

(No Model.)

A. F. REED.
VISE ATTACHMENT FOR ANVILS.

No. 520,011.

Patented May 15, 1894.

Fig. 1.

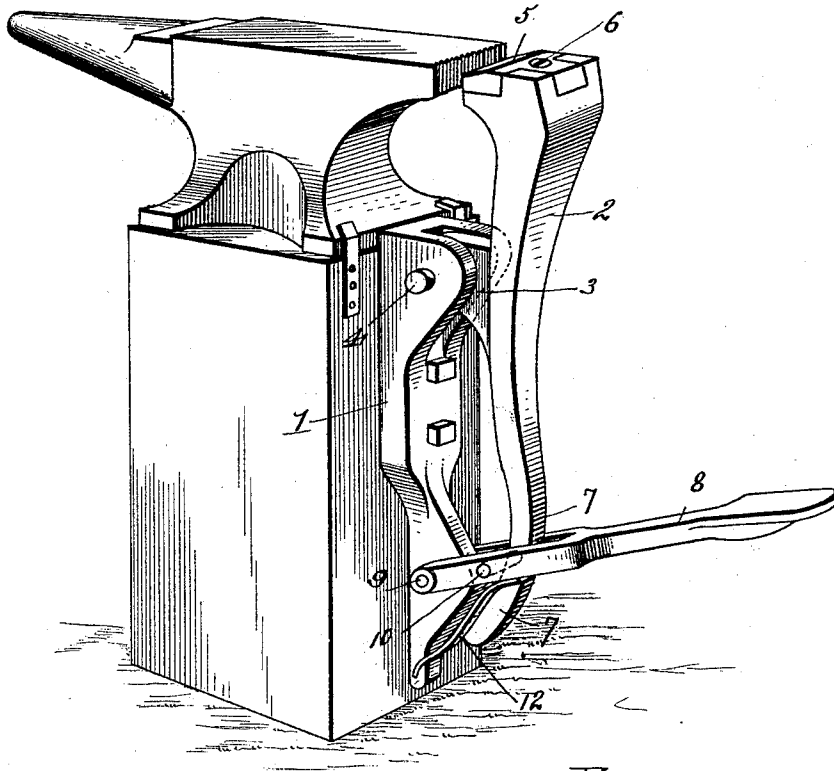
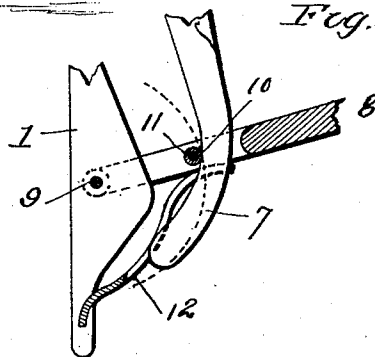


Fig. 2.



Witnesses
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ALBERT F. REED, OF GUTHRIE, IOWA.

WISE ATTACHMENT FOR ANVILS.

SPECIFICATION forming part of Letters Patent No. 520,011, dated May 15, 1894.

Application filed January 19, 1894. Serial No. 497,401. (No model.)

To all whom it may concern:

Be it known that I, ALBERT F. REED, a citizen of the United States, residing at Guthrie, in the county of Guthrie and State of Iowa, have invented certain new and useful Improvements in Vise Attachments for Anvils, of which the following is a specification, reference being had therein to the accompanying drawings, in which—

Figure 1 is a perspective view of my improved vise attachment applied to an ordinary anvil, and Fig. 2 a detail sectional view of the lower part of the device.

This invention relates to an improved vise attachment for anvils which may be applied to any ordinary anvil and which is readily removable from the anvil, as more fully hereinafter appears.

In the drawings, the numeral 1 designates a vertical bar or bracket provided with suitable holes to adapt it to be secured to the base block of the anvil by means of lag-bolts, and 2 designates a jaw pivotally supported on the upper end of said bracket, the jaw having formed on its inner side a lug or rib 3 which is embraced by a pair of ears on the bracket, the pivotal pin 4 passing through said ears and lug. The upper end of the jaw is enlarged and provided with a steel-faced die 5, said die being secured in a recess in the upper end of the jaw by means of a screw 6, so as to be removable therefrom. The upper inner edge of the die is beveled to facilitate the forming of horse-shoe calks and other work. As will be observed from the drawings this jaw in connection with the adjacent end of the anvil forms a strong vise. The lower part of the jaw depends to near the lower end of the bracket and is curved inwardly toward the same, as at 7. The jaw is operated by a foot-lever 8 which has its inner end bifurcated so as to embrace both the jaw and the bracket, to which latter it is pivoted by a horizontal pin 9. Passing through the bifurcated arm of the foot-lever is a pin 10 which carries between the arms a horizontal roller 11 which works or bears against the inner edge of the curved or cam part 7 of the jaw when the foot-lever is depressed. To normally hold the foot-lever up a flat or leaf spring 12 is secured to the bracket below the foot-lever and has its upper free end bearing upon the un-

der side of the foot-lever. The lower end of the jaw is normally pressed inward by the upper weighted end of the jaw, the weight in the upper part of the jaw being disposed outside of the pivot pin 4 for this purpose. It will be observed that to throw the jaw against the adjacent end of the anvil it is simply necessary to depress the foot-lever with the foot, thus leaving the two arms of the smith free to handle the work and the hammer or other tool. When the foot-lever is released it automatically springs up and the jaw falls away from the anvil.

It will be observed that my attachment is not only very simple and durable and inexpensive in construction, but is also adapted to be attached to any sized anvil without altering the construction thereof in the least. Another advantage is that the jaw may be very quickly secured in place and removed from the bracket by simply removing the pivot pin 4; thus preventing inconvenience and saving the time of the smith. Another feature is its compactness which not only enables it to be made very strong, but also prevents it being in the way whether in use or out of use.

This attachment is adapted principally to assist the smith in working up and fitting horse-shoes, but it is also adapted for all kinds of general work. In sharpening shoe-calks the work is done on the beveled edge of the die, the anvil simply serving as one jaw of the vise to support the shoe. The vise may also be used for making corner-irons, shaping tongue-irons, shaft irons and in performing numerous other kinds of work, as is obvious.

I am aware of Patent No. 466,208, granted to Wharton December 29, 1891, and also Patent No. 34,786, granted to Skiff March 25, 1862, and I make no claim to anything therein shown or described. My attachment differs from said patents, principally, in that all the parts are mounted upon a bracket that is adapted to be secured to an anvil of any height by the use of a single pair of lag-bolts, the bracket being so adjusted on the base as to bring the die on the jaw adjacent to the end of the anvil, thereby forming a strong and substantial vise which will enable the work to be done on the die carried by the jaw and not upon the anvil. The jaw is so mount-

ed that its upper end swings normally away
from the anvil and its lower end normally in
toward the bracket, and the foot lever is
forked at its inner end so as to embrace the
5 curved lower end of the jaw and the adjacent
part of the bracket, thereby making a very
strong connection and assisting in preventing
lateral vibration of the jaw. It will also be
seen that the operating-roller is mounted be-
10 tween the forked ends of the lever in front
of and close to the fulcrum thereof so that
the necessary power may be obtained to hold
the work steady. The foot lever is kept nor-
mally pressed upward so that the jaw may
15 swing easily and quickly away from the anvil,
the spring performing no other work except
that of lifting the foot lever.

Having thus fully described my invention,
what I claim, and desire to secure by Letters
20 Patent, is—

A vise attachment for anvils consisting of
a bracket adapted to be removably attached
to the anvil base, a vertical jaw pivoted to

the upper end of the bracket and projecting
above the same to co-operate with the adja- 25
cent end of the anvil, the lower end of said
jaw being curved inwardly toward the lower
end of the bracket and being adapted to swing
normally toward the same, the foot-lever bi-
furcated at its inner end, the two arms formed 30
by the bifurcation embracing the curved
lower end of the jaw and the adjacent part of
the bracket, means for pivotally connecting
the inner ends of the lever to the bracket, a
roller journaled in the forked end of the le- 35
ver in front of its pivotal point and adapted
to bear upon the curved inner edge of the
jaw when the lever is depressed, and a spring
for normally holding the foot-lever up, sub-
stantially as described. 40

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

ALBERT F. REED.

Witnesses:

J. D. BROWN,
A. L. SMITH.