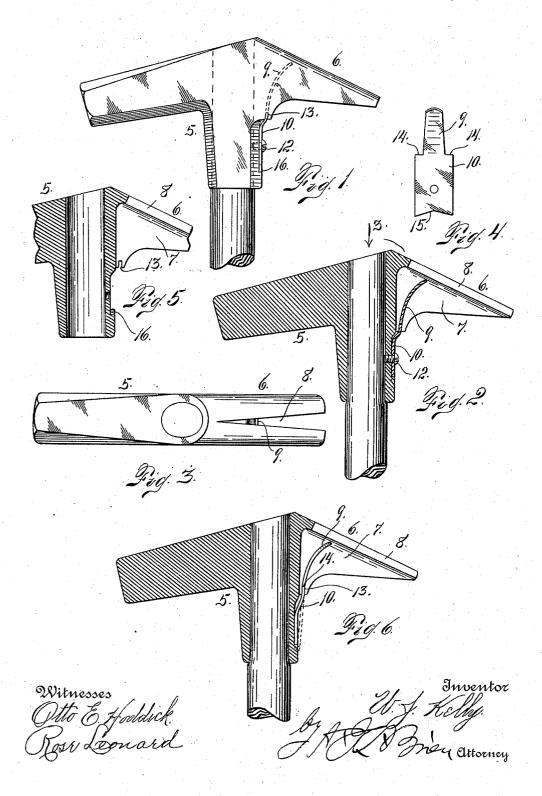
## W. J. KELLY. FARRIER'S NAIL DRIVING HAMMER. APPLICATION FILED COT. 8, 1908.

965,716.

Patented July 26, 1910.



## UNITED STATES PATENT OFFICE.

WILLIAM J. KELLY, OF DENVER, COLORADO.

## FARRIER'S NAIL-DRIVING HAMMER.

965,716.

Specification of Letters Patent. Patented July 26, 1910.

Application filed October 8, 1908. Serial No. 456,825.

To all whom it may concern:

Be it known that I, WILLIAM J. KELLY, a citizen of the United States, residing in the city and county of Denver and State of 5 Colorado, have invented certain new and useful Improvements in Farriers' Nail-Driving Hammers; and I do declare the following to be a full, clear, and exact description of the invention, such as will enable others 10 skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings and to the figures of reference marked thereon, which form a part of this specification.

My invention relates to improvements in farriers' nail driving hammers, my object being to provide a tool of this character which shall be adapted to automatically expel the nail point from the claw of the ham-20 mer, after the protruding portion of the nail has been twisted off by the hammer, as is

customary in shoeing horses.

With hammers of ordinary construction, the point of the nail often sticks in the ham. 25 mer-claw, causing the workman much difficulty and considerable delay in order to remove it. In my improved construction, I employ a spring whose free extremity lies in the path of the nail point as the hammer 30 claw is shoved thereover. As the nail point enters the claw it presses against the spring placing the latter under tension. As soon as the point is twisted off, the recoil of the spring automatically displaces the nail point, 35 thus obviating the aforesaid difficulty experienced in the use of hammers heretofore

Having briefly outlined my improved construction I will proceed to describe the same 40 in detail reference being made to the accompanying drawing in which is illustrated an

embodiment thereof.

In this drawing, Figure 1 is a side elevation of a hammer equipped with my improvement. Fig. 2 is a sectional view of the same. Fig. 3 is an end view looking in the direction of arrow 3 Fig. 2. Fig. 4 is a detail view of the leaf spring employed in performing the nail-point ejecting function. 50 Fig. 5 is a fragmentary sectional view of the hammer with the spring absent. Fig. 6 is a view similar to Fig. 2, but showing a modified form of construction.

The same reference characters indicate the

55 same parts in all the views.

Referring first more particularly to Figs. 1 to 5 inclusive, let the numeral 5 designate the hammer head provided with a claw extremity 6, which is cored out on the inside as shown at 7. The cavity thus formed ex- 60 tends rearwardly beyond the inner extremity of the claw. Projecting into this coredout portion of the hammer claw and occupying a position somewhat forward of the rear extremity of the V-shaped opening 8, is a 65 leaf spring member 9, having an extension 10, through which a screw 12 is passed, the screw being threaded into an opening formed in the adjacent portion of the hammer head. In this form of construction the screw forms 70 the fastening means for the spring. In the form of the device shown in Fig. 6, the hammer head is of such construction that the spring when once applied is self-retaining. In both forms of construction the opposite 75 sides of the hammer claw adjacent the body of the head, are provided with recesses 13 adapted to receive the shouldered portions 14 of the spring on opposite sides of the member 9.

In applying the spring to the form of construction shown in Fig. 6 the shoulders 14 are first inserted in the recesses 13, the part 9 protuding into the cavity 7. The part 10 of the spring is then pressed inwardly to the 85 position shown in Fig. 6, the inward bend being sufficient to cause the V-shaped extremity 15 of the spring to slip into engagement with a shoulder 16 of counterpart shape. It is not necessary, however, to rely 90 upon the self-retaining feature, since it is easy to apply a screw or other suitable fastening device as illustrated in the other views

of the drawing.

From the foregoing description the use of 95 my improved device will be readily understood. After a nail has been driven through the hoof for shoe-securing purposes, its point protrudes from the outer surface of the hoof above the shoe. The claw extremity of the 100 hammer is then shoved over the nail, whereby the member 9 of the spring is caused to move inwardly whereby it is placed under tension. Then by giving the hammer head a twist, the nail point is broken off and the 105 recoil of the spring member 9 automatically ejects this point from the V-shaped opening of the claw.

In Fig. 6, the dotted lines indicate the position of the member 10 before it is pressed 110 inwardly to cause its V-shaped extremity to engage the shoulder or seat 16 of the hammer head.

Having thus described my invention what 5 I claim is:

1. The combination with a hammer having a claw extremity, of a leaf spring secured to the hammer below the claw extremity and projecting into the cavity of the claw portion of the hammer and occupying a position in the path of the nail to which the claw extremity of the hammer is applied.

2. The combination with a hammer head having a claw extremity cored out to form a 15 cavity beneath the claw, and a leaf spring secured to the hammer head outside of the cavity and having a part projecting into the said cavity for the purpose set forth.

3. The combination with a farrier's nail 20 driving hammer having a claw extremity provided with a cavity, of a leaf spring

mounted on the hammer outside of the cavity and protruding into said cavity, and means for holding the spring in place.

4. A farrier's nail driving hammer having its claw extremity cored out on the inside, a leaf spring having a member projecting into the said cavity, the said spring having shoulders on opposite sides of the said member, the hammer having recesses adapted to receive said shoulders, the extremity of the spring opposite the shoulders being V-shaped and the head of the hammer adjacent the said spring extremity being formed of counterpart shape, substantially 35 as described.

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

WILLIAM J. KELLY.

Witnesses:

P. J. EDWIN ROBINSON, A. J. O'BRIEN.