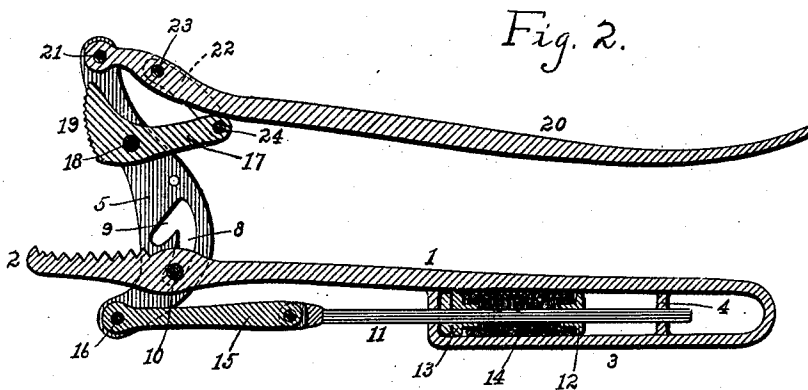
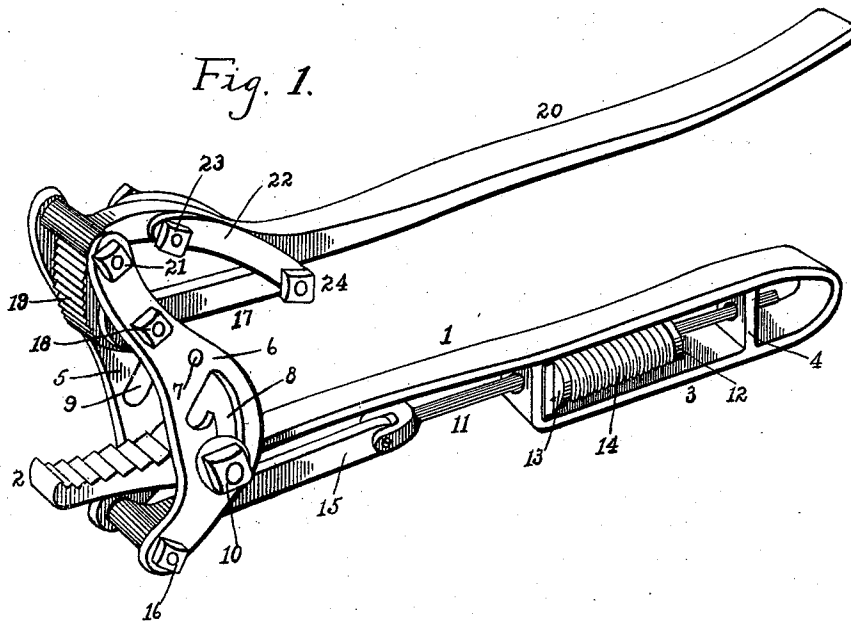


(No Model.)

J. H. RANCK.
HORSESHOE NAIL CLENCHER.

No. 570,185.

Patented Oct. 27, 1896.



Witnesses
F. B. Bury.
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UNITED STATES PATENT OFFICE.

JOSEPH H. RANCK, OF HUSTONTOWN, PENNSYLVANIA.

HORSESHOE-NAIL CLENCHER.

SPECIFICATION forming part of Letters Patent No. 570,185, dated October 27, 1896.

Application filed July 10, 1896. Serial No. 598,752. (No model.)

To all whom it may concern:

Be it known that I, JOSEPH H. RANCK, a citizen of the United States, residing at Hustontown, in the county of Fulton and State of Pennsylvania, have invented certain new and useful Improvements in Horseshoe-Nail Clenchers; 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.

My invention relates to horseshoe-nail clenchers.

My object is to provide a simple, cheap, and extremely powerful nail-clencher of the class described which will be adapted for quick and easy application and manipulation to clench the nail in a highly superior manner without injuring the hoof.

Having this object in view, my invention consists of a clencher of improved construction, as will appear more fully hereinafter, and in the accompanying drawings, in which—

Figure 1 is a perspective view showing my improved nail-clencher in use, and Fig. 2 shows a longitudinal section of the tool.

The numeral 1 designates a hand-lever which is provided at one end with a jaw 2. This lever is bent to form an open handle 3, having a partition 4. There is a rocking lever which consists of two curved sections 5 and 6, which are connected by a pin 7. The sections are provided with curved slots 8, which terminate in straight slots 9, said slots being located in alinement. The forward end of lever 1 projects between the sections of the rocking lever, and 10 designates a pivot-bolt which passes through the hand-lever and slots in the rocking lever. Owing to this construction the point of pivotal connection between the rocking lever and the hand-lever can be changed by shifting the latter, so that the pivot-bolt will either lie at the bottom of the curved slots or at the bottom of the straight slots.

The numeral 11 designates a plunger which works through the forward end of the handle of lever 1, and also through the partition of said handle. This plunger is provided with an adjusting-nut 12, and between this adjusting-nut and a nut 13 loose on the plunger

there is located a coil-spring 14, which tends to keep the plunger retracted in the handle and the adjusting-nut abutting on the partition of the latter. A pitman 15 is pivotally connected to the forward end of the plunger and is also pivoted on a bolt 16, which passes through the lower ends of the respective sections of the rocking lever. Thus the upper end of the rocking lever is normally thrown forward so that it overhangs the jaw of the hand-lever.

A clenching-dog 17 is pivoted between the sections of the rocking lever and on a bolt 18, and is provided with a foot 19, having serrations on its bottom, said foot lying immediately above the jaw 2 of the handle-lever 1. When this dog is depressed, it abuts on the pin that connects the sections of the rocking lever. A second hand-lever 20 is pivoted between the sections of the rocking lever on a bolt 21, which extends through the extreme upper end of the latter. Two links 22 straddle this hand-lever and the dog, and are pivotally connected thereto by respective bolts 23 and 24.

The operation is as follows: After the nail has been driven through the shoe and hoof the jaw of said hand-lever 1 is passed under the shoe so that it abuts on the head of the nail to be clenched. The spring holds the foot of the dog pressed against the side of the hoof so that the jaw is held firmly against the head of the nail. The hand-lever 20 should now be raised, and when this is done the dog is actuated and its foot pressed upon the point of the nail, which protrudes through the hoof, bending the nail over and clenching it inward into the hoof. If the clench is to be made higher up than usual, the pivot-bolt of hand-lever 1 may be shifted so that it will lie at the bottom of the curved slots. The before-described operation may now be repeated.

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

1. In a horseshoe-nail clencher, the combination with a hand-lever provided with a jaw, of a rocking lever pivoted to the hand-lever, a spring-pressed plunger working in the hand-lever and pivotally connected to the rocking

lever, a clenching-dog also pivoted to the rocking lever, and means for actuating said dog.

2. In a horseshoe-nail clencher, the combination with a hand-lever provided with a jaw, of a rocking lever pivoted to the hand-lever, a plunger working in the hand-lever, a link pivotally connecting the plunger to one end of the rocking lever, a plunger-actuated coil-spring encircling the plunger, a clenching-dog pivoted to the free end of the rocking lever, and means for actuating said dog.

3. In a horseshoe-nail clencher, the combination with a hand-lever provided with a jaw, of a spring-retracted rocking lever pivoted to the hand-lever, a clenching-dog provided with a foot and pivoted to the rocking lever, a second hand-lever also pivoted to the rocking lever, and a link pivotally connecting the clenching-dog with the second hand-lever.

4. In a horseshoe-nail clencher, the combination with a hand-lever provided with a jaw, of a rocking lever adjustably fulcrumed to the hand-lever, a clenching-dog pivotally connected to the rocking lever, and means for actuating the dog.

5. In a horseshoe-nail clencher, the combination with a hand-lever provided with a jaw, of a rocking lever provided with a curved and a straight slot in communication, a pivoted bolt passing through the hand-lever and the slot in the rocking lever, a clenching-dog pivoted to the rocking lever, and means for actuating said dog.

6. In a horseshoe-nail clencher, the combination with a hand-lever provided with a jaw, of a rocking lever adjustably fulcrumed to the hand-lever, a spring-pressed plunger movable in the hand-lever and pivoted to the rocking lever, a clenching-dog having a foot and pivoted to the rocking lever, a second hand-lever also pivoted to the rocking lever, and a link pivotally connecting the second hand-lever with the dog.

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

JOSEPH H. RANCK.

Witnesses:

JNO. P. SIPES,
FRANK MASON.