No. 672,038. Patented Apr. 16, 1901.

A. B. JAQUITH.

TOOL HANDLE.

(Application filed Jan. 4, 1901.)

(No Model.)

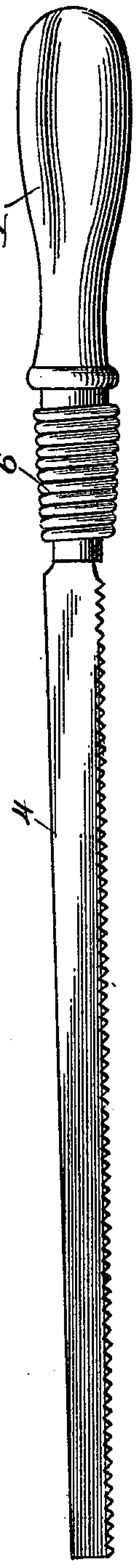

Fig. 1.

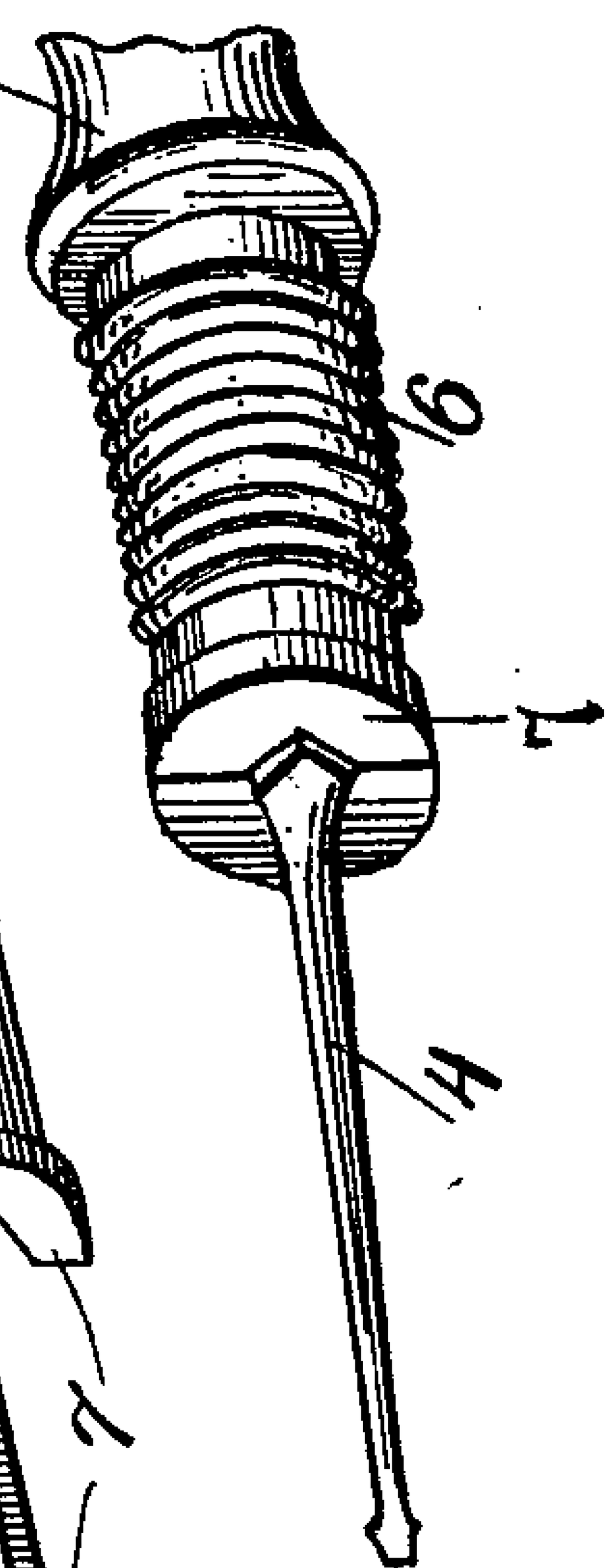

Fig. 5.

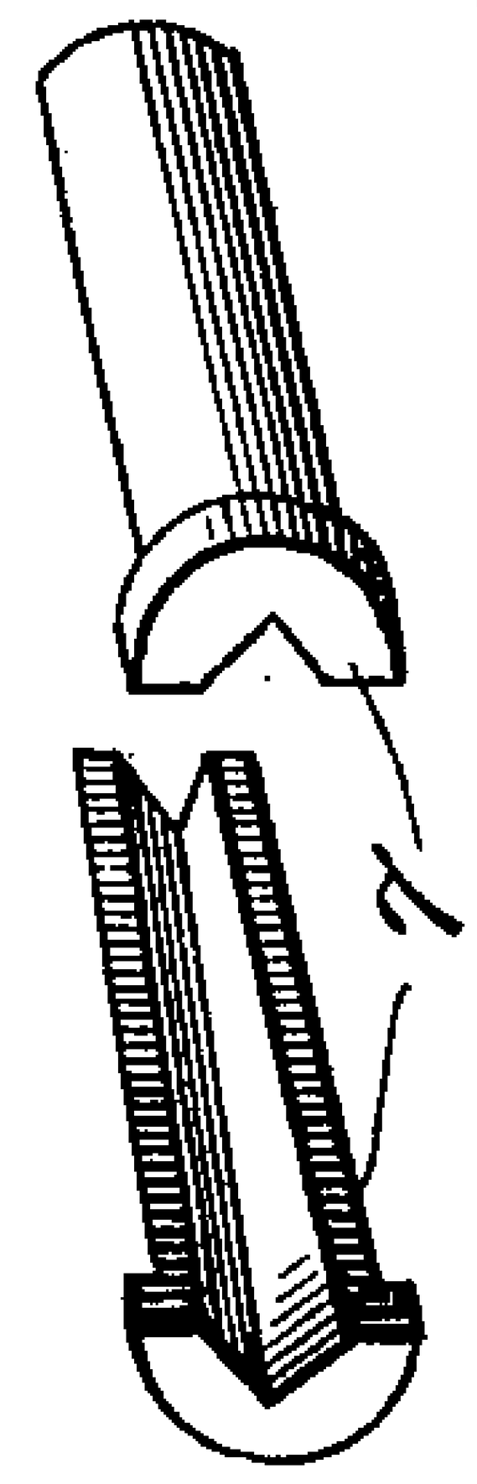

Fig. 3.

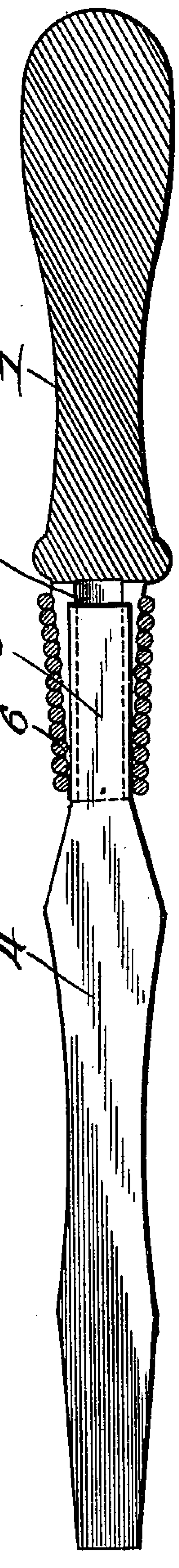

Fig. 4.

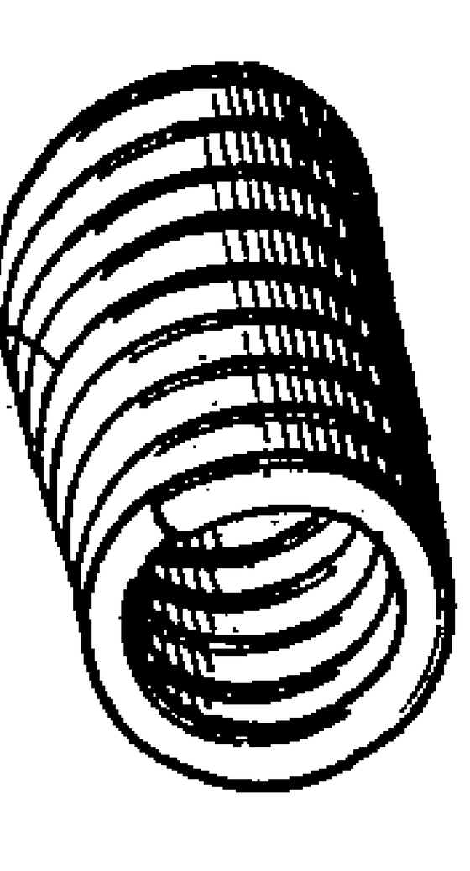

Fig. 2.

Witnesses

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THE NORRIS PETERS CO. PHOTO-LITHO., WASHINGTON, D. C.

UNITED STATES PATENT OFFICE.

AZRO B. JAQUITH, OF CHARLESTOWN, MASSACHUSETTS.

TOOL-HANDLE.

SPECIFICATION forming part of Letters Patent No. 672,038, dated April 16, 1901.

Application filed January 4, 1901. Serial No. 42,108. (No model.)

To all whom it may concern:

Be it known that I, AZRO B. JAQUITH, a citizen of the United States, residing at Charlestown, in the county of Suffolk and State of Massachusetts, have invented certain new and useful Improvements in Tool-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.

This invention relates to tool-handles, and has particular reference to that class in which the tools are removable after being released.

One object of the invention is to provide novel means for retaining the tool-shank in place against displacement or accidental withdrawal, yet permitting its release by manipulating the retaining means.

Furthermore, the object of the invention is to provide means whereby a single handle may be adapted to receive and hold shanks of varying-sized tools, thus increasing the utility of a single handle.

Furthermore, the object of the invention is to provide means operating in conjunction with the tool-handle and the shank of the tool whereby pressure is exerted throughout the contacting surfaces of the shank and handle.

Finally, the object of the invention is to provide a tool-handle and means for attaching the tool therein possessing advantages in points of simplicity, efficiency, and durability, and which will be comparatively inexpensive to produce and sustain.

In describing the invention in detail reference will be had to the accompanying drawings, forming a part of this specification, wherein like characters denote corresponding parts in the several views, and in which—

Figure 1 is a view in elevation of a tool-handle and the tool attached embodying the invention. Fig. 2 is a perspective view of the collar. Fig. 3 is a perspective view of the adjusting means. Fig. 4 is a sectional view taken through the handle. Fig. 5 is a view showing the bushing in position.

In the drawings, 1 indicates the handle, which has a bifurcated end, and the inner surface of each bifurcated end is provided with recesses 2, which form a socket. The shank 3 of the tool 4, which, it is understood, may be a saw-blade, a file, a screw-driver, a knife, or any other suitable implement, is fitted in the bifurcated end and is adapted to be engaged by the inner surfaces of the said bifurcated section. The outer surface of the bifurcated end of the handle is engaged by the ferrule 6, which is slidable on its tapered end. The ferrule is conical in shape and comprises a single strand of resilient wire wound, preferably, so that the sections of the coil abut. The interior diameter of said ferrule is slightly less than the outer diameter of the end of the handle at any corresponding given point of their length, this for the purpose of allowing the ferrule to be pressed longitudinally of the handle with increasing friction as it travels over the inclined surface, and as the ferrule is partially rotated the action is such as to cause the coils to crease the handle slightly and form depressions in which said coils lie. This engagement will suffice to retain the shanks in place against the strain usually necessary to their use.

In order to adapt the handle to tool-shanks of varying sizes, I provide a bushing comprising two approximately semicircular sections 7, adapted to fit in the recesses in the bifurcated ends of the handles. Each section of the bushing is provided with a flange which abuts the end of the handle, so that its inward movement is limited. When these sections of the bushing are applied and the shanks of smaller implements are inserted in the handle, the ferrule is pressed in place, as heretofore described, and thus the bushing and tool are held against displacement.

In this device should one or more coils of the ferrule become sprung it will not interfere with the operation of the device, as they will be drawn in place through the contact of the sections.

It will be observed that in this invention compensation is afforded for wear on the parts as the tension of the ferrule is increased by its travel on the outer surface of the handle, and if the tool becomes loose a slight turn and push on the ferrule will further compress the bifurcated sections into contact with the shank of the handle.

One of the great advantages of this invention is its inexpensive production. Another

advantage is the fact that there are no threads to become worn, and there is practically no end to the durability of the ferrule.

The construction, operation, and advantages will, it is thought, be understood from the foregoing description, and it is noted that I do not wish to be understood as limiting in any way the use to which the ferrules can be put, for it will be apparent to those skilled in the art that it may be employed in connection with any handle which is designed for the reception and retention of tools which are manipulated through the agency of the handle.

Having thus fully described the invention, what I claim as new, and desire to secure by Letters Patent, is—

1. A tool-handle having a bifurcated end, a tool having a shank fitting therein and a ferrule comprising a strand of resilient metal coiled to produce a tapered socket; each strand of said coil having independent action as and for the purpose described.

2. A ferrule comprising a wire coiled to produce a tapered socket, each strand of said coil having an independent spring action, substantially as described.

3. In a device of the character described, a handle having a bifurcated tapered end, semicircular sections fitting between the sections of the handle, a tool-shank fitted therebetween and a ferrule of coiled resilient metal fitted on the tapered end of the handle; each coil of the ferrule having an independent spring action, substantially as described.

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

AZRO B. JAQUITH.

Witnesses:
KATHARYN C. GEE,
FRED SMITH.