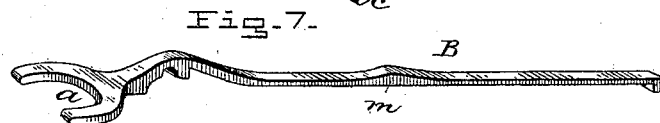
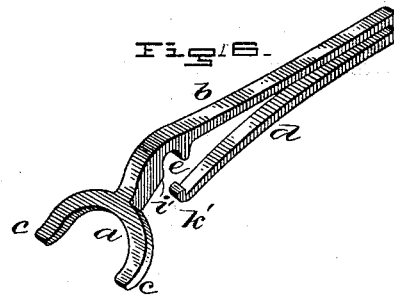
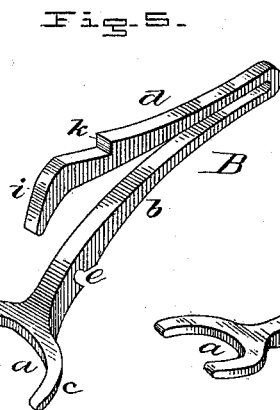
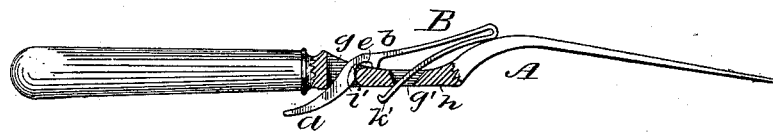
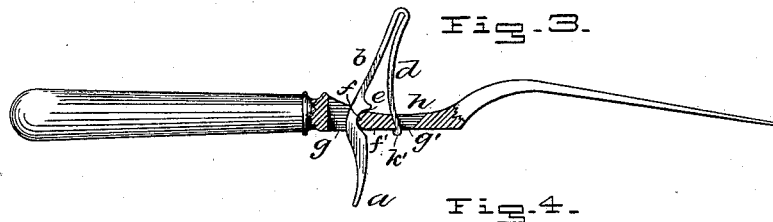
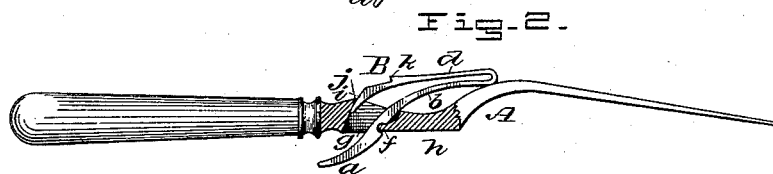
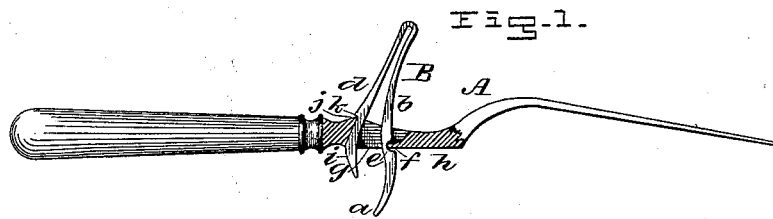


(Model.)

G. H. WARREN.  
CARVING FORK GUARD.

No. 264,004.

Patented Sept. 5, 1882.



WITNESSES:

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Attys

# UNITED STATES PATENT OFFICE.

GEORGE H. WARREN, OF SHELburnE FALLS, MASSACHUSETTS.

## CARVING-FORK GUARD.

SPECIFICATION forming part of Letters Patent No. 264,004, dated September 5, 1882.

Application filed May 24, 1882. (Model.)

*To all whom it may concern:*

Be it known that I, GEORGE H. WARREN, of Shelburne Falls, in the county of Franklin and State of Massachusetts, have invented certain Improvements in Guards for Carving-Forks, of which the following is a specification.

My invention relates to guards for carving-forks, formed either with or without feet to support the fork and raise it from the table; and the invention consists in forming or providing the guard with a spring member so constructed and applied that it serves to retain the guard in the fork without the use of pivot-pins or other fastenings, and also to retain the guard either in an elevated or folded position, as desired.

In the drawings, Figure 1 represents a side elevation of a fork provided with my improved guard, a portion of the shank being broken away to show the construction more clearly; Fig. 2, a similar view, but showing the guard folded down; Figs. 3 and 4, like views, showing a slightly different form of guard; Figs. 5 and 6, perspective views of the guards detached; Fig. 7, a view of the guard-blank as first forged.

The objects of my invention are to produce a guard with or without a rest, which may be applied to and retained in a fork without the use of pins, screws, or other fastenings, which shall be neat in appearance and durable, and which may be applied after all other finishing of the fork is completed. To accomplish these objects I construct the guard as shown in the drawings, in which—

A represents a fork, and B my improved guard, which may be formed with or without feet *a*, as preferred. The guard consists of the stem or body portion *b*, preferably having the feet *c* at its lower end to form a rest or support for the fork and the spring-arm *d*, which may be made integral with the body of the guard, as is preferred, or separate therefrom, and attached thereto by rivets or screws. The spring may be turned to the rear, as in Fig. 1, or to the front, as in Fig. 3, and may be made to act either by compression or by tension, as shown in said figures, respectively. The body or main portion *b* of the guard is formed with

a notch or recess, *e*, which straddles or fits over a lip or edge, *f*, at one end of a slot or opening, *g*, formed through the shank *h* of the fork, said lip or edge serving as a pivot or center of motion for the guard, as indicated in the several figures in both forms of the device. When the spring is arranged, as in Fig. 1, to act by compression, the lip is at the forward end of the single opening *g* used under such construction, and the leaf or spring *d* is arranged to bear against the rear end or wall of the slot or opening *g*, the rear or lower end of the spring being formed with a double incline or a V-shaped tail, *i*, which serves to raise or depress the guard according to the position of the ridge or angle of the tail-piece below or above the bearing-point *j*. A shoulder, *k*, limits the upward or backward movement of the guard.

It will be seen that under the construction thus set forth the spring will be most compressed when the ridge or crest of the tail-piece *i* is directly against the bearing-point *j*, and that in passing from said point to either side thereof the spring is allowed to press outward away from the body of the guard, thereby producing the result stated. It is evident that the spring and guard may be reversed, the spring being placed at the front and the feet *a* formed thereon, if used.

When the spring is designed to act by tension two openings, *g* and *g'*, are formed in the shank *h*, and the body of the guard is passed through one and the spring arm or leaf through the other of said openings, as clearly shown in Figs. 3 and 4. As, however, the spring is intended in this form to act by tension, the notch *e* and the double incline, or what corresponds thereto, are formed on the inner sides or faces of the members instead of the outer, as shown, and the action of the spring serves to draw said members against opposite sides or ends of the intermediate portion, *f'*, at one end of which is formed the lip *f*. When the guard is turned down, as in Fig. 4, the spring is permitted to approach the body or stem *b* of the guard, and, bearing against the end or wall of opening *g'* at the lower side thereof, it tends to hold the guard in its folded position, and any attempt to raise the guard will force the spring

outward and produce additional tension until the spring is moved a given distance, when the curved portion  $i'$ , corresponding to the double incline  $i$ , causes the spring to press or urge the guard upward to and to hold it in its upright position. The upward movement of the guard is limited by a lip or shoulder,  $k'$ , formed on the end of the spring, as shown in Figs. 3, 4, and 6.

It will be seen that under both modifications or forms the principle and mode of operation are essentially the same, the force of the spring serving to hold the guard in place, and its curved or inclined portion moving over a fixed bearing-point, serving to make the spring double-acting, whereby it is caused to either elevate or depress the guard, as required.

The guard and spring are preferably formed of one and the same piece of metal, forged in a drop-press in the form shown in Fig. 7, and subsequently bent into shape, finished, and tempered. In forging, a thickened portion or enlargement,  $m$ , is formed at the point where the bend is subsequently to be made, and from that point to the outer end the metal which forms the spring  $d$  is slightly reduced in thickness.

It is obvious that the position of the spring may be either in front or in rear of the guard, though with the different forms I prefer the arrangements shown.

I also prefer to provide the guard with the feet or rest  $a$ , which may, however, be omitted, the guard in such case terminating just below the notch  $e$ .

I am aware that a bifurcated guard held in place by the separation of its two legs or members and retained at different adjustments by friction has been patented, and I make no broad claim to such construction.

The guard represented in Figs. 1 and 2 is applied to the fork by simply passing it upward through the slotted shank from below until the notched portion springs over the lip  $f$  and the shoulder  $k$  passes the bearing-point  $j$ .

To apply the guard shown in Figs. 3 and 4, the doubled end is first passed upward through opening  $g$  until the free end of the spring is carried above the same, when the guard is moved forward until the notch  $e$  reaches its bearing, whereupon the spring-arm is pressed

or sprung forward and passed down through opening  $g'$ .

The notch  $e$  may be formed in the shank and a lip or point formed upon the guard adapted to enter the notch.

Having thus described my invention, what I claim is—

1. In combination with a fork having an elongated vertical slot in its shank, a guard notched to engage over and turn upon a lip or bearing at one end of the slot, and provided with a spring member adapted and arranged to bear against the other end of the slot, and thereby to retain the notched portion in contact with the lip, substantially as shown and described.

2. In combination with a fork having a slotted shank, a guard supported and free to rock or turn upon a bearing at one end of the slot, and provided with a spring member having a curved or beveled end adapted and arranged to move over a fixed bearing-point, as set forth, whereby said spring member is adapted to retain the guard on the shank and to hold it in either an elevated or a depressed position.

3. In combination with the fork A, having slot  $g$ , provided with lip or edge  $f$  and bearing-point  $j$ , the guard B, having notch  $e$ , spring-arm  $d$ , curved or inclined face  $i$ , and shoulder  $k$ , all substantially as shown and described.

4. A guard for forks, consisting of a body, B, provided with a notch or recess,  $e$ , and with a spring member,  $d$ , rigidly joined to the body B at one end, and curved or inclined at its free end opposite the notch  $e$ , substantially as shown and described, whereby it is adapted to act alternately in reverse directions when moved to opposite sides of a given point, and to press the notch against its bearing-point.

5. In combination with a slotted fork having a bearing point or lip, a combined guard and rest notched to bear and turn upon said lip, and constructed substantially as shown and described, whereby it is adapted to be inserted into or removed from the slot by merely overcoming the force of the spring.

GEORGE HENRY WARREN.

Witnesses:

A. K. HAWKS,  
O. R. MAYNARD.