(No Model.)

J. K. P. NOURSE.

CORKSCREW.

No. 300,391. Patented June 17, 1884.

Fig. 1.

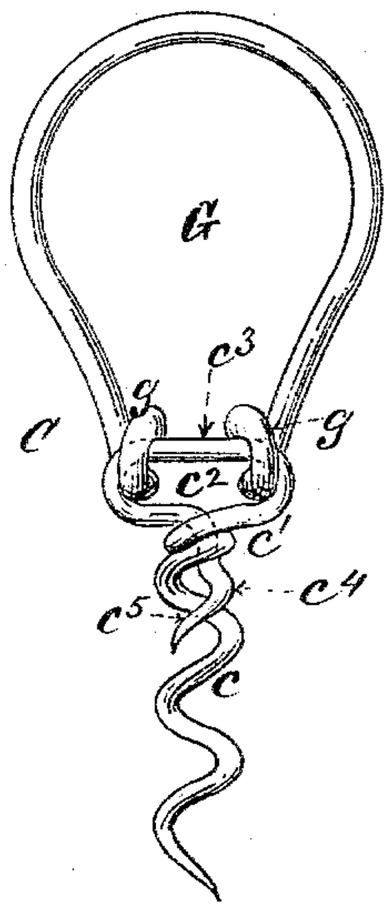

Fig. 3.

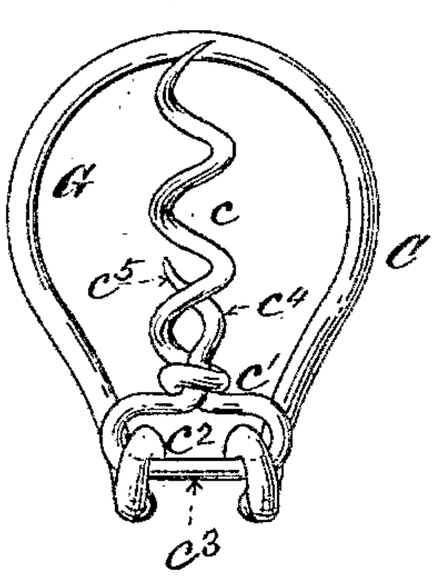

Fig. 2.

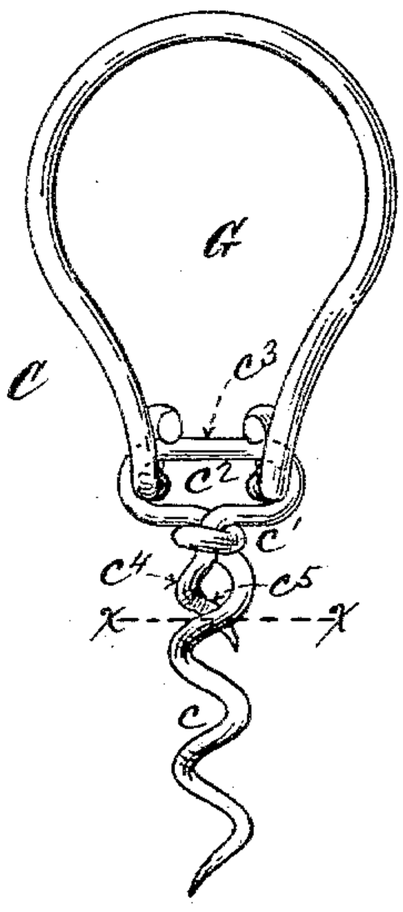

Fig. 4.

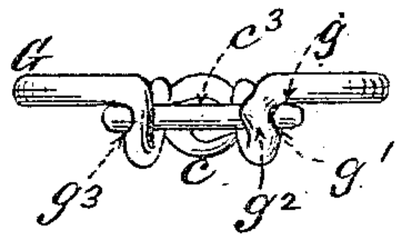

Fig. 5.

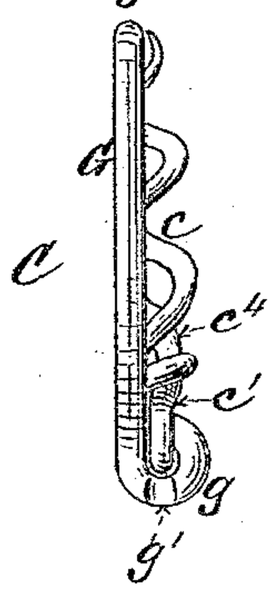

Fig. 6.

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UNITED STATES PATENT OFFICE.

JAMES K. P. NOURSE, OF WEST MEDWAY, MASSACHUSETTS.

CORKSCREW.

SPECIFICATION forming part of Letters Patent No. 300,391, dated June 17, 1884.

Application filed November 17, 1883. (No model.)

To all whom it may concern:

Be it known that I, JAMES K. P. NOURSE, a citizen of the United States, residing at West Medway, in the county of Norfolk and State Massachusetts, have invented certain new and useful Improvements in Corkscrews, of which the following is a specification.

My improvements relate to that class of corkscrews which are formed from metallic rods of wire bent and twisted into the desired shape, thereby attaining simplicity and cheapness of construction with the maximum of strength and durability.

The object of my invention is to produce a folding or pocket corkscrew that will embody all the advantages of the principle of construction named, and that will, in addition, afford a ready and convenient means of severing the wires, which are frequently employed to retain the corks in position in the bottles.

I am aware that heretofore folding corkscrews have been known; but in such cases the parts have been secured together by means of a pin or pivot formed of a separate piece of metal, penetrating both the two extremities of the guard or handle and the shank of the screw, thereby materially weakening the device at the very point at which it is subjected to the greatest torsional strain during practical use, since the effective strength of the device as a whole is limited to that afforded by the comparatively slight thickness of metal left upon any given side of the pivot, or to that afforded by the thickness of the pivot itself. I overcome this difficulty by, and the first feature of my invention consists in, a folding corkscrew in which the connections between the guard or handle and the screw are effected by bending the extremities of the guard or handle around a portion of the screw-shank, which at this point is bent at right angles to the length of the screw proper, from which point it again returns to and engages with the screw portion, thus forming an elongated eye or loop in the material itself, the straight rectangular portion of which constitutes the fulcrum or pivot upon which the guard or handle turns in opening and closing. By this means I am enabled to form the parts of uniform thickness and to produce a joint or hinge between them, the strength of which is, if anything, practically greater than that of any other portions of the device, while it is more easily and cheaply constructed than the old form of riveted joint. Incidentally in this connection my invention includes forming the ends of the guard or handle, where they are bent around the rectangular shank of the screw, in such manner as to constitute inclined surfaces which end in depressions or recesses for the reception of the sides of the loop of the screw-shank when the latter is turned outward into position for use, the elasticity of the handle or guard tending to preserve this engagement, and to thereby hold the parts rigidly in alignment when extended, while the inclined surfaces, when the device is closed, by the same means tend to retain the parts in that position.

Another feature of my invention consists in forming from a single piece of wire a screw provided with a cutting hook or edge for severing the wires by which some corks are held in position, the said wire-cutter being so situated with relation to the screw that the cork-wires may either be severed independently by the said cutting-edge before the insertion of the screw into the cork, or the cutting-edge may be made to perform its office simultaneously with and during the penetration of the cork by the screw—each extremity of the wire of which the device is constructed answering a separate and distinct purpose, the one constituting the screw, and the other the cutting hook or knife.

In the accompanying drawings Figure 1 is an elevation of my improved folding corkscrew extended. Fig. 2 is a similar view of the opposite side to that shown in Fig. 1. Fig. 3 is an elevation of the device closed. Fig. 4 is an edge or bottom view of the device closed. Fig. 5 is an edge view of the device closed, and Fig. 6 is a cross-section of the screw and wire-cutting hook or blade on plane of line x x, Fig. 2.

The corkscrew proper of the device, C, is made from a single piece of wire, one end of which is formed into the screw c, while the

opposite end or shank, c', is bent into the form of a lateral elongated loop, c^2, having a straight portion which performs the function of a pivot, c^3, for the handle or guard B, extending at right angles to the length of the screw. The remaining end of the wire, after completing the loop c^2, is secured to the upper extremity of the screw portion c and extends downward into and between the convolutions of the latter a short distance, sufficient to constitute a hook, c^4, which is sharpened and provided with a cutting-edge, c^5. In the drawings the upper portion of the screw-shank c' is shown as twisted or bound about the shorter or hooked end c^4 at the base of the loop c^2; but it is obvious that, if preferred, the order of fastening may be reversed, and the shorter hooked end c^4 be in a similar manner secured to the upper end of the screw-shank c' with like effect. The hooked cutting end c^4, while conforming to and intervening between the convolutions of the screw c, and preferably not extending beyond the periphery of the latter, still presents its point between the two adjoining thicknesses of the screw in such position that it may readily be inserted between the wires to be cut and the cork which they bind by using the device in a position at right angles to the bottle to be opened. The point of the hook c^4 having been thus inserted under the wire, a partial turn of the device causes the cutting-edge to sever them, the body of the corkscrew c being used as a lever, if necessary, to assist the cutting-edge; but, owing to the position of the cutting-edge c^5 with relation to the corkscrew c, under ordinary circumstances this preliminary operation may be dispensed with, and the wires may be severed during the operation of causing the screw to penetrate the cork, since, when the screw has penetrated to a sufficient depth, the cutting-edge c^5 is bound to encounter the wires, and, during the continued revolution of the screw, sever them. Aside from its offices in severing the wires, the hook or cutter c^4 also performs the service of an auxiliary screw in grasping and removing the cork, as in a variety of corkscrews heretofore known.

The combined guard and handle G is also formed of a single piece of wire of desirable thickness, its middle portion being bent into any appropriate form for convenience in handling, while its extremities converge sufficiently to admit of their being twisted around the straight portion c^3 of the loop c^2. In thus bending them around the pivot c^3, the extreme ends are turned inward toward the center, so that the eyes or knuckles g, thus formed, present inclined surfaces, which are held against the ends of the loop c^2 by the elasticity of the handle or guard G. Thus when the screw is folded over or closed, the outward pressure exerted by the inclined knuckles g against the inner sides of the ends of the loop c^2 prevents the opening of the screw until sufficient force is applied to cause the ends of the loop c^2 to surmount the inclines and force the knuckles g toward each other against the resistance of the bow G. Coinciding with the position of the ends of the loop c^2 of the screw-shank c' when the screw c is extended, I form depressions or recesses g' in the outer surfaces of the knuckles g, which receive and hold the said ends of the loop c^2, and, again, owing to the outward pressure exerted by the ends of the bow or holder G, tend to preserve the alignment and rigidity of the screw when extended. These depressions or recesses g' may be formed by bending the material forming the eyes or knuckles laterally inward, as shown at g^2, Fig. 4, so as to preserve the uniform strength and thickness of the material; or they may be formed, if preferred, by notching the outer sides of the knuckles, as indicated at g^3, Fig. 4, where the thickness of material used might render this unobjectionable.

What I claim as my invention, and desire to secure by Letters Patent, is—

1. A folding corkscrew consisting of two pieces of wire, one of which is formed into a screw having a shank formed with an elongated transverse loop, a portion of which forms the pivot around which the ends of the other piece of wire shaped to form the handle or guard, are bent for the purpose and substantially in the manner described.

2. In a folding corkscrew formed from two pieces of wire shaped and connected substantially as set forth, the inclined outer surfaces of the knuckles formed by the extremities of the holder or guard, in combination with the loop formed in the shank of the screw, substantially in the manner and for the purpose described.

3. In a folding corkscrew formed from two pieces of wire shaped and connected substantially as set forth, the recesses or depressions formed in the knuckles, which are shaped from the extremities of the holder or guard, in combination with the loop formed in the shank of the screw, for the purpose and substantially in the manner described.

4. A corkscrew constructed of a single piece, one extremity of which is formed into the screw, having a shank formed with a loop, and the other extremity of which is formed with a cutting-edge, for the purpose and substantially in the manner described.

JAMES K. P. NOURSE.

Witnesses:
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A. M. B. FULLER.