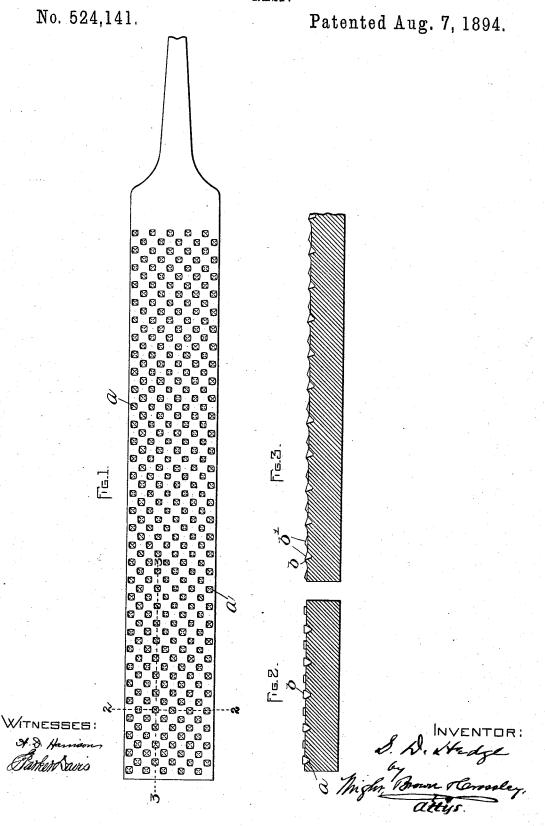
S. D. HEDGE.



## UNITED STATES PATENT OFFICE.

SILAS D. HEDGE, OF BROCKTON, MASSACHUSETTS, ASSIGNOR TO W. COBB, JR., OF SAME PLACE.

## RASP.

SPECIFICATION forming part of Letters Patent No. 524,141, dated August 7, 1894.

Application filed October 30, 1893. Serial No. 489, 534. (No model.)

To all whom it may concern:

Be it known that I, SILAS DEXTER HEDGE, of Brockton, in the county of Plymouth and State of Massachusetts, have invented certain new and useful Improvements in Rasps, of which the following is a specification.

This invention relates to an improvement in rasps, and it consists in the novel formation of filing surface, which is productive of

10 an increased effectiveness.

Of the accompanying drawings, which illustrate the invention: Figure 1 shows a face view of the improved rasp. Figs. 2 and 3 show respectively a cross-section and a longitudinal section, taken on the lines 2—2 and 3—3 of Fig. 1.

The same letters of reference indicate the

same parts in all the figures.

35 the fin b is formed.

In carrying out my invention, I employ a tool having an angular and tapered point, which is suitably hardened, and the tool is placed on a slight angle to the surface of the file to be treated; and, by driving the point into such surface, an angular, flaring opening a is formed, and a filing fin is struck up around two or more sides of the said opening, said fin being most prominent on that side toward which the tool is driven, as shown at b, and having a substantially straight edge, as shown. The portions b' of the filing fin, which are formed on opposite sides of the main or central fin b, protrude but slightly from the surface of the file, and disappear altogether at the side of the opening opposite that where

The substantially straight-edge filing fin, formed in this manner, has been found to be

very effective on the class of work on which this style of file is specially designed to be used, such as lead, copper, brass and wood, or to other soft substances.

My improved rasp is an improvement on that shown and described in Letters Patent of the United States No. 507,071, granted October 17, 1893, in that the filing or cutting fin 45 is substantially straight-edged, and is therefore calculated to accomplish more work in a given time and with the same effort than the aforesaid patented file, while fully possessing all other points of usefulness.

By reason of the slight angle at which the punch is driven into the rasp, the latter is not liable to clog, and readily frees itself from any matter which tends to lodge in the indenta-

tion

Having thus explained the nature of the invention and described a way of constructing and using the same, although without attempting to set forth all of the forms in which it may be made or all of the modes of its use, 60 it is declared that what is claimed is—

A rasp, having in its face angular flaring indentations, and substantially straight-edge filing or cutting fins on the edge of each in-

dentation, as set forth.

In testimony where of I have signed my name to this specification, in the presence of two subscribing witnesses, this 27th day of October, A. D. 1893.

SILAS D. HEDGE.

Witnesses:

C. F. BROWN, A. D. HARRISON.