

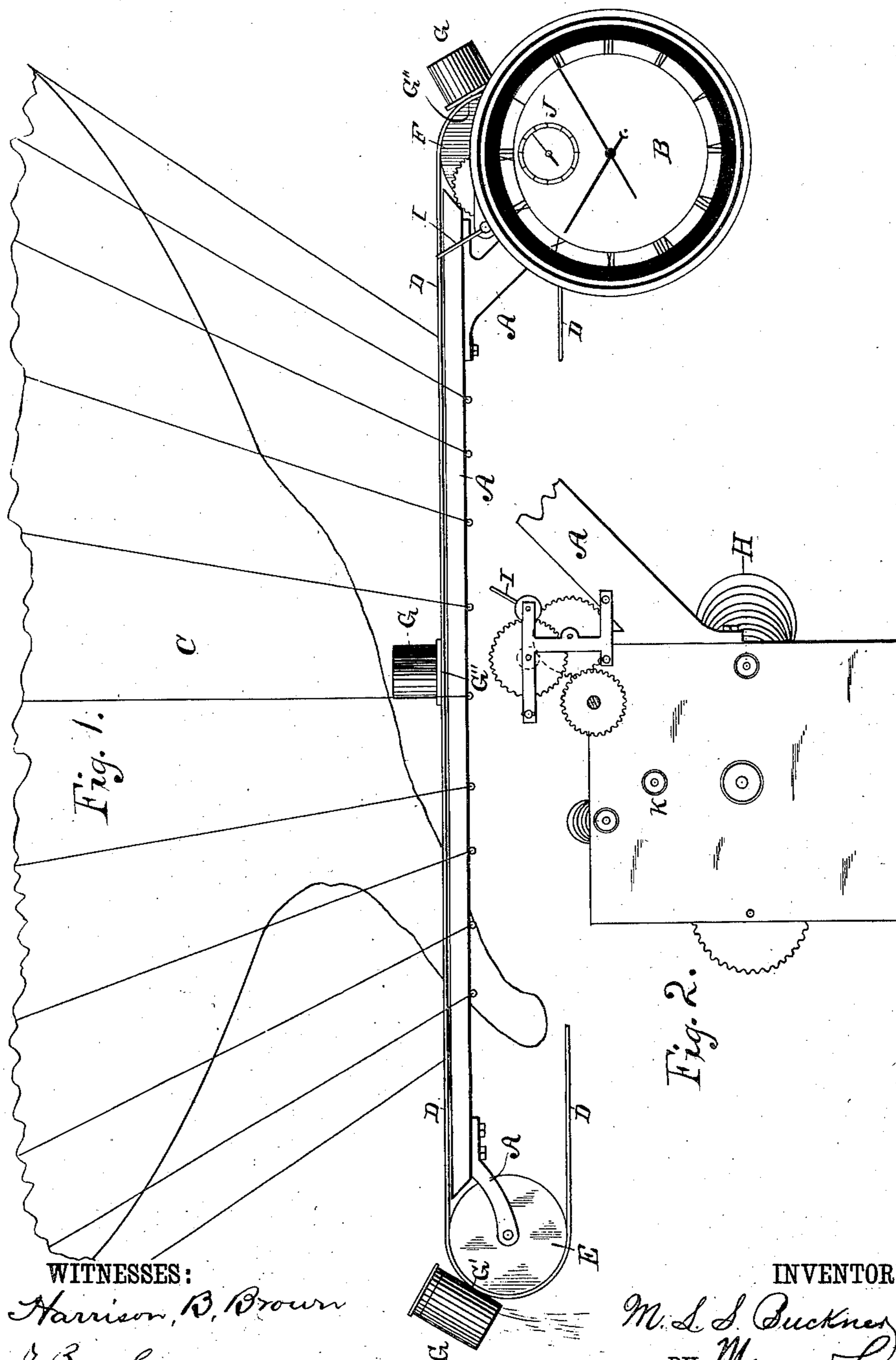
(No Model.)

M. L. S. BUCKNER.

AERIAL DROP FOR EXPLOSIVES.

No. 315,712.

Patented Apr. 14, 1885.



WITNESSES:

Harrison, B. Brown
W. E. Stevens

INVENTOR:

M. L. S. Buckner
BY Munn & Co

ATTORNEYS.

UNITED STATES PATENT OFFICE.

MOSES L. S. BUCKNER, OF SHELBYVILLE, KENTUCKY.

AERIAL DROP FOR EXPLOSIVES.

SPECIFICATION forming part of Letters Patent No. 315,712, dated April 14, 1885.

Application filed September 17, 1884. (No model.)

To all whom it may concern:

Be it known that I, MOSES L. S. BUCKNER, a citizen of the United States, residing at Shelbyville, in the county of Shelby and State of Kentucky, have invented a new and useful Improvement in Aerial Drops for Explosives, of which the following is a description.

This invention relates to aerial transportation of explosives, and dropping them in warfare; and it has for its object to reach the enemy with destroying agents at distances greater than may be done by any present known method of throwing projectiles.

To this end my invention consists in the construction and combination of parts forming the aerial drop for explosives, hereinafter described and claimed, reference being had to the accompanying drawings, in which—

Figure 1 is a front view of my invention, and Fig. 2 shows the principal parts in detail.

A represents a frame of any suitable form, to support a common time-keeping clock, B, and my explosive-dropping arrangements, and to be supported by a balloon, C.

D is a belt or chain mounted to rotate on pulleys E F. The pulley E is a mere roller, and it may be journaled on a level with the pulley F, so as to cause the belt to traverse horizontally, or it may be journaled above the pulley F, causing the belt to travel vertically.

G G are buckets or other receptacles for carrying explosives in any suitable form. These receptacles may hang sidewise against the belt, as at G', or they may sit flat upon the belt, as at G. In either case the revolving of the belt tips the buckets to discharge their contents as each passes over one of the pulleys.

The receptacles may be arranged in any desired order on the belt, either clustered together or equally spaced over its entire length. The pulley F is connected by a train of gear-wheels with a propelling-spring, H, its rate of revolution being governed by a fan-wheel, I, whose blades, being resisted by the air, are restricted to a given speed. This portion of the device is common clock-work, such as is used for similar purposes, and it is here called "propelling mechanism." This propelling mechanism, after being wound up, remains fixed until the clock-hands arrive at the figures indicating the time at which the

device has been previously set to start. Then it starts to revolve, and continues to revolve until the contents of the receptacles G are emptied—that is, until the belt D has made a complete revolution. The shaft of the driving-pulley F would start at once to revolve, as soon as the spring H is wound up, but its revolution is prevented, in the same manner as the alarm of a clock is prevented from operating, until a given time.

J represents the time-hand of the starting device, and K is the knob by which it is set.

In service my aerial dropper for explosives will be managed according to the rules of scientific gunnery and engineering. The speed and course of the wind and the distance to the enemy being ascertained, it only remains to locate the starting-point in the proper line, set the time-escapement to the number of minutes or hours required for the balloon to travel that distance, then start the balloon. Dynamite and such like powerful explosives may be thus dropped upon the enemy from overhead, where he is least protected. A fort, an army, or vessels may be thus destroyed by means wholly irresistible.

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

1. The combination, with a series of explosive-carrying receptacles arranged to empty their contents in rotation, and means for rotating them, of clock-work connected with said means of rotation to start it to rotating at any given time, and a balloon for carrying the said apparatus.

2. The combination, with the frame A and the pulleys E and F, journaled therein, of the belt D, mounted to rotate on the pulleys, the receptacles G, attached to the belt, the spring H, and gear-wheels connecting it with the driving-pulley F, the clock B, provided with the setting-knob K and time-hand J, means connecting the clock with the pulley F, and the balloon C, supporting the frame A and attachments, substantially as shown and described, whereby explosives may be transported through the air for a given length of time, and then be dropped, as specified.

The above specification of my invention signed by me in the presence of two subscribing witnesses.

MOSES L. S. BUCKNER.

Witnesses:

W. X. STEVENS,
SOLON C. KEMON.