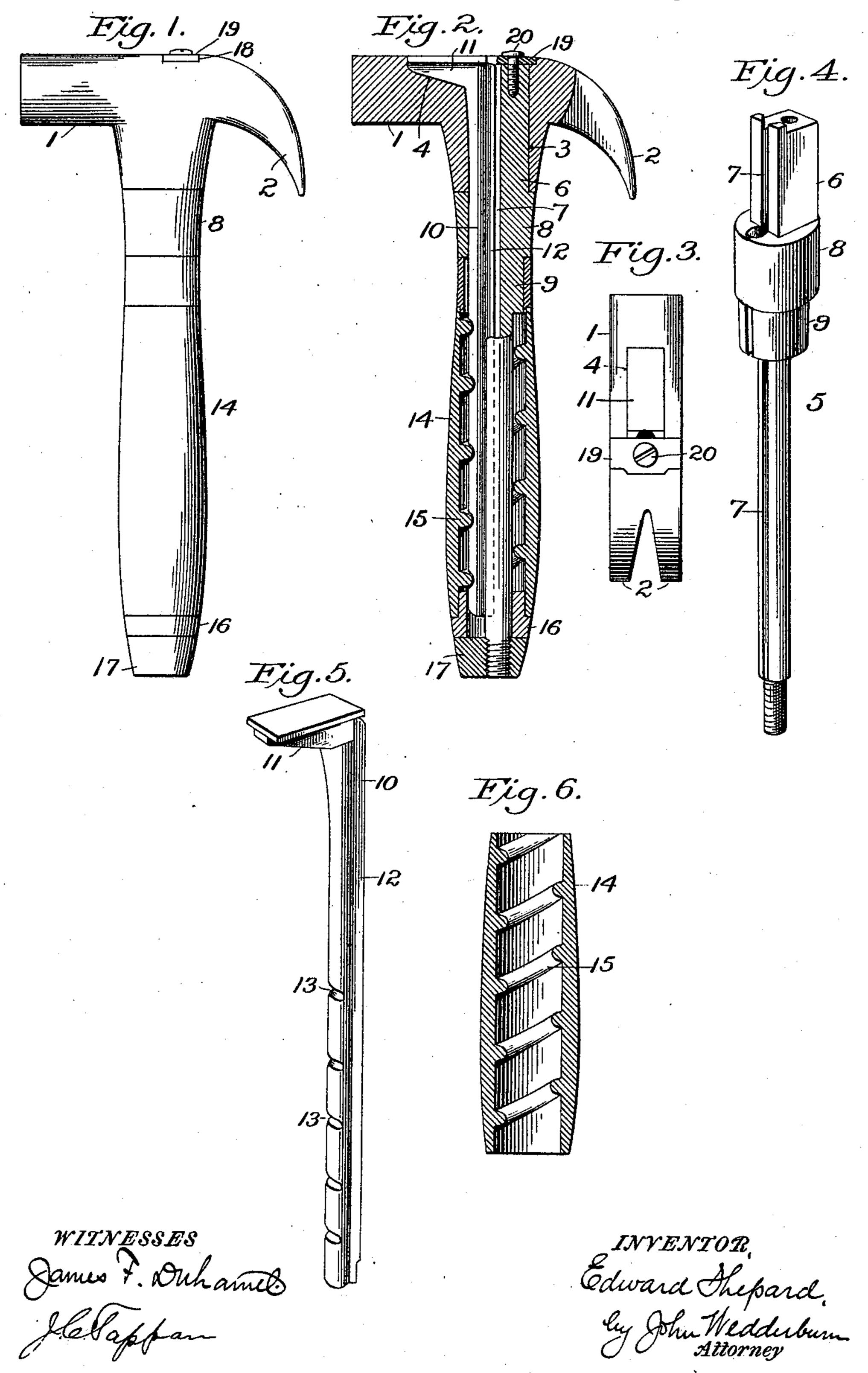
## E. SHEPARD. HAMMER.

No. 587,242.

Patented July 27, 1897.



## United States Patent Office.

EDWARD SHEPARD, OF WHITE SULPHUR SPRINGS, MONTANA.

## HAMMER.

SPECIFICATION forming part of Letters Patent No. 587,242, dated July 27, 1897.

Application filed September 1, 1896. Serial No. 604,563. (No model.)

To all whom it may concern:

Be it known that I, EDWARD SHEPARD, a subject of the Queen of Great Britain, residing at White Sulphur Springs, in the county of Meagher and State of Montana, have invented certain new and useful Improvements in Hammers; 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 improvements in hammers, the object of the same being to provide an attachment for instruments of this character whereby the nail-drawing part thereof may be assisted in its operation, so that nails of any length may be removed without danger of breaking the hammer or

of bending the nail.

The invention consists of a hammer-head of the usual conformation, a handle-bar secured therein having a longitudinal groove along one edge and a screw-threaded outer end, a longitudinally-movable fulcrum-bar 25 having a spline or feather along one edge adapted to fit within and engage the groove in said handle-bar and threads upon the opposing side thereof, a sleeve constituting a handle proper surrounding said handle-bar 30 and said fulcrum-bar, the said sleeve having a worm or screw-threads upon its inner surface adapted to engage the threads on said fulcrum-bar, a cap adapted to screw upon the outer end of said handle-bar, and a washer 35 between said cap and the handle proper.

The invention also consists in other details of construction and combinations of parts, which will be hereinafter more fully de-

scribed and claimed.

In the drawings forming part of this specification, Figure 1 represents an elevation of my device complete. Fig. 2 is a vertical longitudinal section through the same. Fig. 3 is a top plan view of the hammer-head. Fig. 4 is a detail perspective view of the handle-bar detached. Fig. 5 is a similar view of the fulcrum-bar. Fig. 6 is a longitudinal section through the sleeve constituting the handle proper.

Like reference-numerals indicate like parts

in the different views.

In my improved device the hammer-head

1 is of the usual form of construction, being provided with nail-extracting jaws 2. It also has a partially-rectangular slot or open- 55 ing 3 extending through it and its shank and a recess 4 in the upper face thereof, which extends into the slot 3, as clearly shown. Fitting within the slot 3 in the head 1 is a handle-bar 5, having a rectangular upper 60 end 6 and a longitudinal dovetail groove 7 along one side thereof. The said handlebar is also formed with an enlarged portion or shoulder 8, which conforms to the lower end of the shank of the head 1 and is cut 65 away, as shown at 9. Extending through the hammer-head 1 is a longitudinally-movable fulcrum-bar 10, having a head 11 upon its upper end which fits within the recess 4 and lies flush, when in normal position, with 70 the top surface of said hammer-head. The said fulcrum-bar has a dovetail spline or feather 12 along one edge thereof which fits within the dovetail groove 7 in the handlebar 5. Said fulcrum-bar is also provided 75 with notches or threads 13 13, for a purpose which will hereinafter appear. Surrounding the handle-bar 5 and the fulcrum-bar 10 is a sleeve 14, constituting a handle proper. The said sleeve fits around the cut-away portion 80 9 of the shoulder 8 and is formed with a worm or a series of screw-threads 15 upon its inner surface, the said threads engaging the notches or threads 13 on the fulcrum-bar 10. Fitting over the lower end of the han- 85 dle-bar 5 is a washer 16, and upon the outside of said washer is a cap 17, which screws upon the outer end of the handle-bar 5 and holds all of the parts of the device in locked position. The top surface of the hammer- 90 head 1 has a laterally-extending recess 18 just above the end of the handle-bar 5, and within this recess fits a plate 19, which is secured to the upper end of the handle-bar by a screw 20. By this means the handle-bar 5 95 and head 1 are held firmly together.

In using my device it is intended to throw out the adjustable fulcrum-bar 10, so that it will provide a bearing-surface or fulcrum for the end of the hammer corresponding to the 100 length of the nail to be drawn by the jaws 2. To effect this adjustability, the sleeve 14 is turned in one direction and the threads 15 on the inner surface thereof, engaging the

threads 13 on said fulcrum-bar, throw the latter outwardly. For long nails, of course, the said bar will be thrown out a greater distance than for shorter nails, but the distance can be gaged accurately and said bar adjusted at any desired point. A reverse movement of the sleeve 14 will return said fulcrum-bar to its normal position, with the head 11 thereof fitting within the recess 4 in the hammer-10 head 1.

Having now described my invention, what I claim as new, and desire to secure by Letters

Patent, is—

1. In a hammer, the combination with the head thereof having nail-extracting jaws, and a handle connected to said head, of a rotatable sleeve on said handle, a longitudinally-movable fulcrum-bar extending through the head and sleeve, and means actuated by the turning of said sleeve for throwing said bar

outwardly.

2. In a hammer, the combination with the head thereof, having nail-extracting jaws and a handle secured to said head, having a movable sleeve provided with internal screwthreads surrounding said handle, of a vertically-movable fulcrum-bar extending through said head and handle having a spline and-feather connection between it and said handle and provided with notches or threads upon its lower end which are engaged by the threads on the inner surface of said sleeve substantially as and for the purpose described.

35 3. In a hammer, the combination with the head thereof, having the usual nail-extracting jaws and a slot extending through said head and the shank thereof, of a handle-bar secured to said head, having a longitudinal groove along one edge, a fulcrum-bar extending through the opening in said head, having a spline or feather thereon engaging the groove in said handle-bar and notches or threads upon the lower end thereof, a sleeve

constituting a handle proper surrounding said 45 handle-bar and said fulcrum-bar and provided with internal threads engaging the notches or threads on said fulcrum-bar, and a cap secured to the lower outer end of said handle-bar, substantially as and for the pur- 50 page described.

pose described.

4. In a hammer, the combination with the head thereof, having the usual nail-extracting jaws, a laterally-extending recess in the upper surface of said head just above the rec- 55 tangular opening therein and a longitudinal recess in the upper surface of said head, of a handle-bar, having a rectangular upper end fitting the slot in said head, a plate fitting the laterally-extending recess in said head and 60 secured to said handle-bar by a screw fitting the end thereof, the said handle-bar being further provided with an enlargement or shoulder which engages the lower end of the shank of said head and with a dovetail groove along 65 one edge, a vertically-movable fulcrum-bar, having a head upon its upper end which fits the longitudinal recess in the hammer-head when said bar is in its normal position, said fulcrum-bar being further provided with a 70 dovetail spline or feather fitting the dovetail groove in said handle-bar and with notches or screw-threads near its lower end, a sleeve constituting the handle proper surrounding said handle-bar and said fulcrum-bar and pro- 75 vided with internal threads engaging the notches or threads on said fulcrum-bar, a cap screwed upon the lower end of said handlebar and a washer interposed between said cap and said sleeve, substantially as and for 80 the purpose described.

In testimony whereof I have signed this specification in the presence of two subscrib-

ing witnesses.

EDWARD SHEPARD.

Witnesses:

A. R. RHONE, C. E. WIGHT.