

(No Model.)

C. W. FOWLER & E. H. SHELMAN.
HAND GRENADE.

No. 347,587.

Patented Aug. 17, 1886.

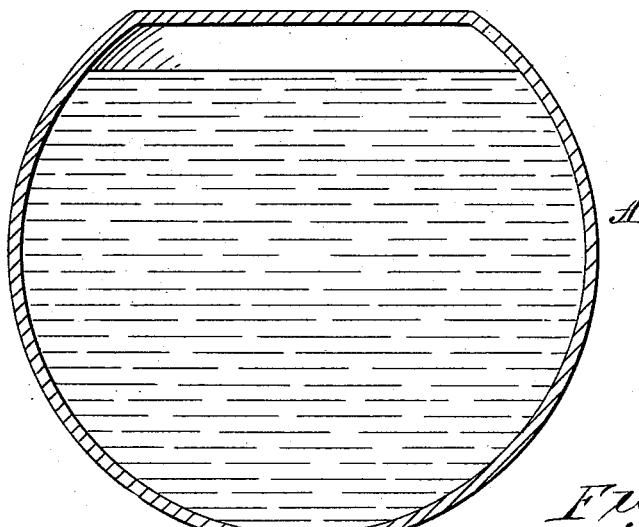


Fig. 1.

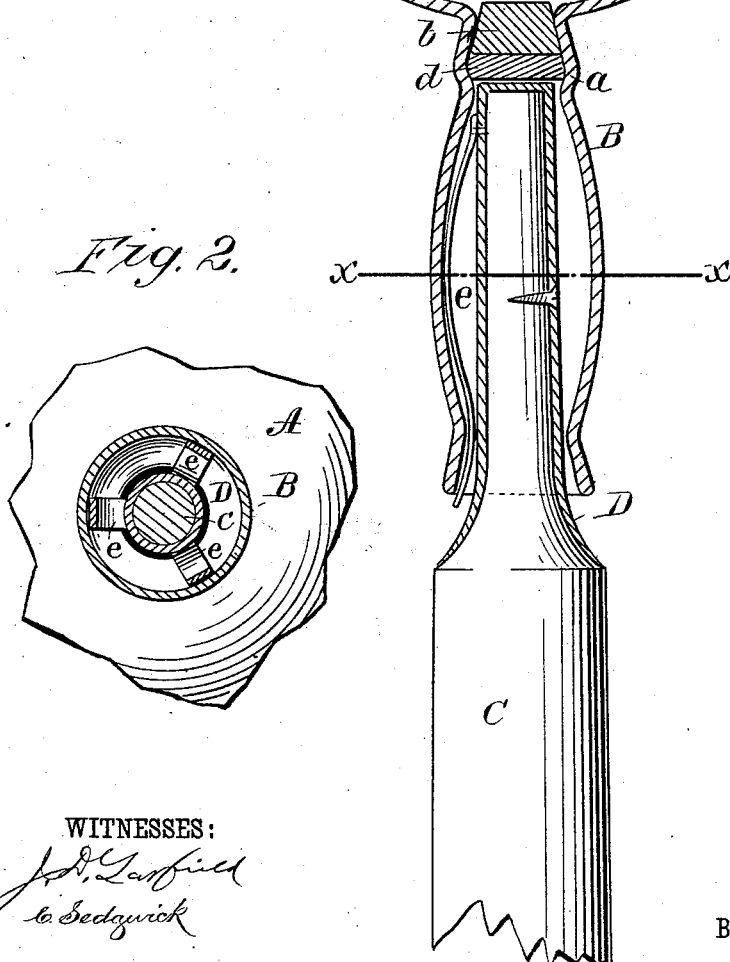


Fig. 2.

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HAND-GRENADE.

SPECIFICATION forming part of Letters Patent No. 347,587, dated August 17, 1886.

Application filed April 29, 1886. Serial No. 200,570. (No model.)

To all whom it may concern:

Be it known that we, CHARLES W. FOWLER and EDWARD H. SHELMAN, of Brandenburg, in the county of Meade and State of Kentucky, have invented a new and useful Improvement in Hand-Grenades, of which the following is a specification, reference being had to the annexed drawings, forming a part thereof, in which—

Figure 1 is a vertical transverse section of our improved hand-grenade. Fig. 2 is a transverse section taken on line *x x* in Fig. 1.

Similar letters of reference indicate corresponding parts in both figures of the drawings.

The object of our invention is to provide a hand-grenade for fire-extinguishing purposes adapted to receive a detachable handle, and in combination therewith a handle for holding the hand-grenade and carrying and applying it to the point of use.

Our invention consists in the construction and arrangement of parts, as will be herein after fully described and claimed.

The body of the bottle A in the present case is approximately of spherical form, and the neck B, formed thereon, is elongated and provided with a recess, *a*, near the bottom of the bottle, for receiving the cork *b* and the sealing-wax or cement, *d*. The neck beyond the recessed portion is bulged or gradually enlarged from the ends toward the middle thereof, and the extremity of the neck is flared to facilitate the entrance to the neck of the retaining-springs of the handle.

The handle or pole C, which is designed to receive and carry the grenade to the point of use and apply it, is reduced in diameter at its end and provided with a ferrule, D, which is smaller in external diameter than the mouth of the neck B. To the ferrule D, near the smaller end thereof, are secured several curved springs, *e*, which extend backward over the ferrule toward the larger part of the handle. In the present case three such springs are employed, the springs being symmetrically arranged around the ferrule and bowed outward sufficiently to contact firmly with the inner surface of the bulged portion of the neck B when the end of the handle C is in-

serted in the neck. The free ends of the springs *e* are curved outward slightly, and bear upon the side of the ferrule D. This arrangement of the springs insures great elasticity, at the same time securing sufficient rigidity to firmly retain the grenade on the end of the handle.

By means of our improvement the neck of the hand-grenade may be readily placed on the end of the handle, and the grenade may be carried by the handle to inaccessible points and there broken.

It is obvious that the arrangement of the springs and handle might be reversed, so as to enable the springs to embrace the outer surface of the neck B, instead of pressing outwardly against the inner surface. It is also obvious that other means may be employed for connecting the hand-grenade with the handle. Therefore we do not limit or confine our invention to the exact form and construction shown in the drawings.

Besides the advantage of readily receiving the end of the handle C, the bulged neck of itself forms a convenient handle for manipulating the hand-grenade.

Having thus described our invention, what we claim as new, and desire to secure by Letters Patent, is—

1. The combination, with a hand-grenade having an elongated neck and a stopper at the juncture of the neck and body, of the removable handle, the upper end of which extends into the neck beyond the stopper, substantially as set forth.

2. A hand-grenade bottle formed with an elongated neck provided with a stopper-recess at the juncture of its neck and body, the part of the neck beyond the stopper-recess forming a handle-socket, substantially as set forth.

3. The combination, with a hand-grenade bottle, A, provided with a bulged neck, B, of a handle, C, carrying curved springs *e*, adapted to engage the inner surface of the bulged neck B, substantially as herein shown and described.

4. A hand-grenade bottle formed with an elongated neck provided with a stopper-re-

cess at its juncture with the body, bulged between the stopper-recess and its outer end to form a handle-socket, and flared at its outer end to form a guide, substantially as set forth.

5 5. As an improved article of manufacture, the hand-grenade A, provided with a bulged neck, B, having a flared outer end, and a removable handle, C, provided with the ferrule

D, carrying curved springs *e*, as herein described.

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Witnesses:

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