

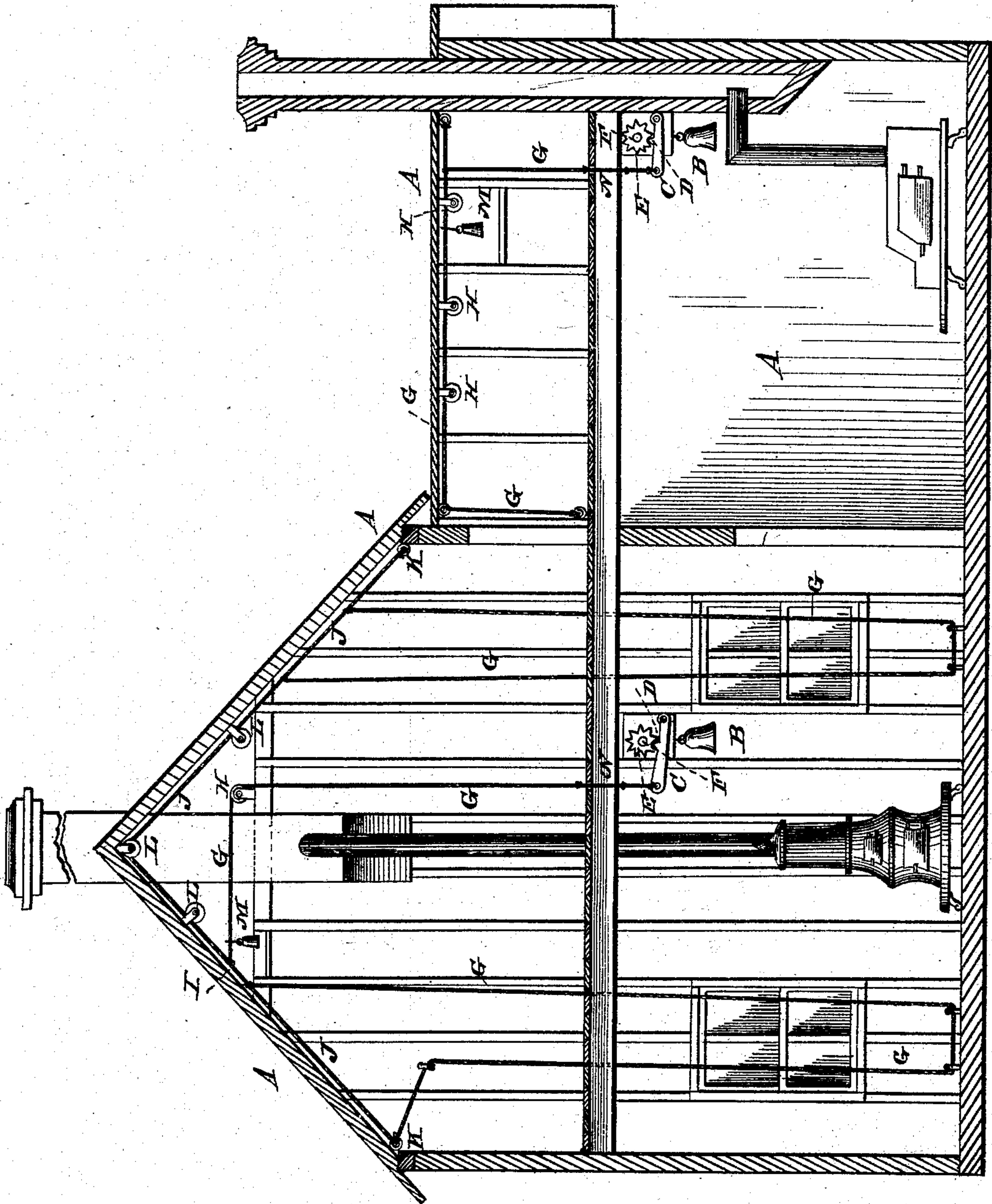
(No Model.)

E. EARLEY.

FIRE ALARM.

No. 252,362.

Patented Jan. 17, 1882.



WITNESSES

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UNITED STATES PATENT OFFICE.

EDWARD EARLEY, OF NEWTON, IOWA.

FIRE-ALARM.

SPECIFICATION forming part of Letters Patent No. 252,362, dated January 17, 1882.

Application filed November 11, 1881. (No model.)

To all whom it may concern:

Be it known that I, EDWARD EARLEY, of Newton, in the county of Jasper and State of Iowa, have invented certain new and useful Improvements in Fire and Burglar Alarms; and I do hereby declare that the following is a full, clear, and exact description of the invention, which will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawing, which forms a part of this specification.

This invention relates to an improved automatic fire and burglar alarm for buildings, the construction and operation of which will be hereinafter fully described with reference to the drawing, which represents a sectional view of a building to which my invention has been applied.

A in the drawing represents the building, and B is an alarm-bell, or other suitable alarm mechanism, located in one of the bed-rooms, or at any suitable point in the building where, when started, it cannot fail to attract attention. Said alarm, which may be operated by springs, weights, or any other suitable power, is, when wound or set, held at rest by a lever, C, having a tooth, D, engaging one of the notches in a cog-wheel, E, upon the main shaft F of the alarm. When the lever drops down to the position shown in dotted lines the cog-wheel is released and the alarm sounded.

Attached to the outer or free end of the lever C is an inflammable cord, G, which passes oversuitably-arranged pulleys or staples H, and is attached at I to a second inflammable cord, J. The ends of the latter are made fast at two points, K K, and it is stretched over a system of pulleys or staples, L, so that it shall cross and recross all points in the building which are exposed to the danger of fire or the invasion of burglars, or both. The said cords must be stretched perfectly taut, so as to keep the lever C in engagement with the alarm mechanism, and to take up any slack caused by expansion of the cords. I suspend upon cord G a weight, M, heavy enough for this purpose.

The cord, where it crosses windows, doors,

and other places exposed to the invasion of burglars, must be sufficiently frail to be ruptured in case it should be attempted to effect an entrance into the building. On the other hand, at points where it is exposed to the ravages of rats and mice, &c., it is my intention to substitute for the cord short lengths of fine wire, as shown at N, to prevent the cord being cut and the alarm being sounded by these or other destructive animals.

The operation of my invention will be readily understood. When the cord is cut or burned at any point it is instantly slackened, thus causing the lever C to drop down, when the alarm is instantly sounded. Two or more alarms may be arranged in different parts of the building, thus simplifying the arrangement of the cords.

My improved fire and burglar alarm is simple, effective, automatic in its operation, and it may be put up at a comparatively trifling cost.

Having thus described my invention, I claim and desire to secure by Letters Patent of the United States—

1. In a fire-alarm, the combination of the cord J, arranged as described, the cord G, having its ends attached respectively to said cord J and to the free end of a weighted lever, C, having tooth D, and a suitable alarm mechanism having toothed wheel E, held inactive by said lever C when cord G is taut, substantially as set forth.

2. In a fire-alarm, the combination of the cord J, arranged as described, the cord G, having its ends attached respectively to said cord J and to the free end of a weighted lever, C, having tooth D, a suitable alarm mechanism having toothed wheel E, capable of being held inactive by the said cord G, and a weight, M, suspended upon the latter, substantially as set forth.

In testimony that I claim the foregoing as my own I have hereto affixed my signature in presence of two witnesses.

EDWARD EARLEY.

Witnesses:

JOHN C. WILSON,
THOMAS H. PORTER.