

(No Model.)

2 Sheets—Sheet 1.

J. B. RYAN.  
BED BOTTOM.

No. 599,738.

Patented Mar. 1, 1898.

Fig. 1.

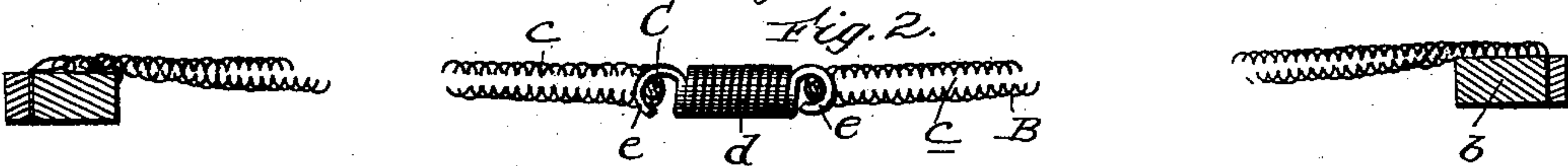
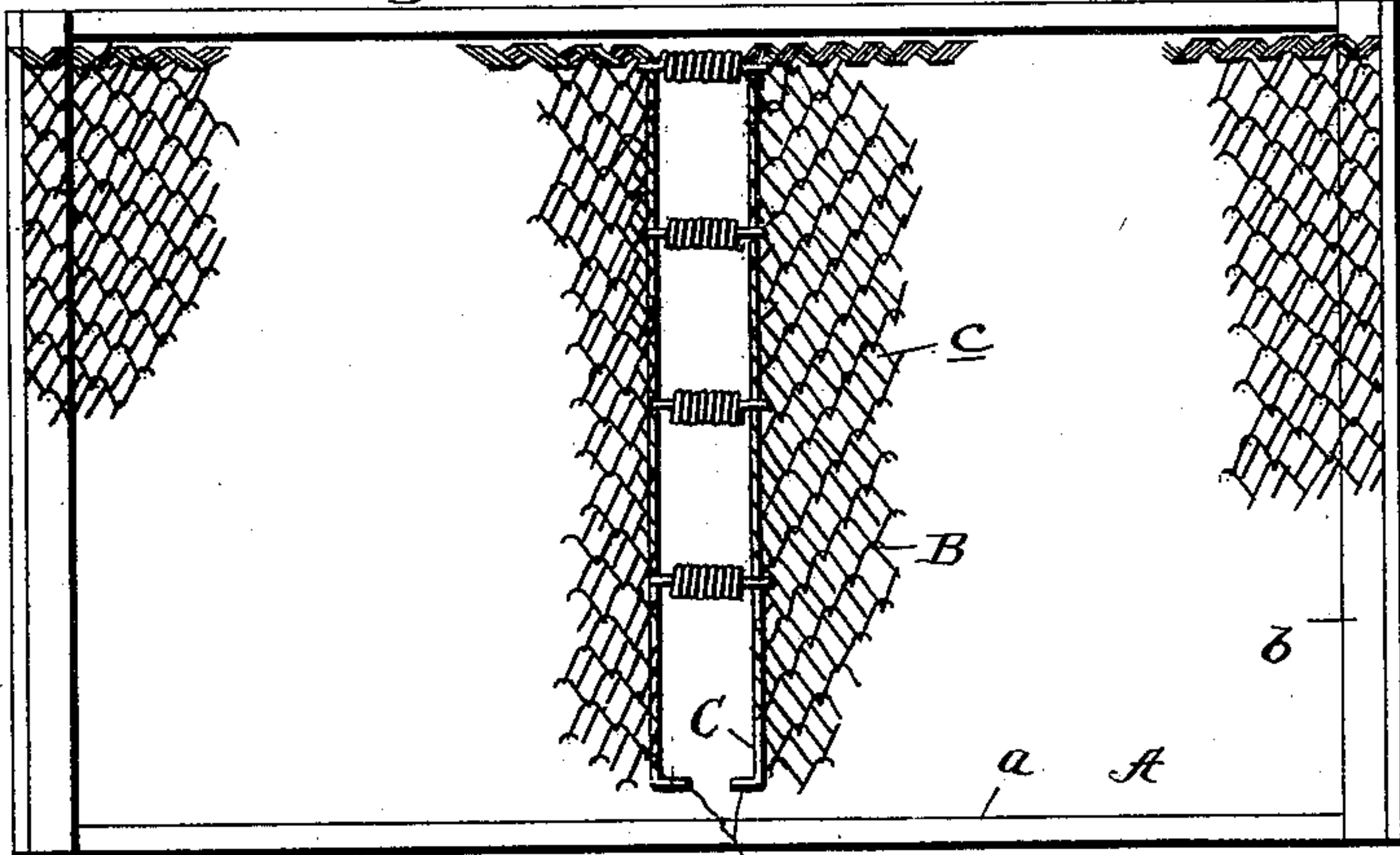


Fig. 3.

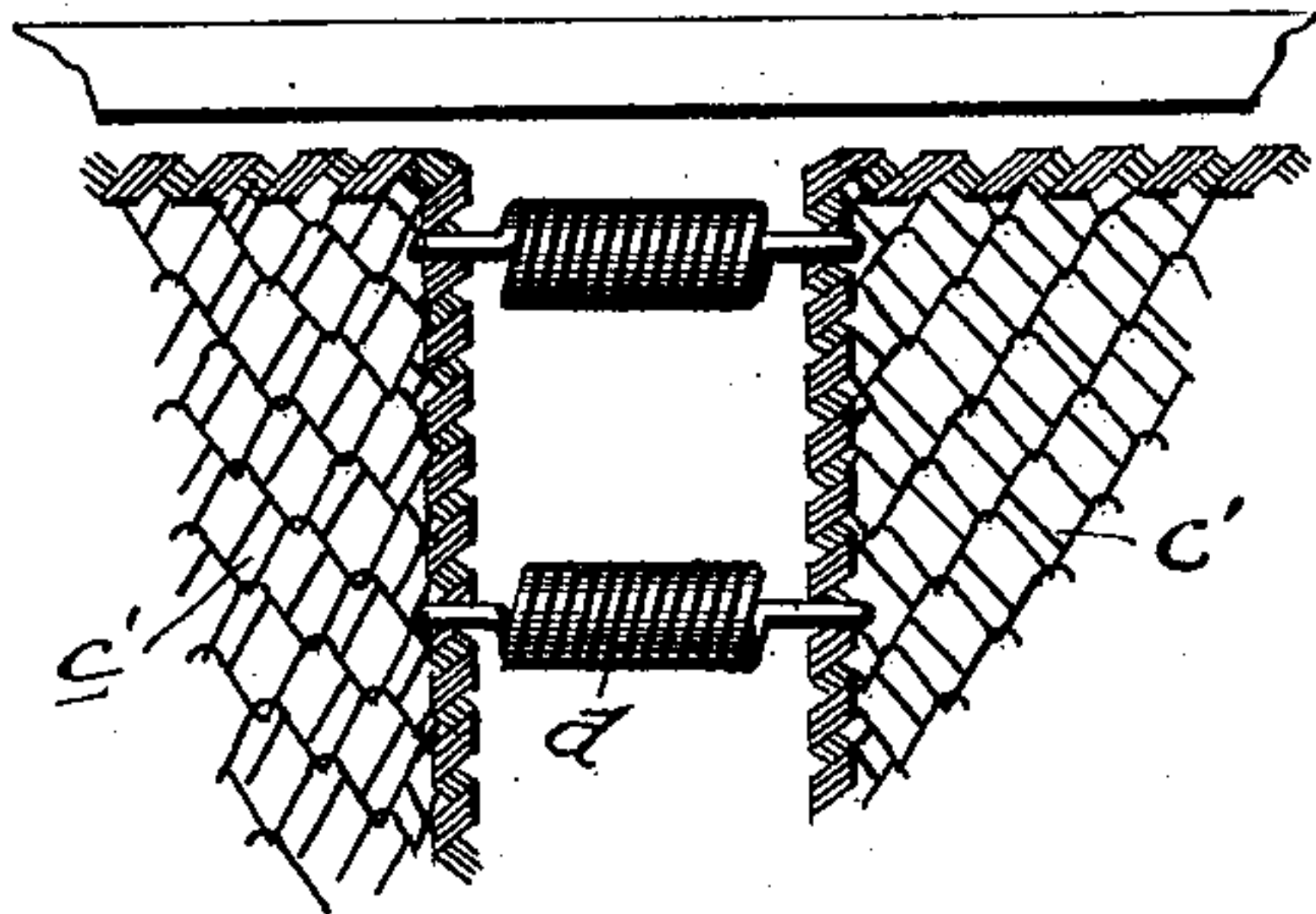
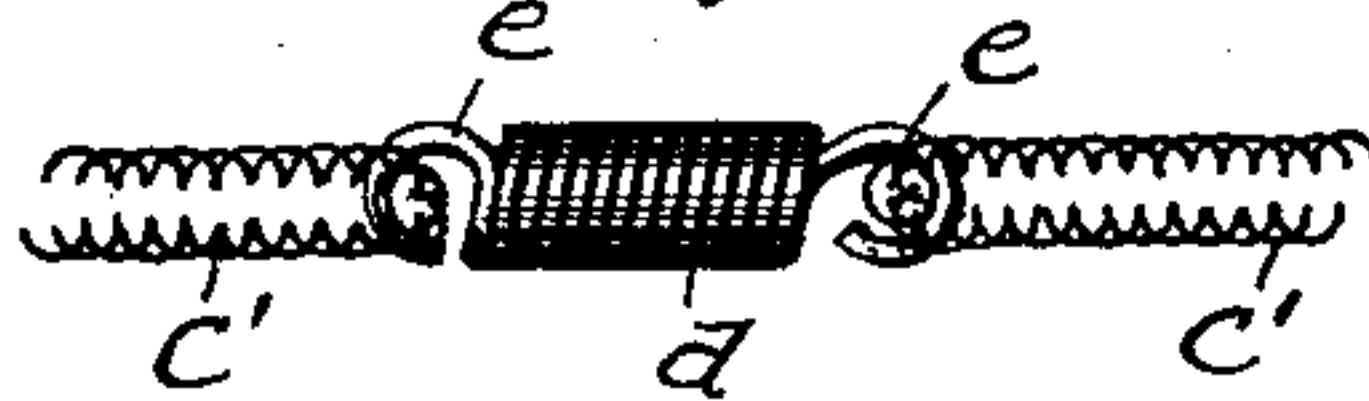


Fig. 4.



Witnesses:  
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*Jessie G. Broney*

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*James B. Ryan*  
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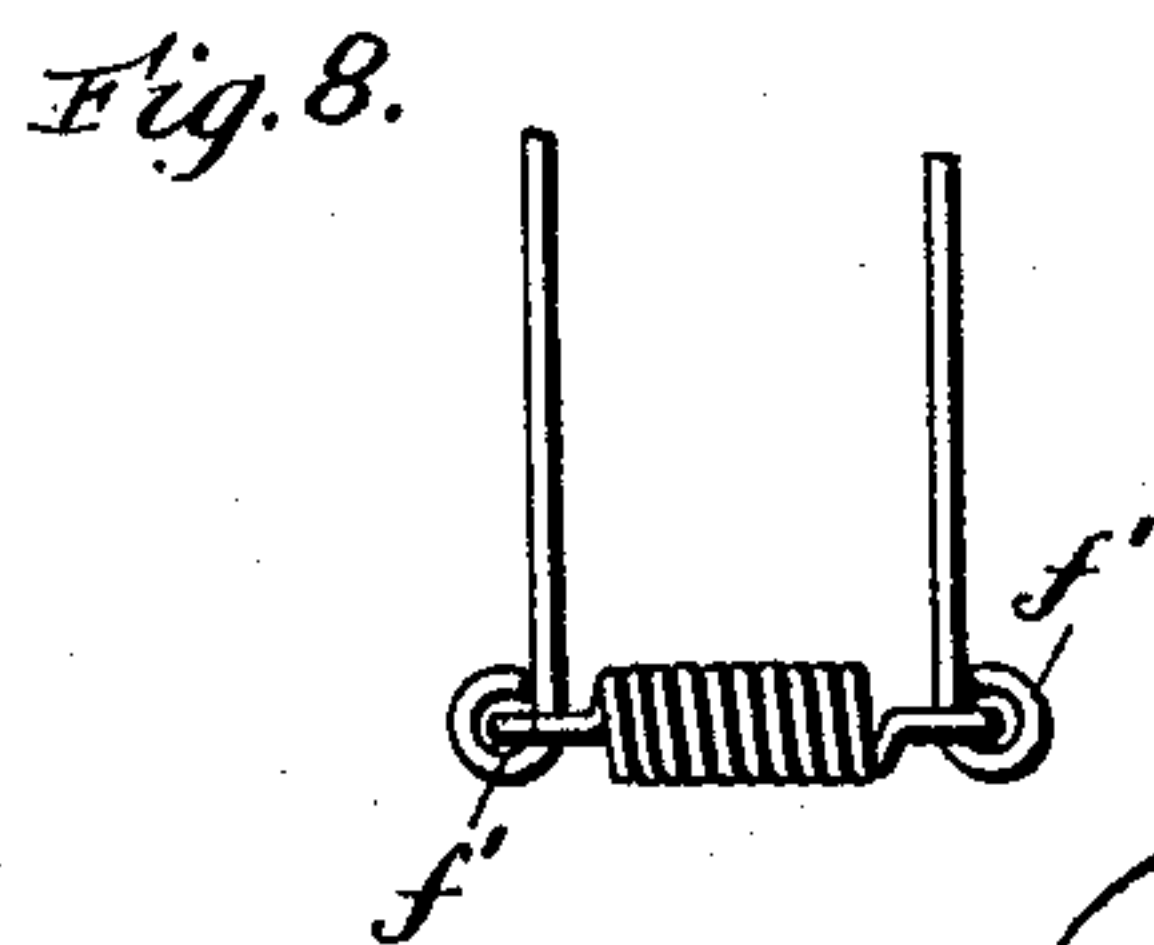
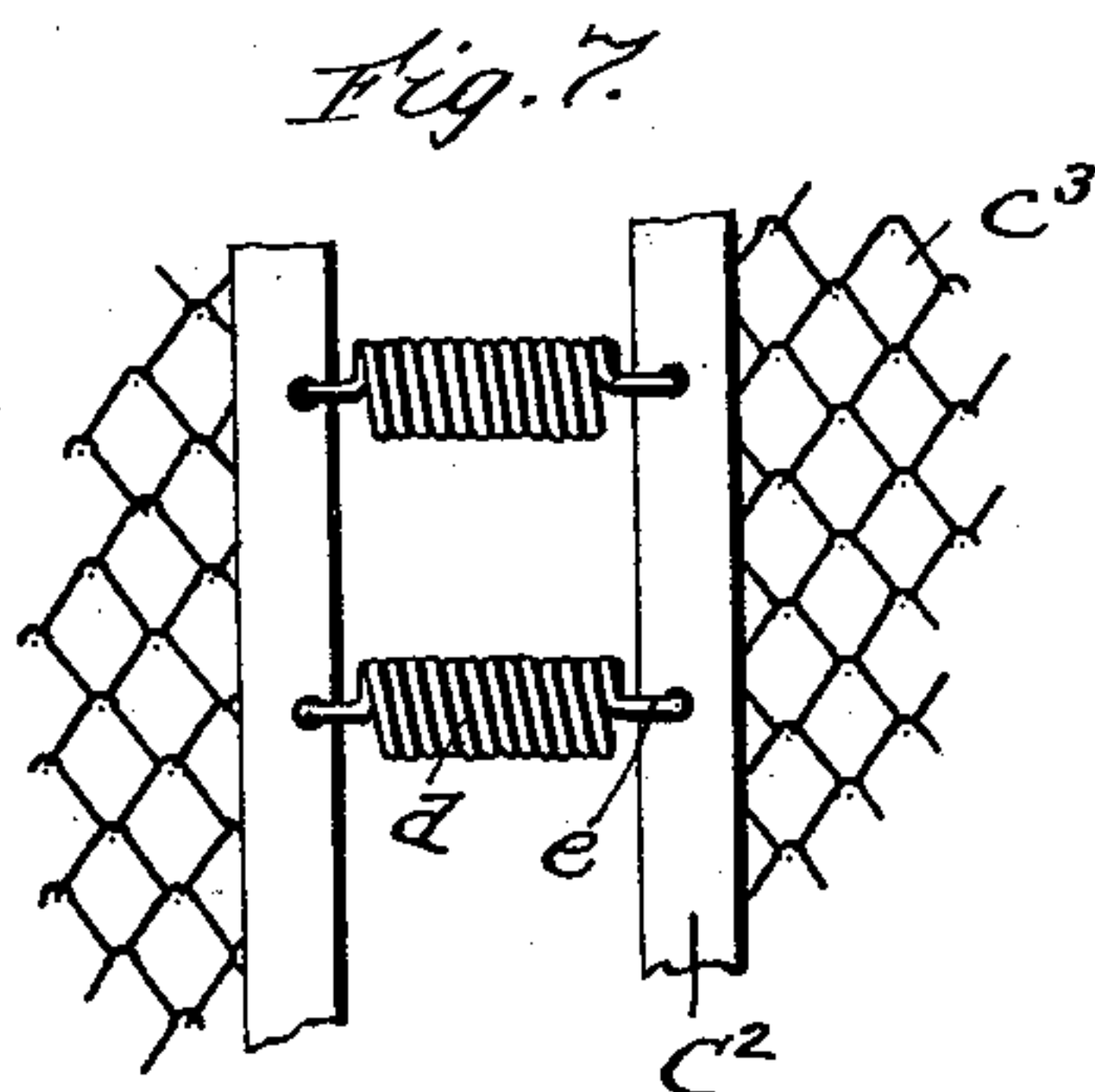
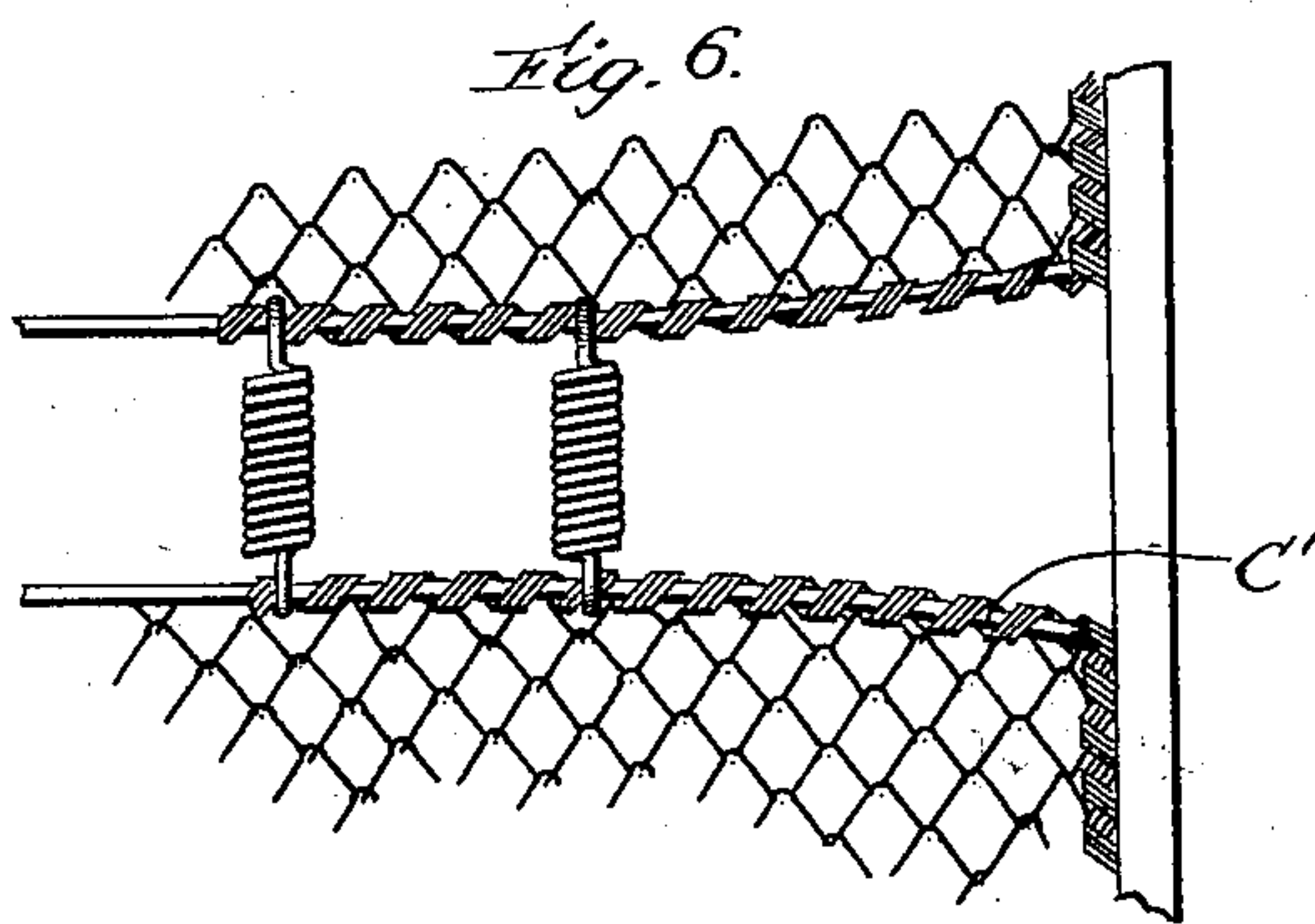
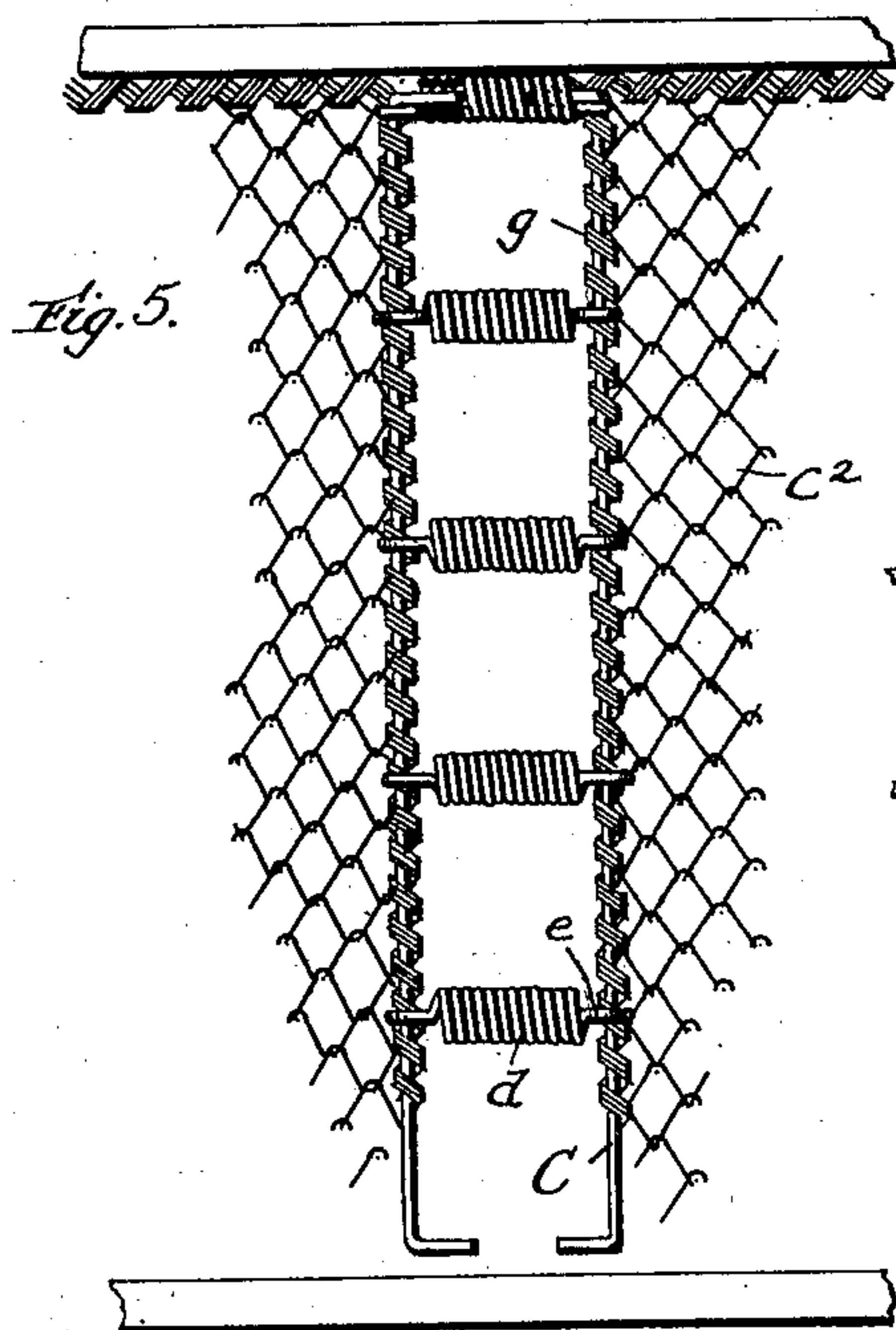
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2 Sheets—Sheet 2.

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BED BOTTOM.

No. 599,738.

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Witnesses:

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# UNITED STATES PATENT OFFICE.

JAMES B. RYAN, OF NEW YORK, N. Y.,-ASSIGNOR TO THE NEW YORK  
WOVEN WIRE MATTRESS COMPANY, OF SAME PLACE.

## BED-BOTTOM.

SPECIFICATION forming part of Letters Patent No. 599,738, dated March 1, 1898.

Application filed June 23, 1897. Serial No. 641,973. (No model.)

*To all whom it may concern:*

Be it known that I, JAMES B. RYAN, a citizen of the United States, residing at New York, in the county of New York and State of New York, have invented certain new and useful Improvements in Bed-Bottoms; 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 that class of bed-bottoms which comprise mattresses formed in whole or in part of woven-wire fabric; and its novelty and advantages will be fully understood from the following description and claims when taken in conjunction with the annexed drawings, in which—

Figure 1 is a plan view of my improved bed-bottom with the woven-wire fabric sections of the mattress partly broken away. Fig. 2 is a longitudinal section of the same. Fig. 3 is a detail plan view of a modification. Fig. 4 is a detail longitudinal section of the same.

Referring by letter to the said drawings, and more particularly to Figs. 1 and 2 thereof, A indicates a bed-bottom frame, which may comprise the usual side bars *a* and end bars *b*, and B indicates my improved mattress. This mattress B comprises two sections *c* of woven-wire fabric suitably connected to the end bars *b* of the frame A and a spring connection, preferably helical springs *d*, interposed between and suitably connected with the contiguous edges of the sections *c* and occupying the transverse center of the bed-bottom, the said spring connection being adapted to render the mattress very strong transversely and admit of it being made wide, so as to adapt it for use on bed-bottoms for large double beds. The said spring connection, arranged transversely, as described, will also prevent the objectionable sagging toward the transverse center so often experienced, and when a greater weight is imposed on one fabric section than on the other will prevent in great measure the depression of the more heavily-weighted section from being transmitted to the other section, and thus obviate the liability of the occupants to slip toward the transverse center.

In the preferred embodiment of the inven-

tion the woven-wire fabric sections *c* are disposed transversely and extend the full width of the frame, and they are respectively formed by bending a piece of woven-wire fabric of suitable length and width upon itself, so as to afford a double thickness of fabric, as better shown in Fig. 2, and thus materially increase the strength of the sections. Each of the said sections has the ends of the piece of fabric of which it is formed suitably connected to one frame-bar *b*, and each section is provided with a transverse rod C, the said rods being arranged in the bights of the loops formed by bending the pieces of fabrics and being designed for the engagement of the hooks *e* at the ends of the springs *d*, as shown. Thus it will be observed that the bending of the fabric sections upon themselves affords a double thickness of fabric and at the same time a seat for the transverse rods and renders the fabric sections considerably stronger at the points where the springs are connected, said springs being preferably connected to both layers of each fabric section, as shown.

The rods C are provided with angular branches *f* at their ends, which are inserted in the end springs *d* of the series, so as to prevent casual removal of the rods from the bights of the sections *c*. Said rods C serve to materially strengthen the connection of the springs *d* and fabric sections *c*, and they are desirable for such reason. They are not essential, however, as when desired they may be omitted and the hooks *e* of the springs placed in direct engagement with the fabric sections *c*, as shown in Figs. 3 and 4, in which case the sections *c* are preferably provided with selvage edges, as shown. I also do not desire to be understood as confining myself to connecting the springs and fabric sections by means of hooks, as any other suitable connection may be employed. The hooks on the springs and the rods in the bights of the fabric sections are preferable, however, inasmuch as they permit of the springs being readily adjusted—that is to say, placed a greater or less distance apart or assembled in close proximity at some point upon which a great portion of the weight is imposed, so as to strengthen the mattress at such point.

Having described my invention, what I



claim, and desire to secure by Letters Patent, is—

1. In a bed-bottom, a frame, and a mattress comprising two sections of woven-wire fabric; 5 each section being formed of a piece of fabric bent upon itself so as to afford a double thickness of fabric and a bight at the inner edge of the section and having its ends connected to one end bar of the frame, and a series of helical springs occupying the transverse center of the bottom and interposed between and connected to the contiguous, bight edges of the fabric sections, substantially as specified. 10

2. In a bed-bottom, a frame, and a mattress comprising two sections of woven-wire fabric; 15 each section being formed of a piece of fabric bent upon itself so as to afford a double thickness of fabric and a bight at the inner edge of the section and having its ends connected to one end bar of the frame, and a series of helical springs occupying the transverse center of the bottom and interposed between the contiguous, bight edges of the fabric 20 and having hooks at their ends extending

through the upper and lower thicknesses of the fabric sections and receiving the bights thereof, substantially as specified.

3. In a bed, a frame, and a mattress comprising two sections of woven-wire fabric; 30 each section being formed of a piece of fabric bent upon itself so as to afford a double thickness of fabric and a bight at the inner edge of the section and having its ends connected to one end bar of the frame, transverse rods arranged in the bights formed at the inner edges of the said sections and a series of helical springs occupying the transverse center of the bottom and interposed between the contiguous, bight edges of the fabric and having hooks at their ends extending through the upper and lower thicknesses of the fabric sections and receiving the bights thereof and the rods in said bights, substantially as specified. 35 40

In testimony whereof I affix my signature 45 in presence of two witnesses.

JAMES B. RYAN.

Witnesses:

FRANK HAMMOND,  
WM. JNO. BARR.