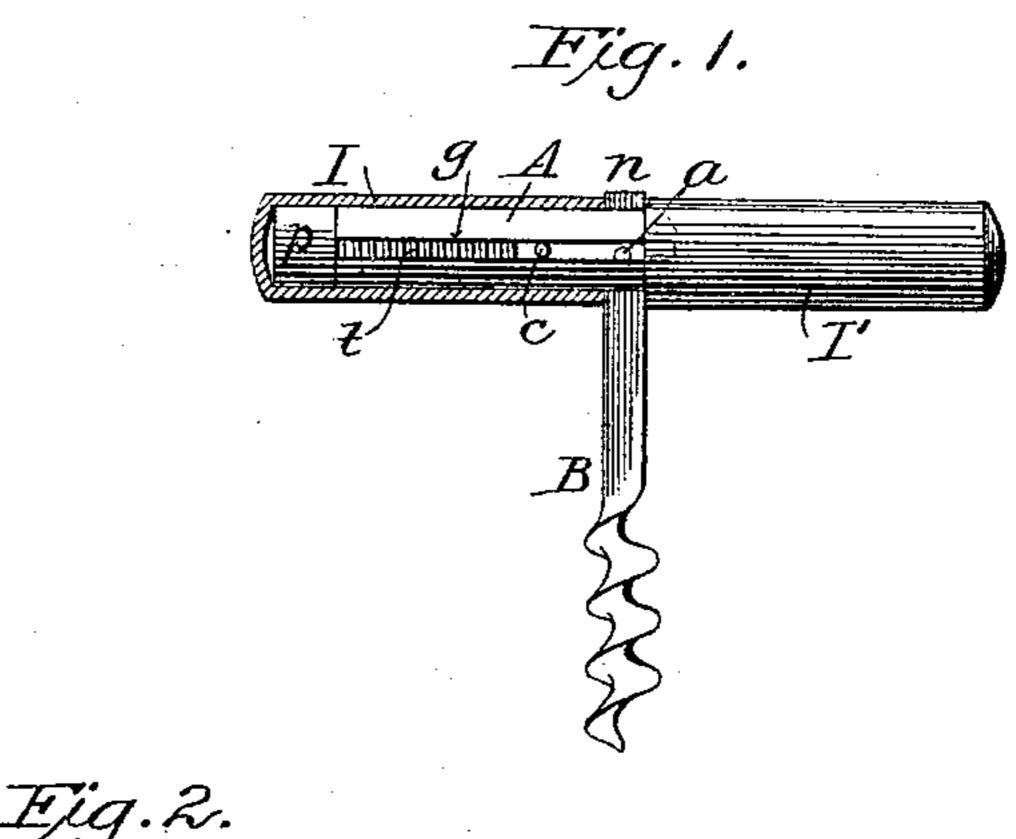
(No Model.)

## LE ROY W. FAIRCHILD.

CORKSCREW.

No. 388,125.

Patented Aug. 21, 1888.



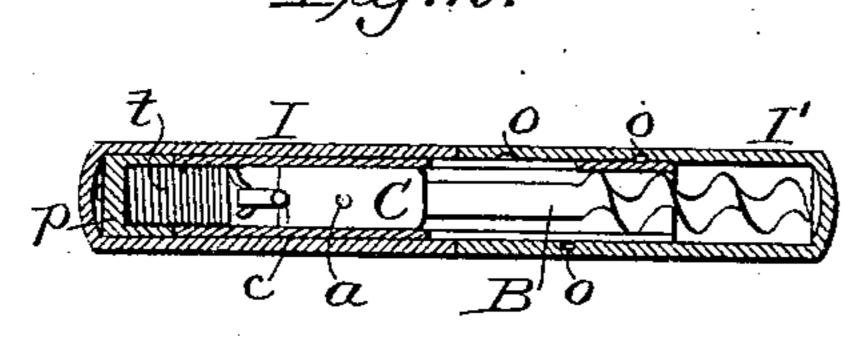
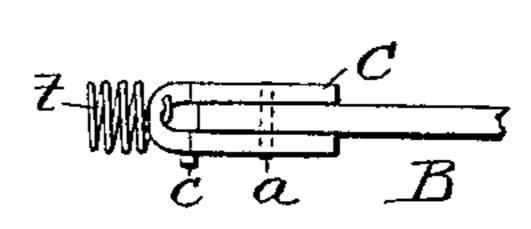


Fig. 4.



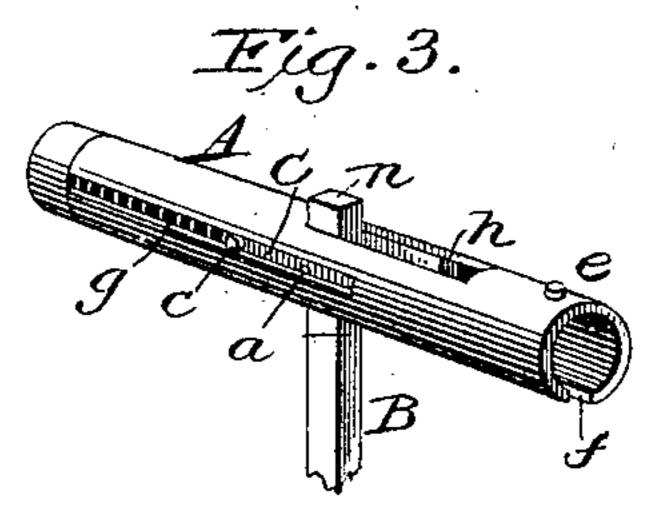


Fig. 5.

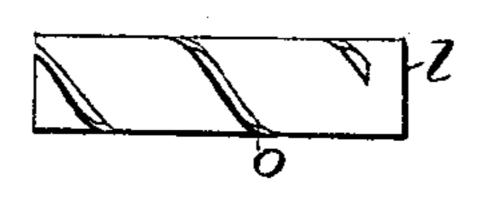
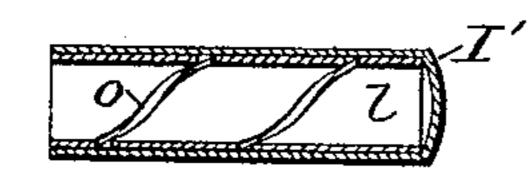


Fig. 6.



Witnesses:

Horace A. Dodge.

Inventor: D. M. Fairchild. by Dodge Hoons. Attys.

## United States Patent Office.

LEROY W. FAIRCHILD, OF NEW YORK, N. Y.

## CORKSCREW.

SPECIFICATION forming part of Letters Patent No. 388,125, dated August 21, 1888.

Application filed April 28, 1888. Serial No. 272, 181. (No model.)

To all whom it may concern:

Be it known that I, LEROY W. FAIRCHILD, of New York, in the county of New York and State of New York, have invented certain new 5 and useful Improvements in Corkscrews, of which the following is a specification.

This invention relates to corkscrews; and the invention consists in certain details of construction and certain combinations of parts or devices, as hereinafter more fully described.

Figure 1 is a side elevation of the corkscrew arranged for use, with a portion in section. Fig. 2 is a side view of the same when closed, with the handle and some of the parts in section. Figs. 3, 4, 5, and 6 represent portions detached to illustrate their construction.

This invention relates to that class of corkscrews designed to be carried about the person, the object being to produce a very compact, strong, and neat implement, one that will occupy but little space, and can be closed so as to exclude dust or dirt.

To construct my improved implement, I first provide a tube, A, of the proper length and 25 size, as shown in Fig. 3, and cut therein three longitudinal slots, f, g, and h, as shown in said figure. The slot f extends about half the length of the tube A, while the slot h, which is directly opposite the slot f, is made to ex-30 tend from the center only part way toward the end, or of such a length as will permit the end n of the shank of the screw B to be turned up through it and project therefrom, as shown in Figs. 1 and 3. The other slot, g, extends 35 from the opposite end of the tube to near the center, as shown, to serve as a guide for the sliding yoke C, to which the shank of the screw B is pivoted.

The yoke C is made of the proper size to per40 mit it to slide freely to and fro in the tube A, and
has the shank of the screw B pivoted therein,
as represented in Fig. 4, by a pin, a, so that
the screw B can be turned in line with the
longer axis of the yoke, as in Figs. 2 and 4, or
45 at right angles thereto, as in Figs. 1 and 3.

To the end of the yoke C, I attach a spiral spring, t, the opposite end of said spring being secured to the end of the handle on its inside in any suitable manner, so that it will tend to draw the yoke C back toward the end of the handle, as in Fig. 2, and thereby draw in the

screw B with it. I have shown the spring t as being connected to a small cup-shaped piece, p, of the same diameter as the tube A, against the end of which it will abut when the parts 55 are assembled, as shown in Figs. 1, 2, and 3. It is obvious, however, that this disk or cup p may be dispensed with, and the spring be secured direct to the end of the tube A, or to the inside of the part I of the handle, it only before ing necessary to fasten it so as to hold it secured.

curely in place.

I provide a case composed of two tubes, I and I', of equal length, and both closed at their outer ends, as represented in Figs. 1 and 2. 65 The part I is soldered or otherwise firmly secured upon that end of tube A which contains the spring, as shown in Fig. 2, and the part I' is made to fit upon the opposite end of the tube A, it being provided on its interior with 70 a spiral groove, o, to engage with a pin or stud, e, which projects from the exterior of the tube A, as shown in Fig. 3, and by which it can be screwed on or off by a couple of turns. The groove o may be cut in the inner surface 75 of the part I' by making the latter thick enough for that purpose; but I prefer to cut it in a thinner tube, l, as shown in Fig. 5, and then secure the latter within the part I', as it is a simpler and easier method of construction. 80 The part I may be made of a single tube of the proper thickness; or it may be made of thinner material, and then have a thin tube corresponding to the tube l in thickness inserted within it before being secured upon the tube A, this 85 being merely a matter of choice, as may be found most convenient in manufacture. By this construction and arrangement of parts it will be seen that when the screw B is turned up in line with the tube A the spring t will 90 operate to draw the yoke C, and with it the screw B back into the tube A to the position shown in Fig. 2, when the cap or part I' can be screwed on, thus closing the whole up tight in a compact form, as represented in Fig. 2, in 95 which form it can be conveniently carried in the pocket or valise, and will prevent the entrance of dust or dirt. When it is desired to use the screw B, the cap I' is detached, and the screw B is pulled out far enough to permit it 100 to be turned to the position shown in Figs. 1 and 3, the spring acting to draw the shank of

the screw snugly against the end of the part I, against which it will bear both above and below, as shown in Fig. 1. The cap I' is then screwed on, thus clamping the shank of the screw B firmly between the inner ends of the parts I and I', as shown in Fig. 1. The shank, as shown, is made rectangular in cross-section, and wider in the line of the slots than crosswise, so that it is held firmly therein and prevented from turning in the handle. When thus arranged, the tube A is re-enforced by the parts I and I', which altogether make a strong handle.

The parts I and I' can be made of gold or silver, or may be plated and ornamented in any manner desired, thus combining utility and ornamentation.

Having thus described my invention, what I claim is—

The combination, in a corkscrew, of the tube A, provided with the slots h and f for the shank of the screw B, and the slot g at the side for the guide-pin c, with the yoke C, provided with the guide-pin c, and having the screw B pivoted thereto, as shown, whereby the shank of said screw is made to project through the slot h when turned into position for use, substantially as shown and described.

2. In combination with the tube A, provided with the slots f, g, and h, the yoke C, provided with the guide-pin c, and having the screw B pivoted thereto, and the spring t, connected at one end to the yoke C and at its opposite end to the end of tube A, or to the interior of the handle in any equivalent manner, whereby the

screw B will be drawn back within the case or handle, as set forth.

3. The combination of the slotted tube A, having the sliding yoke with the shank of the screw B pivoted thereto, so that its end n shall 40 project through the slot h and above the wall of tube A, with the cap I, secured rigidly on the tube A, and the detachable cap I', arranged to screw onto the opposite end of tube A, and thereby clamp the shank of the screw B between it and the adjoining end of tube I, substantially as shown and described.

4. A pocket corkscrew consisting of a tubular handle, a sliding yoke having the screws pivoted thereto, and a spring arranged to draw 50 the yoke and screw back within the handle, and a detachable cap for closing the handle, all constructed and arranged to operate substantially as shown and described.

5. The combination, in a corkscrew, of the 55 slotted tube A, with the sliding screw B therein, and having the cap I fastened on one end, with the detachable cap I', arranged to screw onto the opposite end and abut against the end of tube I, so as to cover and completely 60 close all slots or openings in the implement when closed, substantially as shown and described.

In witness whereof I hereunto set my hand in the presence of two witnesses.

LEROY W. FAIRCHILD.

Witnesses:

R. M. COLLARD, HARRY P. FAIRCHILD.