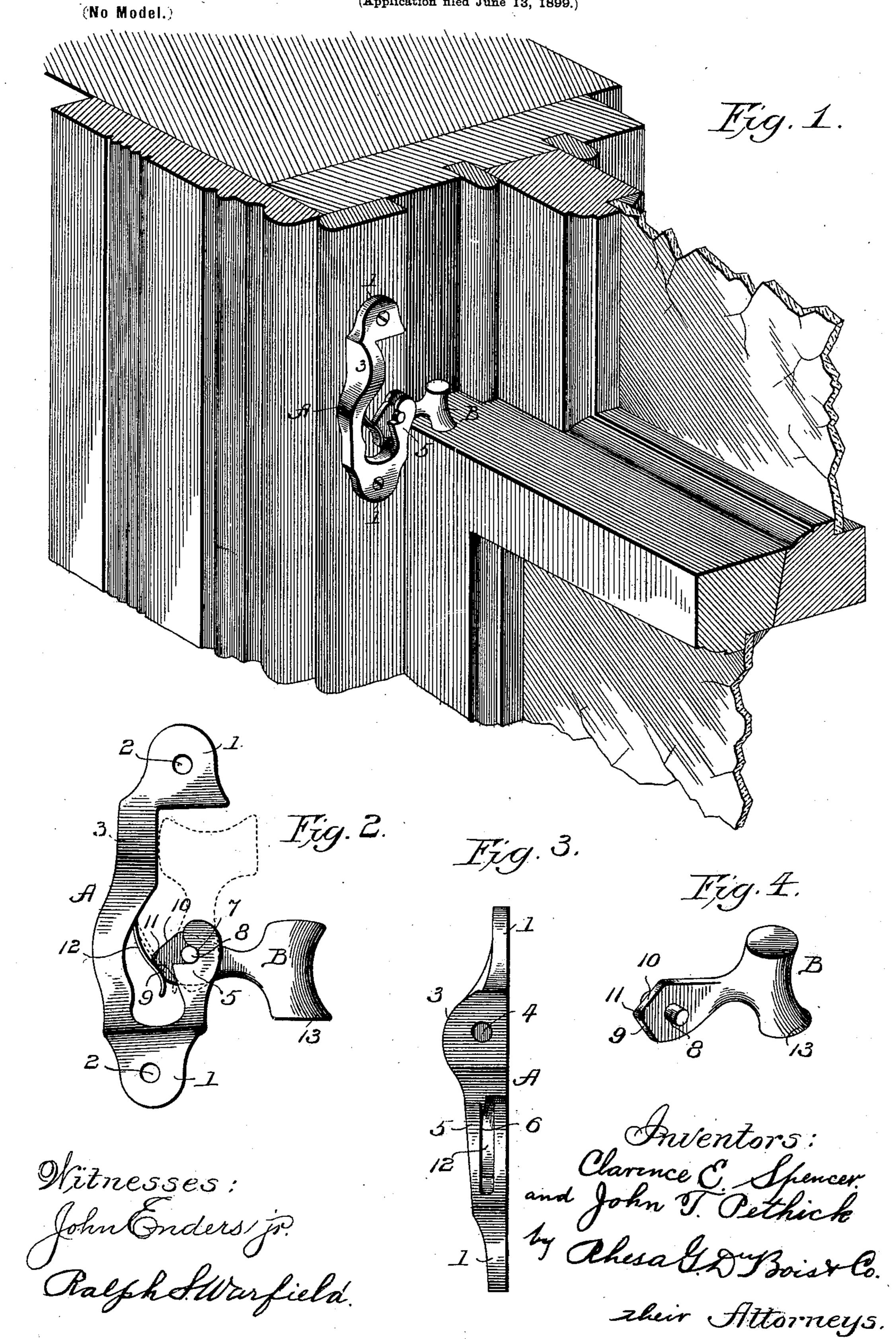
C. E. SPENCER & J. T. PETHICK.

BURGLAR ALARM.

(Application filed June 13, 1899.)



United States Patent Office.

CLARENCE E. SPENCER AND JOHN T. PETHICK, OF CARBONDALE, PENNSYLVANIA.

BURGLAR-ALARM.

SPECIFICATION forming part of Letters Patent No. 633,396, dated September 19, 1899.

Application filed June 13, 1899. Serial No. 720,357. (No model.)

To all whom it may concern:

Be it known that we, CLARENCE E. SPENCER and JOHN T. PETHICK, citizens of the United States of America, residing at Carbondale, in the county of Lackawanna and State of Pennsylvania, have invented certain new and useful Improvements in Burglar - Alarms, of which the following is a specification.

Our invention relates to an improvement in burglar-alarms; and the object is to provide a simple, inexpensive, and effectual article of manufacture for application to windows and doors for giving an alarm to the occupants of the buildings whereon they are applied when an attempt is made to burglarize them or a forced entrance of any kind is attempted.

With the foregoing object in view our invention consists in certain novel features of construction and combinations of parts as will be more fully described hereinafter, and particularly pointed out in the claim.

In the accompanying drawings, Figure 1 is a view showing the device applied in position on a window-casing, and Figs. 2 and 3 are detached views showing the burglar-alarm from different points of view.

A represents the frame of the device, preferably made of cast metal in the general 30 shape outlined in the drawings—that is to say, substantially flat on its inner face where it rests upon the window-casing, door-frame, or floor, as the case may be, terminating in lugs or ears 11 at its opposite ends, and having 35 holes 2 2 therein to receive a screw or other attaching means for holding it in place, and enlarged at 3 with a hole 4, formed transversely therein to receive a percussion-cap. On the opposite side from this enlargement 40 3 an arm 5 is formed. This arm is preferably split, as at 6, and in the inner face of the split portion the inwardly-opening bearings or sockets 7 7 are formed.

B is a hammer provided with trunnions 8 8, which fit and turn in the open bearings or sockets 7 7. Adjacent to the trunnions and at the inner end of the hammer the two converging cam-surfaces 9 and 10 are formed, they coming together at a moderately sharp 50 angle 11.

A small plate-spring 12 is secured in a slit

or slot in the frame with one end bearing against one or the other of the cam-surfaces of the hammer. The action of this spring may be said to be threefold: First, it is utilized by its outward pressure to retain the trunnions of the hammer in the bearings or sockets 77; second, it acts upon the outer cam-surface 9 when the hammer is raised or "set" to retain it in its set position, and, 60 third, it serves to impart a quick movement to the hammer when the spring has passed the dead-center point upon the hammer, thus imparting an impact upon the cap and causing it to explode with a sharp report.

The hammer has an outwardly-turned ear 13 at its rear end, by which it is grasped by the thumb or a finger to pull it back and set it. When applied to a window-casing, the device is so placed that the hammer extends 70 into the path of the window-sash, so that the window upon being moved against it forces the hammer to a point where the dead-center is crossed by the spring, and the hammer flies against the cap with sufficient force to ex-75 plode it.

It is obvious that the device is very simple and capable of being manufactured and placed upon the market at a small initial cost, as it consists of a few number of parts which 80 may be easily made and put together. The application to a window or door requires no special skill, as any one can attach it by the use of a hammer or screw-driver. Furthermore, in operation it is most effective.

Slight changes might be resorted to in the form and arrangement of the several parts described—such as, for instance, the general shape of the parts, the particular variety of spring, and the bearings for the hammer— 90 without departing from the spirit and scope of our invention, and hence we do not wish to limit ourselves to the exact construction herein shown and described; but,

Having thus described our invention, what 95 we claim as new, and desire to secure by Letters Patent, is—

The combination with a main frame having an enlargement therein to form a seat for a percussion-cap, an arm projecting from the 100 frame and having inwardly-opening bearings or sockets formed therein, of a removable

hammer provided with trunnions which turn in these bearings or sockets, the hammer provided with converging cams and a spring connected with the frame and housed and guard-5 ed by the main portion and the arm and normally bearing upon one or the other of the converging cams, said spring having the three functions of retaining the trunnions in their bearings or sockets, locking the hammer in

its raised position and imparting a sudden to impact of the hammer upon the cap when it is released from its locked position.

CLARENCE E. SPENCER.
JOHN T. PETHICK.

In presence of— E. A. WHEELER,
R. S. RETTEW.