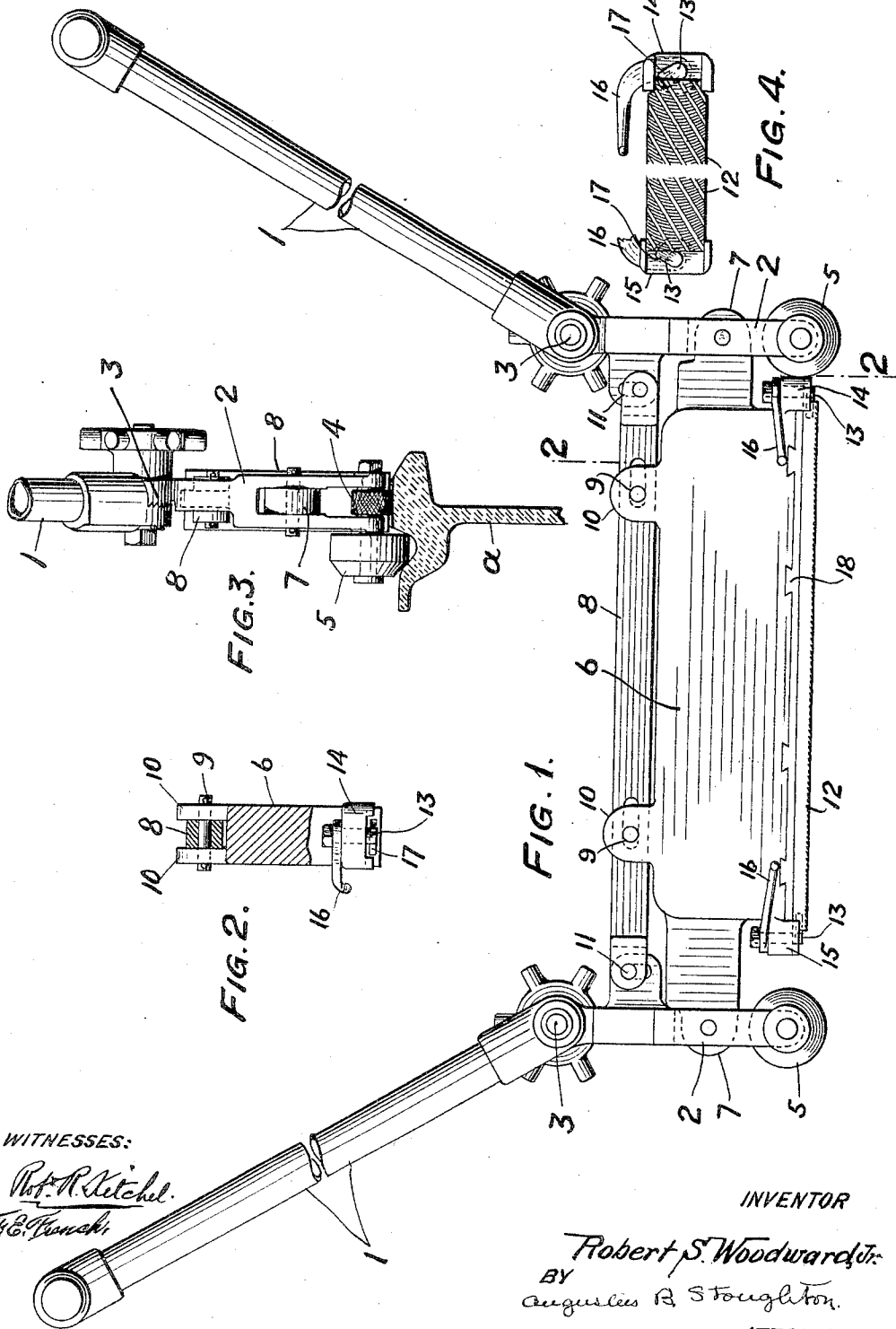


R. S. WOODWARD, JR.
RAIL FILE.
APPLICATION FILED DEC. 23, 1911.

1,051,533.

Patented Jan. 28, 1913.



UNITED STATES PATENT OFFICE.

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RAIL-FILE.

1,051,533.

Specification of Letters Patent.

Patented Jan. 28, 1913.

Application filed December 23, 1911. Serial No. 667,532.

To all whom it may concern:

Be it known that I, ROBERT S. WOODWARD, Jr., a citizen of the United States, residing at Haverford, Montgomery county, State of Pennsylvania, have invented a certain new and useful Rail-File, of which the following is a specification.

The principal object of the present invention is to provide a simple, compact, efficient and comparatively inexpensive tool for dressing rails or rail-joints, which shall be capable of manual operation, even by unskilled labor, and in which the file is automatically presented or pressed to the rail face on one stroke and cleared therefrom on the return stroke.

The invention will be claimed at the end hereof, but will be first described in connection with the embodiment chosen from other embodiments of it for illustration in the accompanying drawings, in which—

Figure 1, is a side elevational view of a rail file or tool embodying features of the invention and illustrating the positions of the parts on the return or non-filing stroke. Fig. 2, is a transverse sectional view taken on the line 2—2 of Fig. 1. Fig. 3, is an end view of the tool, and Fig. 4, is a plan of the file with parts broken away.

In the drawings the parts 1 and 2 constitute hand levers, of which two are shown, one at each end of the tool. The parts 1 and 2 are adjustably connected by means of the pivot clamp 3. Each hand lever is provided at its lower end with a clearance wheel 4 and a guide wheel 5, arranged to run on the face of a rail *a*, in the general manner or way indicated in Fig. 3. As shown the lower end of the hand lever is forked and the clearance wheel is arranged in the fork while the guide wheel is arranged to one side.

6, is a body or file holder shown as provided with endwise projecting lugs 7 to which the parts 2 are pivoted.

8, is a connecting bar having slot-and-pin connection 9 with lugs 10, projecting upward from the body 6 and having like connection at 11 with the part 2.

A file 12 is applied to the lower face of the body or file holder 6.

13, are lock eccentrics pivoted in projections 14 and 15 on the ends of the body 6 and provided with operating handles 16 and with locking members 17.

The ends of the file are provided with openings into which the locking members may be turned and thus the file is held to place. The ends of the file may be of different contours and the cavities in the projections 14 and 15 of corresponding contours, so that the files are necessarily mounted with their teeth in the proper direction for working.

18, is an inlay or backing that may be interposed between the file proper and the holder 6 and in the case of two faced files, it may be of appropriate material for protecting the face of the file which is not exposed.

As shown in the drawings, the tool may be considered as moving or having moved toward the right and it is evident that the hand levers are in such position that the tool is carried upon the wheels with the file face out of action. On the next stroke toward the left, the hand levers are, as it were, rocked in respect to the rail face, with the result that the file face is pressed or applied to the rail face and on the return stroke toward the right the hand levers are again rocked so that the file face is lifted clear of the rail face. By the reciprocation of the tool, the file is automatically brought into operation on one stroke which is in the direction in which the file is intended to operate by reason of the disposition of its teeth and on the return stroke is automatically lifted out of action. The various articulations that have been described permit the hand levers to be rocked in the manner that has been described. Inasmuch as the operation of the tool is largely automatic, it is evident that it can be worked back and forth over the part of the rail or rail joint that is to be dressed by unskilled labor; furthermore files may be readily applied to and removed from it by the same character of labor, since provision is made for insuring the application of the files in the direction in which they are intended to cut. The operating levers can be adjusted as may be required and in a sense the weight of the body 6, if it is built with that object in view, assists the operators in applying pressure to the file, but, if desired, this feature need not be emphasized.

What I claim is:

1. A rail file comprising the combination of hand levers provided with wheels for resting and running on the rails, a file

holder pivoted to each hand lever, and a connecting bar movably connected at its ends to the hand lever and to the file holder, substantially as described.

5 2. A rail file comprising the combination of a file holder, hand levers pivoted intermediate of their lengths to the holder and having one of their ends adapted to rest on the rail and the other of their ends free for
10 manual operation, and a connecting bar movably connected with the handles and with the holder, substantially as described.

3. A rail file comprising the combination
15 of a file holder, hand levers carrying the file holder and having pivotal connection with each end thereof and each having one of its

ends adapted to rest upon a rail and the other of its ends free for manually and positively rocking the levers with the rail as a fulcrum, thereby elevating and depressing 20 the file holder, and means connected with the file holder and levers for permitting of the said rocking movement of the parts and limiting the range of said rocking movement of the hand levers in one direction, 25 substantially as described.

In testimony whereof I have hereunto signed my name.

ROBERT S. WOODWARD, JR.

Witnesses:

CLIFFORD K. CASSEL,

FRANK E. FRENCH.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."
