

W. P. X. SMITH.
Cork-Screws.

No. 155,895.

Patented Oct. 13, 1874.

Fig. 1,

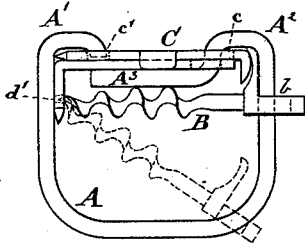


Fig. 2,

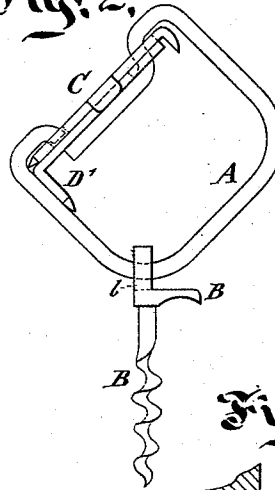


Fig. 4,

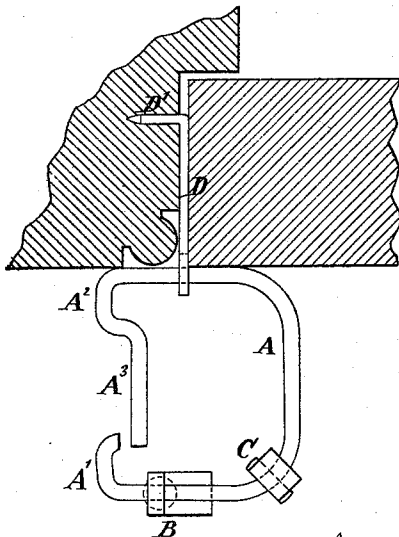


Fig. 5,

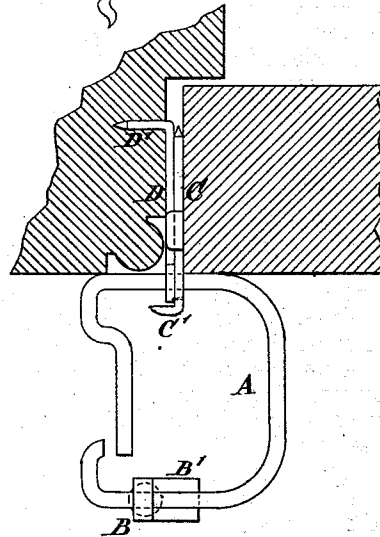
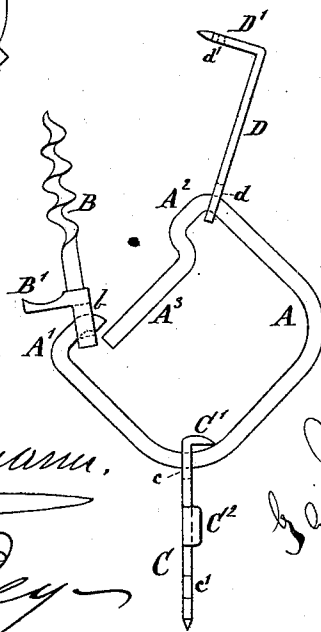


Fig. 3,



Witnesses:

Inventor:

Arnold Hermann
W. C. Dey

W. P. X. Smith
by his attorney *J. S. Latham*
New York City

UNITED STATES PATENT OFFICE.

WILLIAM P. X. SMITH, OF NEW YORK, N. Y., ASSIGNOR TO HIMSELF AND
ALONZO B. SIMONDS, OF SAME PLACE.

IMPROVEMENT IN CORK-SCREWS.

Specification forming part of Letters Patent No. **155,895**, dated October 13, 1874; application filed
April 20, 1874.

To all whom it may concern:

Be it known that I, WILLIAM P. X. SMITH, of New York city, in the State of New York, have invented certain Improvements in Cork-Screws and their attachments, of which the following is a specification:

The device is intended to serve not only as a cork-screw and means of operating the same, with provisions for closing into a narrow space suitably protected for carriage in the pocket, but also as a key-ring, screw-driver, and door-fastener. It may be made efficient for all these purposes with little size or weight.

The following is a description of the invention.

The accompanying drawings form a part of the same.

Figure 1 is a side view in its closed condition, adapted for carriage in the pocket. Keys may be applied in any number required. Fig. 2 represents the device adjusted for use as a cork-screw. Fig. 3 represents it in condition for use as a screw-driver. Figs. 4 and 5 show it in use as a door-fastener.

The figures are horizontal sections through a door and the adjacent casing.

In Fig. 4 the joint between the door and casing is thin, and the door-fastening hook is alone introduced therein.

In Fig. 5 the joint is more open, and the screw-driving blade is applied to contribute its thickness to that of the shank of the door-fastening hook.

Similar letters of reference indicate like parts in all the figures.

A holder, formed of a peculiarly-bent wire of tempered steel or other suitable material, is indicated by A. Certain portions will be designated by additional marks, as A¹, when necessary. This wire forms the handle for my cork-screw, and the guard for protecting it when carried in the pocket. It also forms the attaching means for the other parts. B is the main body of the cork-screw. It is attached to the holder A by passing the latter through the hole b. It has a lateral projection, B', formed as represented. The length of the cork-screw B must be carefully adapted to the dimensions of the other parts. C is my screw-driving blade attached to the holder A

by passing the latter through the hole c. It also receives an end of the wire in a hole, c'. This blade C is formed with a lateral arm, C¹, and with short side flanges C². D is the door-fastening hook. It is attached to the holder A by passing the latter through the hole d. Its lateral projection D' is sharpened and adapted to enter the side casing in serving as a door-fastener. It is also perforated at d' to receive the point of the cork-screw B.

The several parts of the holder A are designated as follows: Its general outline approximates a rectangle with rounded corners. Its main body is marked simply A. One end is bent inward, as indicated by A¹. Another corner of the rectangle has a corresponding inward bend at the point A², but it is prolonged inward farther, and then bent nearly in line toward the other end, and extended straight until opposite thereto. This straight portion, marked A³, performs the important function of holding the blades of the screw-driver and door-fastener firmly in position when the device is closed.

To prepare the device for use, the cork-screw B is thrown into the position indicated in dotted lines in Fig. 1. This liberates the point of the cork-screw, and allows it to be turned into the position shown in Fig. 2. Thus conditioned, the holder A and its attachments serve as a handle, and allow the same to be strongly pulled when fast to the cork.

To liberate the screw-driver and door-fastener it is necessary to press strongly inward on the outer face of the screw-driver blade C, thus detaching it and its companion D from the turned-in end A¹ of the holder or wire A. Thus conditioned, the parts may be loosened out of their closed position, and adjusted for use separately.

In Fig. 3 the parts B and D are idle, and the screw-driver blade C is in condition for useful operation.

In Fig. 4 the door-fastener D is alone in use. In this condition the holder A forms a cross-bar to secure the door, while the hook D' forms a firm attachment therefor to the door-case.

The screw-driver forms a useful adjunct

when the door is shrunken, so as to make a very open joint. This use is shown in Fig. 5.

In the folded condition, the side flanges C² on the screw-driver blade C serve to hold the door-fastener hook in position. The door-fastener blade in its turn holds in position the point of the cork-screw. The lateral arms B' on the cork-screw and C¹ on the screw-driver match together, and contribute to the firmness of the mutual support.

It is important that the several holes *b d d'* be of just sufficient length to perform as shown, and that the wire or material for the holder A be of a proper strength and elasticity.

I claim as my invention—

1. The holder A A¹ A² A³, constructed as described, with the end A³ adapted to yield

elastically, as shown, to allow the inclosing of the other parts, as specified.

2. The cork-screw B, constructed as described, in combination with the holder A A¹ A² A³, as specified.

3. The holder A A¹ A² A³, cork-screw B, door-fastener D, and screw-driver C combined, and adapted to serve relatively to each other, as herein specified.

In testimony whereof I have hereunto set my hand this 16th day of April, 1874, in the presence of two subscribing witnesses.

W. P. X. SMITH.

Witnesses:

WILLIAM C. DEY,
ARNOLD HÖRMANN.