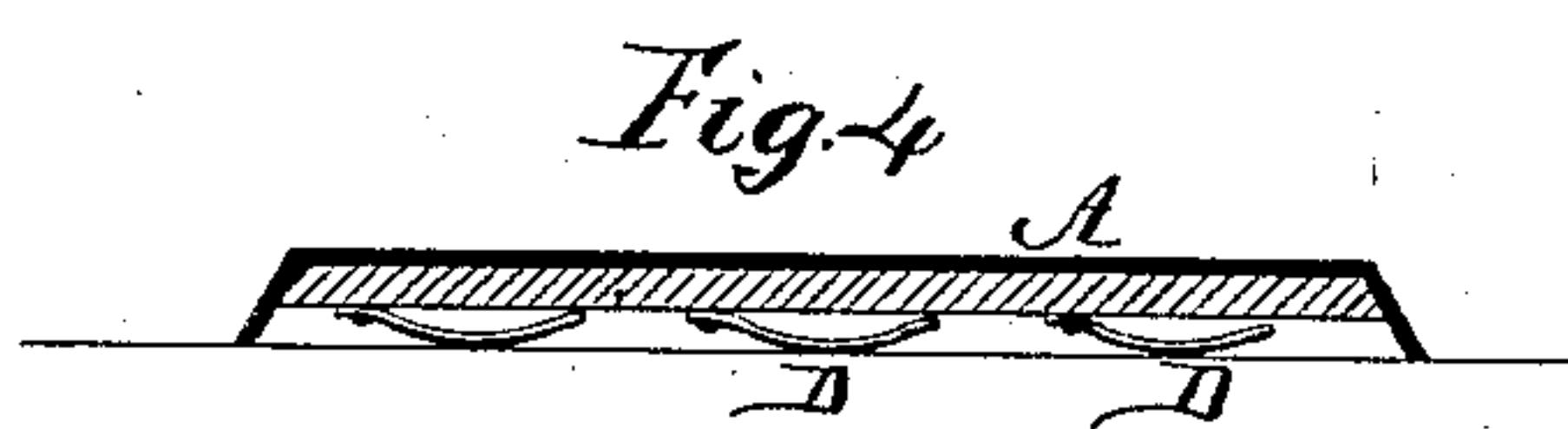
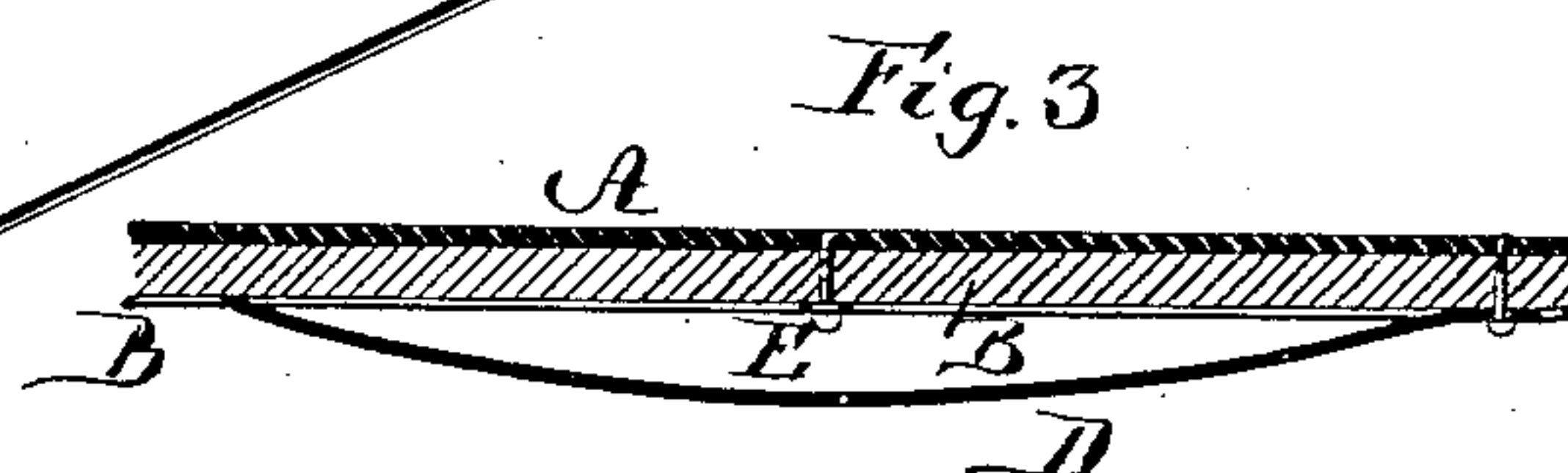
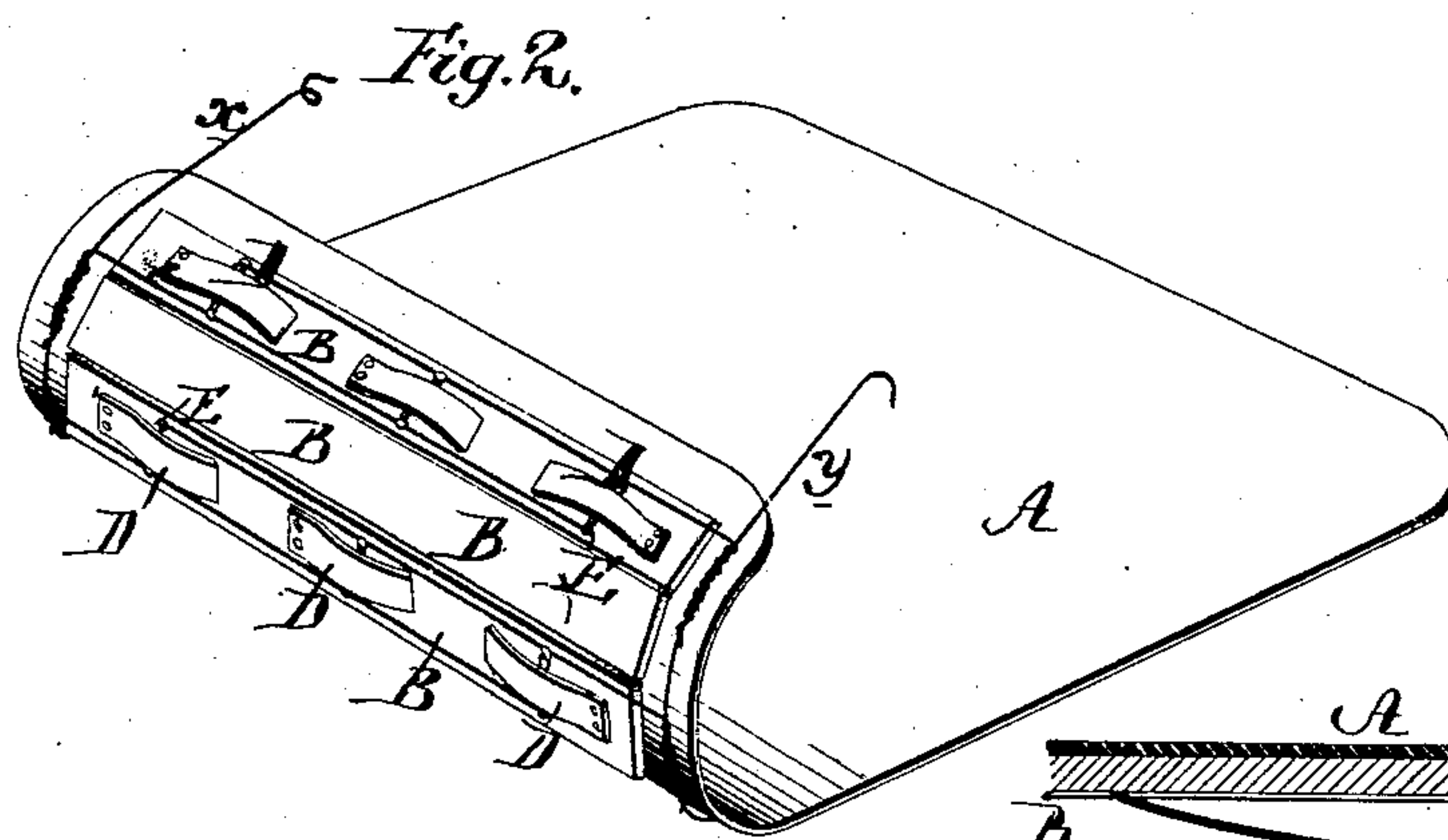
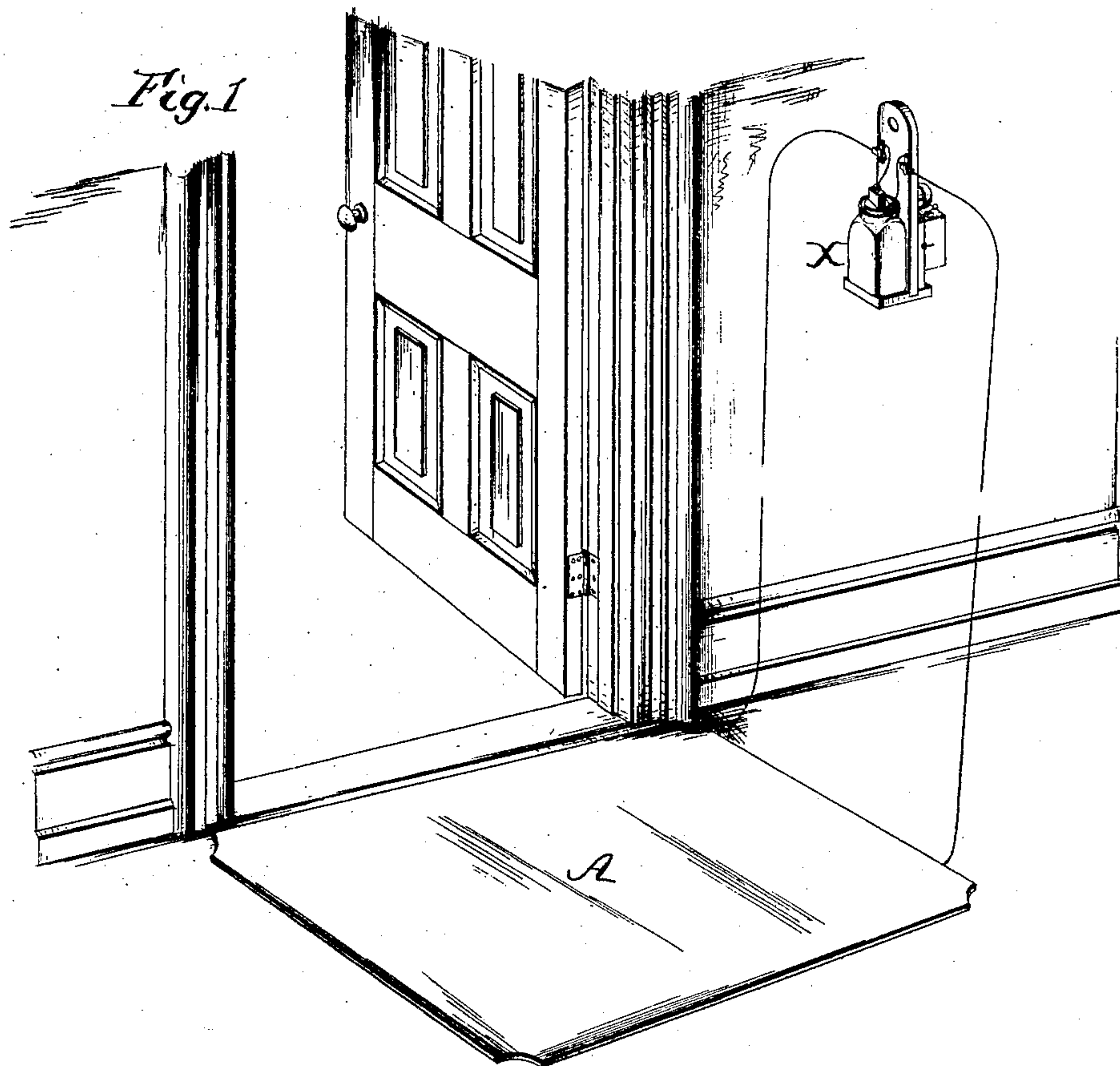


S. S. APPLGATE.  
CIRCUIT-CLOSERS FOR ELECTRIC BURGLAR-ALARMS.

No. 195,074.

Patented Sept. 11, 1877.



Witnesses

John M. Deemer.  
Henry Howson Jr.

Inventor  
Samuel S. Applegate  
by his Attorneys.  
Howson and son

# UNITED STATES PATENT OFFICE.

SAMUEL S. APLEGATE, OF CAMDEN, NEW JERSEY.

## IMPROVEMENT IN CIRCUIT-CLOSERS FOR ELECTRIC BURGLAR-ALARMS.

Specification forming part of Letters Patent No. **195,074**, dated September 11, 1877; application filed August 9, 1877.

*To all whom it may concern:*

Be it known that I, S. S. APLEGATE, of Camden, Camden county, New Jersey, have invented new and useful Improvements in Circuit-Closers for Electric Alarms, of which the following is a specification:

My invention relates to an improvement in the circuit-closers for electric alarms for which Letters Patent of the United States No. 174,461 were granted to me March 7, 1876; and the object of my invention is to render the circuit-closing device portable and applicable in any desired situation without previous preparation.

This object I attain in the manner which I will now proceed to describe, reference being had to the accompanying drawing, in which—

Figure 1 is a perspective view, showing the application of my improvement to a doorway; Fig. 2, a perspective view of the portable circuit-closer; Fig. 3, an enlarged sectional view of part of the circuit-closer; and Fig. 4, a sectional view of a modification of my invention.

A is a mat, of rubber, oil-cloth, carpet, or other flexible material, to the under side of which are secured a number of wooden slats, B, as shown in Fig. 2. To these slats, preferably to each determinate slat, are secured a number of short elliptic springs, D, of metal, which are fastened at one end only, so as to yield under pressure, two metal pins, E, being secured in the slat adjacent to the curved portion of each spring-plate. One pin, E, is connected to one wire, *x*, of an electric alarm, X, Fig. 1, and the other pin is connected to the other wire, *y*, so that when any spring-plate is brought in contact with the pins the electric circuit will be complete, and the alarm will be given.

Supposing the circuit-closing mat A to be placed near a doorway, as shown in Fig. 1, and its pins to be connected to the alarm X, any one entering the doorway and stepping on the mat will cause one or more of the

spring-plates to come in contact with the pins E, thereby closing the electric circuit, and consequently sounding the alarm.

Although I prefer to make the mat of flexible material, it may be rigid, as shown in Fig. 4, and covered or not with carpet or other material, and in either case it may be used as an ordinary door mat or rug, or placed below the carpet or oil-cloth.

Instead of connecting the wires *x y* to two pins in each circuit-closer, one wire may be connected with a single pin, while the other wire connects with the spring-plate. The alarm with which the wire communicates may be placed in any situation which the arrangement of the building, rooms, or other circumstances may suggest.

As the mat, whether flexible or rigid, is in itself a complete circuit-closer, it can be at once placed in position without the preparation demanded in applying the device described in my former patent above mentioned.

When the mat is made of flexible material it can be rolled up, as indicated in Fig. 2, into a small compass, and readily carried from one place to another.

I claim as my invention—

1. The combination of the wires of an electric alarm with a mat and circuit-closing devices attached to the said mat, as set forth.
2. A mat composed of flexible material, provided on its under surface with circuit-closing devices, in combination with the wires of an electric alarm.
3. The combination of the mat A, elliptic springs D, and a pin or pins, E, with the wires of an electric alarm.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

SAMUEL S. APLEGATE.

Witnesses:

JNO. A. BELL,  
HUBERT HOWSON.