

*G. B. Richmond,*

*Bed Bottom.*

*No. 103658.*

*Patented May 31, 1870.*

FIG. 1

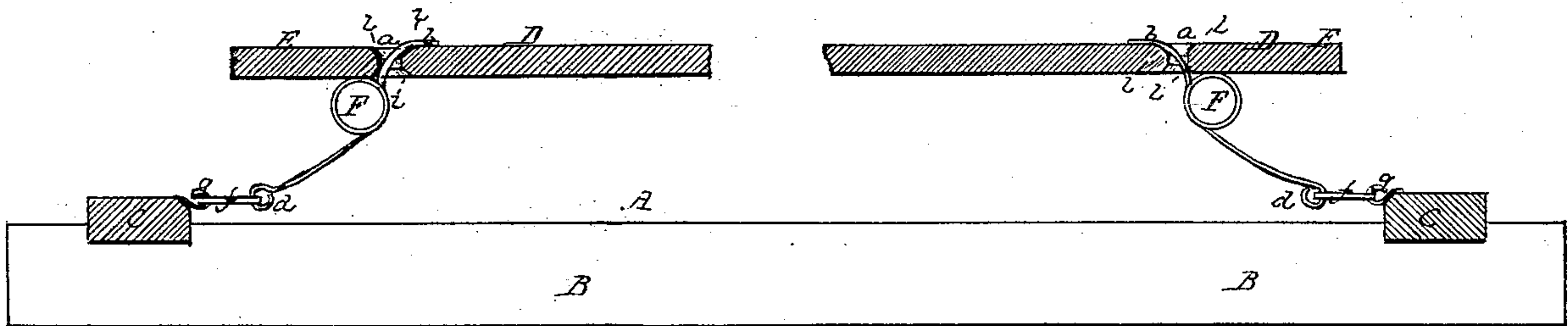


FIG. 3.

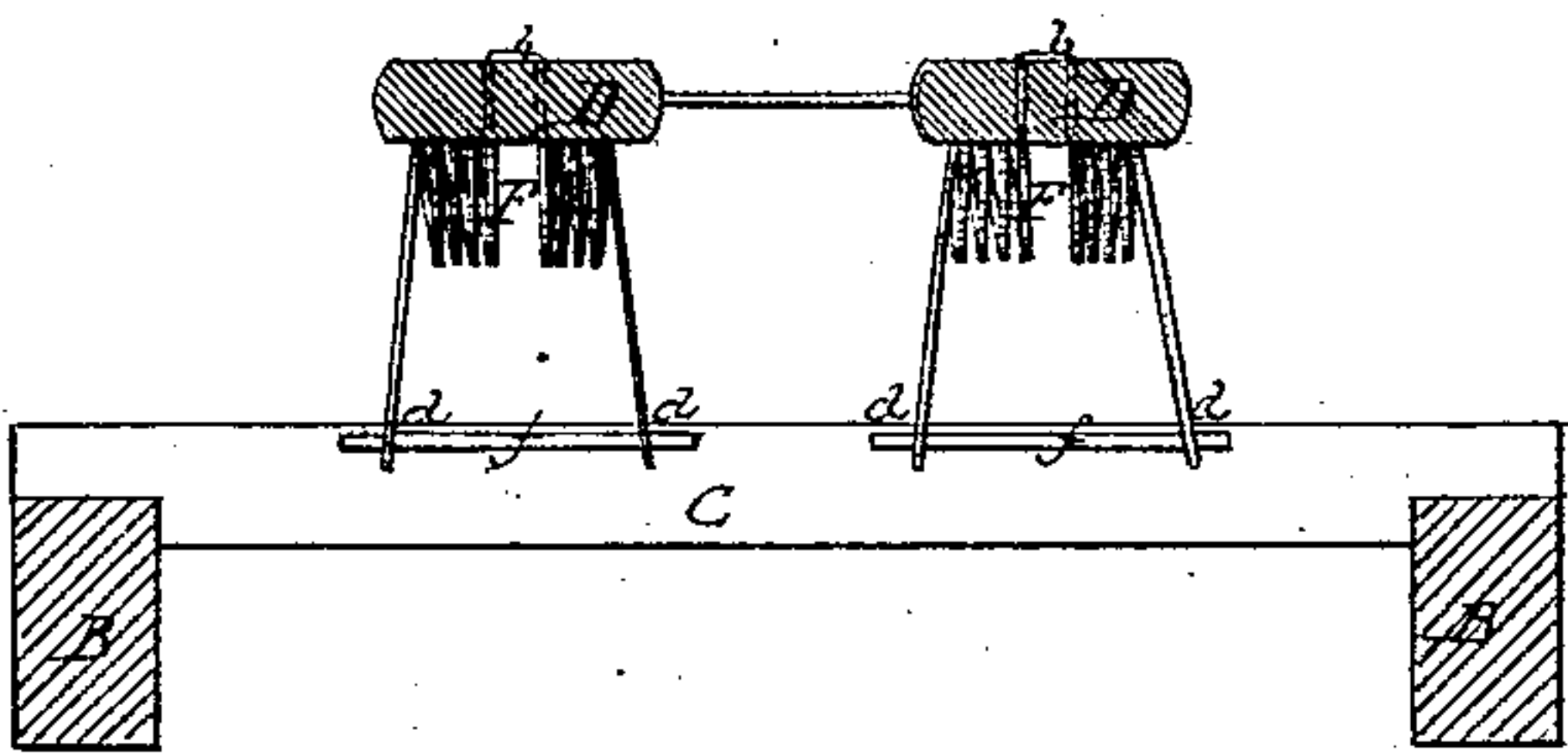
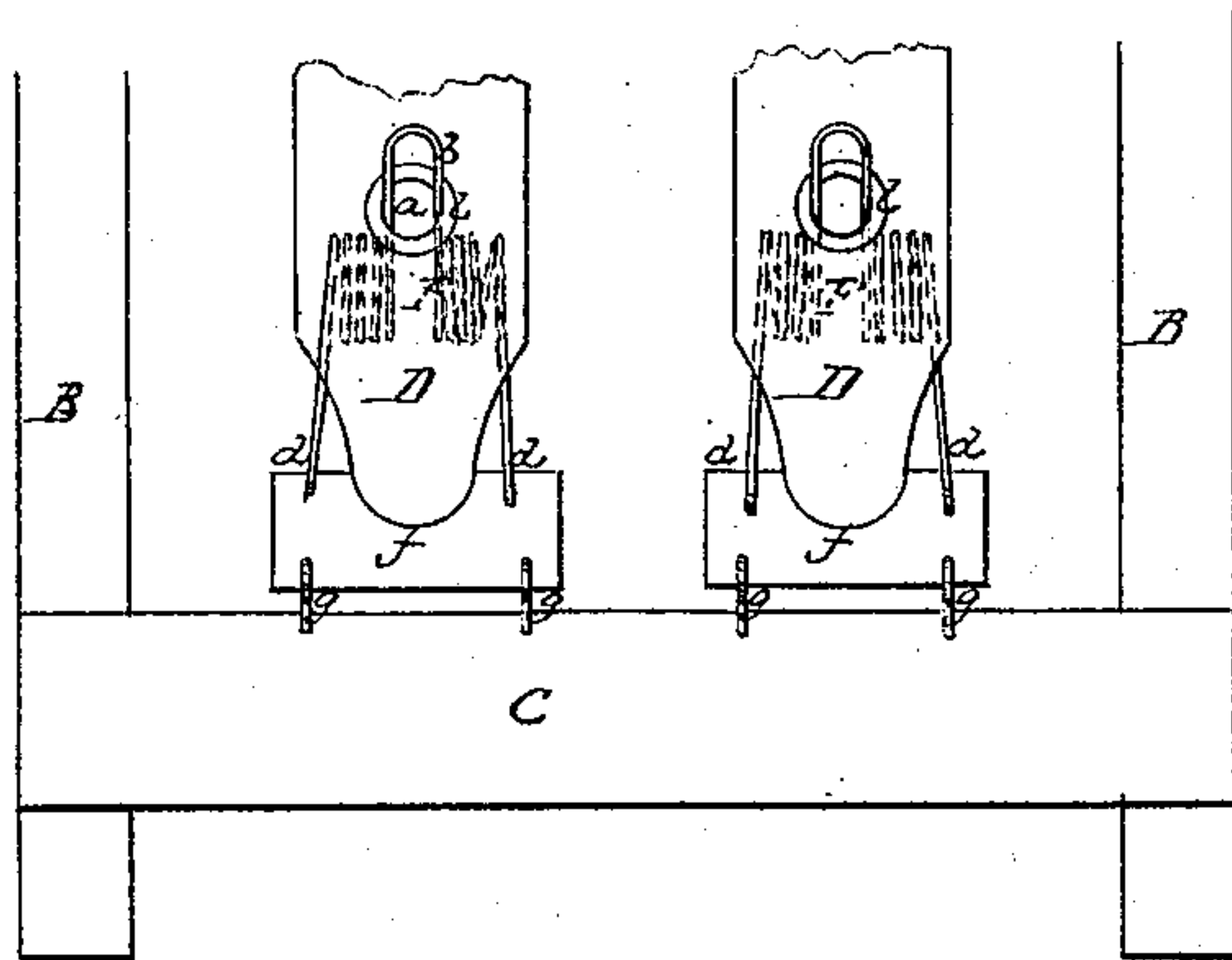


FIG. 2.



INVENTOR.

*Gideon B. Richmond*

WITNESSES.

*Edwin M. Brown.*  
*Albert W. Brown.*

# United States Patent Office.

GIDEON B. RICHMOND, OF CHARLESTOWN, MASSACHUSETTS.

Letters Patent No. 103,658, dated May 31, 1870.

## IMPROVED SPRING BED-BOTTOM.

The Schedule referred to in these Letters Patent and making part of the same.

To all persons to whom these presents shall come:

Be it known that I, GIDEON B. RICHMOND, of Charlestown, in the county of Middlesex and State of Massachusetts, have invented certain new and useful Improvements in Spring-Beds, and that the following is a full and exact description of the same, reference being had to the accompanying plate of drawings.

The present invention relates to that class of spring beds in which the slats, at each end, are secured to a frame by and through a spring connection, the spring portion of which is of a spiral form, and arranged directly under and in contact with the slat.

The invention consists in the construction and arrangement of a spring and its connection to the end of the slat, said attachment being a continuation, in a loop form, of the springs under the slat, and of such a curvature and direction, in conjunction with an aperture made in the slat to receive the same, as to cause, with pressure upon the slat, a further coiling of the spring, and a tighter hold or bind of the attachment to the slat.

In the accompanying plate of drawings my improvements in spring-beds are illustrated,

Figure 1 being a central longitudinal section of a slat connected to a frame, in accordance with my invention.

Figure 2, a plan view of one end of the arrangement of slat springs, shown in fig. 1.

Figure 3, a transverse vertical section in plane of line *x x*, fig. 1.

A, in the drawings, represents a frame, constructed of parallel side, B, and end, C, rails.

D, slats arranged in parallel lines between side rails B, with their ends E connected to the end rails C by and through an arrangement and construction of parts, as follows:

*a a*, circular apertures, through thickness of slats D, one at each end, which apertures are rimmed or turned out on both sides of the slat.

F, spiral or coiled springs of wire, connected and

joined together by a loop, *b*, which is a continuation of the wire from the coils of the two springs; opposite to each other the wire, at the two outer ends of the coils, being extended, terminating in a hook, *d*, by which they are hung and connected to flexible or leather pieces, *f*, connected, in turn, through hooks, *g*, fastened to and in the end rails C of the frame.

The loops *b* to the springs are made with a curve in the direction of their length, and by them, connection is made with the slats; the loops being inserted in their holes *a*, extending toward their center, resting upon the upper surface, *h*, and bearing against the bevel or incline *l* of the aperture, both of the upper and lower sides of the slat, but at points diametrically opposite, (see fig. 1 more particularly,) the coiled springs being directly under the slat, with the slat resting thereon.

With slats hung to springs in the manner described, the greater the pressure on the slats the more the springs will be coiled, and the firmer the fastening together of the slat and springs will be made, the loops being held to the slats by the bearing of the loop on its upper side, and its bearing within the aperture against its incline, both upper and lower.

Having thus described my invention,

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

The spring, consisting of a continuous wire, doubly coiled at F, and extended beyond the coils into loop *b*, forming the upper termination of the spring, and entering an opening in the slat, in connection with the ends of the wire below the coils, being connected to a piece *f*, as herein set forth.

The above specification of my invention signed by me this 21st day of April, A. D. 1870.

GIDEON B. RICHMOND.

Witnesses:

EDWIN W. BROWN,  
ALBERT W. BROWN.