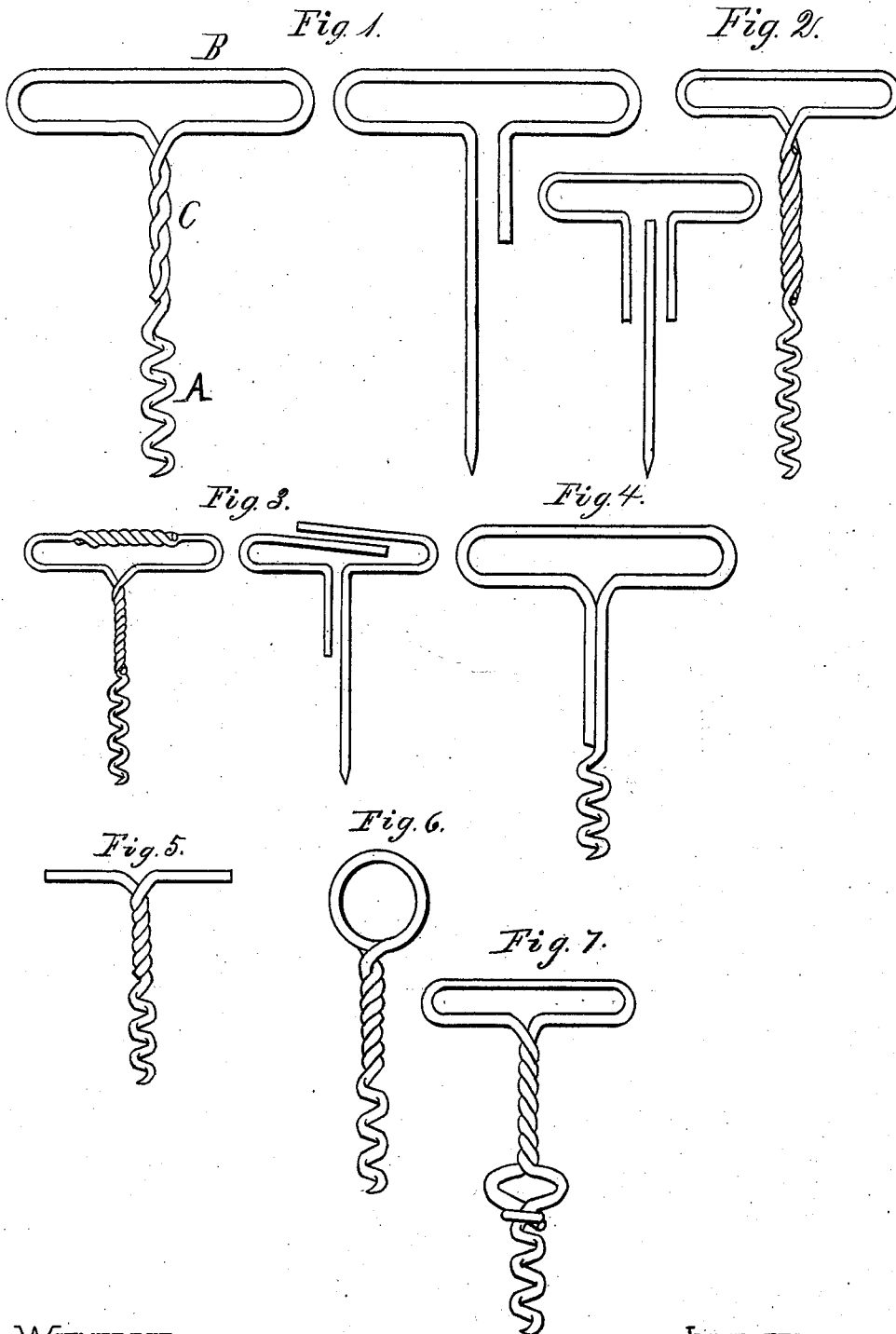


W. R. CLOUGH.

CORK-SCREW.

No. 172,868.

Patented Feb. 1, 1876.



WITNESSES:

Chas. C. Gill  
W. Hendley

INVENTOR:

Wm. R. Clough  
by his attys.  
Cox & Cox.

# UNITED STATES PATENT OFFICE.

WILLIAM R. CLOUGH, OF NEWARK, NEW JERSEY.

## IMPROVEMENT IN CORKSCREWS.

Specification forming part of Letters Patent No. **172,868**, dated February 1, 1876; application filed November 1, 1875.

*To all whom it may concern :*

Be it known that I, WILLIAM R. CLOUGH, of Newark, New Jersey, have invented a certain new and useful Improvement in Corkscrews, of which the following is a specification:

The invention relates to a corkscrew formed of one or more pieces of wire, two or more strands of which are united to form the shank, which distinguishes the device from that for which Letters Patent of the United States were granted to me on the 6th day of April, 1875, the device claimed in which patent exhibited the employment of but one piece of wire.

The object of the invention is to provide a cheap, durable, and useful cork-screw.

It is well known that it has heretofore been customary in the construction of corkscrews to employ a blank or piece of metal of such weight and diameter as to permit of its being adapted to form a shank of strength and rigidity, which qualities it is desirable that the shank should possess, for reasons which need not be recited. I am enabled by my invention to dispense with the use of such blank or piece, and to produce a corkscrew in which the desired strength and rigidity of the shank are effected by uniting two or more pieces of wire, or two or more parts of a single piece of wire, by bending, twisting, folding, wrapping, coiling, or otherwise manipulating the wire or wires, in such manner as to form the shank in two or more threads, pieces, or parts without in any wise changing the diameter or diameters of the wire or wires employed. I am also enabled to dispense with a separate handle by bending the wire or wires to form a handle, and to effect other important and beneficial results, as hereinafter more fully set forth.

In the accompanying drawings, Figures 1, 2, and 3, are views showing embodiments of the invention, with the blanks out of which the respective devices are formed. Figs. 5, 6, and 7 are views showing embodiments of different styles and configurations. Fig. 4 shows the free end of the wire attached by soldering.

In constructing the device I take, by pref-

erence, a single piece of wire, of any suitable length and diameter, and form the lower part into a screw, A. The upper part I bend to form a handle, B, having due regard to the formation of the shank C, which I construct, by preference, by twisting, coiling, folding, wrapping, or soldering the free end of the wire around or to the part between the screw A and handle B, twisting it, or otherwise attaching it, so as to get substantially double the strength of a single part or section of the wire. I prefer to construct the handle in the form of an ellipse, substantially as shown in Figs. 1, 2, and 3, whereby I am able to gain strength and rigidity without sacrificing other important features. I prefer, also, to construct the shank as shown in Fig. 1, believing the same to be the most effective form; nevertheless any and all the other embodiments shown may be practiced with good results.

While I prefer to construct the corkscrew in all respects substantially as shown in said Fig. 1, I regard the divers other embodiments shown as important and useful, and especially meritorious, as facilitating the full enjoyment of the invention by the public, by enabling the public to practice it by employing more than one piece of wire, whereby short pieces or fragments of wire may be utilized. When more than one piece of wire is employed, the several pieces are united or connected by twisting, bending, coiling, or soldering, and manipulated to form a device having a screw, shank, and handle, substantially the same as those hereinbefore described. Figs. 2, 3, 5, 6, and 7, represent devices in which more than one piece of wire is employed, and will be suggestive of numerous other like embodiments of the invention. Where more than one piece of wire is used, the pieces may be of different diameters, and the length of the pieces will be relatively immaterial, but a better result will be produced if the pieces are of the same diameter and otherwise similar. While, as hereinbefore set forth, I prefer the elliptical form of handle; other forms may be used. Thus, the handle may be in the shape of one or more loops, or one or more eyes, or of any other shape or configuration, as may be desired. And pieces of wood or other ma-

terial may be inserted within the handles, or loops, or eyes, and employed as supplemental handles, when desired.

It is manifest that the nature of the invention is such that it admits of a multiplicity of embodiments and modifications which it would be impracticable to describe herein. I do not claim broadly herein a corkscrew made of a single piece of wire, as shown and described in Letters Patent of the United States granted to me on the 6th day of April, 1875, but what I claim as my invention, and desire to secure by Letters Patent, is—

1. A corkscrew formed of a single piece of wire, a portion of the wire being formed into a screw, its upper part formed into a handle, and its free end utilized to strengthen the shank between the handle and screw, substantially as shown and set forth.

2. A corkscrew, formed of two or more pieces of wire, connected to form a screw, A, handle B, and shank C, substantially as described.

3. A corkscrew, formed of two or more pieces of wire twisted together throughout a portion of their length to form the shank of the screw, substantially as described.

In testimony that I claim the foregoing improvement in corkscrews, as above described, I have hereunto set my hand and seal this 30th day of October, 1875.

WILLIAM R. CLOUGH. [L. S.]

Witnesses:

HENRY C. BANKS,  
ROWLAND COX.