

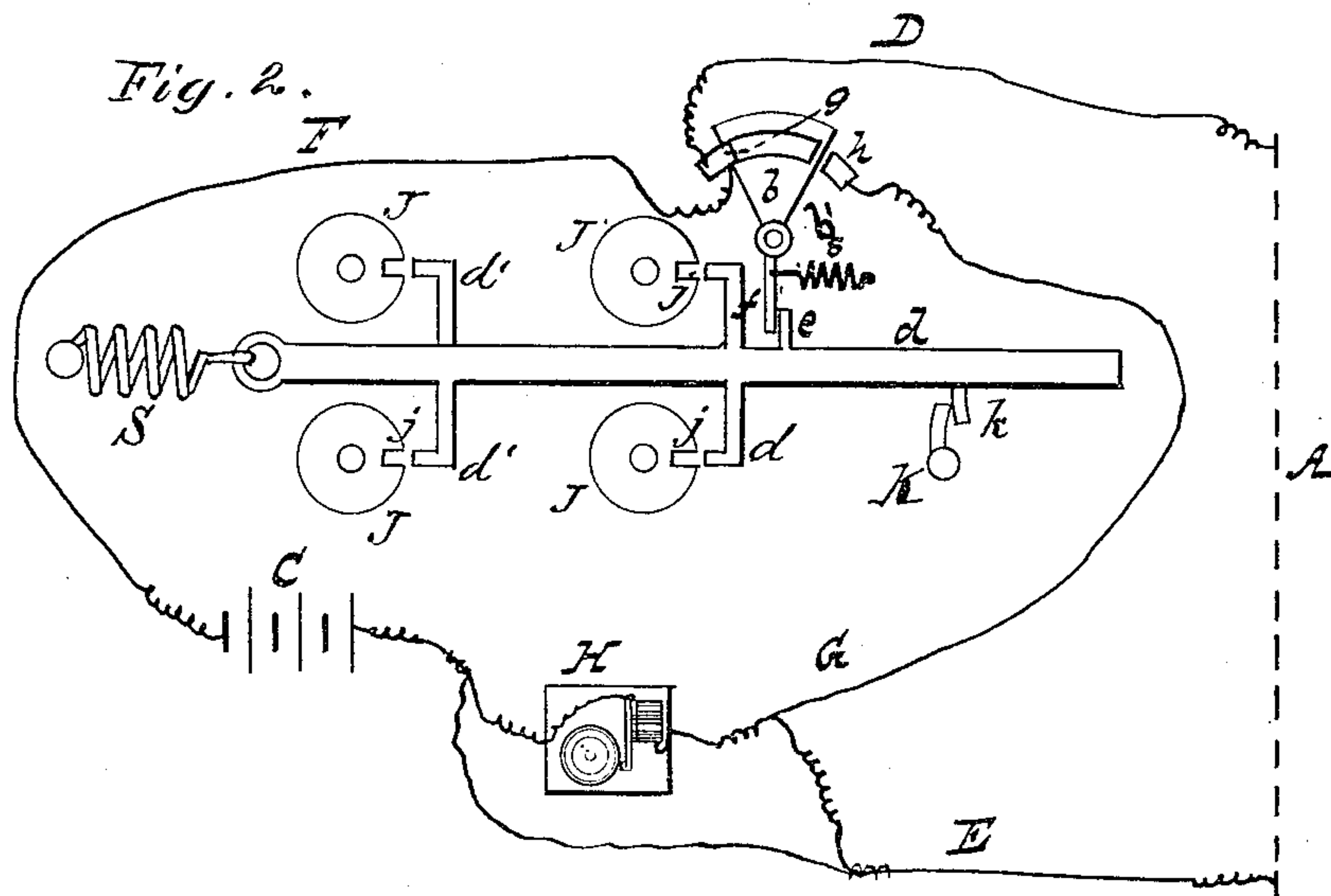
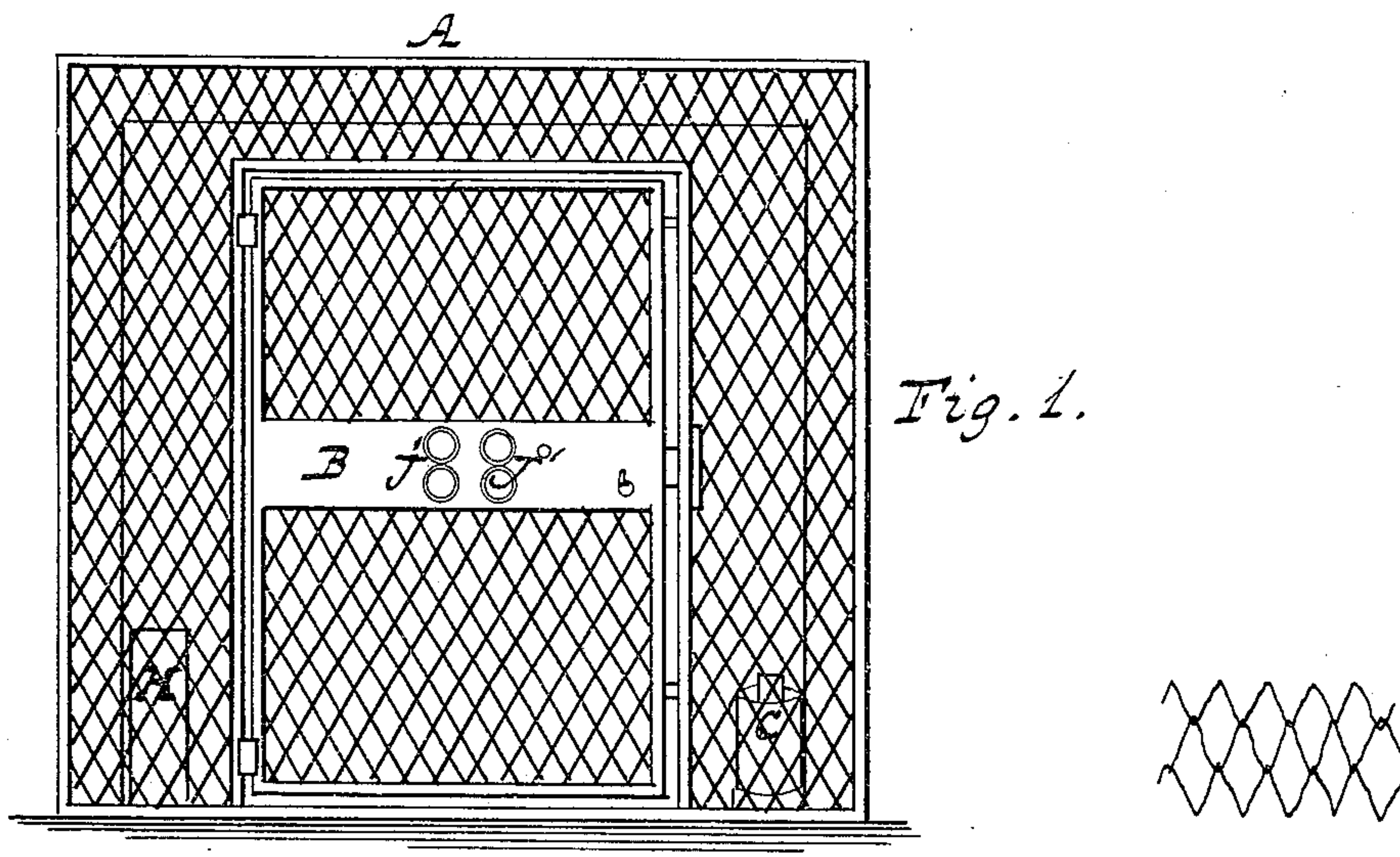
(No Model.)

J. FLECKINGER.

APPARATUS FOR PROTECTING SAFES AND VAULTS.

No. 350,823.

Patented Oct. 12, 1886.



Witnesses:  
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# UNITED STATES PATENT OFFICE.

JOSEPH FLECKINGER, OF ALLEGHENY, PENNSYLVANIA.

## APPARATUS FOR PROTECTING SAFES AND VAULTS.

SPECIFICATION forming part of Letters Patent No. 350,823, dated October 12, 1886.

Application filed March 9, 1885. Serial No. 158,271. (No model.)

*To all whom it may concern:*

Be it known that I, JOSEPH FLECKINGER, a citizen of Prussia, (having declared his intention to become a citizen of the United States,) and a resident of Allegheny city, in the county of Allegheny and State of Pennsylvania, have invented certain new and useful Improvements in Electrical Safe-Protectors, of which the following is a specification.

My invention relates to improvements in the employment of electricity to protect safes used for the deposit of valuable property; and the objects of my improvements are, first, to warn unauthorized persons that the safe is electrically protected; and, second, to cause the sounding of an alarm should an attempt be made to open the door of a cage inclosing a safe or other object. I attain these objects by mechanism, illustrated in the accompanying drawings, in which—

Figure 1 represents a front view of a metallic cage provided with my improvements. Fig. 2 is a diagram of a door-bolt and a portion of its locking device combined with an electric battery, an alarm, a switch, and part of the cage adapted to inclose a safe.

Similar letters of reference indicate similar parts in both figures.

A designates a metallic cage, which may be of any suitable size and shape, and which is properly insulated. B is the door of this cage, provided with a rectilinear sliding bolt, *d*, which is retracted when free by a spring, S. This bolt, which is suitably guided, is provided with rectangular arms *d'*, as shown in Fig. 2, the ends of which are adapted to enter notches *j* in rotative cylinders J when these cylinders are all turned by means of knobs J', so that the notches register exactly with the ends of said arms *d'*. The bolt *d* is also provided with a pin, *k*, adapted to be acted on by a key, K, for shooting the bolt. When the bolt is shot, the cylinders J are turned, so that the notches *j* do not register with the ends of arms *d'*, and the bolt is locked. On the upper edge of the bolt *d* is a pin, *e*, against which is held, by a spring, *s*, the tail *f* of a switch, *b*, which is pivoted at *b'* to the lock-case and suitably insulated. In close relation to this segment-shaped switch is a post, *h*, which is electrically connected by a wire, G, with the electro-magnet of a suitable bell-arm, H.

Within the cage or elsewhere is a galvanic

battery or other suitable generator of electricity, (indicated by the letter C,) from which a wire, F, is carried to a metallic plate, *g*. Another wire, F', connects the other pole of the battery or electrical generator with the alarm H. Other wires, E N D, connect the metallic cage A with said generator, as shown in Fig. 2.

By the above-described contrivance an unlocking movement of the bolt *d* will cause the pin *e* to press against the tail *f* of the pivoted switch and shift the same, so as to cause its metallic plate *g* to contact with the post *h*, and thereby establish a complete circuit through the alarm H, thereby sounding it.

When the cage-door is locked, the bars and wires composing the entire cage will be brought within the electric circuit by the arrangement of wires, as described, so long as the source of electricity is in proper working condition.

It is obvious that the alarm mechanism and the generator of electricity may be located outside of the cage A in any convenient place.

Having described my invention, I claim—

1. The combination of the sliding bolt *d*, provided with arms *d'*, the notched cylinders adapted to operate as described, a retracting-spring for the bolt, a pin, *k*, thereon for a key, the pin *e*, the spring-actuated switch, the plate *g*, electrically connected to a generator, C, the post *h*, its electrical connection with the alarm, and the electrical connection of the latter with said generator, all as described and shown.

2. The combination, with the insulated cage A and its swinging door provided with a sliding bolt having a retracting-spring and an arm, *e*, of the spring-actuated switch, the plate *g*, electrically connected to a generator, C, the post *h*, electrically connected with an alarm, the electrical connection of the latter with the generator and the electrical connections of said cage with the wire G, leading from post *h* to the alarm, and the wire leading from the alarm to the generator, and also with the wires D F, leading through the switch-plate *g* to this generator, all substantially as described.

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