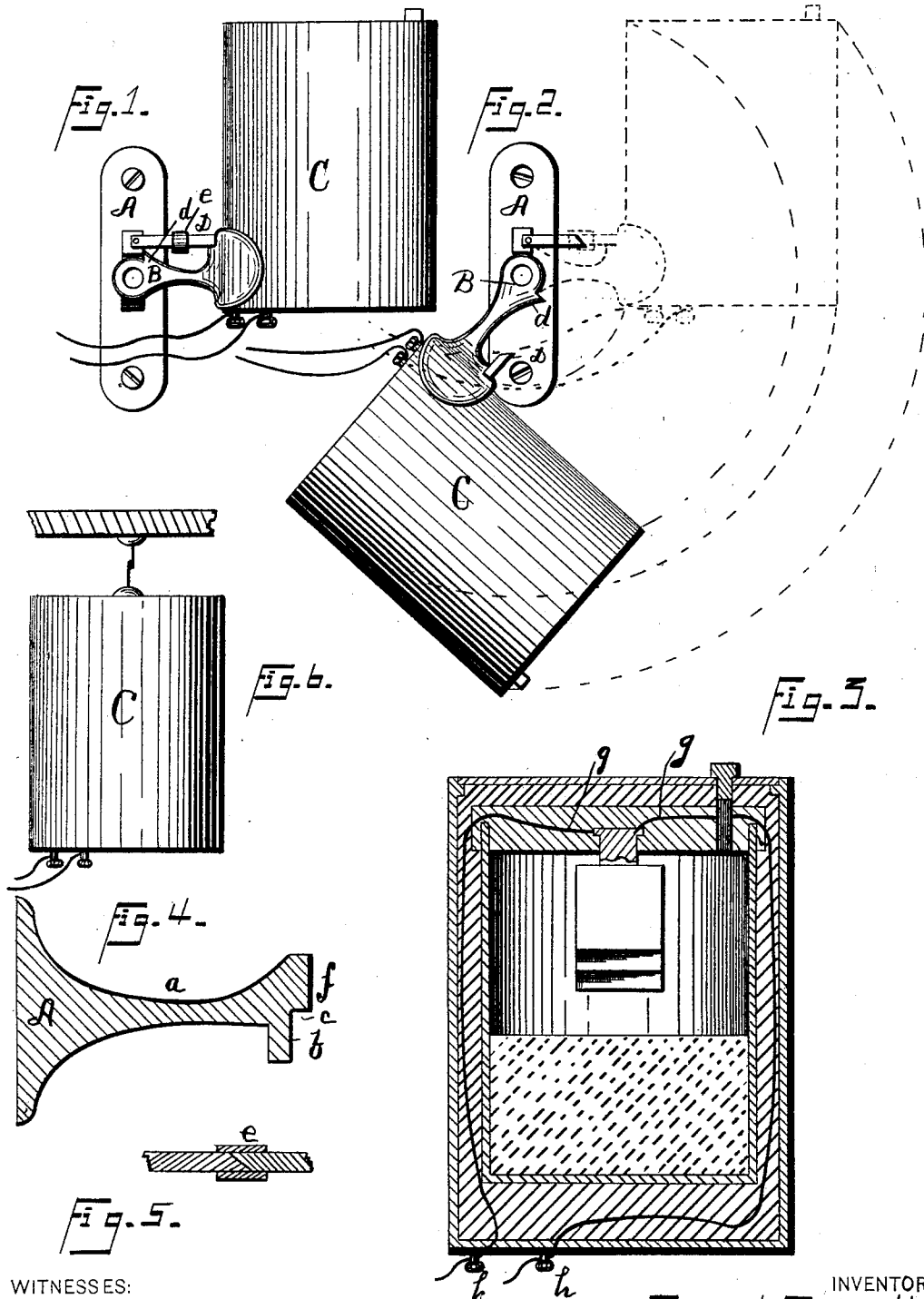


(No Model.)

D. F. HALL.
CIRCUIT MAKER.

No. 522,055.

Patented June 26, 1894.



WITNESSES:

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DANIEL FOSTER HALL, OF SCHENECTADY, NEW YORK.

CIRCUIT-MAKER.

SPECIFICATION forming part of Letters Patent No. 522,055, dated June 26, 1894.

Application filed October 16, 1893. Serial No. 488,227. (No model.)

To all whom it may concern:

Be it known that I, DANIEL FOSTER HALL, of Schenectady, in the county of Schenectady, in the State of New York, have invented new and useful Improvements in Circuit-Makers, of which the following, taken in connection with the accompanying drawings, is a full, clear, and exact description.

This invention relates to electric fire alarms or annunciators or more particularly a device for forming a battery to generate the necessary electricity to actuate the annunciators.

My object is to produce a device in which the elements forming the battery are held normally apart and so constructed and arranged that when the temperature approaches a dangerous point, the elements will be thrown together, a battery formed and sufficient electricity generated to actuate an annunciator at any point desired or to turn on the automatic sprinkler throughout the compartment and to that end my invention consists in the several new and novel features, the combination of parts hereinafter described and specifically set forth in the claims hereunto indicated, and it is constructed as follows, reference being had to the accompanying drawings, in which—

Figure 1 is a side view complete, set ready for use. Fig. 2. is a side view of the same, showing it after the fusible supporting arm has been melted apart and the receptacle in its inverted position. Fig. 3. is a vertical section through the receptacle. Fig. 4. is a cross section of the bracket to which the supporting arm is hinged. Fig. 5. is a longitudinal section of the strut. Fig. 6. is a view of the receptacle supported or hung from the ceiling by the strut, showing the circuit wires leading from its lower end which support it in its upturned position when the strut has been melted apart.

Similar letters of reference indicate corresponding parts.

A. is a bracket having a forwardly supporting web *a.*, the outer edge of which is provided with suitable means *b.* to which the supporting arm B. may be hinged, as shown in Fig. 1, just over the point at which the arm is hinged is a lug *c.* upon the web. The supporting arm B. is provided upon its upper

side with a shoulder *d.* adapted to engage with the lug *c.* to prevent it being raised above a substantially horizontal position. The outer end of the arm B. is provided with suitable means for receiving and holding the receptacle C. D. is a separable strut adapted to be held together preferably by fusible solder and may be used in any form desired, as for instance, the band *e.* I do not, however, limit myself to this sized construction as it will be evident that it may be otherwise fusibly secured together.

One end of the strut D. is secured to the web at the point *f.* and its opposite end to the receptacle C. or the forwardly extending portion of the supporting arm for the purpose of holding it in the upright position shown in Fig. 1.

The receptacle C. is composed of first, a glass or earthen jar and around it is a coating or covering of plaster of paris or other similar material and then a casing constructed of any material desired. Supported from the top of the inner jar, are the electrodes to which the circuit wires *g.* are secured, extending in opposite directions down through the plaster of paris around the binding posts *h.* and then to the annunciator which is located at any point desired. In the bottom of the jar is the solution in which the electrodes are immersed when the receptacle is inverted, thereby forming a battery of sufficient power to generate electricity to actuate the annunciator.

I do not limit myself to the construction of supporting the receptacle shown in Fig. 1., as it will be evident that various ways may be devised for supporting the receptacle in its upright position.

What I claim is—

1. A circuit maker comprising a bracket, a supporting arm pivoted thereto, a battery receptacle having circuit wires secured thereto and in which receptacle, the elements forming the battery are held normally apart and adapted to coalesce when the receptacle is inverted.

2. A circuit maker comprising a bracket, having a lug thereon, a supporting arm having shoulder adapted to engage with said lug on its upper side and pivoted thereto, a re-

ceptacle having circuit wires secured thereto and in which receptacle, the elements forming the battery are held normally apart and adapted to coalesce when the receptacle is inverted.

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3. A circuit maker forming a bracket, a supporting arm pivoted thereto, a battery receptacle having circuit wires secured thereto, and in which receptacle, the elements forming the battery are held normally apart and adapted to coalesce when the receptacle is inverted, and a fusible strut adapted to hold the battery receptacle upright.

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4. A circuit maker comprising a battery receptacle having circuit wires secured thereto, the elements forming the battery held normally apart and adapted to coalesce when

said receptacle is inverted and a fusible strut adapted to support said receptacle normally upright.

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5. In the circuit maker a battery receptacle comprising a jar having the elements forming the battery normally apart and circuit wires permanently connected to the electrodes, said wires passing around outside of said receptacle, a layer of plaster of paris or similar material covering said wires and a casing as set forth.

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In witness whereof I have hereunto set my hand this 12th day of October, 1893.

DANIEL FOSTER HALL.

In presence of—

G. H. GOODWIN,
FRANK FETSHE.