

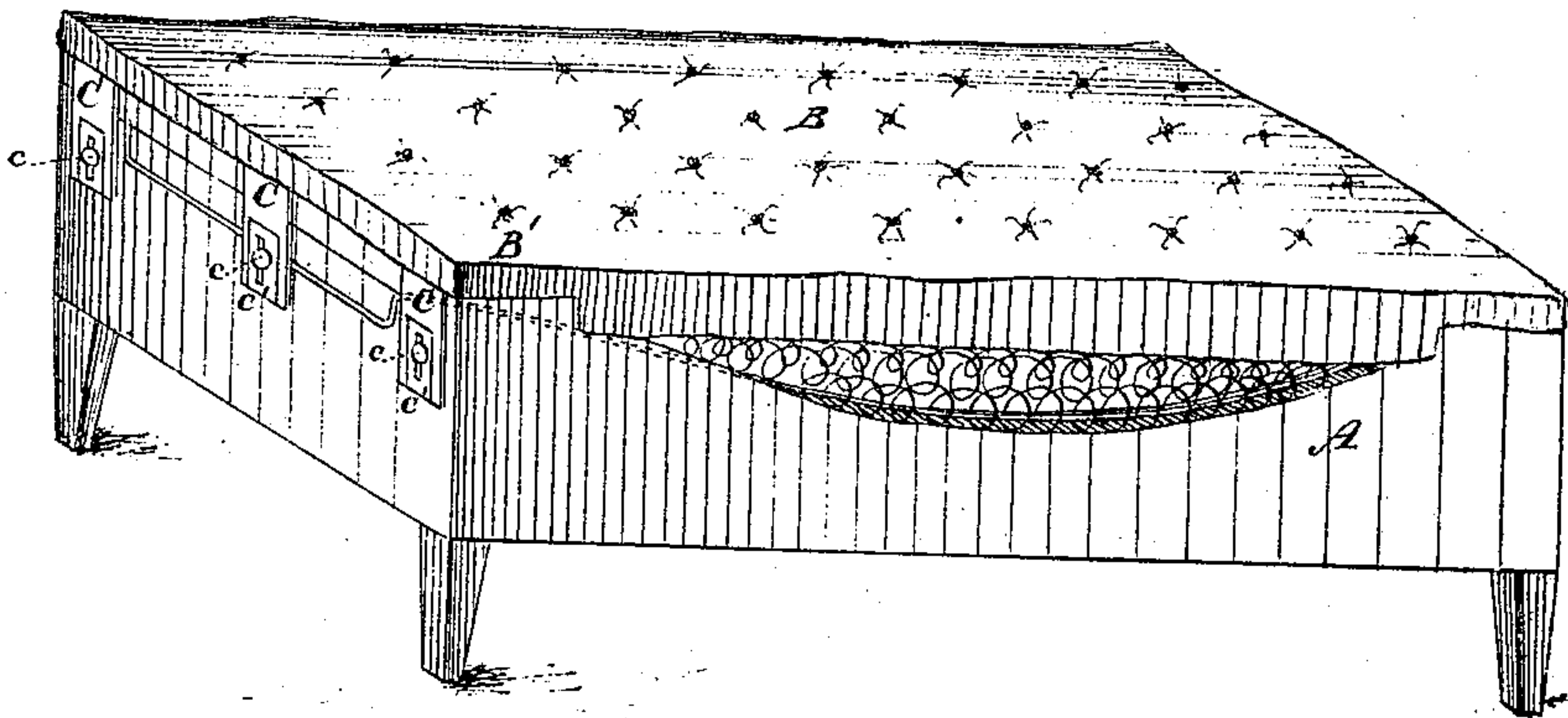
*G. Richardson,*

*Bed Bottom.*

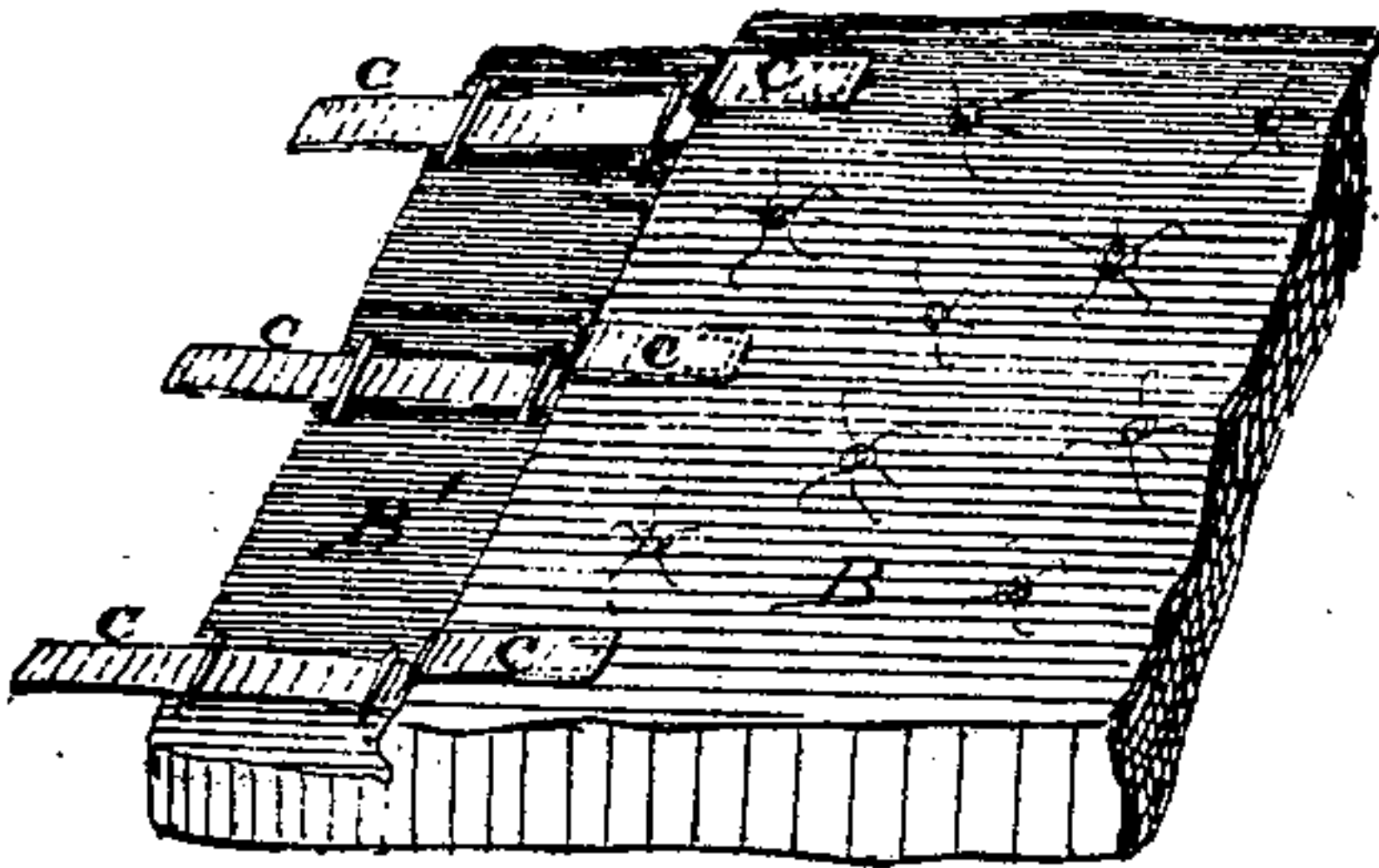
*No. 106,726.*

*Patented Aug. 23, 1870.*

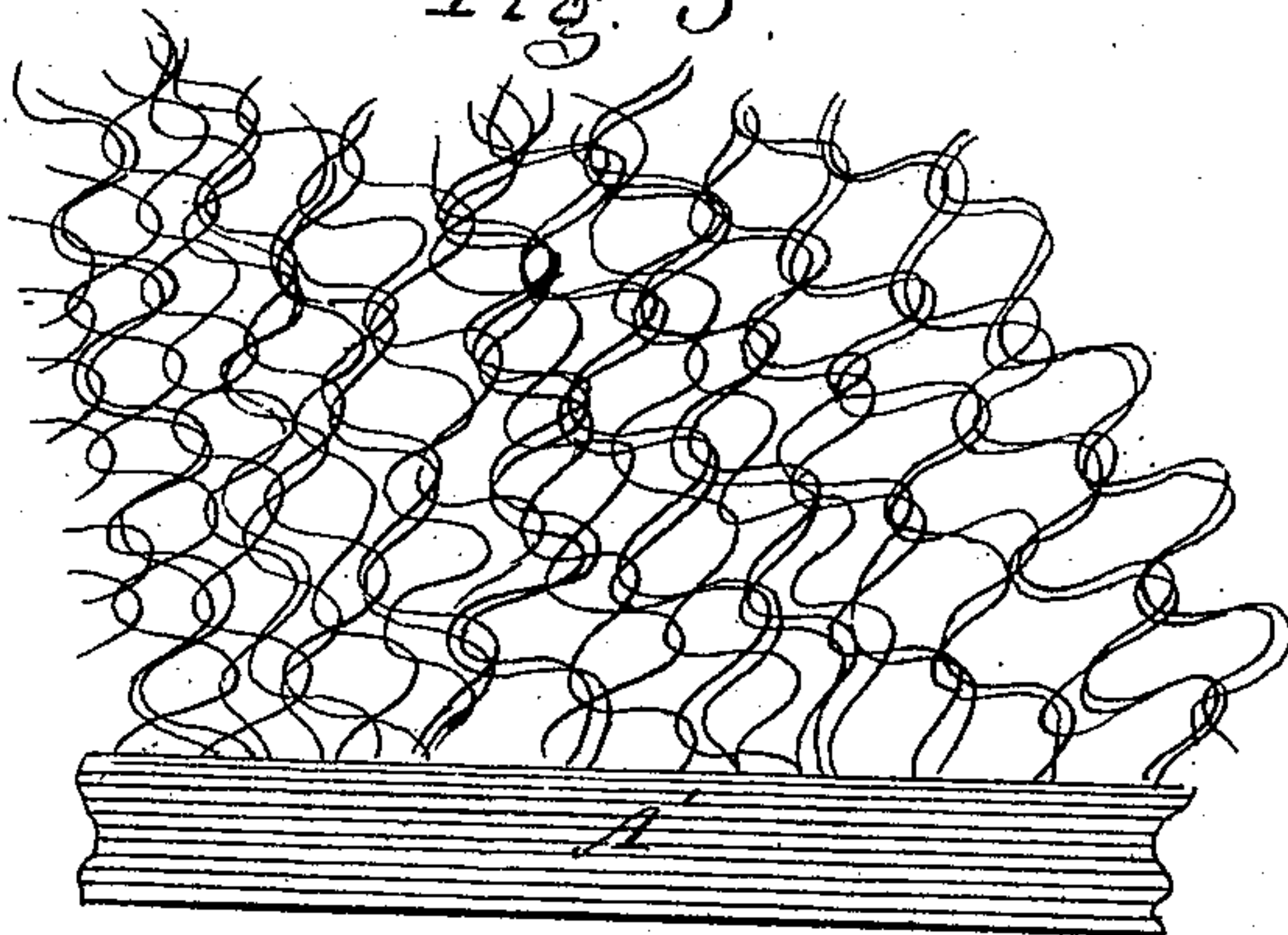
*Fig. 1.*



*Fig. 2.*



*Fig. 3.*



*Attest*  
*A. Ruppert*  
*C. F. Clausen*

*Geo. Richardson*  
*Inventor*  
*J. R. H. H. H. & Co*  
*Attys*



# United States Patent Office.

GEORGE RICHARDSON, OF MILWAUKEE, WISCONSIN.

Letters Patent No. 106,726, dated August 23, 1870.

## IMPROVED BED-BOTTOM.

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

*To all whom it may concern:*

Be it known that I, GEORGE RICHARDSON, of the city and county of Milwaukee and State of Wisconsin, have invented certain Improvements in Bed-Bottoms and Mattresses; and I do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the annexed drawing making part of this specification, in which—

Figure 1 is a perspective view of my improved bed-bottom and mattress as they appear when combined.

Figure 2 is a bottom view of my improved mattress, showing the end reduced in thickness, and the means of securing it to the bed-bottom.

Figure 3 is a plan view of a portion of the wires which constitute the support for the mattress, and showing the cleat for fastening them to the ends of the bed-bottom.

Corresponding letters refer to corresponding parts in the several figures.

This invention relates to that class of bed-bottoms which is supplied with a series of small wires woven or interlocked together, in such a manner as to form a cloth for supporting the mattress; and

It consists in combining therewith a mattress of peculiar construction, and, also, in combining therewith wires for conducting off electricity; and, further, in the combination with the mattress and bed-bottom of straps for the purpose of uniting them together, as will be more fully explained hereinafter.

Bed-bottoms of this type have heretofore been constructed of two thicknesses of wire-cloth only, and, in order to strengthen those portions which had to sustain the weight of the persons resting upon it, an additional thickness of cloth has sometimes been placed under the upper thickness, and attached to it at the sides and at the center, or narrow strips have been placed under it at these points; but the wires of these additional thicknesses have never been interwoven with those of the upper cloth, so as to constitute in reality only one thickness of cloth, strengthened, where required, by interweaving of additional wires to reduce the elasticity of the cloth at such points.

I propose to construct a bottom consisting of two or more thicknesses of wire-cloth, the wires of which interlock longitudinally one with the other, as clearly shown in fig. 3.

To prevent the wires or cloth, which supports the mattress, being too much depressed in the center, I at that part place another thickness of cloth, the wires of which are interlocked with or woven into the main body of the cloth, by which means it is very much strengthened at that point. The same means are employed to strengthen this support at its sides, where the cloth is also supplied with an additional thickness of wires interlocked with those of the other thicknesses

in the manner clearly shown in fig. 3 of the drawing.

The cloth thus made is fastened to a frame, A, made of boards of suitable thickness, its length and width being such as to adapt it to the bed to which it is to be applied.

The sides or longest parts of this frame are to be hollowed out in their central portion, as shown in fig. 1, for the purpose of allowing a greater movement to the wires at that point.

To the ends of this frame the wire-cloth is to be attached by means of a cleat, A', which may be either nailed or screwed to the ends of the frame, it covering the ends of the wire-cloth, thus holding it in position, as well as preventing it from injuring the mattress. The ends of the wires or of the wire-cloth are attached to the upper surface of the frame, while its sides are attached to the lower surface, thus giving it a greater amount of elasticity at its center longitudinally than at its ends.

A copper rod or wire, A<sup>2</sup>, is run around the frame A, secured to it in any suitable manner, which may be used in connection with staples to fasten the wires to the sides, in the manner shown. But its principal office is to conduct off the electricity in case the bed is struck by lightning. Where its ends meet they are united together and run to any desired point away from the bed.

The mattress B, to be used in connection with the bottom hereinbefore described, is constructed with its ends B' reduced in thickness on the under side, for such a distance as to permit the main body to lie upon the wire-cloth between the cleats A', or the end-rails of the frame A, so that it may rise and fall with the movements of the wires without subjecting such ends to any extra wear on the cleats or end rails, and for the further purpose of keeping the upper surface of the mattress level, or nearly so, under all ordinary circumstances.

The mattress is provided at each end with a series of straps, C, made of elastic material, by preference, and fastened to it at the under side in any suitable and substantial manner at one of their ends. The other end is provided with an eye to hook over broad-headed nails c, driven at the proper points into the end rails of the frame A, for the purpose of securing the mattress to the bottom.

The eye in the straps is covered on one or both sides by a metallic plate, c', with a round central aperture, large enough to admit the head of the nail, and narrow slots extending vertically from each side of the central hole to permit it to move over the shank of the nail in the rise or fall of the mattress.

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

1. The combination of the bed-bottom herein de-

scribed, and the mattress B B', substantially as set forth.

2. In combination with the within-described bed-bottom, the copper wire or rod A<sup>2</sup>, arranged as described, and for the purpose set forth.

3. The combination of the bed-bottom, mattress, and straps C, for attaching the latter to the former, substantially as set forth.

In testimony whereof I have signed my name to this specification in presence of two subscribing witnesses.

GEO. RICHARDSON.

Witnesses:

HOLLON RICHARDSON,  
D. P. HOLLOWAY.