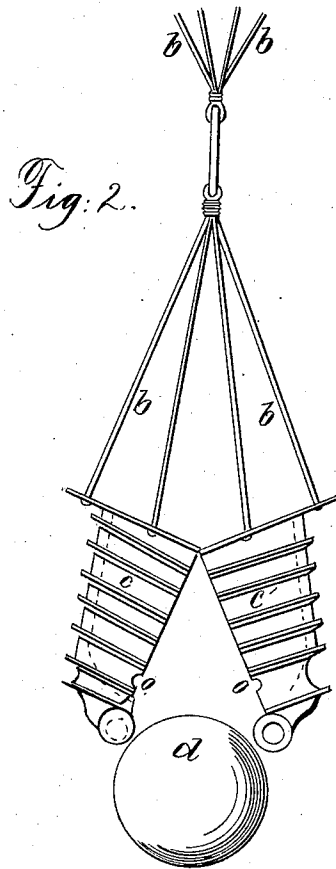
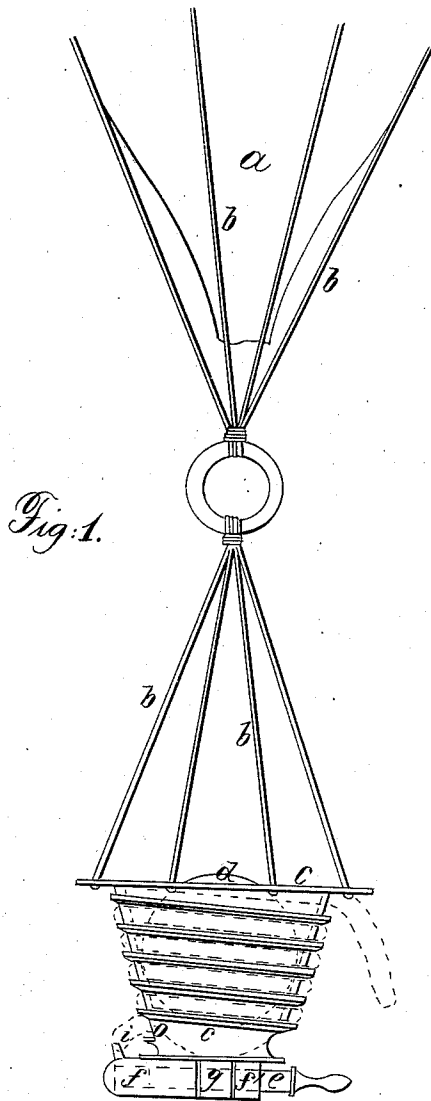


C. PERLEY.
Rocket.

No 37,771

Patented Feb. 24, 1863



Witnesses.

Lemuel M. Sewell

Asst. Gen. Harold

Charles Perley.

UNITED STATES PATENT OFFICE.

CHARLES PERLEY, OF NEW YORK, N. Y.

IMPROVEMENT IN DISCHARGING EXPLOSIVE SHELLS FROM BALLOONS.

Specification forming part of Letters Patent No. 37,771, dated February 24, 1863.

To all whom it may concern:

Be it known that I, CHARLES PERLEY, of the city and State of New York, have invented and made a certain new and useful Means for Discharging Bomb-Shells, &c.; and I do hereby declare that the following is a full, clear, and exact description of the said invention, reference being had to the annexed drawings, making part of this specification, wherein—

Figure 1 is an elevation of my bomb-carrier, and Fig. 2 is a similar view with the bomb dropping out.

Similar marks of reference denote the same parts.

In warfare it is often important to injure an enemy that is entirely out of the range of cannon-shot and too far for bombs to be thrown from mortars, and heretofore it has been necessary to approach within two or three miles of an enemy in order to operate effectively against him.

The nature of my said invention consists in a mode of conveying bomb-shells and other destructive projectiles by means of balloons and discharging them at the time desired, so as to fall and explode in a camp or fortification or city to which it is directed.

In all instances care has to be exercised in getting directly to the windward of the object to be destroyed, and then estimating the speed of the current, so as to know how long the balloon will be in arriving over the designed place, and for this purpose test-balloons or gas-bags may first be sent up. These preliminaries being arranged, it is easily understood that a balloon can be made to pass over any object, and that any-sized bomb or missile of destruction can be carried up over the place to be destroyed.

My invention relates particularly to the means for discharging at a given time, so as to fall at the required place.

In the drawings, *a* represents a portion of a gas-bag, which may be of any usual character and of sufficient size to sustain the weight to be carried; *b b*, cords or wires from the gas-bag to a divided basket, *c c'*, containing the bomb *d* or other missile of destruction, which may be of any size or shape and filled or prepared in any usual manner; and I prefer that

the same be made so as to explode upon striking.

The basket *c c'* is made with a conical interior, so that the weight of the bomb will open the halves thereof and fall out so soon as the fastening at the bottom of the basket is removed. This fastening I make similar to a hinge, and have an easy-moving hinge-pin, *e*, and one part of the hinge is formed similar to a pistol-barrel, as at *f*, so that when the powder contained therein is fired the hinge-pin *e* is fired out, and the parts of the hinge *f*, *f'*, and *g* separate and the bomb drops. In order to fire this barrel *f*, clock-work may be used to set off a hammer to explode a cap on the nipple *i*, and thereby the period of the explosion be timed; but I have shown by red lines in Fig. 1 a fuse wound around between spiral flanges outside of the basket *c*, and by leading one end to the nipple *i* and regulating the length of the fuse the period of the explosion in *f* and the dropping of the bomb may be determined. If desired, the bomb itself may be lighted by leading the end of the fuse through a hole at *o* directly into the bomb, after passing the nipple *i*, so that said bomb would be lighted and fall and explode just before reaching the article to be destroyed. The balloon itself might also be fired and destroyed by the same means.

It will be evident that balloons fitted in this manner and fired by the aforesaid means, or by electricity through a wire, might be employed for harbor-defenses, and either a shot or bomb dropped from four or five hundred yards high upon an approaching vessel would pass entirely through and sink the vessel.

For the destruction of cities at a distance, approaching fleets, and the dispersion of an enemy from camp or intrenchments, particularly when used at night, my said improvement is especially available.

It will be evident that a variety of different devices may be employed for disconnecting the bomb from the gas-bag at a given time. I have, however, shown that which I prefer as being efficacious and certain in operation.

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

1. The employment of a divided basket or

receptacle sustained by a gas-bag, and carrying the bomb or other article to be dropped by the opening of said basket; as set forth.

2. The employment of the hinge-pin *e* and barrel *f* to disconnect the halves of the basket by firing out the said pin *e*, as set forth.

3. A bomb-shell or its equivalent attached to and conveyed by a gas-bag, in combination

with automatic means for disconnecting the said bomb at a given time, as set forth.

In witness whereof I have hereunto set my signature this 24th day of January, 1862.

CHARLES PERLEY.

Witnesses:

LEMUEL W. SERRELL,
THOS. GEO. HAROLD.