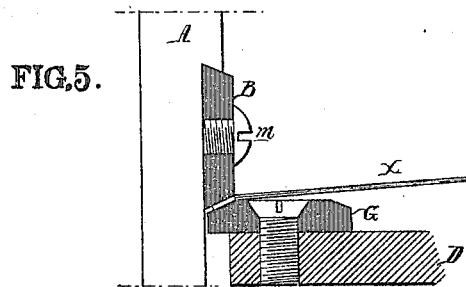


FIG. 5.

WITNESSES *Thomas McLean*  
*Harry Smith*

*C. T. Shoemaker*  
*by his Atty.*  
*Howson and Son*

# UNITED STATES PATENT OFFICE.

CHARLES T. SHOEMAKER, OF PHILADELPHIA, PENNSYLVANIA, ASSIGNOR  
TO HENRY DISSTON & SONS, OF SAME PLACE.

## IMPROVEMENT IN SAW-SETTING DEVICES.

Specification forming part of Letters Patent No. 134,320, dated December 24, 1872.

*To all whom it may concern:*

Be it known that I, CHARLES T. SHOEMAKER, of Philadelphia, Pennsylvania, have invented an Improved Saw-Setting Instrument, of which the following is a specification:

The main object of my invention is the ready setting of saws by the movement of the operator's foot, while his hands are at liberty to adjust the blade.

I accomplish this object by means of a spring-bar, A, arranged to slide in a frame, D, on a bench, E, and carrying a striker, B, which, on the sudden depression of the bar by the foot of the operator, is brought into violent contact with the tooth of the blade X and bends the same against an anvil, G, on the said frame, the blade being adjusted by the hands of the operator, all as best observed in the vertical section, Fig. 1. A coiled spring, a, surrounds the upper portion of the bar A and tends to retain the same in the elevated position shown. The lower end of the bar is, however, connected in any suitable manner to an ordinary treadle or other device so controlled by the foot of the operator that while he holds the saw-blade X he can readily depress the bar. The blade is supported at its toothed edge by the anvil G, and near its rear edge by the heads of two set-screws, b b, and the tilting of the blade is prevented, a set-screw, d, passing through a projection on the frame D. The vertical flanges e e of a plate, F, shown in the sectional plan, Fig. 2, and in the perspective view, Fig. 3, serve as guides against which the toothed edge of the blade may be adjusted, this plate being secured to the frame D, and one of its flanges having an angular projection, h, adapted to the spaces between the teeth to enable the operator to so adjust the blade that there will be always a tooth in its proper position on the anvil to receive the blow of the striker.

Both the anvil and striker are made in the peculiar manner best observed in the face view, Fig. 4, each consisting of a hardened steel plate or die, having a central hole, j, and a number of radial projections, i, six in the

present instance. Each projection is beveled at the end, but the beveled surfaces of different projections are of different areas to suit saw-teeth of different dimensions. It should be understood, too, that the beveled surface of each projection is plane, and in this respect differs from such strikers and anvils of saw-setting instruments as have rounded surfaces. The anvil can be so turned on a central pin, by which it is secured to the frame, that any one of its projections shall be immediately below a corresponding projection of the striker B, the latter being secured to the spring sliding bar A by a set-screw, m, to which, however, no shock resulting from the blow of the striker is imparted, as the shocks are resisted by a shoulder, n, on the bar A, the upper edge of the striker fitting snugly against this shoulder, as shown in Fig. 1.

The action of the striker and anvil on the saw-blade will be best understood by referring to the large vertical section, Fig. 5.

I claim as my invention—

1. A saw-setting instrument in which a spring sliding bar, connected to a treadle or its equivalent, and carrying a striker, is combined with an anvil, all substantially in the manner and for the purpose herein set forth.

2. The within-described striker and anvil, each consisting of a hardened steel plate or die, with a central opening and radial projections of different dimensions, beveled at the ends, as set forth.

3. The combination with the anvil and striker, of the adjustable plate F, its flanges e e, and projection h.

4. The combination with the anvil and striker, of supporting-screws b b, and set-screw d.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

CHAS. T. SHOEMAKER.

Witnesses:

J. SHERBORNE SINGER,  
E. B. AUSTIN.