

W. BUBEL.
COMBINATION BED.
APPLICATION FILED MAR. 26, 1909.

Patented Feb. 8, 1910.

5 SHEETS—SHEET 1.

948,411.

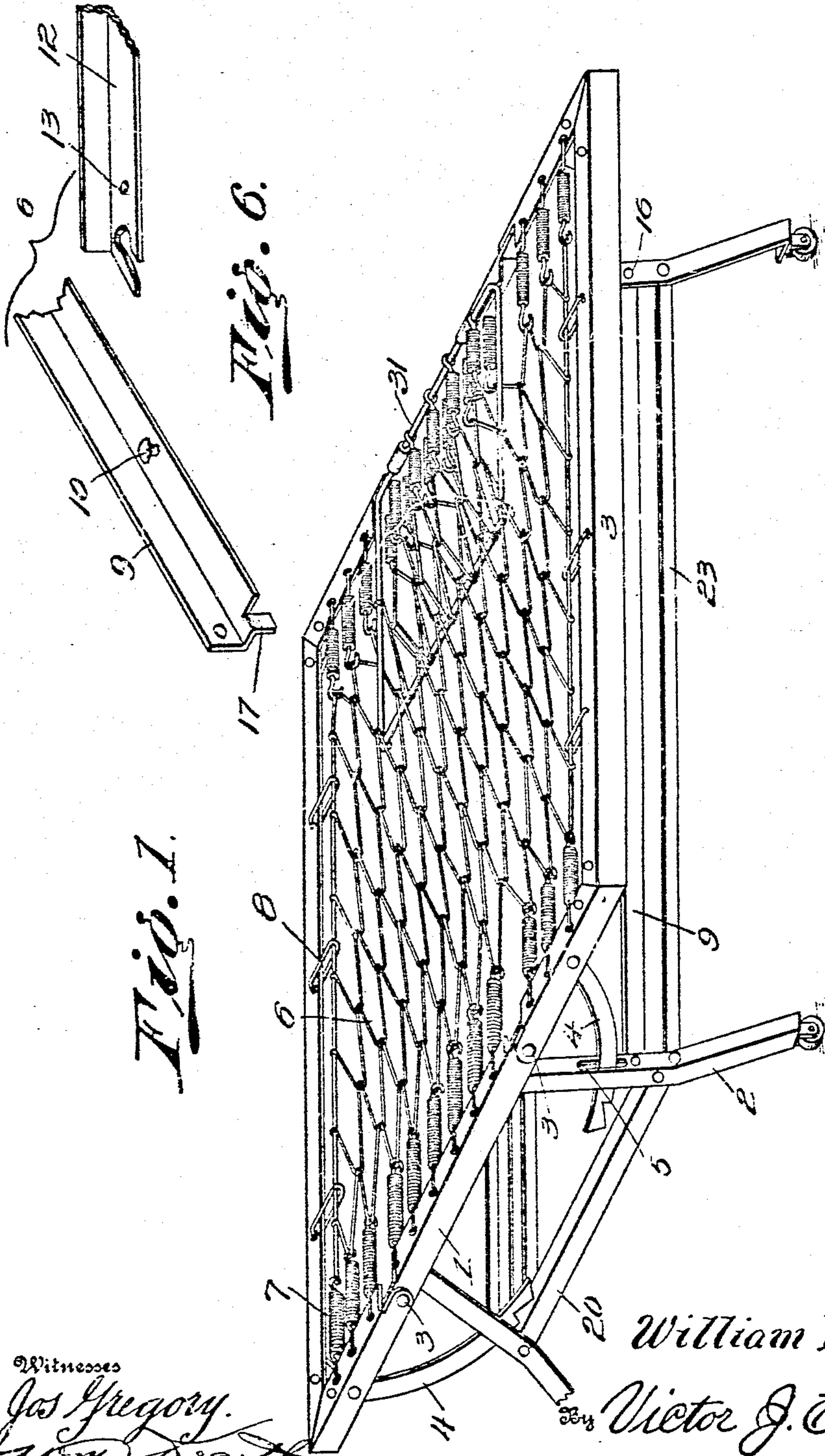


Fig. 1.

Fig. 6.

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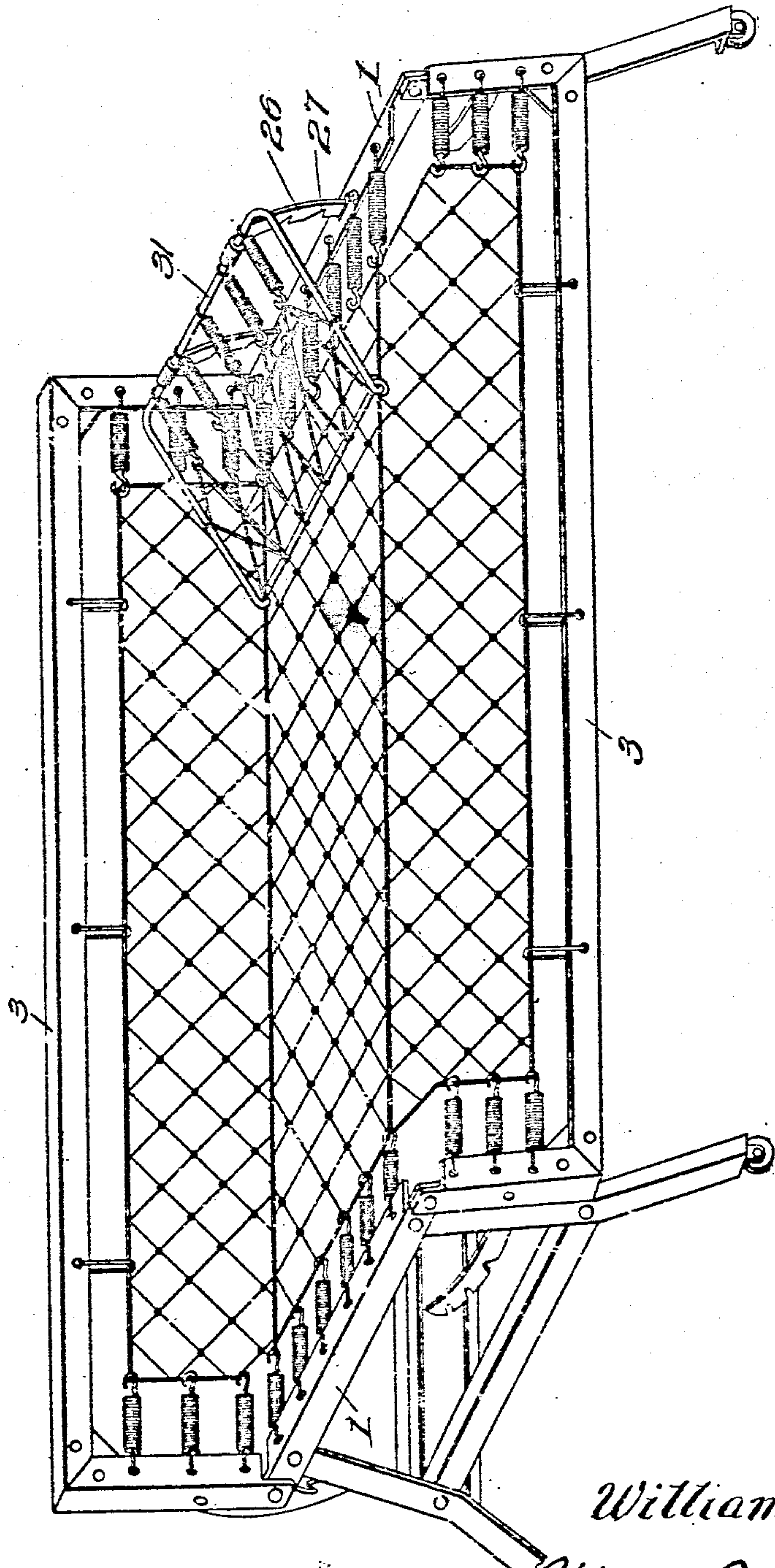
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5 SHEETS—SHEET 2.

Fig. 2.



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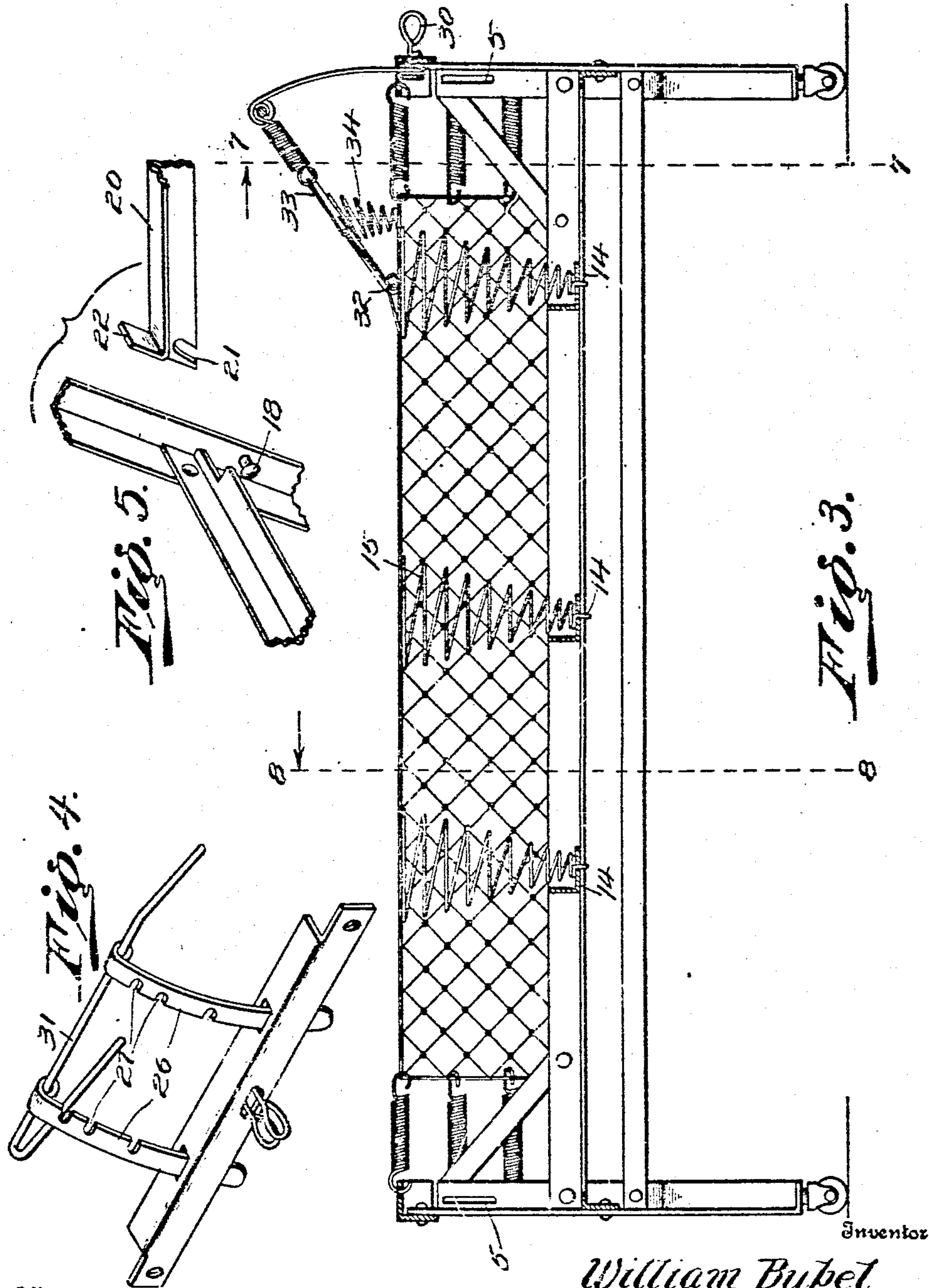
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5 SHEETS—SHEET 3.



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5 SHEETS—SHEET 4.

Fig. 7.

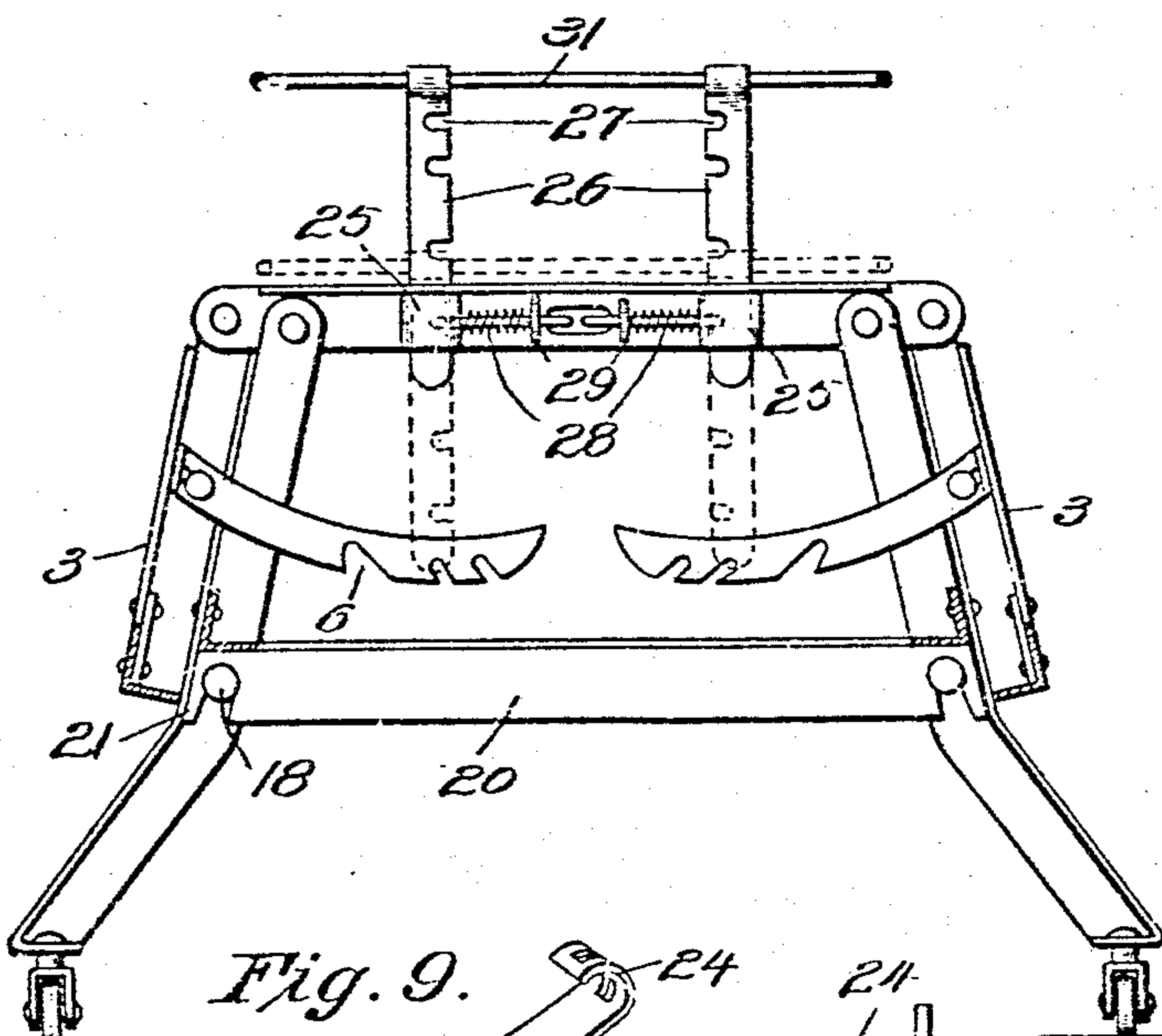


Fig. 11.

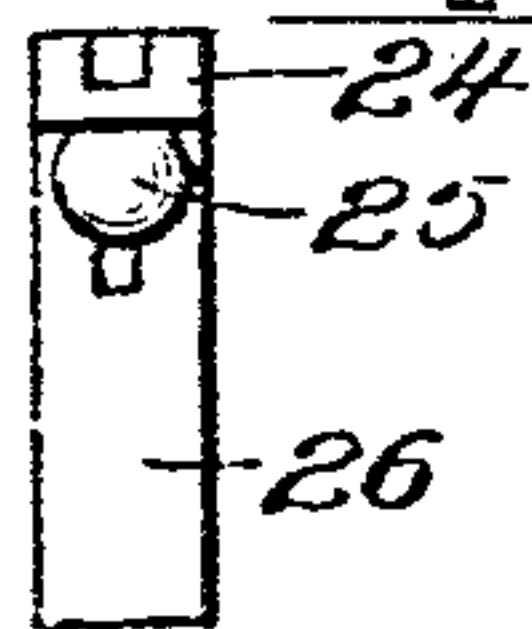


Fig. 9.

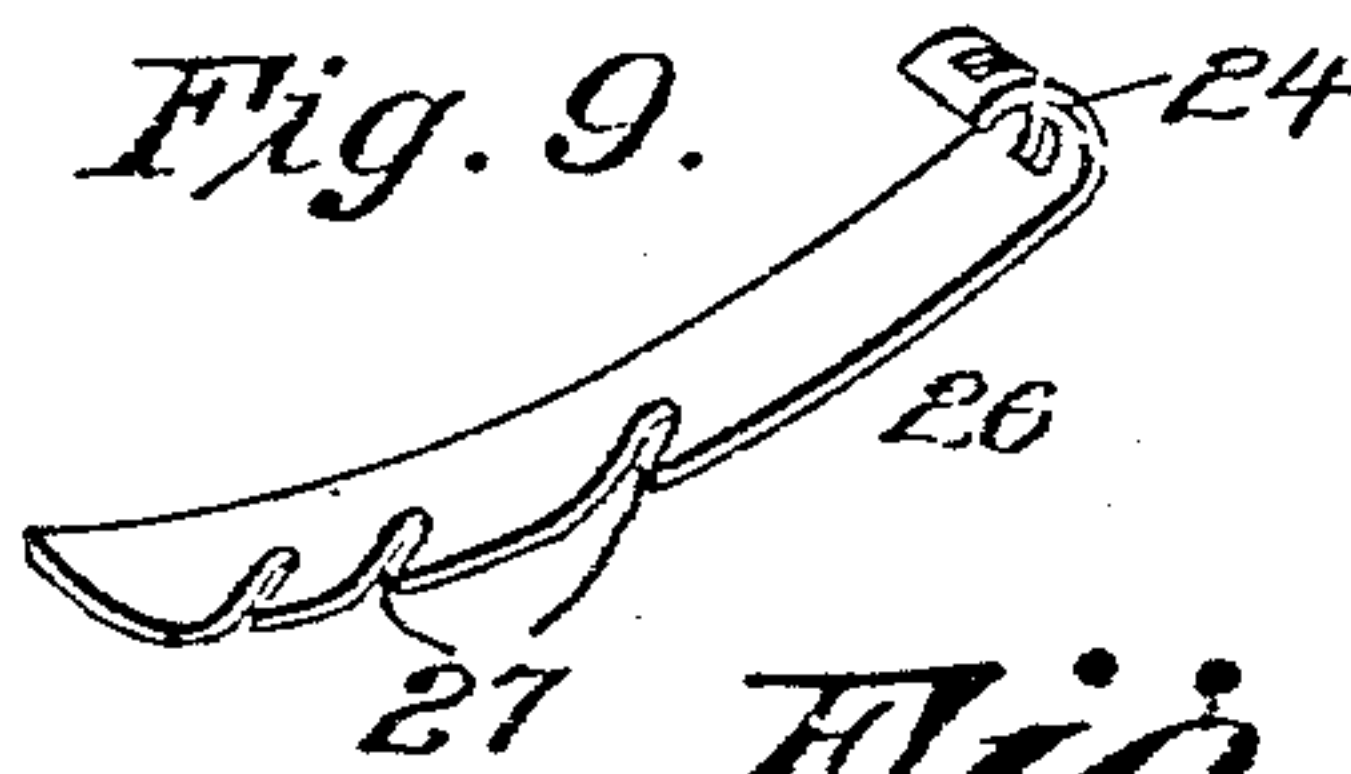
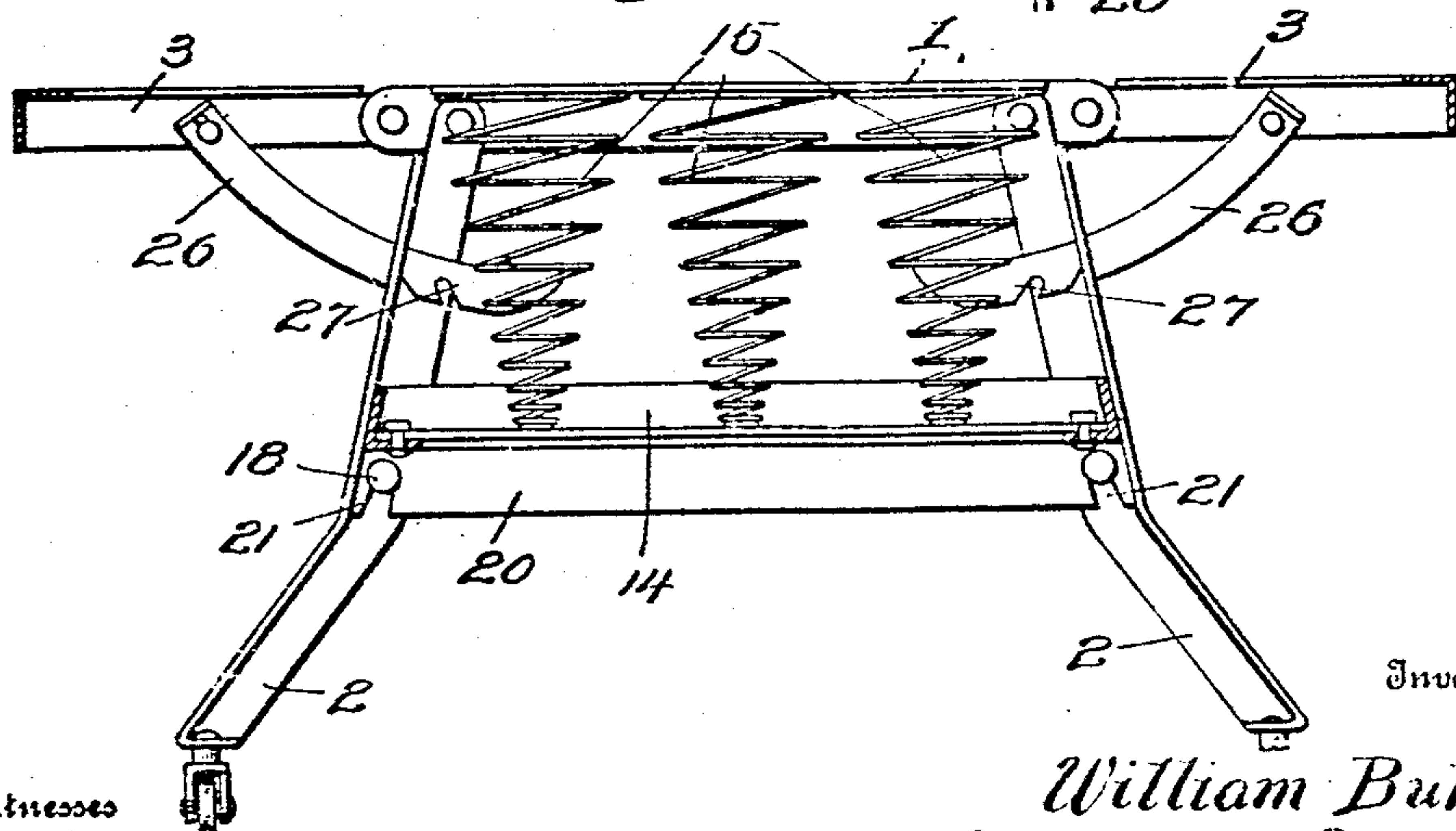


Fig. 10.

Fig. 8.



Witnesses

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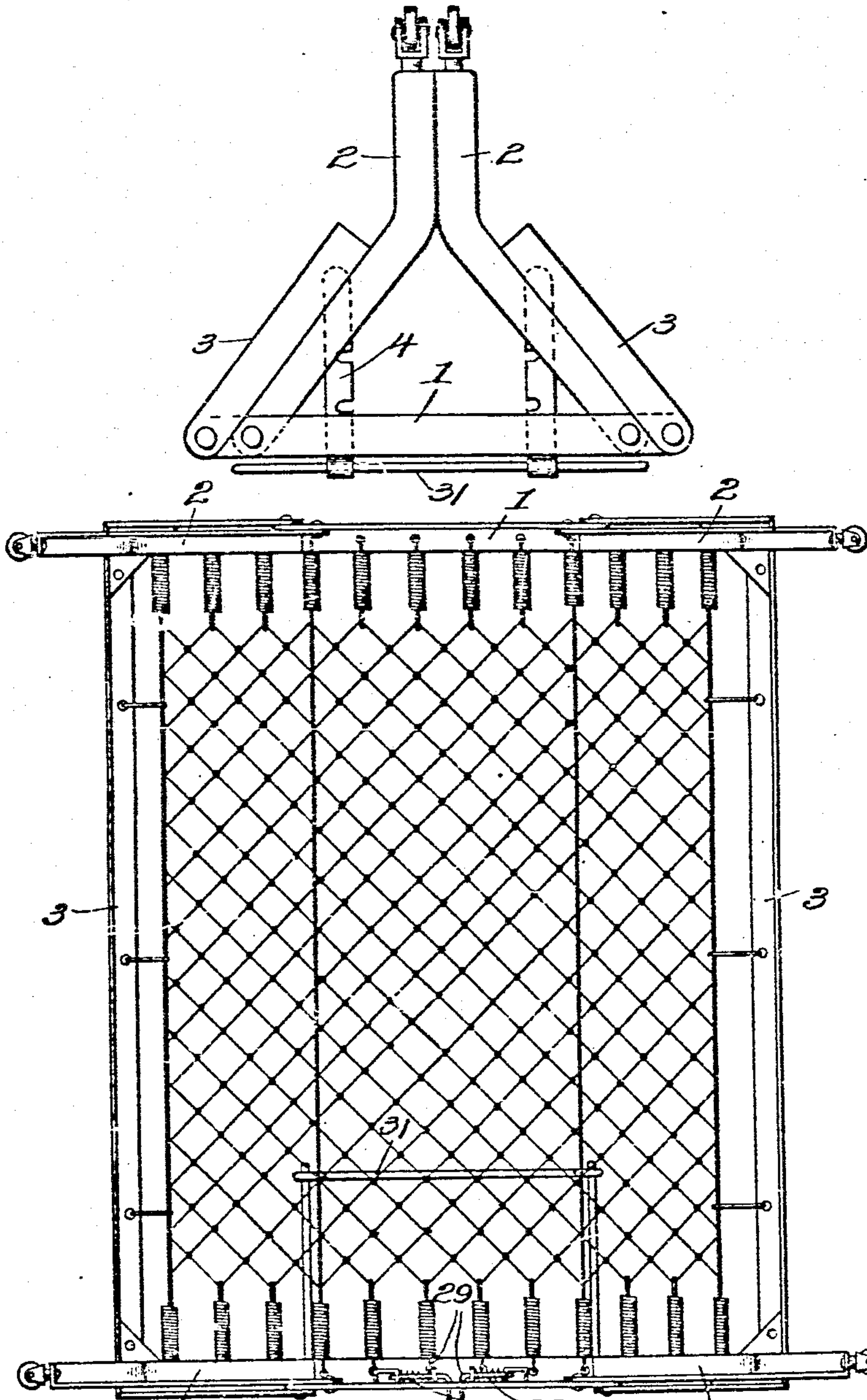
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5 SHEETS—SHEET 5.

Fig. 12.



Witnesses
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Fig. 13.

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UNITED STATES PATENT OFFICE.

WILLIAM BUBEL, OF SALT LAKE CITY, UTAH.

COMBINATION-BED.

948,411.

Specification of Letters Patent.

Patented Feb. 8, 1910.

Application filed March 26, 1909. Serial No. 485,941.

To all whom it may concern:

Be it known that I, WILLIAM BUBEL, a citizen of the United States, residing at Salt Lake City, in the county of Salt Lake and State of Utah, have invented new and useful Improvements in Combination-Beds, of which the following is a specification.

This invention relates to convertible sofas, and the object of the invention is to provide an article of this character which may be readily changed from a sofa to a bed or couch or to a crib as desired.

One of the principal objects of the invention is to provide a device of this character which is extremely simple in construction and wherein the parts are so constructed and arranged so that the device may be easily and quickly adjusted and secured in its various positions.

A still further object of the invention is to provide a device of this character which may be easily and quickly folded into a small space for shipment or storage.

With the above, and other objects in view which will be more apparent as the description progresses, the invention resides in the novel construction and arrangement of parts hereinafter fully described and claimed.

In the accompanying drawings there has been illustrated a simple and preferred embodiment of the invention, it is to be understood that I do not limit myself to the precise structural details therein exhibited as minor changes in proportion and detail may be resorted to if desired without departing from or sacrificing any of the details of construction and advantages set forth in the appended claims.

In the drawings, Figure 1 is a perspective view of the device illustrating the same spread to provide a bed. Fig. 2 is a similar view illustrating the device in the form of a lounge or davenport. Fig. 3 is a central longitudinal sectional view showing the pillow or bolster in its raised position. Fig. 4 is a detail perspective view of the frame of the bolster. Fig. 5 is a fragmentary perspective view of one of the bottom rails and one of the end cross rails, illustrating the method of connecting these members. Fig. 6 is a detail perspective view of the bottom rail and cross rail, also illustrating the method of securing the cross rail to the bottom rail. Fig. 7 is a transverse sectional view upon the line 7—7 of Fig. 3. Fig. 8

is a similar sectional view upon the line 8—8 of Fig. 3. Fig. 9 is a detail perspective view of one of the arcuate stays. Fig. 10 is a detail sectional view illustrating the position of the arcuate stay upon the side frame of the device. Fig. 11 is a front elevation of the same. Fig. 12 is an end elevation illustrating the manner in which the device may be folded for storage or shipment. Fig. 13 is a plan view of another method of folding the device for storage or shipment.

The improved device comprises primarily end rails, constructed of angle irons, and designated by the numeral 1, supported by oppositely angularly disposed legs 2, also constructed of angle irons and side frames 3. The side frames 3 like the end rail and legs of the device are preferably constructed of angle irons and are pivoted to the end rails as designated by the numeral 3. The side frames 3 comprise substantially rectangular members and are provided upon both of their ends with arcuate or annular stay members 4. The legs 2 are each provided with suitable slots or cut away portions upon one of their faces and the stays 4 have their underface provided with teeth or cut away portions which are adapted to engage the lower wall provided by the cut away portions 5 of the angular legs 2. The teeth of the stay members 4, which are designated by the numeral 6, are so arranged as to support the side frames 3 from any desired angle from a horizontal to a vertical plane in relation to the end rails 1. The stay members 4 are also adapted to be passed through the slot 5 when the side frames 3 are lowered and brought into a position adjacent the leg irons 3, as illustrated in Figs. 2 and 7 of the drawings.

The frame comprising the side members 3 and the end members 1 are provided with a suitable flexible body portion designated by the numeral 7. This covering element is preferably constructed of wire connected at its ends with a plurality of spring members 7 and adapted to be retained in proper position upon the longitudinal walls of the side frame 3 through the medium of suitable connecting elements 8.

The legs 2 of the device are connected longitudinally through the medium of L-shaped bottom rails 9. These rails 9 are constructed of angle irons and have their

horizontal surfaces provided with spaced headed rivets 10 which project a suitable distance above said horizontal walls of the members 9, and these rivets are adapted for the reception of suitable cut away portions or mouths 11 provided in the ends of angular cross or connecting rails 12. These rails 12 are each provided with suitable perforations 13 which are adapted for the offset portion 14 of the lower convolution of cone-shaped helical springs 15. The connecting members 9 are riveted or otherwise rigidly secured to the leg irons 2 as designated by the numeral 16 and the portions of the horizontal wall of the members 9 adjacent the vertical walls or portions of the legs 2 are slit and the said slitted portions bent downwardly to provide bearing faces as indicated by the numeral 17. The wall of the leg member is provided with a suitable stud 18 positioned adjacent this bearing face 17. The head of the rivet 18 as well as the bearing face or portion 17 of the member 9 are both spaced a sufficient distance away from the angular leg so as to provide for the insertion of the cross end rails 20. These end rails 20 are also constructed of angle irons and are provided upon one of their offset portions, adjacent the ends thereof with a depression or mouth 21 adapted to engage the rivet 18. The rail 20 has its angular portion adjacent that occupied by the mouth 21 provided upon its ends with upturned portions 22 which are adapted, when the end rail is positioned upon the legs of the device to bear against the face 17 of the bottom rail 9, thus effectively connecting the end rails with the connecting rails 9 as well as providing means whereby the said end rails may be readily disconnected when the device is folded for storage or shipment, as will be hereinafter fully set forth. In order to give the device additional rigidity the leg members 2 are retained in spaced relation with each other through the medium of suitable longitudinally extending brace rods 23.

From the above description, taken in connection with the accompanying drawings, it will be noted that the device may have its sides adjusted so as to provide a lounge, bed, or crib as desired, the adjustment whereby the crib is provided being attained by merely adjusting the side frames 3 to a substantially vertical position in relation to the end rails 1, thereby providing a substantial crib while the bed is provided by simply adjusting the side frames horizontally with the end rails 1, and the couch or sofa being provided by adjusting one or both of the side frames 3 to their lower position. It will be still further noted that the device may be readily folded compactly so as to afford only a small space when shipped or stored. When the auxiliary supporting devices provided by the cross rails 12 are to be shipped or stored

with the remainder of the frame, the device is folded into the position illustrated by Fig. 12 of the drawings. In this figure it will be noted that the legs 2, after the removal of the end and cross rails, are folded toward and against each other while the side frames are likewise folded against the legs. This leaves the device provided with a longitudinally extending recess or compartment, as clearly illustrated in the said figure of the drawings, and which is adapted for the reception of the cross and end rails as well as the springs supported by the cross rails.

By reference to Figs. 9, 10 and 11 of the drawings it will be noted that the curved braces 4 have their upper extremities rounded, and this rounded portion is provided with a slot 24 which is adapted to engage the headed portion of the stud 25. By this arrangement, it will be noted that when the side arms 3 are entirely withdrawn from the slot 5 provided in the leg 2, the said brace 4 may be folded against the covering 6' of the device, as illustrated in Fig. 13 of the drawings. In this figure the leg members 2 are illustrated as simply spread outward away from each other in a line with the body of the device, it being understood that the end and cross rails as well as the springs carried by the cross rails have been previously removed.

One of the end racks 1 has its horizontal portion provided with spaced guide ways 25 which are adapted for the reception of stay members 26. These members 26 each comprise a substantially rectangular element having its inner edge provided with spaced openings which are adapted to be contacted by suitable spring pressed dogs 28. These dogs 28 are arranged in pairs and are supported in suitable brackets 29 and have their ends bent at an angle and extending through a suitable opening provided in this member 4 so as to produce clasp elements 30. By reference to Fig. 7 of the drawing it will be noted as the dogs 28 are brought together against the tension of the springs the said dogs will be withdrawn from engagement with the depressions 27 of the members 26 so as to allow the upward or downward movement of the members. The upper extremities of the members 26 are bent upon themselves to provide suitable eyes whereby a substantially rectangular frame 31 is connected with the members. This frame 31 is substantially U-shaped and has its free ends pivotally connected with the body of the device as at 32. The frame 31 is provided with a suitable covering of elastic material as designated by the numeral 33, and in order to support the frame and at the same time provide for the additional resiliency thereof a spiral flexible element 34 is interposed between the lower face of the covering 33 and the body 6' of the device.

Having thus fully described the invention what is claimed as new is:

1. In a foldable couch, end members, leg members pivotally connected with the end members, removable braces for the leg members, side frames pivotally connected with the leg members, a flexible covering for the top and sides of the device, a bolster for the top of the device, said bolster comprising a substantially rectangular frame having one of its ends pivotally connected with the flexible cover of the device, the opposite end of the frame being provided with downwardly extending members provided with spaced depressions, the end of the frame adjacent the bolster being provided with openings adapted to the reception of these members, and a spring dog carried by the end member adapted to engage the depressions substantially as described.

2. The combination with end rails provided with pivoted side frames and a flexible covering for the rails and frames, of leg members substantially angular in cross sec-

tion pivotally connected with the end rails, means for adjusting the frames upon the legs in relation to the end rails, longitudinally extending supporting rails connecting the leg members, said rails being provided with headed studs and having their ends bent downwardly to provide bearing faces adjacent their ends, headed studs upon the legs below the bearing faces of the connecting rail members, end cross rails having their extremities provided with recesses adapted to engage the studs of the legs and having upturned portions adapted to engage with bearing faces of the connecting members, and cross rails provided with resilient elements and having their ends provided with cut away portions adapted to engage the rivets of the connecting members.

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

WILLIAM BUBEL.

Witnesses:

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CHAS. H. NORBERG.