

(No Model.)

W. HEWITT.

METALLIC SPRING MATTRESS.

No. 335,924.

Patented Feb. 9, 1886.

Fig. 1.

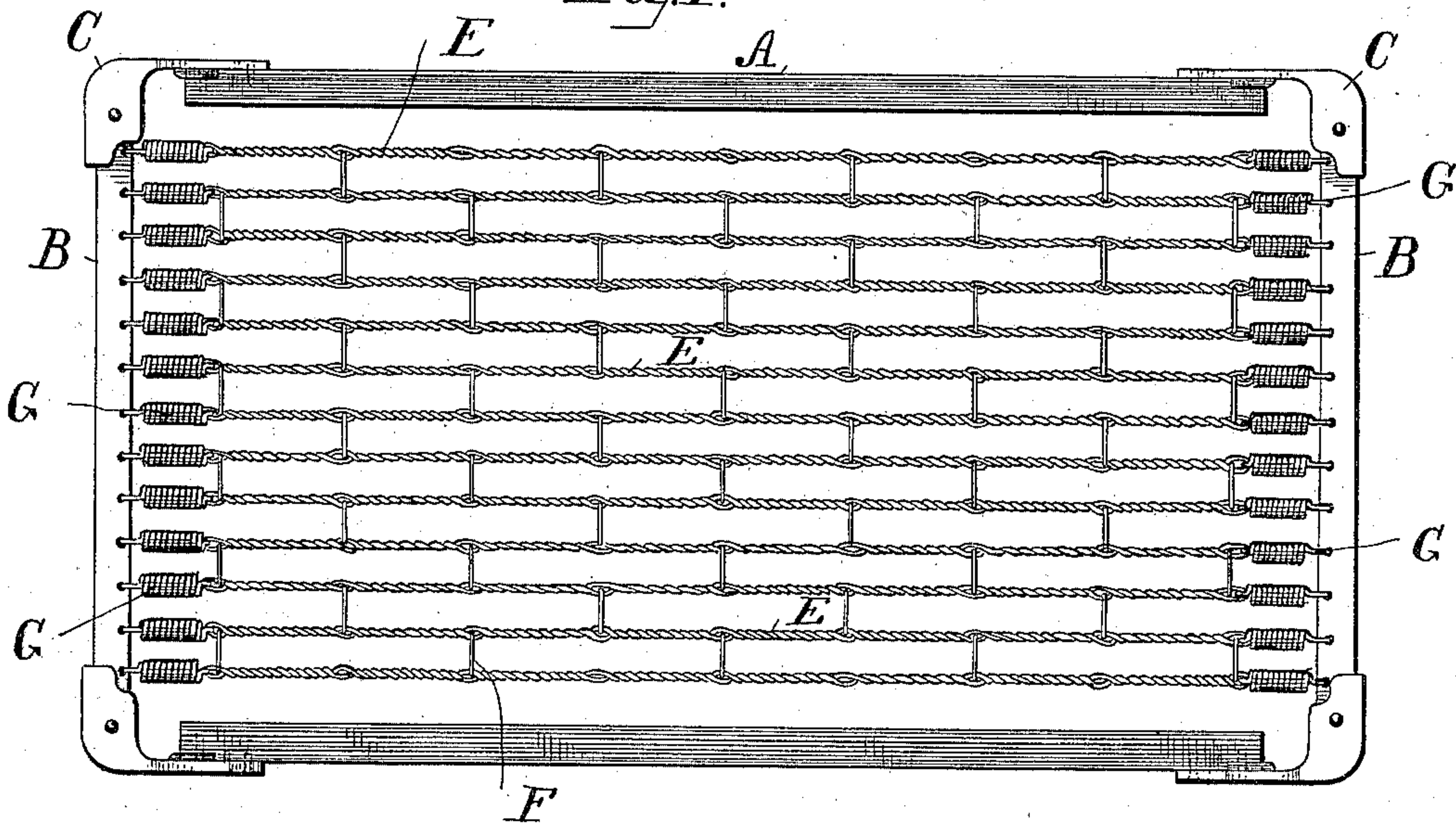


Fig. 2.

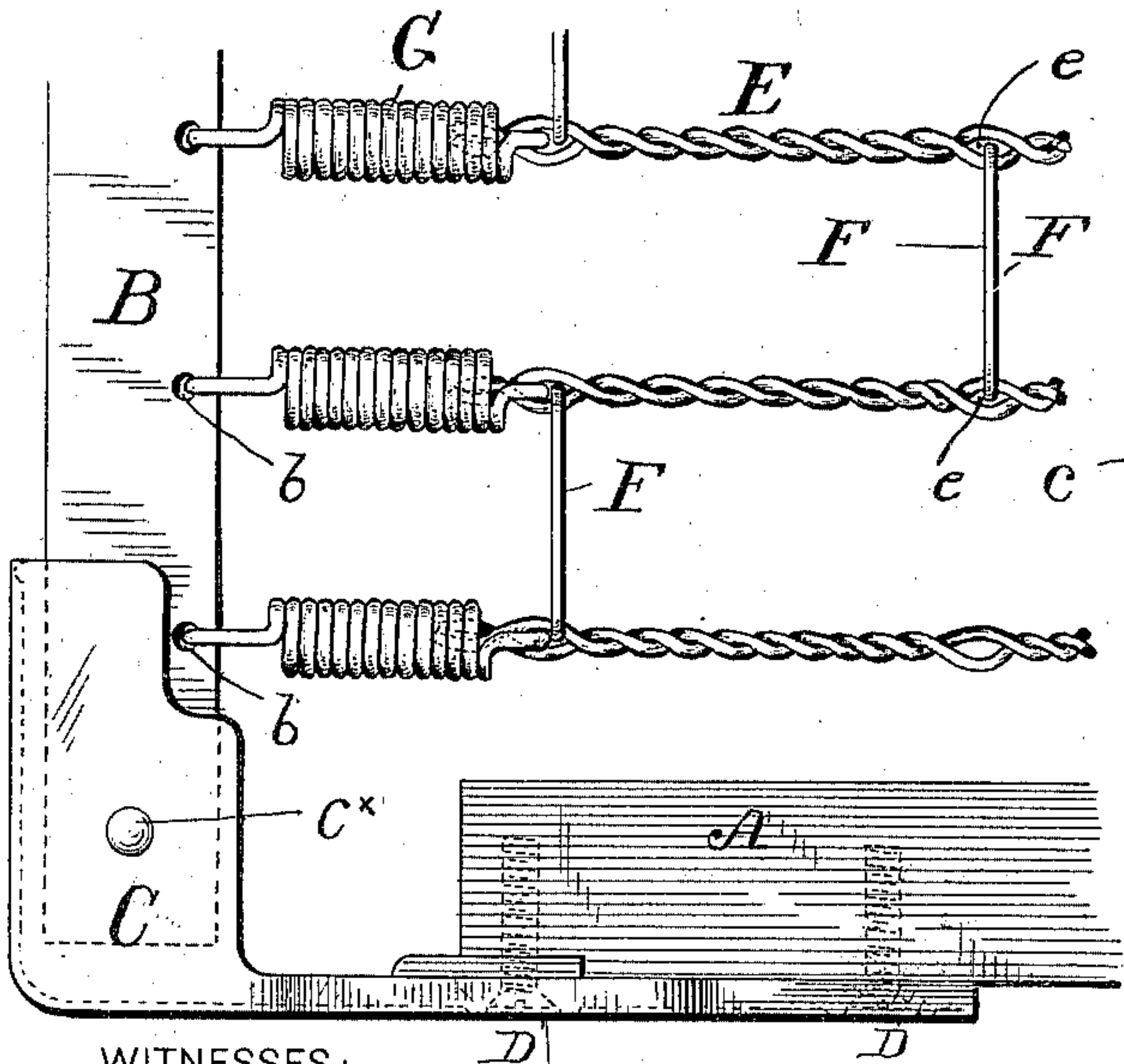


Fig. 5.

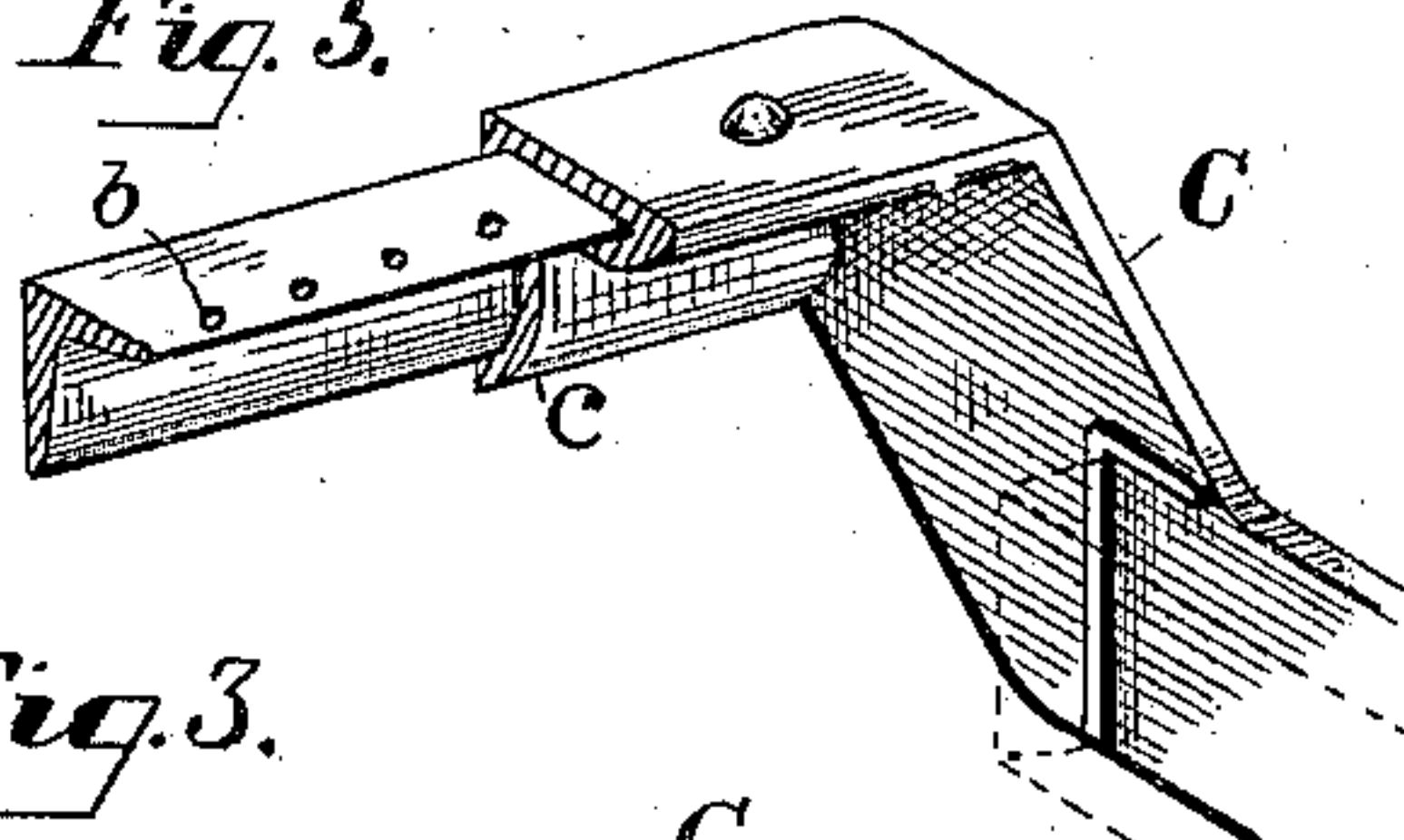
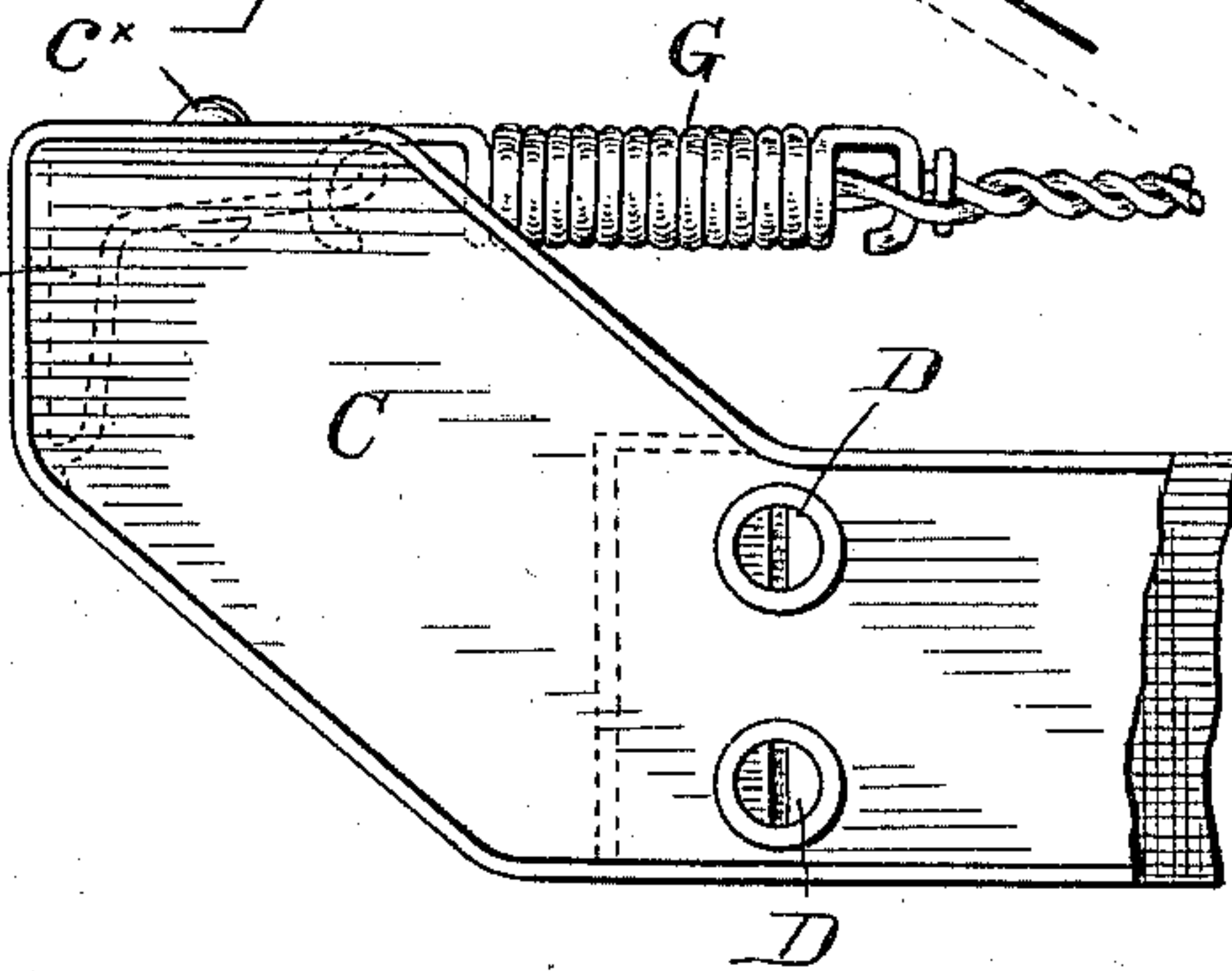


Fig. 3.

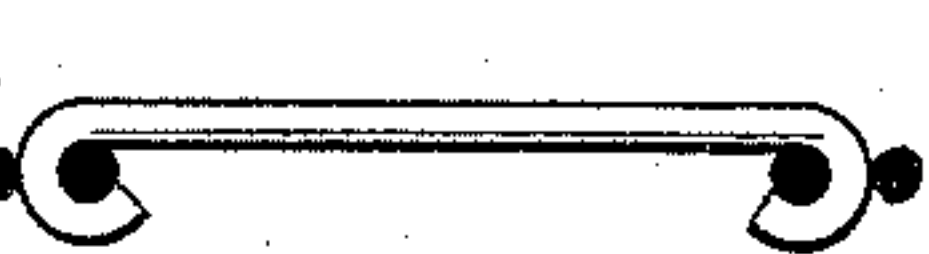


WITNESSES:

John Dolley

J. Norman Dixon.

Fig. 4.



Wm Hewitt
INVENTOR

By his Attorney,
W. C. Strawbridge
Bornall Taylor

UNITED STATES PATENT OFFICE.

WILLIAM HEWITT, OF TRENTON, NEW JERSEY, ASSIGNOR TO THE TRENTON
IRON COMPANY, OF SAME PLACE.

METALLIC-SPRING MATTRESS.

SPECIFICATION forming part of Letters Patent No. 335,924, dated February 9, 1886.

Application filed October 21, 1885. Serial No. 180,473. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM HEWITT, a citizen of the United States, residing in Trenton, New Jersey, have invented an Improvement in Metallic-Spring Mattresses, of which
5 the following is a specification.

The object of my invention is the construction of a light, strong, simple, and inexpensive metallic-spring mattress; and to such end
10 my invention comprehends such a mattress as is hereinafter described and claimed.

In the drawings, Figure 1 is a top plan view of a mattress conveniently embodying my invention and applied within a frame. Fig. 2
15 is a magnified fragmentary plan of a corner portion of the mattress represented in Fig. 1. Fig. 3 is a side elevation of one of the corners of the mattress-carrying frame. Fig. 4 is an end elevational detail of one of the link-bars
20 for connecting the longitudinal cables of the mattress. Fig. 5 is a view in perspective of the socket-bracket which I employ to connect the side and end rails of the frame.

Similar letters of reference indicate corresponding parts.

In all of the accompanying drawings the mattress is represented as applied to a frame of special construction, and which is well adapted to sustain it. I do not, however, desire to restrict myself to the invariable employment of the said frame, as other frames
30 may be used instead of it.

In the drawings, A represents the side rails of the bed-frame, which are conveniently of
35 wood.

B represents the end rails, which are preferably angle-irons of a character represented in Fig. 5, and provided in such case as to their horizontal member with a series of holes, *b*.

40 C is the socket-bracket, which is essentially an angle-bracket provided as to one of its angular portions with a right-angular or other suitably-shaped socket, *c*, for the extremity of the end rails. The bracket as an entirety is
45 conveniently made as a casting, and its connection with the side rails is conveniently effectuated by the screws D. The socket-bracket may, however, be formed as a part of the side rails. The socket-brackets being connected with the side rails, the end rails are
50 introduced into their sockets *c*, and conveniently

secured against withdrawal by bolts, rivets, or kindred fastenings *e*.

The mattress proper, or the spring-carrying surface of the bed, is composite, essentially, 55 of longitudinal cables composed of two or more twisted or cabled wire-strands, preferably of a quality known as "spring-wire," and which is commonly employed for the making of spiral springs, such as upholsterers use. At intervals throughout the length of the cables eyes
60 or openings between the strands are formed. The eyes in adjacent cables are preferably formed at corresponding distances, so that when the cables are colligated link-bars F, 65 preferably of rigid metal, can be secured conveniently by hook-shaped extremities to the eyes of the adjacent cables. The eyes secure the link-bars against longitudinal displacement, and the link-bars insure lateral flexibility. 70

G are spiral springs, which are employed to connect the terminal extremities of the cables with the end rails, the said springs being provided with a hook at each end for engagement, respectively, with eyes or loops formed
75 at the ends of the cables and in the end rails.

Such being a description of a convenient mode of constructing the mattress, and also of a frame for carrying it, it is proper to state 80 that the preferable construction and arrangement of the link-bars is that represented in Fig. 1—that is to say, a staggered arrangement in which the said link-bars, being simply strong wires, alternate with respect to
85 neighboring cables, and are not therefore arranged in a continuous transverse line across the mattress.

I am aware that I am not the first to form a metallic web for a bed-bottom, composed of 90 bands formed of interlocked links or sheet metal, which links are connected together by transverse links, such a subject-matter being set forth in United States Letters Patent No. 146,227, granted January 6, 1874. 95

I am also aware that I am not the first to make a bed-bottom composed of spiral springs to constitute an elastic carrying-surface, the said spiral springs being connected together by wire links, which construction is the subject 100 of United States Letters Patent No. 208,987, granted October 15, 1878.

I am likewise aware that I am not the first to connect the ends of cords or wires forming the longitudinal members of a metallic bed-bottom with the end rails of the frame by means of spiral springs, such a construction being represented in United States Letters Patent No. 197,422, granted November 20, 1877, and also in Letters Patent No. 275,523, granted April 10, 1883.

To no one of the foregoing constructions do I lay claim.

Having thus described my invention, I claim and desire to secure by Letters Patent of the United States—

1. The combination, to form a metallic mattress, of a series of twisted wire cables provided with eyes formed by partially separating the strands of the cables with a series of link-bars hooked into the eyes, substantially as set forth.

2. The combination, to form a metallic mattress, of a series of twisted wire cables provided with eyes formed by partially separating the strands of the cables, a series of link-

bars hooked into the eyes, and spiral springs applied to the extremities of the cables, substantially as set forth.

3. The combination, to form a metallic mattress, of a series of twisted wire cables provided with eyes formed by partially separating the strands of the cables, a series of link-bars hooked into the eyes, and a frame with which the cables are connected by means of springs, substantially as set forth.

4. The combination, to form a metallic mattress, of a series of twisted wire cables having eyes formed in them by partially separating the strands of the cables with a series of alternately disposed or staggered link-bars hooked into the said eyes, substantially as set forth.

In testimony whereof I have hereunto signed my name this 20th day of October, A. D. 1885.

WM. HEWITT.

In presence of—

J. BONSALE TAYLOR,
WM. C. STRAWBRIDGE.