

(No Model.)

J. TURNER.
RASP CUTTER.

No. 581,474.

Patented Apr. 27, 1897.

Fig. 1.

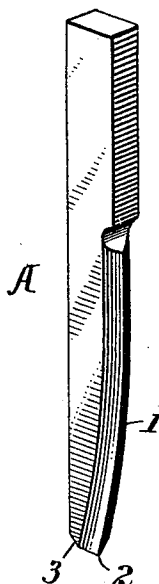


Fig. 2.

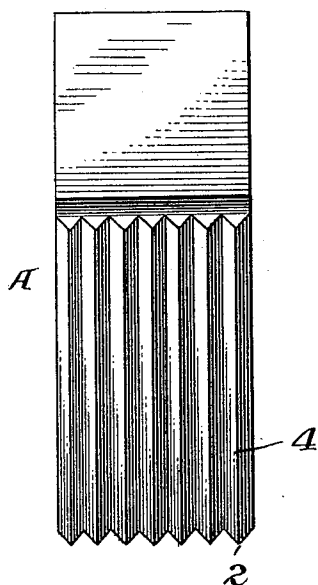


Fig. 3.

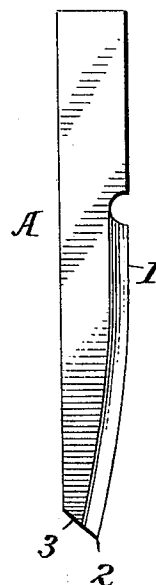
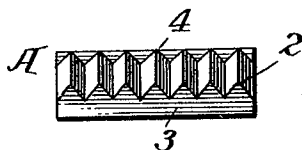


Fig. 4.



Witnesses
Wm. Hinkel
James O. Thomas

Inventor
James Turner
by *Arthur Freeman*
Attorneys

UNITED STATES PATENT OFFICE.

JAMES TURNER, OF PATERSON, NEW JERSEY, ASSIGNOR TO THE KEARNEY & FOOT COMPANY, OF NEW YORK, N. Y.

RASP-CUTTER.

SPECIFICATION forming part of Letters Patent No. 581,474, dated April 27, 1897.

Application filed January 13, 1897. Serial No. 619,093. (No model.)

To all whom it may concern:

Be it known that I, JAMES TURNER, a citizen of the United States, residing at Paterson, in the county of Passaic and State of New Jersey, have invented certain new and useful Improvements in Rasp-Cutters, of which the following is a specification.

This invention relates to certain new and useful improvements in cutters adapted for use in rasp-cutting machines; and it has for its object to improve the construction of such cutters, whereby in use they will form a more perfect and efficient rasp, the teeth of which are uniform and sharp.

With these ends in view the invention consists in the novel features of construction hereinafter more particularly referred to.

In the accompanying drawings, forming a part of this specification and in which like letters and figures of reference indicate corresponding parts, Figure 1 is a perspective view of a single cutter constructed in accordance with the present invention. Fig. 2 is a plan view of a gang-cutter embodying the invention. Fig. 3 is a side elevation thereof, and Fig. 4 is an end elevation of the same.

Heretofore in rasp-cutting machines it has been customary to employ a cutter having all of its cutting edges upon a straight plane; but this form of cutter has been found objectionable for the reason that there is a tendency for it to dig or draw inward, failing to make a clear, straight, and uniform cut, resulting in teeth which are not only at too acute an angle to the surface of the rasp, but which are also lacking in uniformity. The point of a straight-edge cutter when just entering the blank is strained in an upward direction from the blank, but after there is a sufficient wall of steel in front of the cutter, say when the tooth is half formed, the strain

comes in the opposite direction, causing a jam or dig which tends to merely make a hole without materially raising the tooth. In order to overcome these objections, the cutter A is formed with a sharpened rib or edge 1, which edge is curved and ends abruptly at the point 2 of the flat face 3 of the cutter. When thus constructed, there is not the slightest tendency for the edges of the cutter to dig or draw inward, for in operation the curved edge of the cutter rides upon the surface of the cut and holds the point of the punch up to its work.

In some instances it is desirable to employ gang punches or cutters in the manufacture of rasps—that is, a series of cutters arranged side by side. Sometimes, however, these cutters instead of being formed independent and connected together are formed integral. Thus, as shown in Figs. 2 and 4, the cutter is formed of a single block having one of the edges 1 curved and provided upon its face with a series of parallel sharp-edged ribs 4, which terminate abruptly to form the face or edge 3 of the cutter.

What I claim is—

1. A punch or cutter for rasp-making machines having a straight face and a curved edge which terminate at the point, substantially as described.

2. A punch or cutter for rasp-making machines having a straight face and a curved edge rib said rib being substantially V-shaped in cross-section, substantially as described.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

JAMES TURNER.

Witnesses:

SANDFORD D. FOOT,
CHAS. E. WATTS.