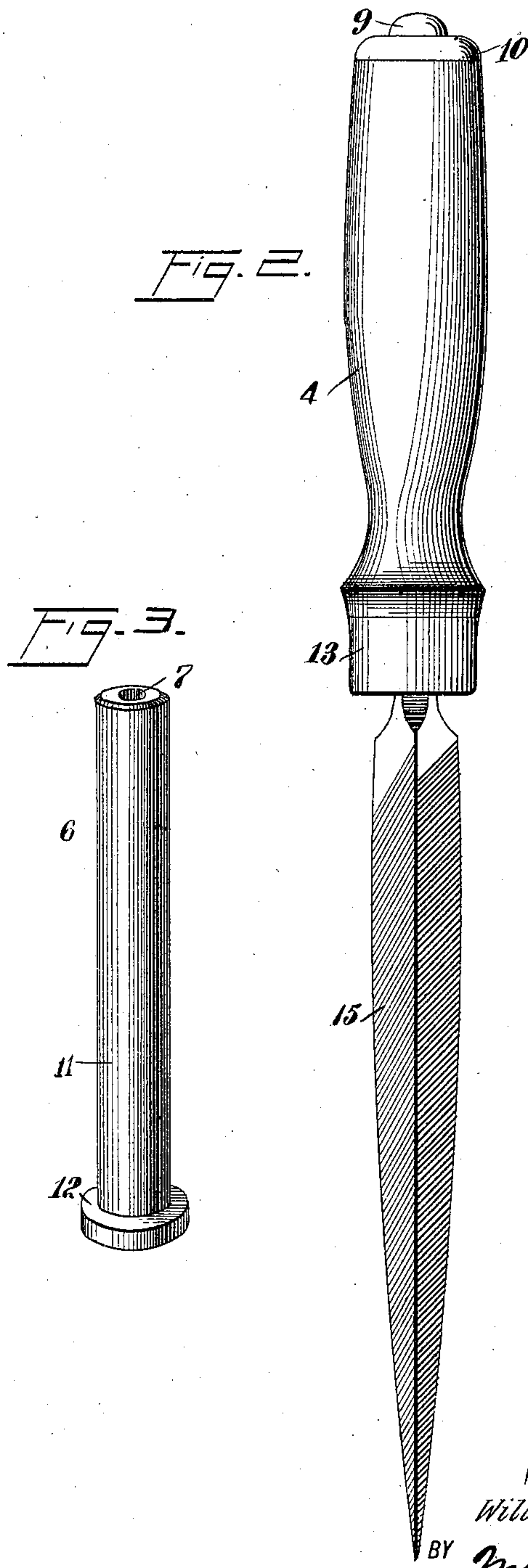
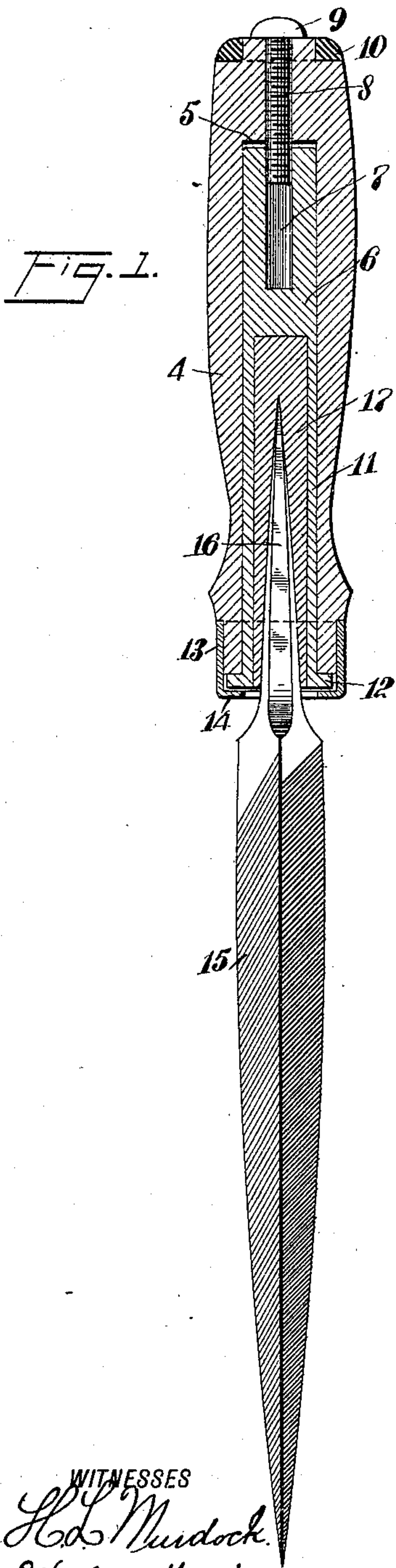


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 FILE HANDLE.  
 APPLICATION FILED JAN. 14, 1910.

983,788.

Patented Feb. 7, 1911.



WITNESSES  
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# UNITED STATES PATENT OFFICE.

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## FILE-HANDLE.

983,788.

Specification of Letters Patent.

Patented Feb. 7, 1911.

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*To all whom it may concern:*

Be it known that I, WILLIAM B. WANKEL, a citizen of the United States, and a resident of the city of New York, borough of Brooklyn, in the county of Kings and State of New York, have invented a new and Improved File-Handle, of which the following is a full, clear, and exact description.

My invention relates to file handles, my more particular purpose being to provide a type of handle in which one part is movable relatively to the other movable part carrying the file, so that the latter can turn independently of the handle.

More particularly stated, my invention relates to the provision of a tubular member revolvably mounted in the handle and adapted to hold a piece of comparatively soft material, such as wood, into which the file shank is driven and thus held rigid in relation to the tubular member.

My invention further comprehends means whereby at the will of the operator a file blade normally revoluble in relation to the file handle, may be fixed rigidly in position and operated as any other file.

My invention further relates to various improvements whereby the general efficiency of the file handle is improved.

Reference is to be had to the accompanying drawings forming a part of this specification, in which similar characters of reference indicate corresponding parts in all the figures.

Figure 1 is a plan view showing my improved handle partly in section and showing the file as mounted therein; Fig. 2 is a plan view of the file complete; and Fig. 3 is a perspective showing the revoluble tubular member removed from the handle.

A handle 4 is provided with a hole 5 extending almost its entire length and revolvably mounted in this hole is a cylindrical member 6 provided with a threaded hole 7 into which fits a screw 8 provided with a head 9. A washer 10 encircles the end of the handle adjacent to the screw head 9. The cylindrical member 6 is provided with a thin tubular portion 11 which has an annular flange 12 integral with it. At 13 is an annular guard which encircles one end of the handle 4 and is provided with an inwardly extending portion 14 which overhangs the flange 12.

A file blade 15 is provided with a shank 16 in the usual manner. A rod 17 of wood, having generally a cylindrical form, is driven into the tubular portion 11 of the cylindrical member 6 so as to completely fill this tubular member out flush with the flange 12. The rod 17 fits very tightly in position and the shank 16 is driven centrally into the rod. The screw 8 is preferably fitted snugly into the threaded hole 7, so as to turn with the cylindrical member 6. By turning the screw 8 and holding the file blade 15, however, the screw pulls upon the sleeve 6 and causes the flange 12 to bind tightly against the adjacent end of the handle 4. In doing this the file blade 15 becomes rigid relatively to the handle, and the operator, by grasping the handle can use the file blade in the ordinary way.

The operation of my device is as follows: The operator grasps the handle 4 and operates the file by drawing the file blade 15 across the work to be operated upon. The cylindrical member 6 turns freely within the handle 4 and carries with it not only the screw 8 but also the wooden rod 17 and the file blade. In doing many kinds of work with the file, a workman is apt to turn his hand and thus disturb the operative relation of the file. It is therefore desirable that the file blade shall be movable relatively to the handle in order that false motion of the handle may not produce false motions in the file blade.

By the invention above described a workman can use his wrists with considerably more freedom than is usually the case, and yet the work of the file blade, at least for many purposes, is not interfered with by the rotary movement of the handle. When the wooden rod 17 is split or worn out, or if, owing to dryness, it contracts, it can be taken out and a new one substituted. This construction is provided, because, owing to the spongy character of wood, it is peculiarly adapted for holding a file shank, and yet the wood must be readily removable, because it wears out.

While the device above described is ordinarily so used that the file blade turns freely in relation to the handle 4, the blade 15 may be secured rigidly in relation to the handle and the device is used as any other file handle. To do this, all that is necessary is to turn the screw 8 sufficiently to pull the



flange 12 tightly against the adjacent end of the handle. The complete tool is, therefore, convertible in that it may be operated with the blade rigid or fixed, as desired.

5 I do not limit myself to the use of file blades in connection with my improved handle, because obviously many other kinds of tools may be employed in the same relation. Neither do I limit myself to the use of  
10 particular materials for the construction of the various parts.

Having thus described my invention, I claim as new and desire to secure by Letters Patent:

15 1. The combination of a handle provided with a hole, a revoluble member fitted loosely within said hole and free to turn therein, a wooden rod connected rigidly with said revoluble member, an operating member  
20 having a shank driven tightly into said wooden rod, and a guard of annular form mounted upon said handle and provided with a portion extending inwardly to limit the play of said revoluble member relatively  
25 to said handle.

2. A device of the character described, comprising a handle provided with a hole, a revoluble member mounted loosely within said hole so as to turn freely in relation to  
30 said handle, a screw connected with said revoluble member and extending through a portion of said handle, said screw being adjustable relatively to said handle for the purpose of limiting the play of said revo-  
35 luble member relatively to the same, and a wooden rod connected with said revoluble member for receiving the shank of an operating member.

3. A device of the character described,  
40 comprising a handle provided with a hole, a cylindrical member fitted loosely within said hole and free to turn relatively to said handle, means controllable at will for adjusting the degree of play between said cy-  
45 lindrical member and said handle, and a rod secured rigidly to said cylindrical member and made of comparatively soft material for the purpose of receiving the shank of an operating tool.

50 4. A device of the character described,

comprising a handle provided with a hole, a cylindrical member loosely mounted within said hole and free to turn relatively to said handle, means controllable at will for  
55 adjusting the amount of play between said cylindrical member and said handle in the general longitudinal direction of the axis of said cylindrical member, and means for supporting an operating tool upon said cylindrical member. 60

5. The combination of a hollow handle, a cylindrical member loosely fitted therein and provided with a flange, a flange mounted upon said handle and provided with a portion overlapping said first-mentioned flange  
65 for preventing removal of said cylindrical member from said handle, and means independent of said flange upon said handle for adjusting the limit of play of said cylindrical member relatively to said handle. 70

6. The combination of a handle provided with a hole extending almost the entire length thereof, a separate member fitted loosely into said hole and free to turn relatively to said handle, a screw supported upon  
75 said revoluble member and adjustable relatively to the same, and a wooden member connected rigidly with said revoluble member and adapted to receive the shank of an operating tool. 80

7. The combination of a handle provided with a hole extending almost the entire length thereof, a separate member mounted loosely within said hole and free to turn, a screw mounted upon said separate member  
85 and adjustable relatively to the same, said screw being provided with a head for engaging the end of said handle in order to limit the play of said separate member relatively to said handle in the general direc- 90  
tion of the axis of rotation of said separate member, and means for supporting a tool upon said separate member.

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

WILLIAM B. WANKEL.

Witnesses:

WALTON HARRISON,  
PHILIP D. ROLLHAUS.