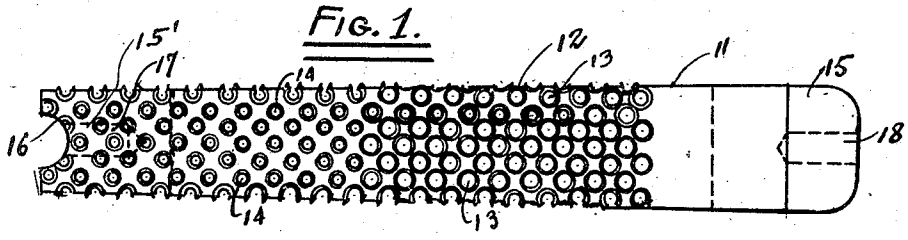
A. RODOW.

RASP FILE.

APPLICATION FILED FEB. 1, 1921.

1,418,974. Patented June 6, 1922.

FIG. 1.



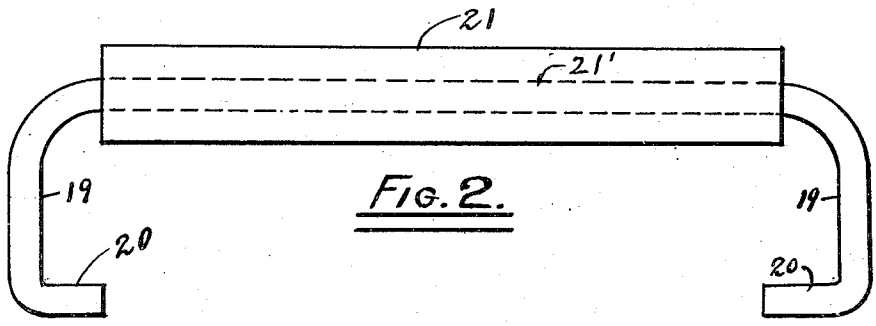


FIG. 2.

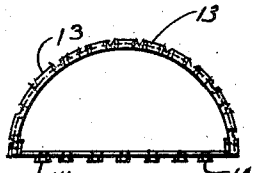


FIG. 3.

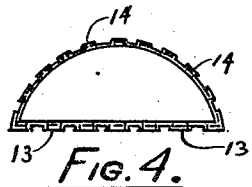


FIG. 4.



FIG. 5.

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RASP FILE.

1,418,974. Specification of Letters Patent. Patented June 6, 1922.

Application filed February 1, 1921. Serial No. 441,703.

To all whom it may concern:

Be it known that I, ABRAHAM RODOW, a citizen of the United States, residing at 1534 Webster Ave., New York, in the county of Bronx and State of New York, have invented a new and useful Rasp File, of which the following is a specification.

My invention relates to improvements in rasp files used for filing wood, leather, rubber, lead and similar things of medium or moderate hardness, and it consists in the novel features hereinafter more fully described.

The objects of my improvement are:

First: To make a rasp file of sheet steel, instead of cast iron or cast steel.

Second: To provide the file with a detachable handle whereby it may be employed for filing floors or similar flat surfaces.

Third: To have the file in part coarse and in part fine; and

Fourth: To have said file simple, durable and inexpensive.

I attain these objects by the rasp file illustrated in the accompanying drawings or by any mechanical equivalent or obvious modification of the same.

In the drawings Fig. 1 is a plan of my rasp file omitting the handle.

Fig. 2 is an elevation of the handle.

Fig. 3 is an end view, from right to left, in Fig. 1 of the right hand of my rasp file on a somewhat larger scale.

Fig. 4 is an end view from left to right of the left end of my rasp file.

Fig. 5 is a section illustrating the method of forming the points or cutting edges of my rasp file.

Similar numerals refer to similar parts throughout the several views.

11 designates the untoothed part at the right end of my rasp file in Fig. 1, which is clearly shown in Figs. 3 and 4 as made of sheet metal, hollow, and having the ends closed up with the plugs 15 and 15′, which may be of wood or some other suitable material; each of said plugs 15 and 15′ has a socket 18 and 17 respectively for the ends 20 of the handle 21′ to be engaged therein when it is desired to apply the rasp file to a floor or some other flat surface.

The left end of the file and the plug 15′ have therein a cut out or vertical groove 16 for receiving one of the prongs 19 of the handle 21′ thereby enabling this end of the file to reach corners and bends in the material to be filed, which might otherwise be inaccessible.

The working surface 12 of my rasp file is formed by punching the holes 13 and 14 outwardly in the sheet metal strips (when the steel thereof is soft) of which my file is then made up by curving the upper part and joining it to the lower part by overlapping the edges of one of the parts over the other one, as shown in Figs. 3 and 4; the file may also be made of one piece of sheet steel and joined on the edge.

The outline of my file may also be different than as shown in Figs. 3 and 4.

I prefer to have cutting teeth of two sizes 13 and 14 on my rasp file, the larger ones being produced by punching larger holes and the smaller ones by correspondingly smaller holes in the sheet steel.

I also prefer to have the larger cutting teeth 13 on the upper surface of the file opposite the smaller teeth 14 on the lower surface thereof as shown in Fig. 3, and vice versa, as shown in Fig. 4.

The handle 21′ may be made of a round bar of spring material, the middle part of which may be enclosed by a wooden hand bar 21; the prongs 19 are shown as bent at right angles thereto, and each of said prongs 19 terminates in the pin 20 bent inwardly therefrom and substantially at right angles thereto.

The pins 20 may be moved away from each other by springing the prongs 19 and returned to their original position by releasing said prongs; in this way the pins 20 may be moved out of the sockets 15 and 15′ and returned into engagement therewith if desired.

For most purposes the untoothed part 11 may serve as a handle for my rasp file instead of the handle 21′.

The cutting teeth 13 and 14 may be hardened after punching the holes 13 and 14.

Many changes could be made in the details of my rasp file without departing from the main scope of my invention; I do not therefore restrict myself to the details as shown in the drawings; but I intend to include also

all mechanical equivalents and obvious modifications thereof within the scope of my invention.

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

1. A hollow file of sheet metal having therein holes punched outwardly, the metal of said holes thereby being formed into cutting teeth, a plug at the end of said file, extending outwardly therefrom, and an untoothed part in said sheet metal adjacent to said plug, said untoothed part with the end of said plug being adapted to serve as a handle for said file.

2. A hollow file of sheet-metal having therein holes punched outwardly, the metal of said holes thereby being formed into cutting teeth, a plug at each end of said file and a handle adapted to be detachably connected to said plugs, thereby enabling the file to be used on floors or similar flat surfaces.

3. A hollow file of sheet metal having therein holes punched outwardly, the metal of said holes thereby being formed into cutting teeth, a plug at each end of said file, a cut-out in one end of the file and in the plug thereof, and a handle having at its ends prongs adapted to be detachably connected to said plugs, said cut out being adapted to receive one of said prongs, thereby enabling the end of said file to reach corners and bends in the material to be filed.

ABRAHAM RODOW.