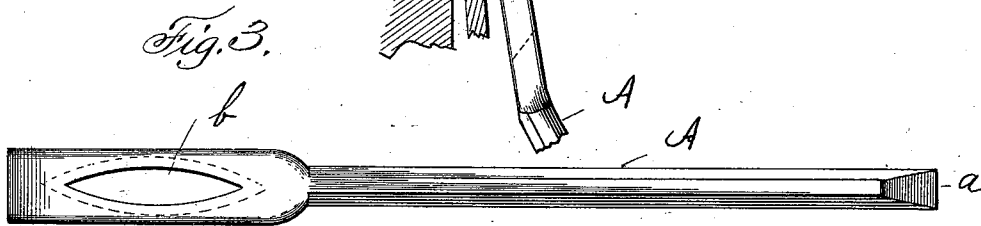
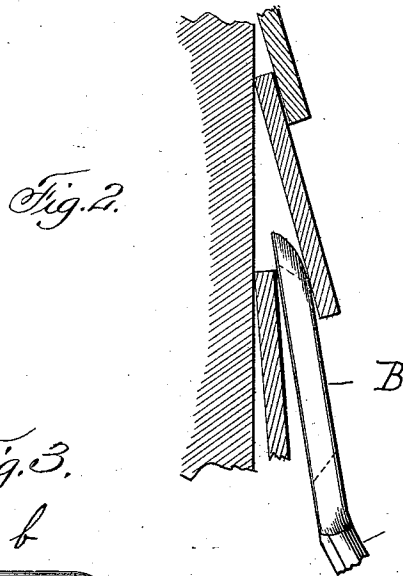
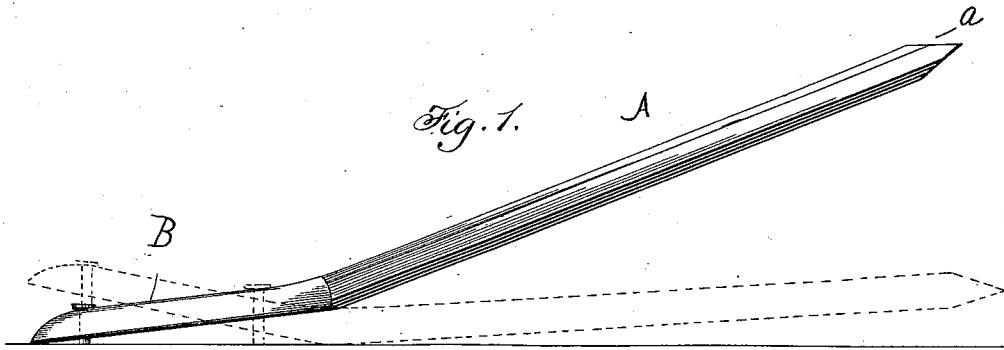


(No Model.)

J. S. BROOKS.
COMBINATION STEEL BAR.

No. 542,989.

Patented July 23, 1895.



witnesses:
Henry S. Rohrer.
Chas. A. Place.

Inventor:
Jesse S. Brooks
by J. F. Beale
atty.

UNITED STATES PATENT OFFICE.

JESSE S. BROOKS, OF CEDAR BAYOU, TEXAS.

COMBINATION STEEL BAR.

SPECIFICATION forming part of Letters Patent No. 542,989, dated July 23, 1895.

Application filed December 4, 1894. Serial No. 530,834. (No model.)

To all whom it may concern:

Be it known that I, JESSE S. BROOKS, a citizen of the United States, residing at Cedar Bayou, in the county of Harris and State of Texas, have invented certain new and useful Improvements in Combination-Tools; and I hereby declare that the following is 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 combination-tools.

The object of my invention is to provide a tool adapted for extracting nails and spikes more readily and with less liability to bend the same or split the timber; also for cutting off the protruding ends of nails or spikes.

It is also my object to combine a tool of this description with a tool for removing siding or clap boards from houses or sheathing and planking from the sides of ships.

In the accompanying drawings, forming a part of this specification, Figure 1 is a side elevation showing my invention applied as a nail or spike extractor. Fig. 2 is a side elevation showing my invention applied to removing sidings or sheathing. Fig. 3 is a top plan view of the tool, and Fig. 4 is a bottom plan view of the same.

Referring more particularly to the drawings, A denotes the handle of the tool, its upper end terminating in a chisel *a*.

B denotes the lower end portion of the tool bent at an obtuse angle to the handle, as shown in Figs. 1 and 2, and provided with a slot *b*. The handle is preferably octagonal in shape, though it may be round or square. It is about forty-three inches in length and of sufficient diameter to withstand the strain incident to using the same for the purposes named—say of an inch or more. The lower end portion is rectangular in outline, about five inches long, one and a half inches wide, and about three-quarters of an inch in thickness. The under side or face is flat and terminates in a straight edge. The upper side or face is also flat part of its length, but is rounded near its end to meet the straight edge of the under side, as shown in Figs. 1 and 2. The slot *b*, as shown in Figs. 3 and 4, extends lengthwise of the portion B, its side walls diverging to a point midway of its length and converge toward their inner and outer ends, where they

meet, forming acute angles at said ends. The side walls are beveled outwardly from the upper side of the portion B, and a cutting-edge is formed by this bevel in the upper part or face of said portion.

In using the tool for extracting nails the end portion B is placed over the nail, the head of which will project above the side walls of the slot, as shown in Fig. 1. The tool is then drawn toward the operator and the head of the nail will be jammed in the outer end of the slot. The handle is then raised until the nail is partly withdrawn. To complete the withdrawal the handle is then lowered and the tool thrust forward until the nail-head is jammed in the inner end of the slot. The handle is then raised and the nail can then be completely withdrawn. It is evident that if the first operation was continued the nail would be bent in a circle or broken, and with long nails it would be impossible to remove them by the outer end of the slot. Now by shifting the head of the nail to the inner end of the slot the nail is removed to a greater distance from the fulcrum and can be raised higher and completely extracted with less liability of bending the same. It will be seen that another advantage of the longitudinal slot having an inner and outer nail extractor is that the nail may be worked in opposite directions and prevent its bending or injuring the wood. It is also evident that the nail may be extracted by bearing down on the handle end of the tool. Thus I am enabled to afford four different angles of purchase upon the head of the nail. The cutting-edge formed on the face of the portion B by the beveled sides of the slot serve for cutting off protruding nails and is used when it is desired to remove the protruding portion instead of extracting the entire nail. To effect this the tool is placed over the head of the nail, as shown in Fig. 1, and forced back and forth while the protruding end of the nail is subjected alternately to the cutting-edges of the slot at each end.

In using the tool for removing siding or sheathing the bottom of the bent end is placed against the side of the ship or house, as shown in Fig. 2, the straight edge serving to enter under the plank while the rounded portion of the upper side serves as a wedge to pry

the plank off as the tool is forced upward. It is evident that the handle, being at an angle, is projected out from the siding and is more accessible to the operator. Another advantage
5 of this construction is that the handle may be forced inward or pulled outward in operating the bent portion to remove the planking or siding.

10 Having shown and described my invention, what I claim, and desire to secure by Letters Patent, is—

15 1. A combination tool adapted for extracting nails or spikes and removing sheathing or clapboards, consisting of a handle bar and a bent portion extending at an obtuse angle thereto, having a slot extending lengthwise thereof, the side walls of which converge toward the ends, where they meet, forming an

acute angle at each end of said slot, said bent portion being flat upon its under side and
20 terminating in a straight edge, and its upper side terminating in a rounded end, substantially as shown and described.

2. A combination tool adapted for cutting and extracting nails or spikes, consisting of
25 a handle bar having a bent portion extending at an obtuse angle thereto, and provided with a slot extending lengthwise thereof, the side walls of which form an acute angle at each end and are beveled to form cutting edges with
30 upper face of said bent portion, substantially as shown and described.

JESSE S. BROOKS.

Witnesses:

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J. H. KIPP.