

No. 679,176.

Patented July 23, 1901.

A. J. LINDEN.
FIRE ALARM.

(Application filed Jan. 18, 1901.)

(No Model.)

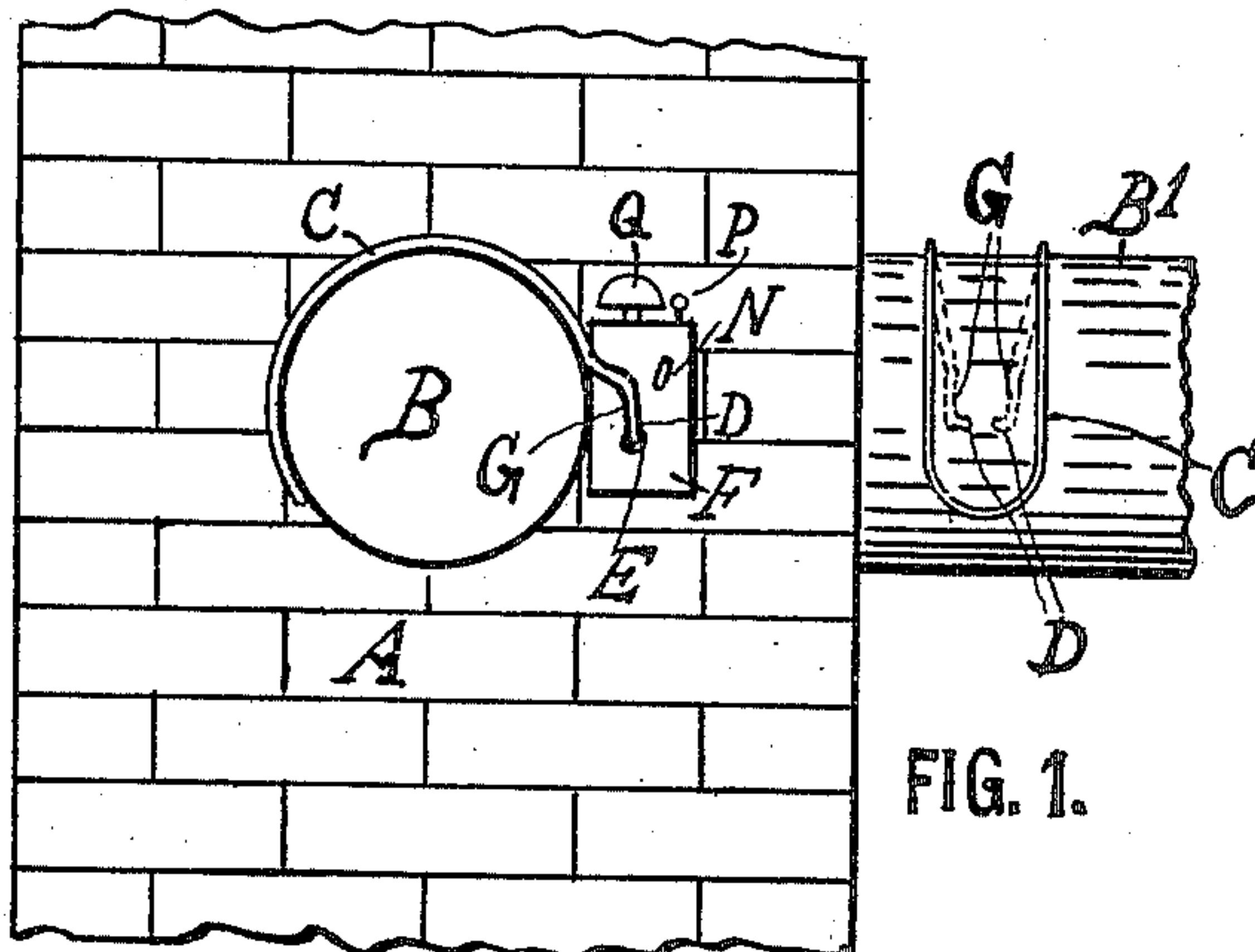


FIG. 1.

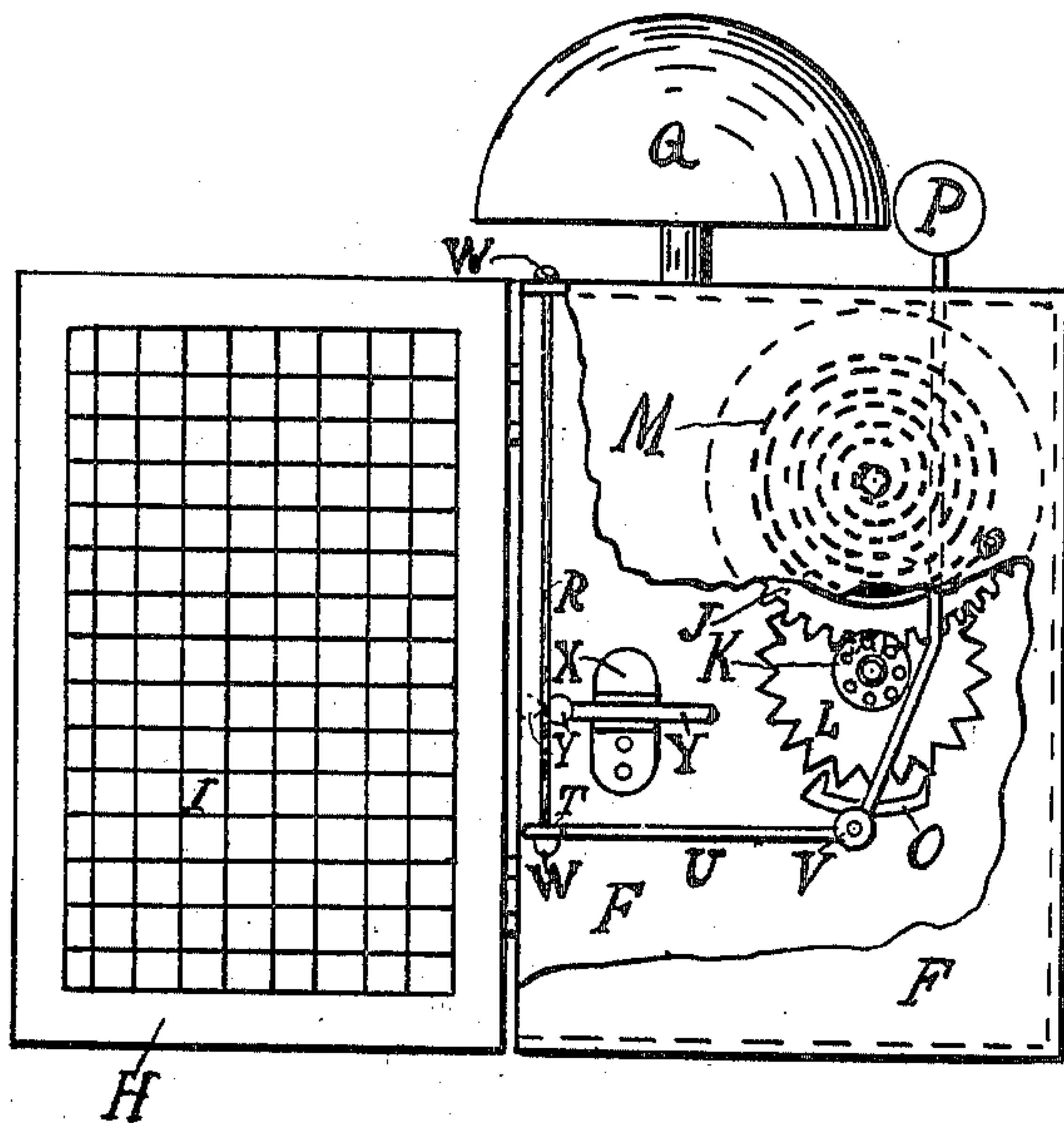


FIG. 2.

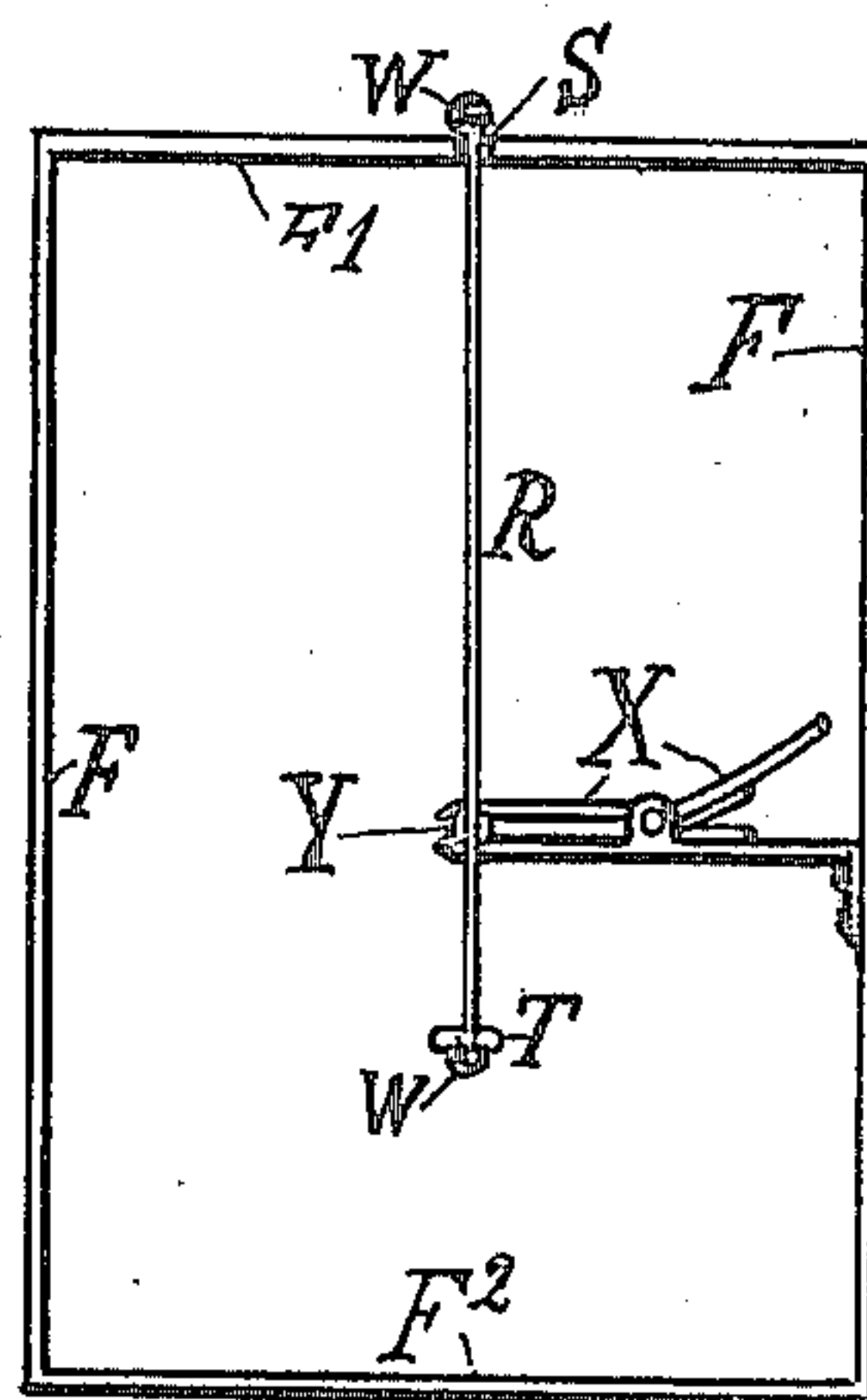


FIG. 3.

WITNESSES:

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UNITED STATES PATENT OFFICE.

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FIRE-ALARM.

SPECIFICATION forming part of Letters Patent No. 679,176, dated July 23, 1901.

Application filed January 18, 1901. Serial No. 43,822. (No model.)

To all whom it may concern:

Be it known that I, ANDREW J. LINDEN, a citizen of the United States, residing at Hitterdal, in the county of Clay and State of Minnesota, have invented certain new and useful Improvements in Fire-Alarms; and I do declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to the letters of reference marked thereon, which form a part of this specification.

My invention relates to improvements in fire-alarms, and has for its purpose the providing of a handy efficient fire-alarm device easy to keep in order and securable especially to stovepipes near chimneys, so that when dangerous heat is caused by the burning of soot in the stovepipe or in the chimney the device will signal the alarm before the building may take fire. This object I attain by the novel construction and arrangement of parts illustrated in the accompanying drawings, in which—

Figure 1 is a side elevation of a portion of a chimney with stovepipes inserted therein, one shown from the end and the other from the side and my fire-alarm secured on the end view of the pipe, while only the clasp holding the alarm is shown in the side view of the pipe. Fig. 2 is an enlarged side view of the device with a portion of the side wall cut away and with the door thrown open. Fig. 3 is a front view of the device looking as from left to right in Fig. 2. The view is simply to give a clear idea of the position of the match-holding clasp, which in Fig. 2 is shown as secured to the left side wall, while in Fig. 3 to the right side wall, of the box of the device.

Referring to the drawings by letters of reference, A represents a chimney; B and B', stovepipes inserted in the same. C is a wire clasp adapted to be forced upon the stovepipe from the side of the latter and to engage with its inwardly-bent ends D the holes E in the sides of the case F of the device, while its inwardly spring-held arms G, by frictional

contact with the sides of the box, hold it in any desired position, tilted more or less from the stovepipe.

The box F F' F² is provided with a door H, through the wire net I of which the heat may pass freely, as may also the air necessary to permit the igniter to burn. In the box F F' F² or in any suitable framework added thereto I provide a train of gear-wheels J K L, driven by the spring M, wound by the key N, (shown in Fig. 1,) and operating the escape-hook O and hammer P, which gives the alarm by striking on the bell Q. The hammer P is normally held arrested in an inactive position by the string R, which is thrown sideways into a notch S in the top of the box and into the hook T of the arm U, extending from the hammer-shaft V and provided with knots W, stopping beyond said notch and hook. In one of the sides of the box I secure the spring-closed clasp or clamp X, which holds between its jaws a match Y, the phosphor of which is placed close to the string R, so that when the phosphor is ignited by the overheated stovepipe or chimney the string will break by being burned, and thus set the hammer free to give alarm by striking on the bell. The match may project with its phosphored end beyond the string, as shown in dotted line in Fig. 2, so as to get it still closer to the stovepipe. A string like R and the match may very easily be replaced after each alarm, and if a more ignitable substance than the end of a match is desired the clamp will readily hold the same just as well as a match.

I am aware that prior to my invention fire-alarms have been made with strings to burn by ignitable substances, so I do not claim such art broadly, nor any of the special features invented by others as far as I know; but

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

1. A fire-alarm device having means for giving alarms and as the means for releasing or starting it a string holding its mechanism normally arrested, a spring-closed clasp or clamp adjacent thereto and a substance ignitable in dangerous temperature held in the

clasp close to the string so as to burn it when ignited.

2. A fire-alarm device having a suitable alarm mechanism and a string holding the
5 same in an inactive condition, an easily-opened clasp adjacent thereto and a match held by the clasp near the string and exposed to such parts of a building as may easily be-

come overheated like stovepipes and chimneys.

In testimony whereof I affix my signature in presence of two witnesses.

ANDREW J. LINDEN.

Witnesses:

S. P. HANSON,
HANS P. HANSON.