No. 617,938. Patented Jan. 17, 1899.

A. DE F. RISLEY.

ELECTRICAL ALARM MATTING.

(Application filed Jan. 27, 1898.)

(No Model.)

Fig. 1.

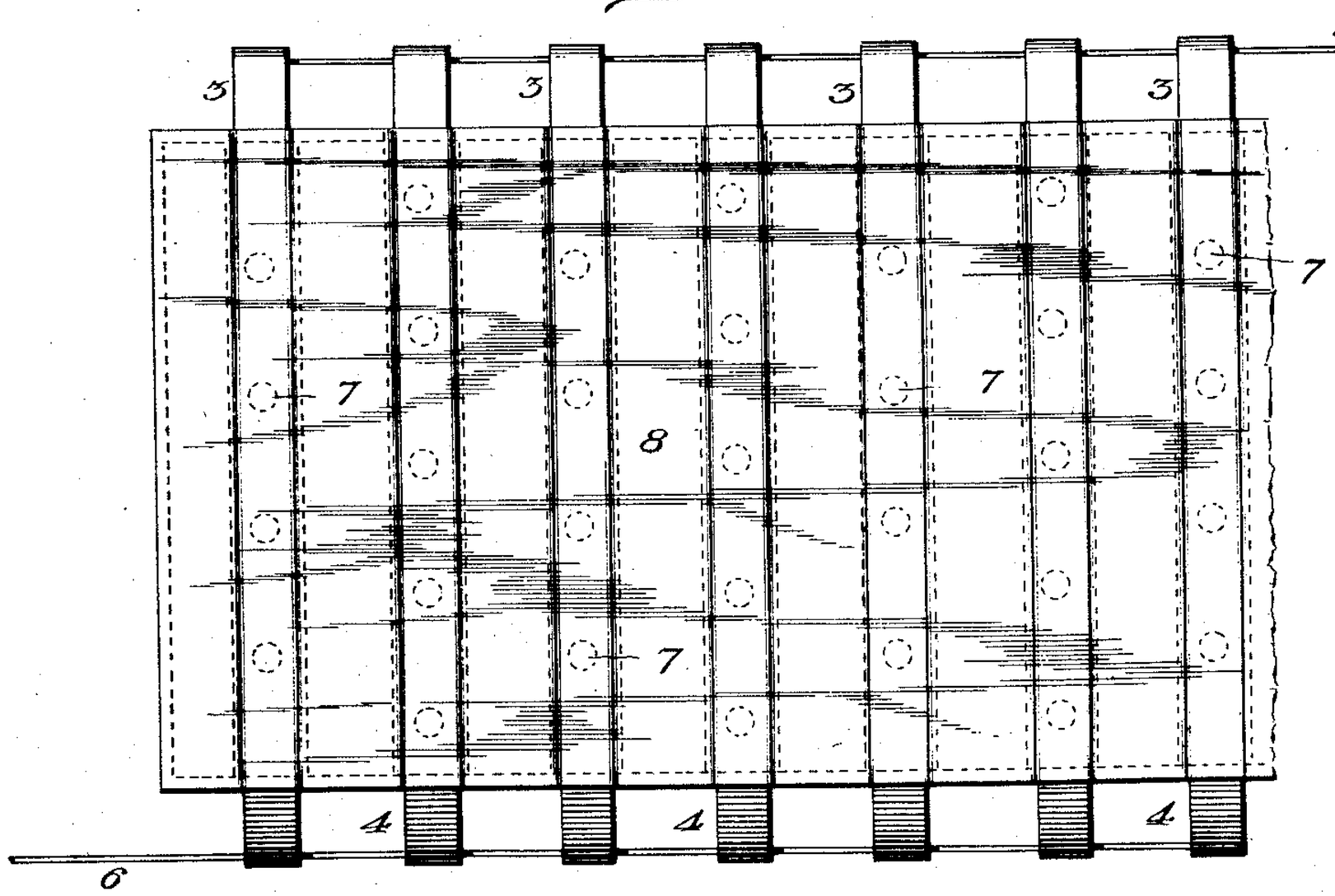

Fig. 2.

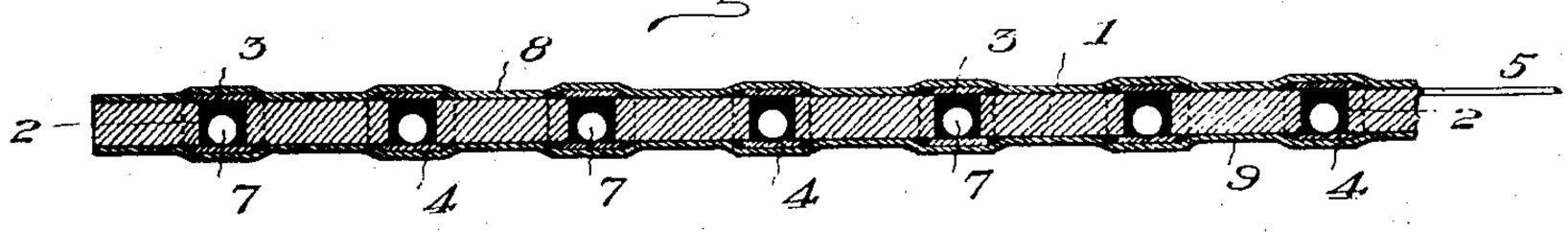

Fig. 3.

Witnesses

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UNITED STATES PATENT OFFICE.

ARTHUR DE FOREST RISLEY, OF RICHFIELD SPRINGS, NEW YORK.

ELECTRICAL-ALARM MATTING.

SPECIFICATION forming part of Letters Patent No. 617,938, dated January 17, 1899.

Application filed January 27, 1898. Serial No. 668,152. (No model.)

To all whom it may concern:

Be it known that I, ARTHUR DE FOREST RISLEY, a citizen of the United States, residing at Richfield Springs, in the county of Otsego and State of New York, have invented certain new and useful Improvements in Electrical-Alarm Matting; 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.

My invention relates to improvements in electrical-alarm matting; and the object is to provide a simple, inexpensive, and reliable device for this purpose.

To this end the invention consists in the construction, combination, and arrangement of the device, as will be hereinafter more fully described, and particularly pointed out in the claims.

The accompanying drawings show my invention in the best form now known to me; but many changes in the details might be made within the skill of a good mechanic without departing from the spirit of my invention as set forth in the claims at the end of this specification.

The same reference characters indicate the same parts of the device in the several views.

Figure 1 is a top plan view of my improved electrical-alarm matting. Fig. 2 is an enlarged longitudinal section of the same. Fig. 3 is a similar transverse view.

1 denotes a strip of flexible elastic non-conducting fabric formed with a series of orifices 2 2, arranged in parallel rows, as shown.

3 and 4 represent a series of parallel conducting-strips arranged, respectively, in line with and above and below each of the rows of orifices 2, the projecting ends of the conducting-strips 3 being connected to a common conductor 5, which forms one terminal of an electric-alarm circuit, and the projecting ends of the conducting-strips 4 being correspondingly connected to a common conductor 6, forming the opposite terminal of the said alarm-circuit.

7 denotes a loose conductor, preferably a single shot or the like, of a size or diameter somewhat less than the thickness of the elastic fabric. One of these conductors 7 is placed in each of the pockets formed by the orifices 2 and the conducting-strips 3 and 4. After these conductors 7 have been placed in position, as above described, the non-conducting flexible binding-strips 8 and 9 are placed on the top and bottom of the matting and the whole secured together by the parallel rows of stitching 10 10, as well as the longitudinal rows of stitching 12 12, which serve to bind the whole together.

When in use, the loose conductors 7 will rest upon the lower conducting-strips 4 4, but will be held out of contact with the superimposed conducting-strips 3 3 by reason of the thickness of the elastic fabric. If, however, the matting be stepped upon, so as to compress the elastic fabric 1, the upper conducting-strip 3 will be brought into electrical contact with the loose conductor 7 and that in turn with the lower conducting-strip 4, thereby closing the alarm-circuit between the terminal conductors 5 and 6 and sounding the alarm. As soon as the pressure is removed the elasticity of the fabric 1 raises the conducting-strip 3 out of contact with the lower conducting-strip 4, thereby interrupting the circuit and discontinuing the alarm.

Having thus fully described my invention, what I claim as new and useful, and desire to secure by Letters Patent of the United States, is—

1. The elastic non-conductor 1, provided with the orifices 2, the conducting-strips 3 and 4 arranged respectively above and below said orifices and forming the insulated terminals of an electrical-alarm circuit, and the loose conductor 7 caged within said orifices 2, as and for the purpose set forth.

2. The elastic non-conducting fabric 1, provided with the alined orifices 2, the parallel conducting-strips 3 and 4, arranged respectively above and below said alined orifices and forming the insulated terminals of an electrical-alarm circuit, and the loose conductors 7, caged within said orifices 2, as and for the purpose set forth.

3. The elastic non-conducting fabric 1, formed with a series of alined orifices 2, the parallel conducting-strips 3 and 4 arranged

respectively above and below said alined orifices, a conductor 7 loosely mounted in each orifice, and the binding-strips 8,9, encompassing said conducting-strips 3 and 4, and nonconducting fabric 1 and adapted to secure the whole together, as and for the purpose set forth.

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

ARTHUR DE FOREST RISLEY.

Witnesses:
E. B. CALLAHAN,
LUCINDA R. MILLS.