

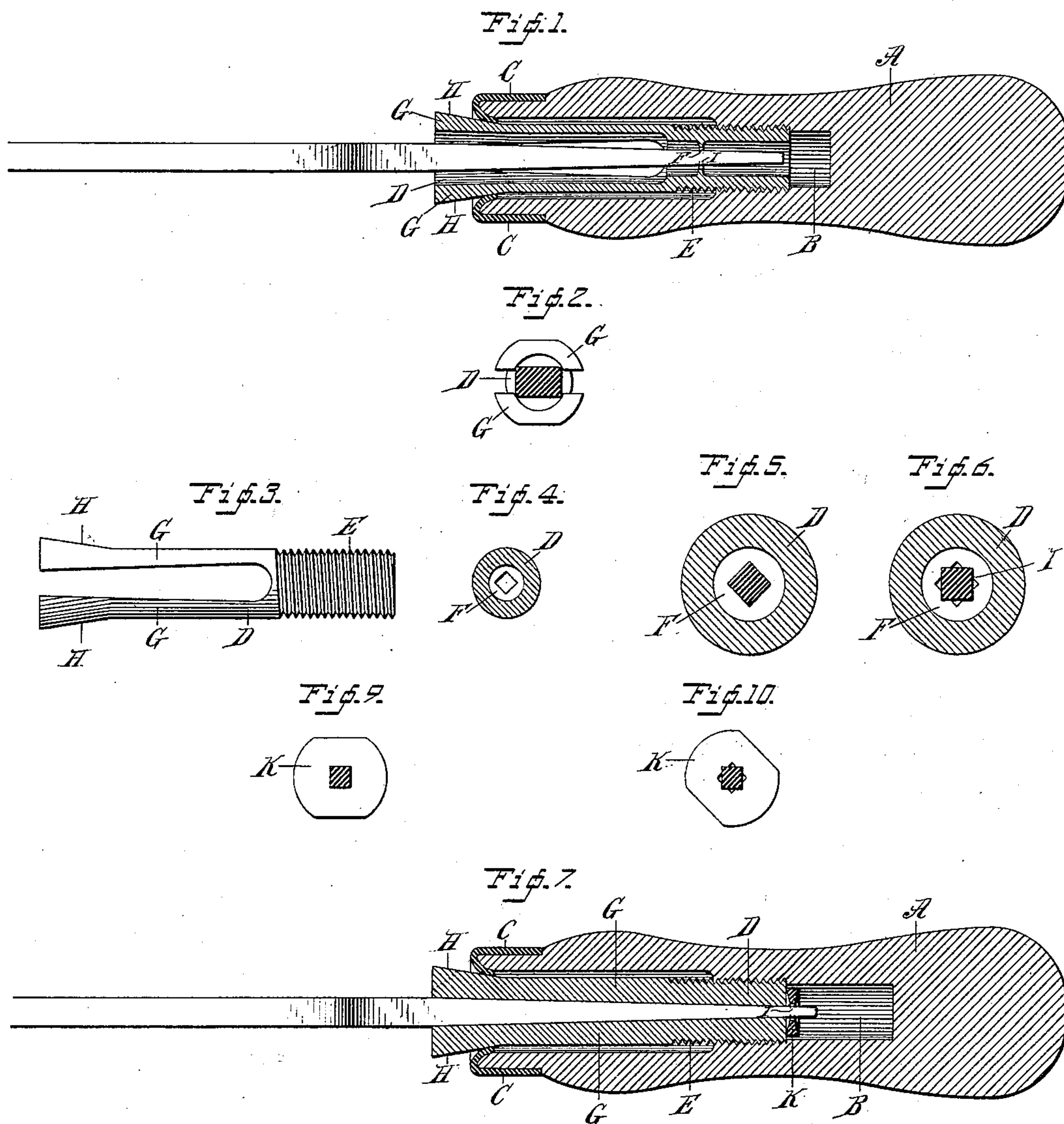
(No Model.)

J. CHANTRELL.

FILE HANDLE.

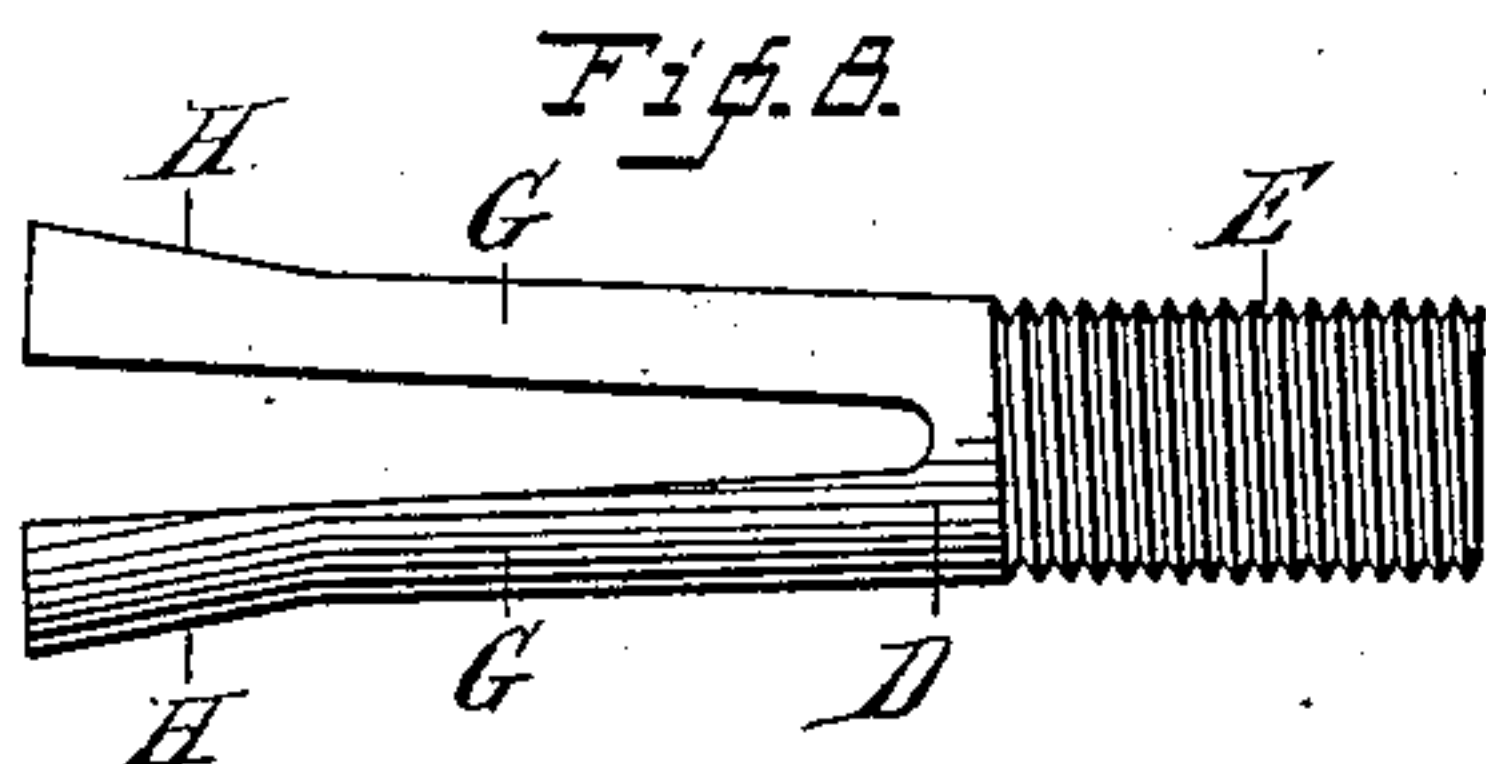
No. 337,244.

Patented Mar. 2, 1886.



Witnesses,

C. C. Perkins.
C. E. Ruggles



Inventor,
John Chantrell
By
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UNITED STATES PATENT OFFICE.

JOHN CHANTRELL, OF READING, PENNSYLVANIA, ASSIGNOR TO THE
READING HARDWARE COMPANY, OF SAME PLACE.

FILE-HANDLE.

SPECIFICATION forming part of Letters Patent No. 337,244, dated March 2, 1886.

Application filed October 5, 1885. Serial No. 173,984. (No model.)

To all whom it may concern:

Be it known that I, JOHN CHANTRELL, a citizen of the United States, residing at Reading, in the county of Berks and State of Pennsylvania, have invented certain new and useful Improvements in File-Handles; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

My invention has for its object to simplify and improve the construction of this class of devices, to produce in brief a handle from which a file or other tool may be readily removed, when desired, but which will hold it so firmly that it cannot possibly be extracted therefrom except in the proper manner. With this end in view I have devised the novel construction which I will now describe in connection with the accompanying drawings, forming part of this specification, in which—

Figure 1 is a section of my improved handle, showing the manner in which it engages the tang of the file, the latter being shown in elevation. Fig. 2 is an end view of a sheath, the tang of the file being shown in section; Fig. 3, a side elevation of the sheath detached; Fig. 4, a cross-section of the sheath looking inward; Fig. 5, an enlarged cross-section of the sheath, showing the tang in engagement with a nut. Fig. 6 is a similar view, the tang having been given a quarter-turn. Fig. 7 is a section of a slightly modified form of handle complete. Fig. 8 is a side elevation of a sheath, as in Fig. 7, detached. Figs. 9 and 10 show the nut in the modified form in its position relatively to the tang before and after it has been given a quarter-turn.

Similar letters denote like parts in all the figures.

A represents the body of the handle, which has a central opening, B, extending down into it, and a ferrule, C, at the end which is to receive the sheath. This ferrule is curved over at the end of the handle, and extends a short distance down into the opening, as is clearly shown in Figs. 1 and 7.

D represents the sheath, which is externally screw-threaded at its inner end, as at E, to engage a corresponding screw-thread in the handle, and is provided with an internal fixed

nut, F, which is preferably cast integral with the sheath. The sheath is also provided with spring jaws G, having inclines H upon their outer ends, which are so formed as to engage the inwardly-turned portion of the ferrule, and be closed thereby against the tang of the file or other tool. The edges of the opening in nut F, within the sheath, are made of just proper shape and size to receive the tang of the file or other tool, and thin enough to cut into it. When a new file or other tool is inserted, it is forcibly turned in nut F, thus cutting nicks or grooves I through the corners of the tang. If preferred, these grooves may be made in the manufacture of the file. The groove having once been made, the insertion or withdrawal of the file is a very simple matter. The tang is inserted into the sheath as far as it will go and given a quarter-turn by hand. The sheath with the file in place is then turned into the handle. As it is turned in the ferrule at the end of the handle acts on inclines H upon the jaws to press the latter against the tang, causing them to grasp it firmly and prevent it from turning. It will thus be seen that the nut and jaws act together, the former to prevent the file from being drawn out until it has been turned, and the latter to prevent it from being turned until they are loosened.

In the modified form the sheath and jaws are preferably made to embrace the tang its entire length, and instead of a fixed nut within the sheath a loose nut, K, is used, which is placed over the end of the tang below the sheath, after which it is given a quarter-turn, as indicated in Figs. 7, 9, and 10. Having secured the tang against withdrawal by turning the nut, the sheath is turned in as before, the ferrule acting to close the jaws against the tang, whereby it is prevented from turning.

I do not of course limit myself to the exact details of construction as shown and described, as they may obviously be varied within reasonable limits without departing from the spirit of my invention.

I claim—

1. A file-handle consisting, essentially, of a part, A, having a central opening, spring-jaws to engage the tang, a sheath which engages part A, and a thin nut in which the tang

is adapted to be turned to make or engage a groove at the corners, whereby it is locked against withdrawal, substantially as described.

2. In a file-handle, part A, having a central opening, and a ferrule turned over its outer end, in combination with a sheath having a screw-thread to engage part A, a nut in which the tang is adapted to be turned to cut or engage a groove therein, and spring-jaws having inclines which engage the ferrule, by which they are forced against the tang, as and for the purpose set forth.

3. The combination, with a file whose tang is provided with a groove at the corners, of spring-jaws and a screw-threaded sheath, a nut adapted to engage the groove in the tang when given a quarter-turn, and part A, into which the sheath is turned and which closes the jaws against the tang.

4. Part A, having a central opening, spring-jaws, and a sheath, the jaws having inclines at their outer ends to engage the end of the handle, and the sheath having a screw-thread to engage the body of the handle, in combina-

tion with a file or other tool with a grooved tang, and a nut with an opening corresponding in shape with the tang, the edges of said opening being made thin to engage the groove in the tang when given a quarter-turn.

5. A combined sheath and jaws for tool-handles, the sheath having an external screw-thread to engage the handle, and an internal fixed nut with thin edges adapted to engage or make a groove in the tang, and the jaws having inclines by which they are forced against the tang to keep it from turning.

6. A combined sheath and jaws for tool-handles, the exterior of said sheath being screw-threaded, and it having also a fixed nut with a central opening corresponding with the tang of a file, the edges of said opening being made thin, as and for the purpose set forth.

In testimony whereof I affix my signature in presence of two witnesses.

JOHN CHANTRELL.

Witnesses:

GEO. A. HICKMAN,
ISAAC R. FISHER.