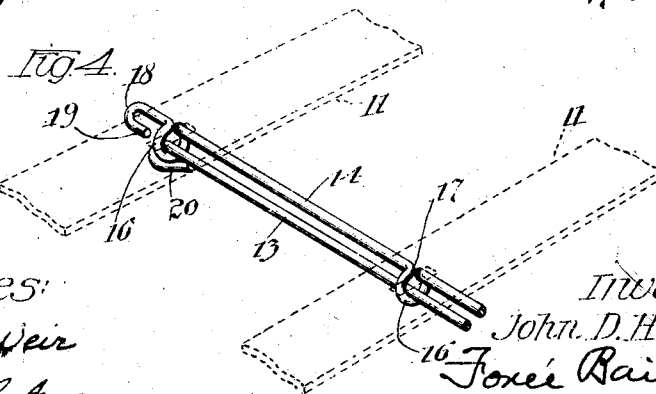
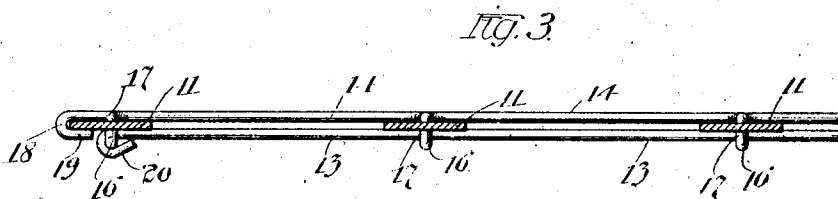
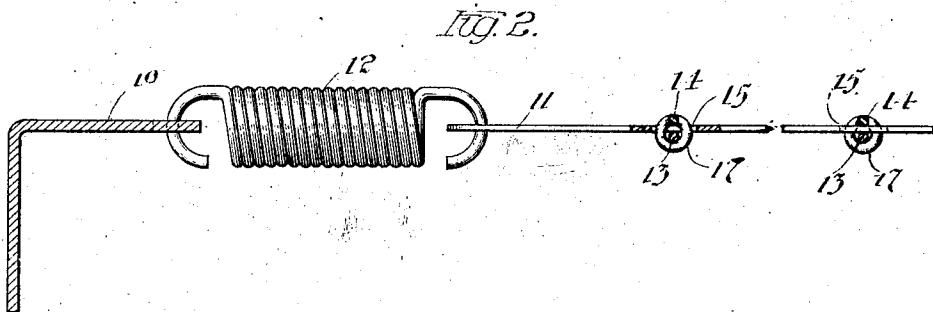
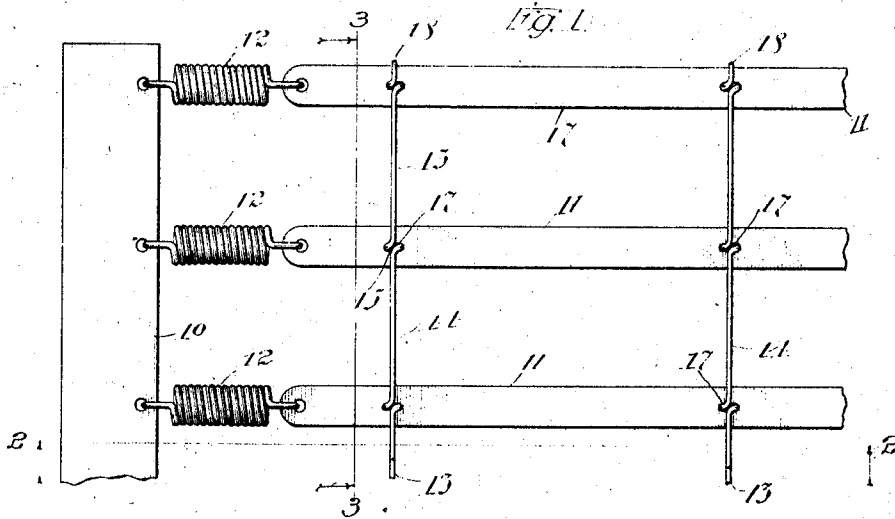


J. D. HAGGARD.
METALLIC FABRIC.
APPLICATION FILED APR. 5, 1913.

1,062,967.

Patented May 27, 1913.



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UNITED STATES PATENT OFFICE.

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METALLIC FABRIC.

1,062,967.

Specification of Letters Patent.

Patented May 27, 1913.

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To all whom it may concern:

Be it known that I, JOHN D. HAGGARD, a citizen of the United States, residing at Chicago, in the county of Cook and State of Illinois, have invented certain new and useful Improvements in Metallic Fabric, of which the following is a specification.

My invention relates to improvements in metallic fabric and has particular reference to a novel and advantageous elastic fabric especially adapted for use in the construction of spring mattresses, bed bottoms, and the like, in which longitudinal metal ribbons or slats are interwoven with wires uniformly disposed at proper intervals along the longitudinal extent thereof: the longitudinal members being suspended in a relatively rigid frame by springs attached to each end of each of the members and spaced apart at points of attachment to said frame and at intervals by the transverse stay-wire members.

Some of the objects of my invention are to secure the ribbon-like longitudinal slat members, at intervals to transverse stay-members composed, preferably, of wire, and to key the parts securely together by another wire: thereby to enhance the resiliency of the structure: to space apart and maintain the longitudinal members in proper relation by transversely extending wires, the resiliency of which will permit some relative longitudinal movement of the slatted members, and at the same time prevent any lateral relative movement thereof; and to generally improve such structures by increasing the resiliency, durability, and wear without materially increasing the cost of construction.

Further objects and advantages of my invention will become readily apparent to persons skilled in the art from a consideration of the following description when taken in conjunction with the drawings, and the novel features thereof will be specifically defined in the appended claims.

In the drawing, Figure 1 is a fragmentary plan view of the structure; Fig. 2 is a section taken on line 2—2 of Fig. 1; Fig. 3 is a section taken on line 3—3 of Fig. 1; Fig. 4 is a perspective of a portion of one of the transverse members showing the association with a longitudinal member of the structure.

In all the views the same reference char-

acters are employed to indicate similar parts.

In using my slatted fabric for bed-bottoms, spring mattresses, or the like, I provide a rigid frame 10, to which the longitudinal members of the structure 11 are attached at stated intervals, as by springs 12—12. There are two oppositely disposed frame members 10 in a bed bottom and each end of the longitudinal member 11 is attached thereto by means of a spring 12, so that each of the longitudinal members is independently suspended in the frame by means of the springs. By this arrangement the longitudinal members 11 are uniformly spaced apart throughout the entire transverse dimensions of the structure. To maintain these members in proper spaced relation throughout their length, I provide intermediate transverse stay members composed of wires 13 and 14 which extend at intervals across the longitudinal members 11. The longitudinal members 11 are perforated, at intervals, to provide slots 15. The transverse stay members are composed of wires 13 and 14. The wire 14 is intended to lie upon the top of the slats 11 and, at proper intervals, is bent into loops 16 to provide eyes 17. The eyes 17 are in the same plane as the axis of the parallel wire 13.

When the longitudinal members 11 are assembled the respective perforations 15 of all of the members are in the same transverse plane, so that in the act of assembling, the stay wires 14 have their loops 16 passed through the slots 15 of the longitudinal members 11, the ends of the wires 14 being turned back upon the slat 11, as at 18, so that the end 19 thereof is tucked away to be out of possible contact with passing objects. The key-rod or wire 13 is then passed through the eyes made in the series of loops 16 of the wire 14 and under the longitudinal cross members 11. After the key-rods have been passed through the eyes of all the loops 16, the ends of the key-rods are inturned through the terminal loop 16, as shown at 20. By this means all of the raw or sharp terminal surfaces of the wires are inturned so as to be out of the way and nothing but smooth round surfaces are exposed to contact. The key rods 13 are passed through the loops 16 for the purpose of holding the wires 14 in proper rela-

tion with respect to the longitudinal members 11 and to retain the loops within the slots made in said longitudinal members; otherwise the wires 13 could be readily dispensed with. The loops 16 are made at right angles to the axis of the wire 14 so that the slots 15 made in the longitudinal members 11 may have their longest dimension parallel with the sides of the members instead of transversely thereof, whereby the possible weakening of the slot 11 is avoided.

Any weight that may be imposed upon a given longitudinal member 11, to cause it to be downwardly deflected to a greater extent than its associate members, will cause the lateral deflection of the transverse stay members 13 and 14 sufficiently to permit the said downward movement of the longitudinal members, and the resiliency of the stay members will cause it to come back into line when the weight has been removed from the longitudinal member, thereby permitting relative longitudinal movement of the longitudinal members under extreme conditions of use without disturbing the relatively rigid connections between the longitudinal and transverse members. The transverse members therefore contribute somewhat to the resilient activity of the structure and in connection with the springs 12 provide a resilient fabric, the members of which will be readily returned to their normal position after the cause of their unequal deflection has been removed.

It will be evident, to persons skilled in the art, that without the springs 12 my fabric is adapted for use in the making of fences, slatted barrels, boxes or other receptacles and many other purposes that will readily

suggest themselves from an understanding of my present disclosure, and while I have described and shown a single embodiment of my invention, it is apparent that changes may be made therein without departing from the spirit and scope of the appended claims.

What I claim is:

1. In a device of the character described, the combination of a plurality of parallel slats uniformly spaced apart and perforated at regular intervals; transverse stay members comprising wires having loops at uniform intervals to provide eyes in the axial plane of the respective stay wires for engagement in the perforations in the slat members; and key-rods threaded through said eyes and located on the opposite sides of said slat members.

2. In a device of the character described, the combination of a relatively rigid frame having opposite end members perforated at regular intervals; a plurality of slats perforated at regular intervals, said slats independently supported in said frame by springs engaging each end thereof; transverse stay members comprising wires having loops at uniform intervals to provide eyes in the axial plane of the respective stay wires for engagement in the perforations in the slat members; and key-rods threaded through said eyes and located on the opposite sides of said slat members.

In testimony whereof I hereunto set my hand in the presence of two witnesses.

JOHN D. HAGGARD.

In the presence of—
FORÉE BAIN,
MARY F. ALLEN.