No. 754,260. PATENTED MAR. 8, 1904.

J. G. VENABLE, Sr.

SPRING BED BOTTOM.

APPLICATION FILED MAY 9, 1903.

NO MODEL. 2 SHEETS—SHEET 1.

FIG. 1.

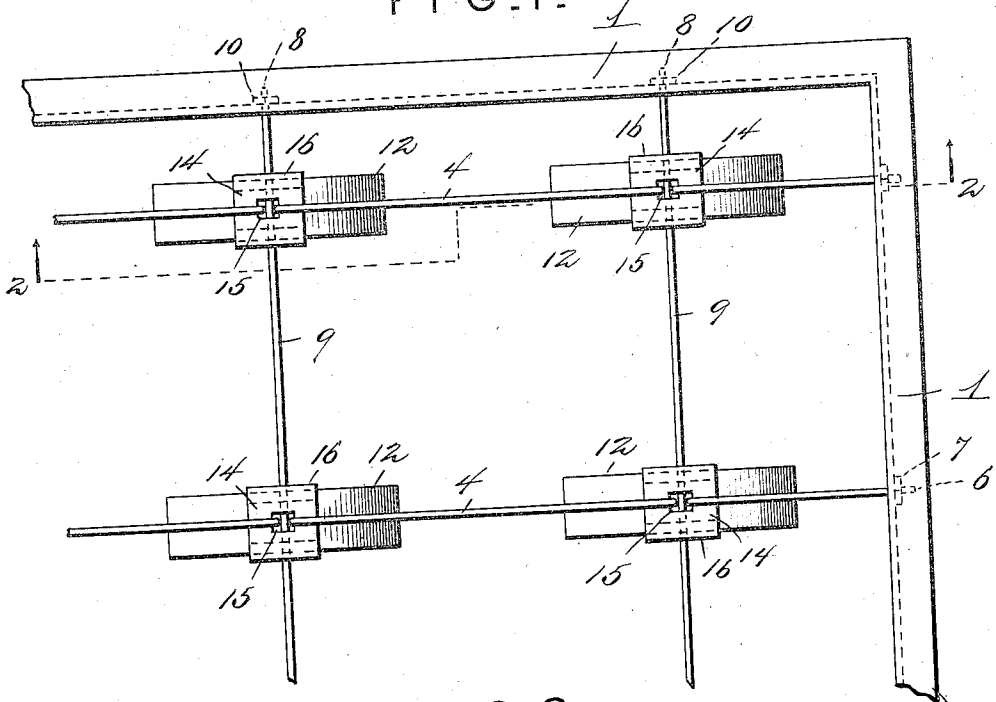


FIG. 2.

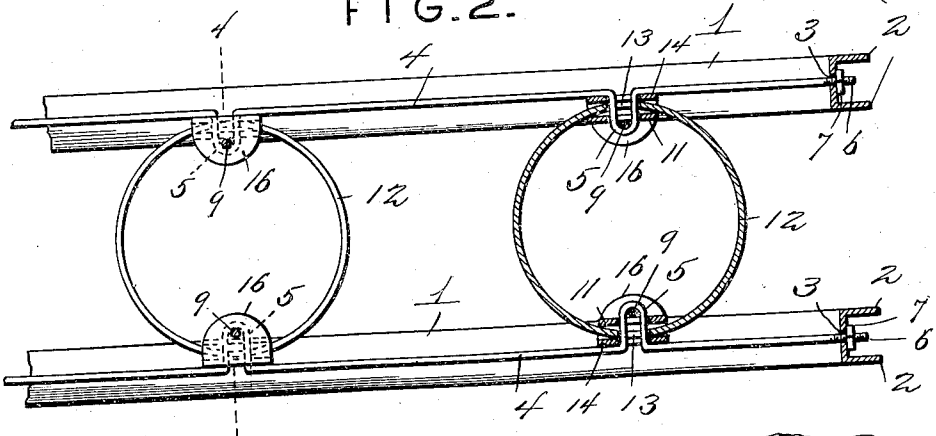
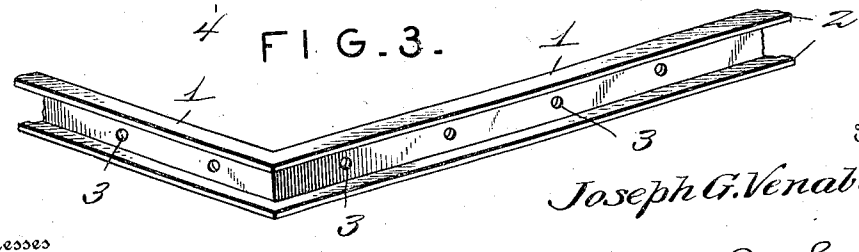


FIG. 3.



Witnesses

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Herbert D. Lawson.

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By Victor J. Evans

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NO MODEL. 2 SHEETS—SHEET 2.

FIG. 4.

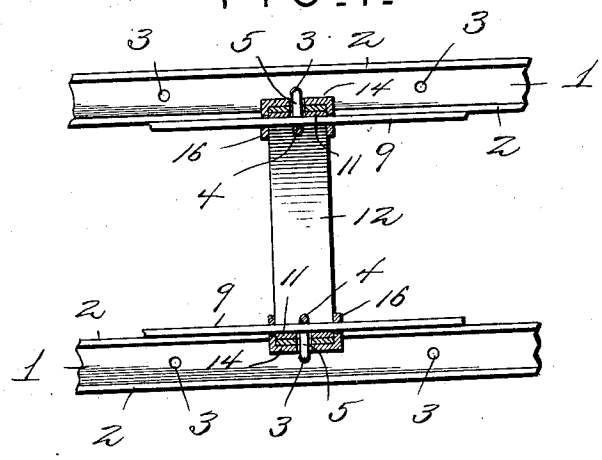


FIG. 5.



FIG. 6.

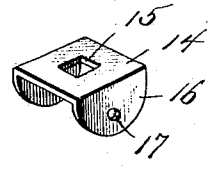


FIG. 7.

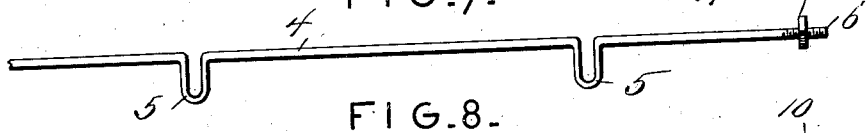


FIG. 8.

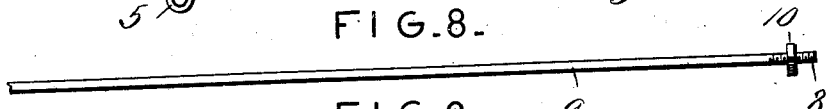
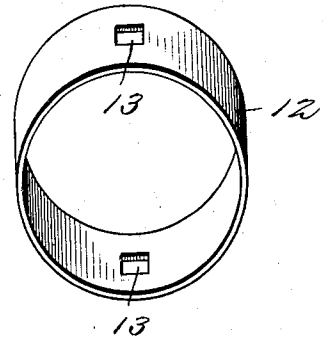


FIG. 9.



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No. 754,260. Patented March 8, 1904.

UNITED STATES PATENT OFFICE.

JOSEPH GLASS VENABLE, SR., OF PETERSBURG, INDIANA.

SPRING BED-BOTTOM.

SPECIFICATION forming part of Letters Patent No. 754,260, dated March 8, 1904.

Application filed May 9, 1903. Serial No. 156,414. (No model.)

To all whom it may concern:

Be it known that I, JOSEPH GLASS VENABLE, Sr., a citizen of the United States, residing at Petersburg, in the county of Pike and State of Indiana, have invented new and useful Improvements in Spring Bed-Bottoms, of which the following is a specification.

My invention relates to new and useful improvements in spring bed-bottoms; and its object is to provide frames of novel construction having springs interposed therebetween.

A further object is to employ novel means for connecting the strands on the frames and the supporting-springs.

With the above and other objects in view the invention consists in employing, preferably, two rectangular frames which are similar in construction and each of which is provided with series of transversely-extending wires, which are securely fastened in position against longitudinal movement. Circular springs are interposed between the two frames, and means are employed for securing these springs in position, said means also serving to fasten the wires of the series together.

The invention also consists in the further novel construction and arrangement of parts hereinafter more fully described and claimed, and illustrated in the accompanying drawings, in which—

Figure 1 is a plan view of a portion of the device. Fig. 2 is a section on line 2 2, Fig. 1. Fig. 3 is a perspective view of a portion of one of the frames. Fig. 4 is a section on line 4 4, Fig. 2. Figs. 5 and 6 are detail views of the binding-plates employed at each point of the connection within the device. Figs. 7 and 8 are similar views of the longitudinal and transverse wires, respectively; and Fig. 9 is a perspective view of one of the springs detached.

Referring to the figures by numerals of reference, 1 is a preferably rectangular frame of any suitable proportions and having outwardly-extending flanges 2 at the edges thereof. Apertures 3 are formed within each side of the frame at desired intervals, and the end apertures of said frame serve to receive longitudinally-extending wires 4, having downwardly-extending U-shaped extensions 5 at desired intervals. The ends of these wires are screw-threaded, as shown at 6, for the reception of nuts 7, which serve to prevent longitudinal movement of the wires within frame 1.

The apertures within the sides of the frame receive the threaded ends 8 of straight wires 9, and these ends also project into nuts 10, adapted to prevent longitudinal movement. The wires 9 are at such distances apart as to permit them to rest within the U-shaped extensions 5, before referred to, and rectangular plates 11 are arranged upon the wires 9 and inclose extensions 5. A circular spring 12, preferably formed of sheet metal, is provided at opposite sides with rectangular openings 13, and one of the extensions 5 is adapted to project into one of these openings. Said spring projects over the plate 11 and below a rectangular plate 14, having an opening 15 therein for the reception of the extension 5. This plate 14, as well as the spring 12, is arranged above the wire 9, and it is provided with side flanges 16, having apertures 17 therein, through which said wire projects. Two frames such as above described are provided in my improved construction of bed-bottom; but the extensions 5 of the lower frame project upward instead of downward, and the springs 12 are connected to the extensions 5 of both frames in the same manner.

In assembling the parts of the device the wires 4 are first placed in position and the extensions 5 are then inserted through first the plates 14 and then the springs 12 and finally the plates 11. The wire 9 is then inserted longitudinally through the side apertures 3 in the frame, the apertures 17 in flanges 16, and the extensions 5. Said wire is then secured against movement by the means of the nuts 10, and it will be seen that all of the parts will then be securely bound together.

By means of the nuts 7 and 10 longitudinal movement of the wires is prevented, and two suitable frames are thus provided, the same having the circular springs 12 interposed therebetween and securely fastened thereto.

It will be seen that the device is extremely simple in construction, and the parts thereof can be readily assembled. The wires 9 not only

serve the purposes of the transverse strands of the bed-bottom, but also are employed for binding the various parts together. It will be seen that with this construction the outer surfaces of the bed-bottom are comparatively smooth, and no sharp or rough edges are presented upon which a mattress may be torn or otherwise injured.

In the foregoing description I have shown the preferred form of my invention; but I do not limit myself thereto, as I am aware that modifications may be made therein without departing from the spirit or sacrificing any of the advantages thereof, and I therefore reserve the right to make such changes and alterations as may fairly fall within the scope of my invention.

Having thus fully described my invention, what I claim as new, and desire to secure by Letters Patent, is—

1. In a device of the character described, the combination with a frame, of longitudinally-extending wires therein, extensions on the wires, transversely-extending wires within the frame and seated within the extensions, a circular spring having an aperture therein for the reception of one of the extensions, apertured plates upon the extension at opposite sides of the aperture in the spring, and flanges to one of the plates for the reception of a transverse wire whereby said spring and wires are bound together.

2. In a device of the character described, the combination with a frame, of longitudinally-extending wires secured therein, U-shaped extensions to said wires, transversely-extending wires secured within the frame and seated within the extensions, means for preventing longitudinal movement of the wires, a circular spring having an aperture therein for the reception of one of the extensions, apertured plates upon the extension at opposite sides of the apertured portion of the spring, and flanges at opposite sides of one of said plates and having openings therein for the reception of a transverse wire, whereby the wires, plates and spring are secured together.

3. In a device of the character described, the combination with frames having longitudinally-extending wires therein and inwardly-projecting U-shaped extensions thereon; of transversely-extending wires within each frame and seated within the extensions, means for preventing longitudinal movement of said wires within the frames, circular springs having oppositely-disposed apertures therein for the reception of the extensions of the wires, apertured plates upon each extension and at opposite sides of the adjacent apertured portion of the spring, and flanges upon one of said plates having openings therein for the reception of a transversely-extending wire.

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

JOSEPH GLASS VENABLE, Sr.

Witnesses:

BENONI R. HARSHA,

WILBUR C. KELLY.