

(No Model.)

2 Sheets—Sheet 1.

H. J. OLNEY.
EXHIBIT PROTECTOR.

No. 596,824.

Patented Jan. 4, 1898.

Fig. 1.

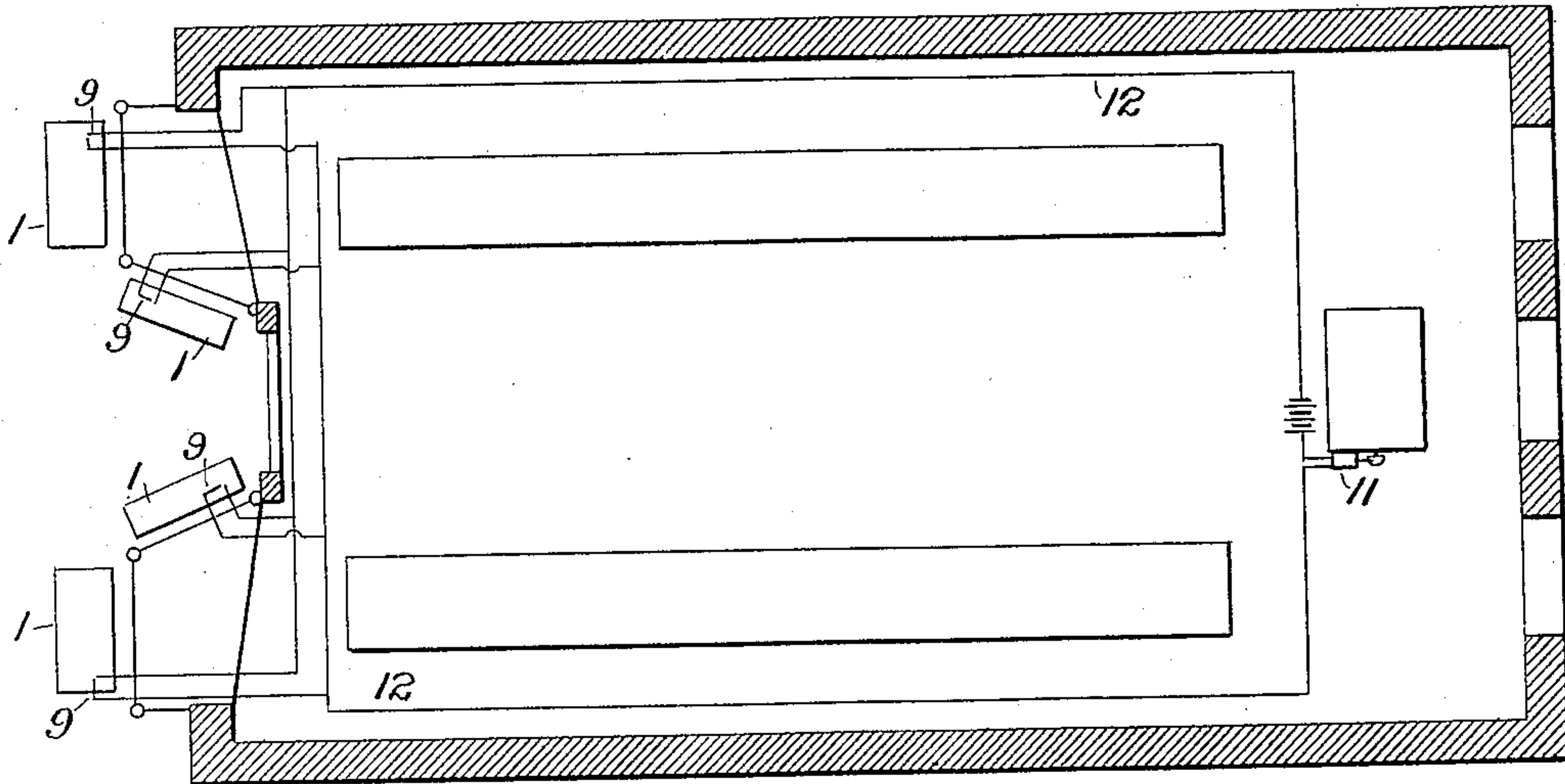
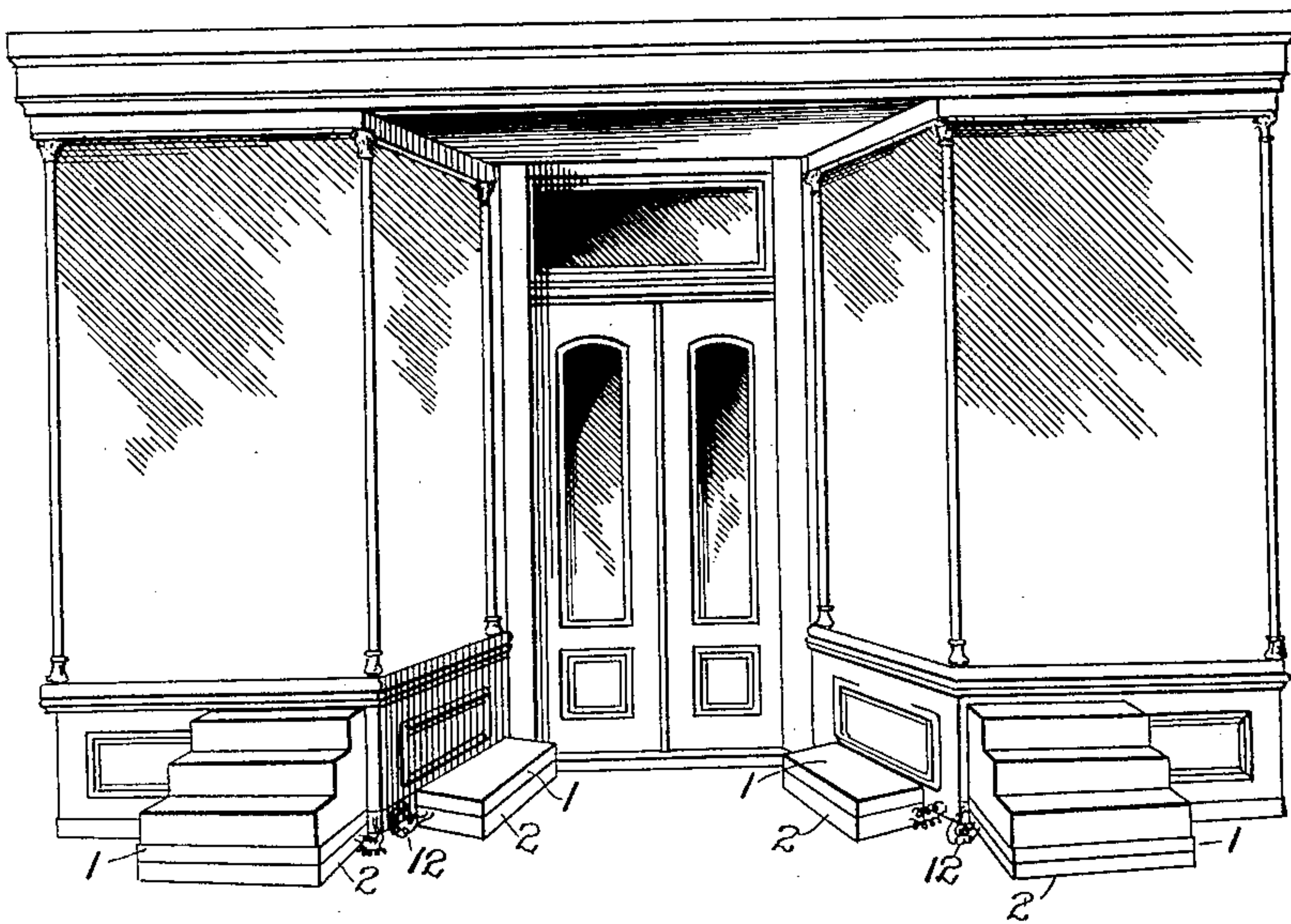


Fig. 2.



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Fig. 3.

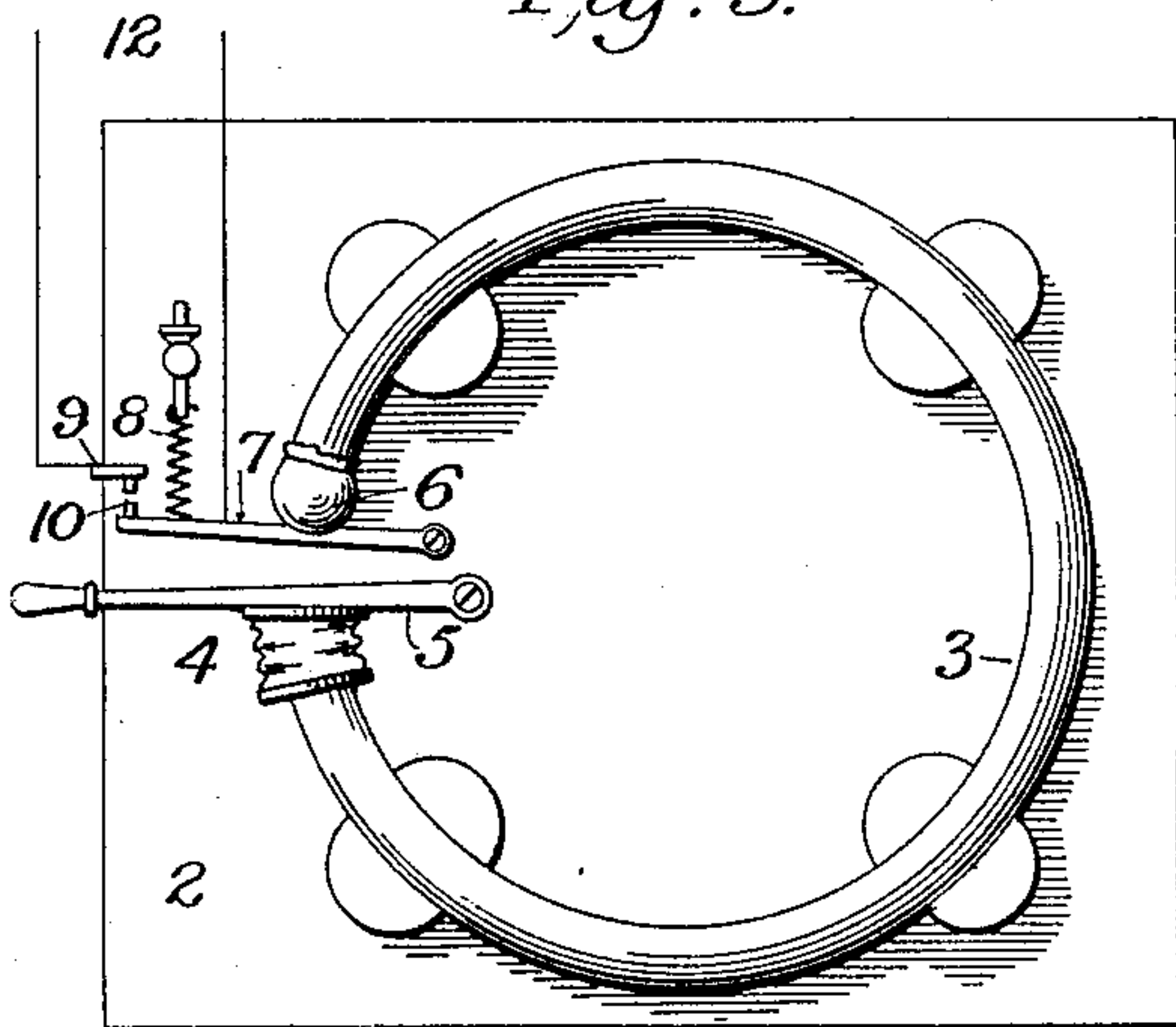


Fig. 4.

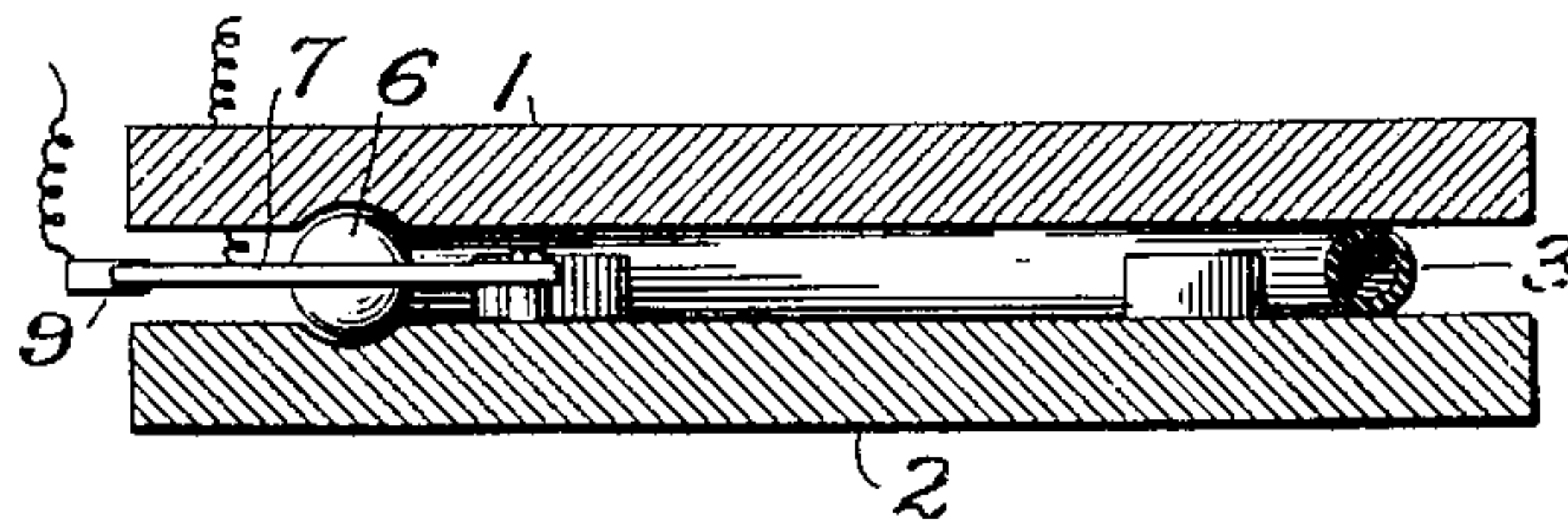


Fig. 5.

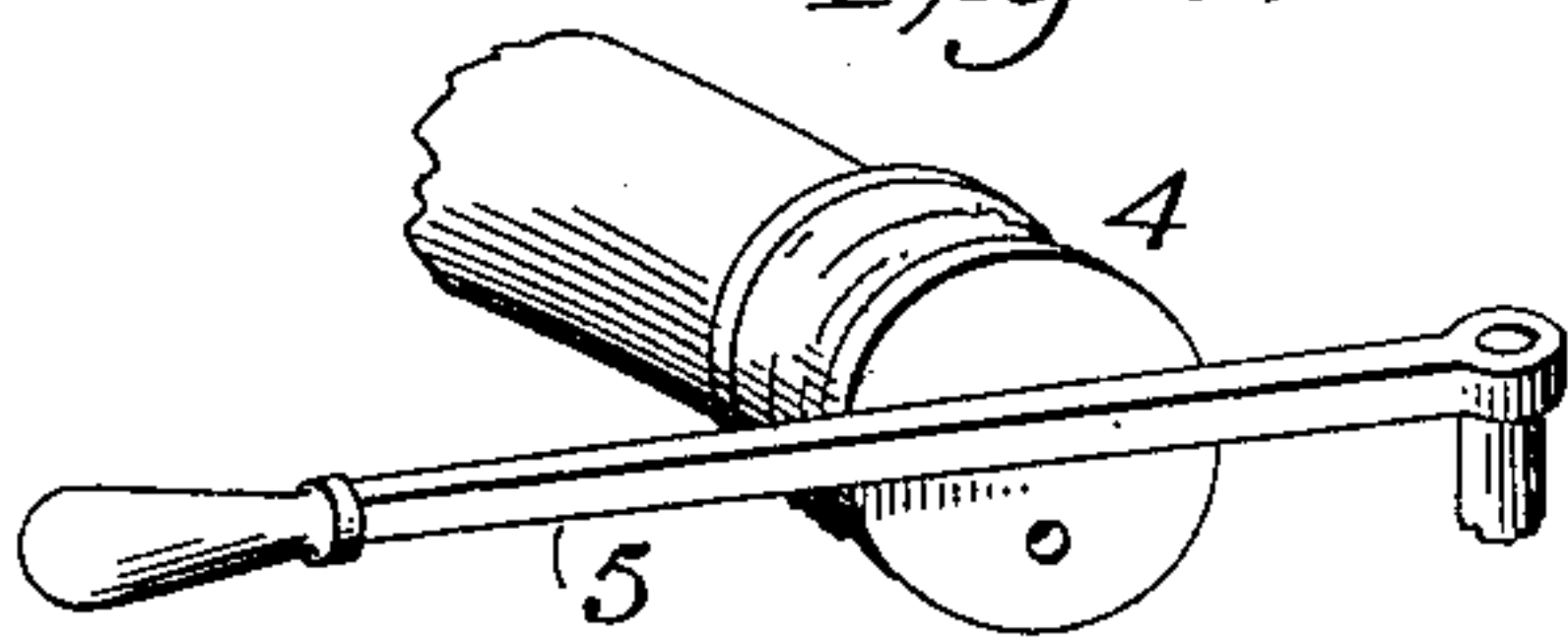
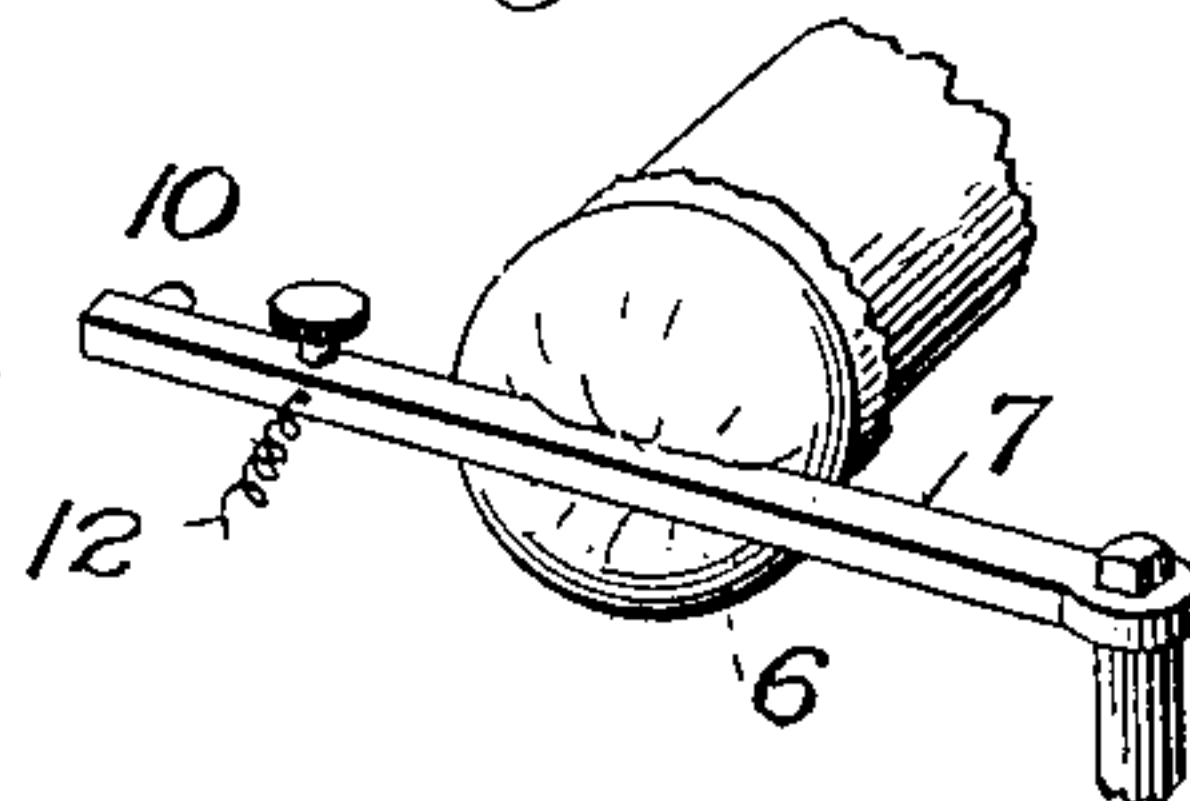


Fig. 6.



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UNITED STATES PATENT OFFICE.

HARMON J. OLNEY, OF CEDAR RAPIDS, IOWA.

EXHIBIT-PROTECTOR.

SPECIFICATION forming part of Letters Patent No. 596,824, dated January 4, 1898.

Application filed March 13, 1897. Serial No. 627,293. (No model.)

To all whom it may concern:

Be it known that I, HARMON J. OLNEY, a citizen of the United States, residing at Cedar Rapids, in the county of Linn and State of Iowa, have invented certain new and useful Improvements in Exhibit-Protectors; and I do hereby 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.

My invention relates to exhibit-protectors.

My object is to provide an improved device adapted for use in connection with exhibits displayed in front of a store to protect the same by automatically giving an alarm if the exhibits are disturbed and thereby insuring against the exhibits being stolen.

Having the foregoing objects in view, the invention consists of certain improved features and novel combinations of parts, appearing more fully hereinafter.

In the accompanying drawings, Figure 1 is a diagrammatic view showing the contacts and the circuit; Fig. 2, a view showing the device in use in front of a store; Fig. 3, a top detail view of the bottom half of the device itself; Fig. 4, a longitudinal section; Fig. 5, a detail showing the compressor, and Fig. 6 a similar view showing the elastic diaphragm and the contact mechanism.

I will first describe the protector itself. Said protector consists of upper and lower members or platforms 1 and 2, which may be of any preferred shape. The lower platform rests on the ground and the upper platform supports the articles being exhibited.

The numeral 3 designates a pneumatic tube which is secured to the platform 2 and is placed in annular arrangement, although its ends do not meet. At one end of the tube there is an ordinary bellows compressor 4, and the numeral 5 designates a lever pivoted to the base thereof, and this bellows can be operated to compress the air within the tube. Over the other end of the tube there is stretched an elastic diaphragm 6, which of course is bulged out or distended by the action of the compressed air.

The numeral 7 designates a lever pivoted to the base and against which the diaphragm presses, a coil-spring 8 being connected to the lever and to the platform 2, so as to keep said

lever normally against the diaphragm. There is an electrical contact member 9 connected to the platform, and the lever 6 carries on its free end a similar contact device 10. In the store there is located near the bookkeeper's desk or in a convenient position to attract attention an electric gong or bell 11, which, together with a battery, is in the circuit that takes in the two contact members. Any preferred tension mechanism could be employed for regulating the spring. It will be observed that when the air is compressed in the tube it acts against the lever 7 and holds the contact member carried thereby away from the contact member 9. This is the case when a sufficient weight is on the upper platform 1 to compress the tube. Immediately upon the article or exhibit being removed from the upper platform, however, the pressure being relieved from the tube, it allows the spring to pull the contact member of the lever against the other contact member and, the electric circuit being completed, the gong is sounded, attracting the attention of any one in the store. It will be seen, therefore, that should stealing of the exhibits be attempted an alarm will be immediately given.

There are many slight changes which could be resorted to in carrying out the present invention without detracting from any of the advantages thereof, and hence I do not limit myself to the precise construction herein contained, but consider that I am entitled to all changes as properly come within the spirit and scope of the invention.

Having thus described the invention, what I claim as new, and desire to secure by Letters Patent, is—

1. In an exhibit-protector, the combination with a lower platform, of an upper platform movable toward and away from the lower platform, a normally-inflated pneumatic tube located between the platforms and on which the upper platform rests and is supported, an alarm, and mechanism operated by the expansion of said tube to sound the alarm when pressure on the upper platform is released.

2. In an exhibit-protector, the combination with a lower platform, of a pneumatic tube superposed thereon and which has an elastic diaphragm, electrical contact devices made

to engage by the movement of the diaphragm, an electrical circuit, an alarm in said circuit, and an upper platform resting on the tube and adapted to sustain the exhibits.

- 5 3. In an exhibit-protector, the combination with a lower platform, of a pneumatic tube located thereon, an elastic diaphragm for said tube, a pivoted lever, a contact device on the platform, another contact device on the lever,
10 a spring which holds the lever against the diaphragm, an electric circuit in which the contact devices are located, a signaling device in said circuit, and an upper platform resting on the tube and which supports the
15 exhibits.

4. In an exhibit-protector, the combination with a lower platform, of a pneumatic tube located thereon, an elastic diaphragm for said tube, a compressor for compressing the air in the tube, alarm mechanism actuated by the
20 movement of the diaphragm, and an upper platform resting on the tube which is adapted to support the exhibits.

In testimony whereof I have signed this specification in the presence of two subscrib- 25
ing witnesses.

HARMON J. OLNEY.

Witnesses:

J. H. GRAHAM,
S. RICHEY.