No. 832,387. PATENTED OCT. 2, 1906.

E. JENSEN.

BOLT OR NAIL EXTRACTOR.

APPLICATION FILED JAN. 25, 1906.

Fig. 1.

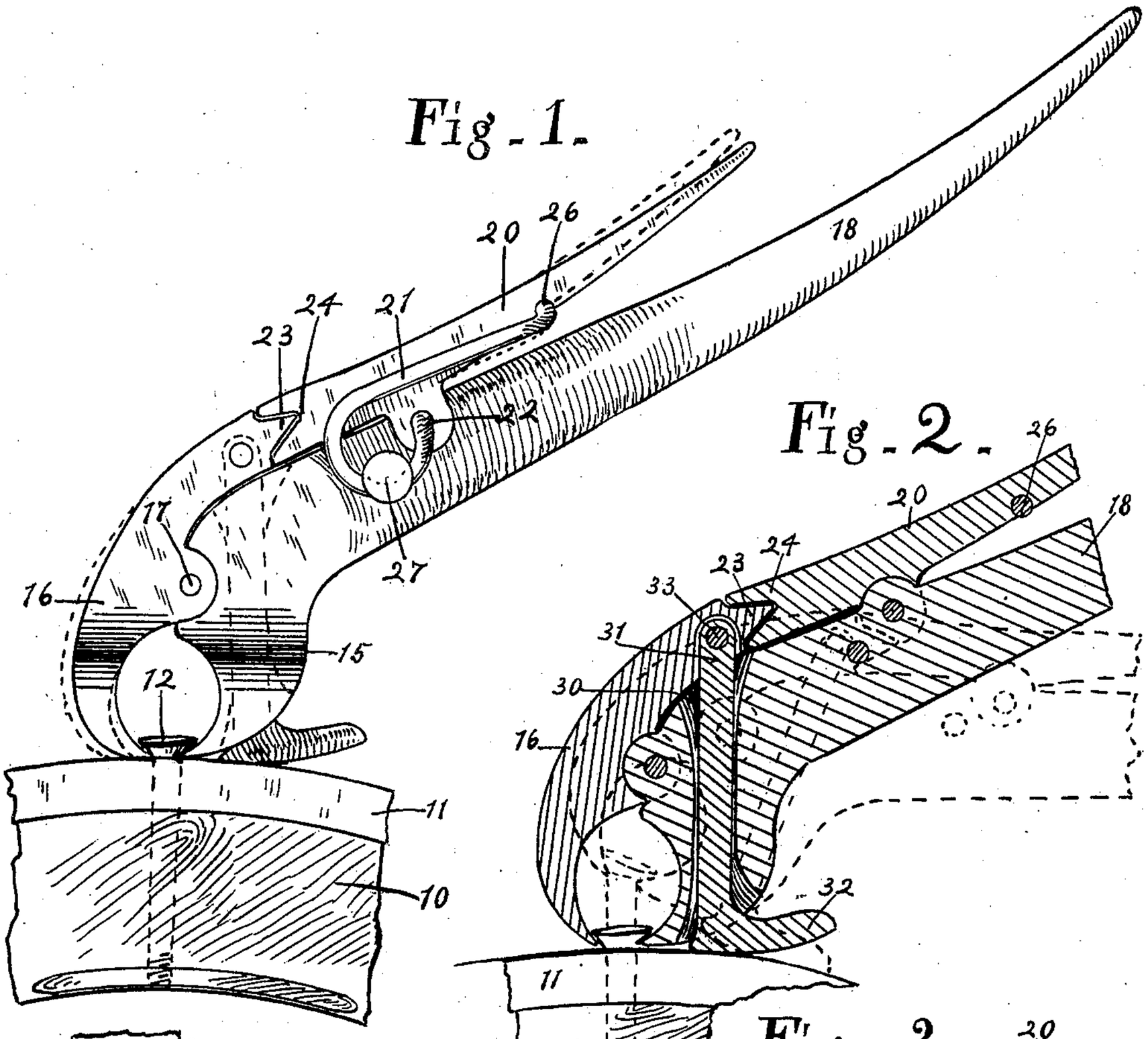


Fig. 2.

Fig. 3.

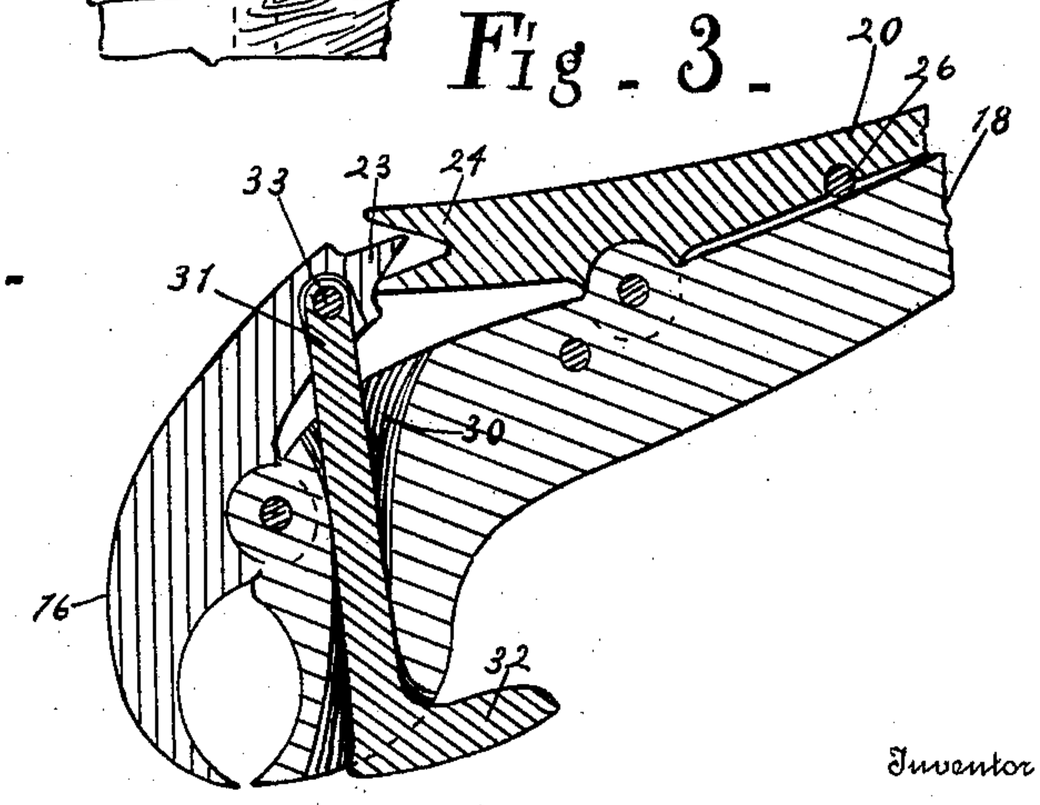
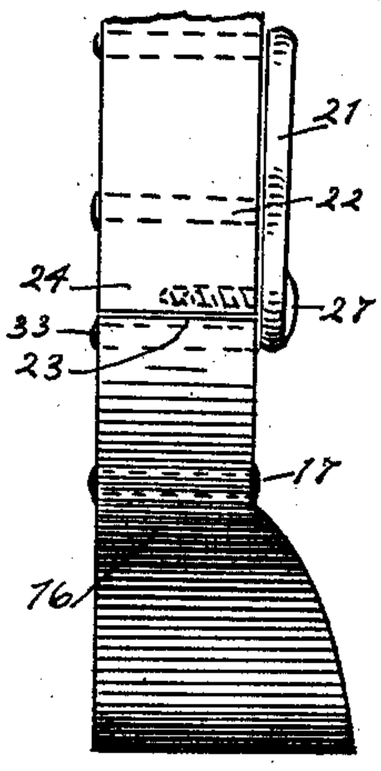


Fig. 4.



Witness
W. M. Gentle.
N. Allenson.

Inventor
Engebret Jensen.
By V. H. Lockwood
Attorney

UNITED STATES PATENT OFFICE.

ENGEBRET JENSEN, OF WHEATFIELD, INDIANA.

BOLT OR NAIL EXTRACTOR.

No. 832,387. Specification of Letters Patent. Patented Oct. 2, 1906.

Application filed January 25, 1906. Serial No. 297,748.

To all whom it may concern:

Be it known that I, ENGEBRET JENSEN, of Wheatfield, county of Jasper, and State of Indiana, have invented a certain new and useful Bolt or Nail Extractor; and I do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawings, in which like figures refer to like parts.

The object of this invention is to provide an improved device for extracting bolts from tires, and nails or like things from boxes, blocks, or other objects.

The nature of this invention will be more fully understood from the accompanying drawings and the following description and claims.

In the drawings, Figure 1 is a side elevation of the device and a portion of the tire, the device being shown in process of application to a bolt in the tire. Fig. 2 is a longitudinal vertical section through the device in its idle position, a part of it being broken away. Fig. 3 is the same as Fig. 2 in its operating position. Fig. 4 is a front elevation of the device, part being broken away.

There is shown here the rim 10 of a vehicle-wheel having a tire 11 and a bolt 12 for holding the tire-wheel. I have shown the device applied to a tire, and it was originally made as a tire-puller; but I do not wish to be limited to such use, as it may be employed also to extract nails from blocks, boxes, and the like.

The device consists of what I shall term herein a "lower" main jaw 15 and an "upper and smaller jaw 16," pivoted to each other by the pin 17 and the lower main jaw 15 having a long rigid handle 18. The two jaws have pointed lower opposite edges for grasping a bolt or nail under its head. The smaller upper jaw 16 is actuated and controlled by a handle 20, that is separate from said jaw, being fulcrumed by the wire 21 at 22 to the handle 18 of the main jaw. The upper small jaw 16 has at its upper end a V-shaped projection 23, that enters loosely a corresponding V-shaped recess 24 in the adjacent end of the small handle 20. Said handle is held in its normal position by the spring 21. The outer end of said spring at 26 extends under and in a groove in the lower side of the small handle and extends under a headed pin 27 for giving it tension. The small handle in its normal position is depressed at its inner end and elevated at its outer end, as shown in dotted lines in Fig. 1. As the outer end of the small handle 20 is depressed from the position shown in Fig. 2 to that shown in Fig. 3 its near end actuates the small jaw and brings its point closer to the large jaw, so as to grasp a nail or bolt. The lower main jaw has a vertical groove 30 through it for the rod 31 of the bearing-foot 32, which is at the lower end of said rod and receives the pressure of the tool during the extraction of a bolt or nail as said bearing-foot rests upon the tire, block, or box from which the bolt or nut is being extracted. The upper end of said rod is pivoted to the upper end of the smaller jaw 16, its function being to press the upper end of the small jaw 16 upward and outward, as shown in Fig. 3, so as to hold the smaller jaw tightly against the nail or bolt being drawn. During the extraction of the nail or bolt as the outer end of the lever 18 is depressed it is obvious that the greater the resistance of the bolt or nail there will be a corresponding greater upward pressure of the rod 31 on the upper end of the jaw 16 and that this will cause a correspondingly-stronger hold of the jaws on the nail or bolt.

What I claim as my invention, and desire to secure by Letters Patent, is—

1. A tool for extracting bolts, nails and the like having a lower main jaw with a substantially vertical opening therethrough, a handle rigidly connected with said jaw for operating it, an upper small jaw pivoted to said lower main jaw, a handle fulcrumed upon said rigid handle for engaging the upper end of said upper small jaw and actuating it, and a rod pivotally connected to the upper part of the small jaw and extending through the opening of said main jaw so as to press upon the object from which the bolt or nail is being extracted and hold said upper small jaw in engagement with the bolt or nail.

2. A tool for extracting bolts, nails and the like having a lower main jaw with a substantially vertical central opening therethrough, a handle rigidly connected with said jaw for operating it, an upper small jaw pivoted to said main jaw, a handle fulcrumed upon said rigid handle for engaging the upper end of

said upper small jaw and actuating it, a rod pivotally connected to the upper part of the small jaw and extending through the opening in said main jaw, and a bearing-foot on the lower end of said rod adapted to bear upon the object from which the bolt or nail is being extracted.

In witness whereof I have hereunto affixed my signature in the presence of the witnesses herein named.

ENGEBRET JENSEN.

Witnesses:

LOUIS PAULSEN,

CHARLES MYERS.