

J. W. FOARD.  
Peg-Rasps.

No. 135,419.

Patented Feb. 4, 1873.

FIG. 1.

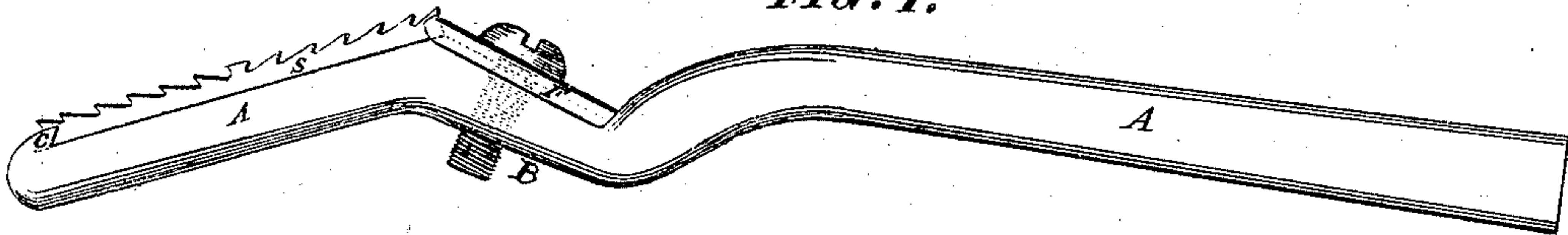


FIG. 2.

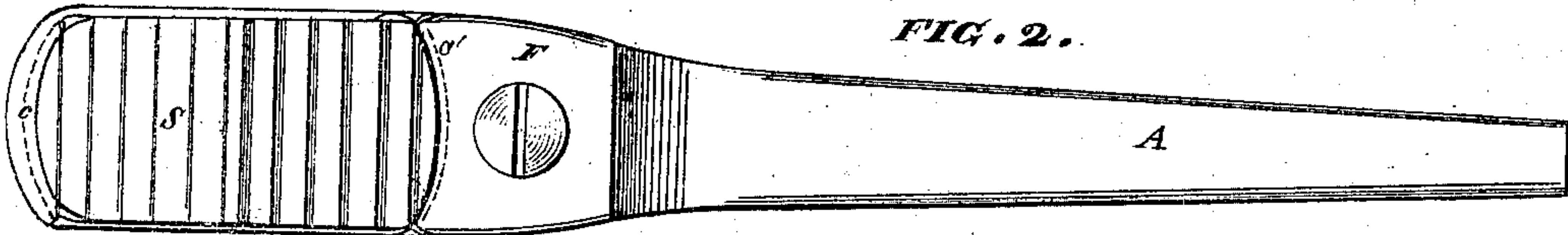


FIG. 3.

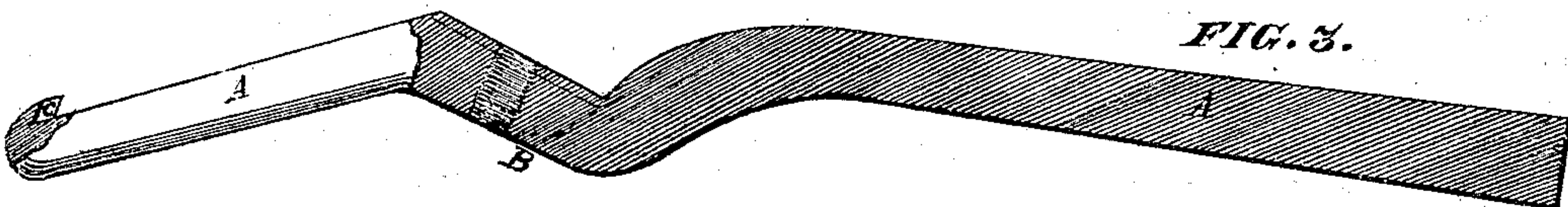


FIG. 4.

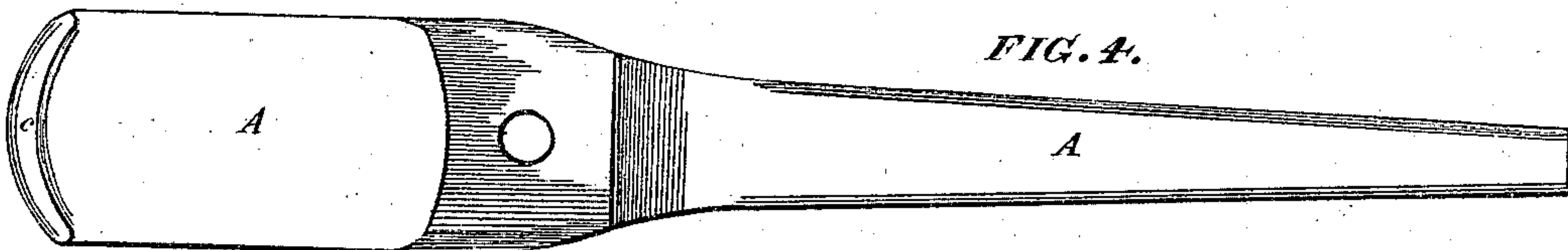


FIG. 5.

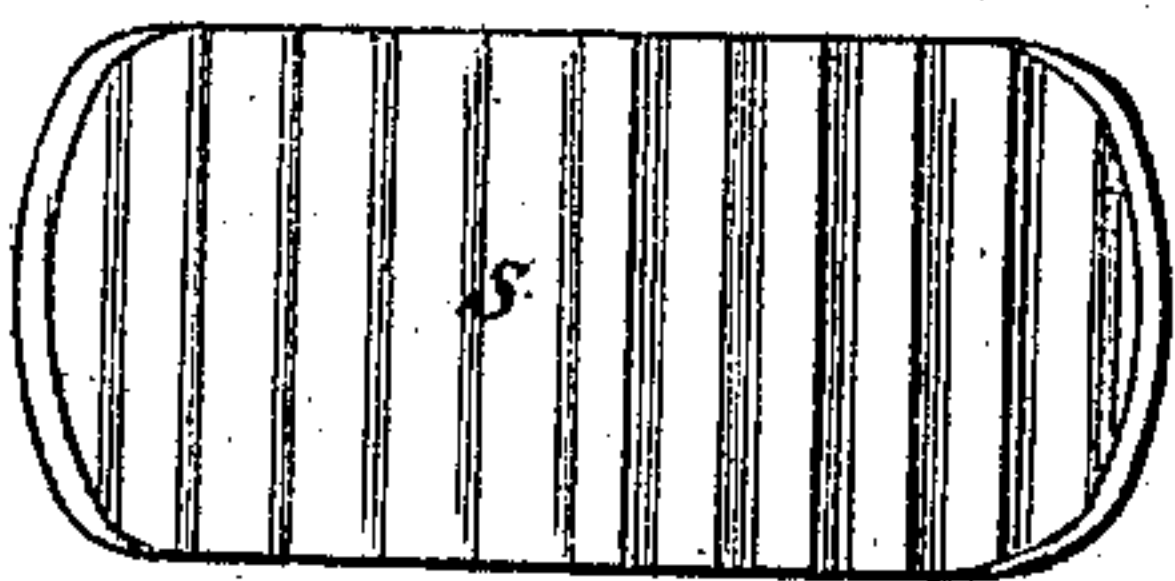


FIG. 6.

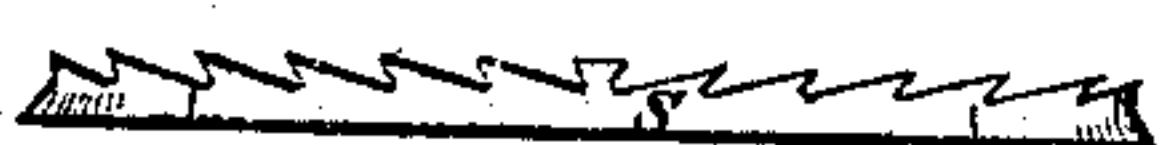


FIG. 7.

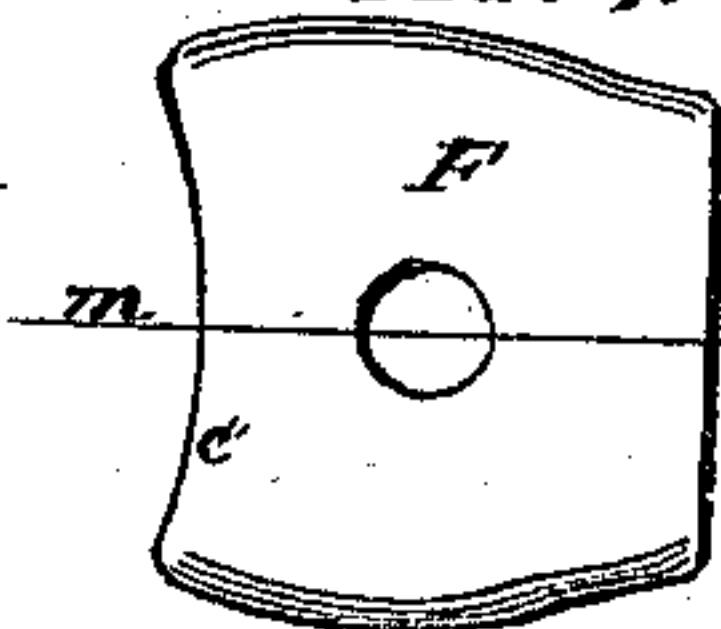


FIG. 8.

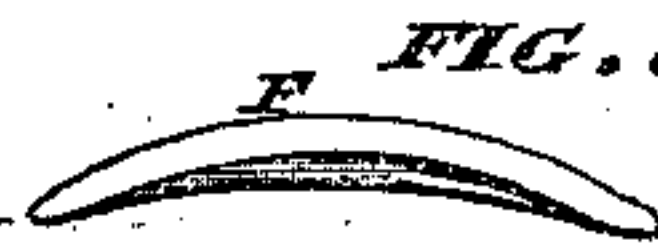


FIG. 9.



FIG. 10.

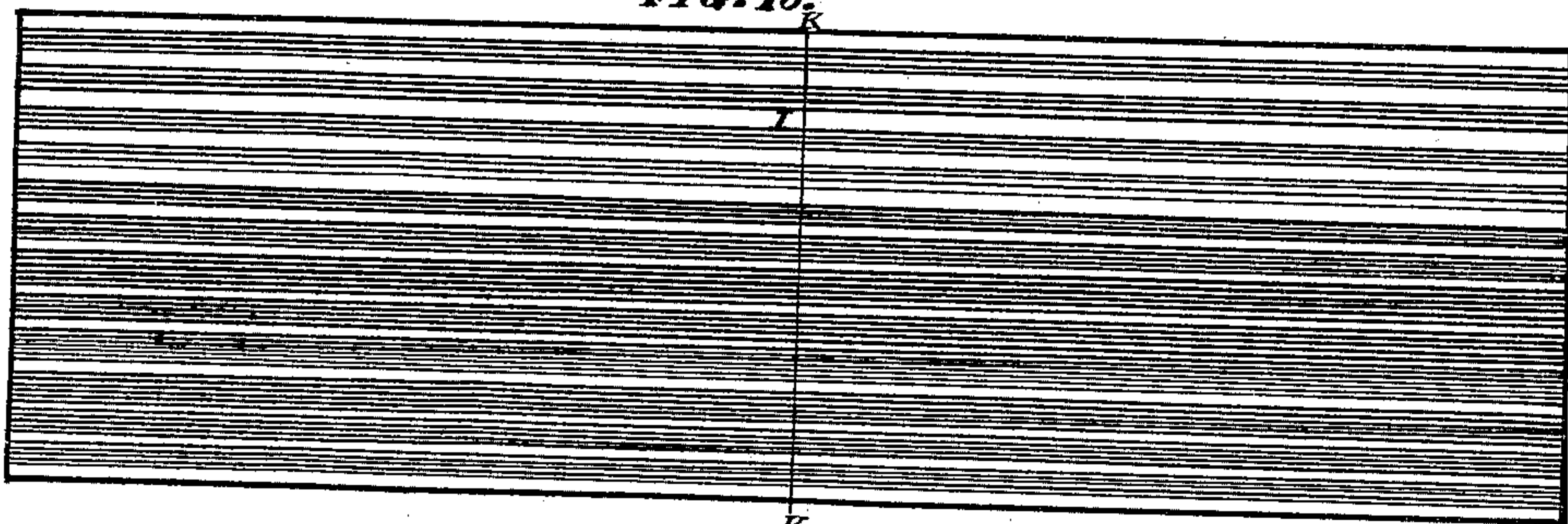


FIG. 11.



WITNESSES.

Lionel Yarnes  
E. V. Thwing

INVENTOR.

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# UNITED STATES PATENT OFFICE.

JEREMIAH W. FOARD, OF SAN FRANCISCO, CALIFORNIA.

## IMPROVEMENT IN PEG-RASPS.

Specification forming part of Letters Patent No. 135,419, dated February 4, 1873.

*To all whom it may concern:*

Be it known that I, JEREMIAH W. FOARD, of the city and county of San Francisco, in the State of California, have invented an Improvement in Peg-Rasps, of which the following is a specification:

My invention consists in a novel mode of combining a fine steel cutter with a metal stock or holder, whereby to form an improved instrument for removing pegs and nails from the inner surfaces of the soles of boots and shoes; and referring to the annexed drawing—

Figure 1 represents a side view of the instrument, complete. Fig. 2 represents a front view of it, also complete. Fig. 3 represents a side view of the stock A, partly in section, through the central line. Fig. 4 represents a front view of the stock. Fig. 5 represents the toothed face of the cutter S. Fig. 6 represents a longitudinal section of the cutter S. Figs. 7, 8, 9 represent front, end, and sectional views of the follower F through the line M M. Figs. 10 and 11 represent a face and sectional view of the steel plate when prepared for punching out the cutter S.

A is the stock or holder. B is a bend upward of the shank of the stock or holder immediately in the rear of the cutter S. F is the follower, operated by an ordinary round-headed screw, as shown in Fig. 1. S is the cutter or rasp proper. C is the overlap at the forward end of the stock A, forming the recess to receive the end of the cutter S. C' is the overlap at the front of the follower F, forming a similar recess for the back end of the cutter S.

The stock A may be of any desired metal, and has that part intended to hold the cutter slightly wider than the cutter, so as to form a guard on its sides to prevent the teeth of the cutter from coming in contact with the upper leather of the boot or shoe; it has also a dovetail-shaped recess at the forward end, on its lower or working face, to receive the one end of the cutter, which has both its ends so beveled as to correspond in shape to that of the recess. The ridge forming the front recess constitutes a guard against contact of the end of the cutter with the upper leather of a boot or shoe. Immediately behind the seat of the cutter the handle of the holder

is bent upward, as at B, so that the head of the screw operating the follower F, and which engages directly the metal of the handle at that point, shall be above the plane of the face of the cutter, when the latter is in place, thus preventing the screw-head from touching the surface operated upon. The follower F is of metal, curved in shape, so as to correspond on its concave face to the form of the ends of the cutter, and, when forced down by means of its screw, carries the cutter forward into the front recess, securing it therein as in a vise. The cutter S is made of fine steel, and may be of any desired length, width, and thickness, and is beveled at either end, so as to fit the recess provided for it at the front end of the holder, the bevel being on the toothed face of the cutter, thus making the reverse face the longer of the two.

In making the cutter I have the steel rolled into an elongated plate or bar of the desired thickness and of a width slightly in excess of the length of the cutter, the teeth being formed in the rough lengthwise of the plate or bar in the process of rolling. The plate is then cut into pieces of any desired length and annealed, and the teeth are finished in a planing-machine, the chisel being set at such angle to the face of the plate as to give the requisite fineness to the edge of the tooth of the cutter. From the plate thus finished, as shown in Figs. 10 and 11, the cutter is punched out transversely to its length, the toothed surface being downward, so as to protect the edges of the teeth against injury in the process of punching. The cutter is then beveled at its ends, and is afterward hardened or tempered, fitting it for use. It may be punched out of the plate as the latter comes from the rolls, however, if desired, and the teeth be finished with a file, thus avoiding the use of the planing-machine.

The end of the punch or die is convexed longitudinally and laterally, so as that the piece punched out shall have the desired convex surface without further manipulation.

The teeth of the cutter are set toward either end from the center, so that when those of one-half have become dull the cutter may be turned end for end, practically giving a new one.

To remove the cutter it is only necessary to turn the screw back, and it is at once released; and now,

Having carefully set forth and described my invention in its several parts, I claim—

The combination of the stock A with its bend B, follower F and its appropriate screw,

and the cutter S, substantially as set forth and described, and for the purposes stated.

JEREMIAH W. FOARD.

Witnesses:

E. V. THWING,

E. V. JOICE.