

No. 778,570.

PATENTED DEC. 27, 1904.

J. A. DEVORE & S. C. YOUNT.

INVALID BED.

APPLICATION FILED APR. 5, 1904.

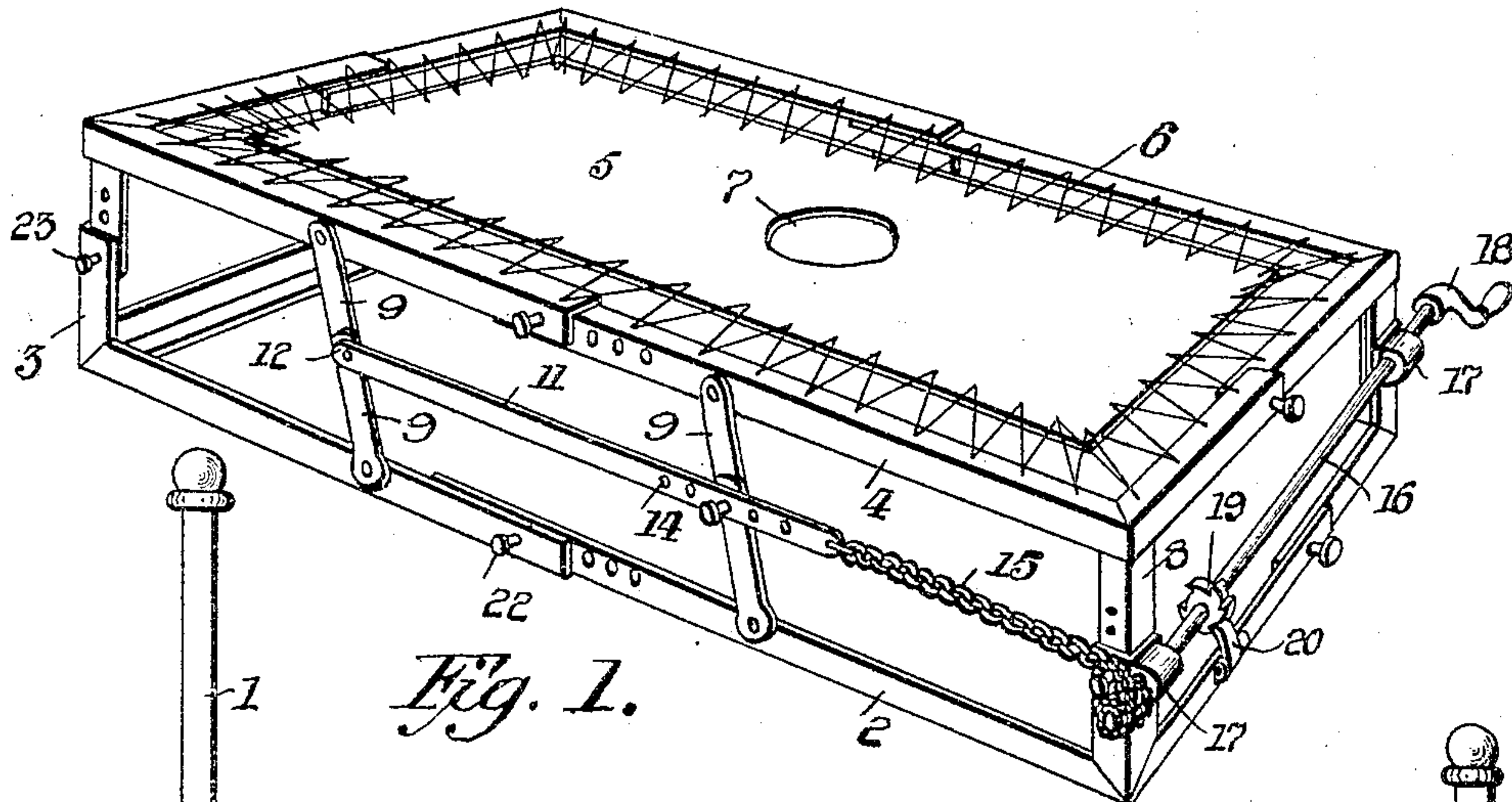


Fig. 1.

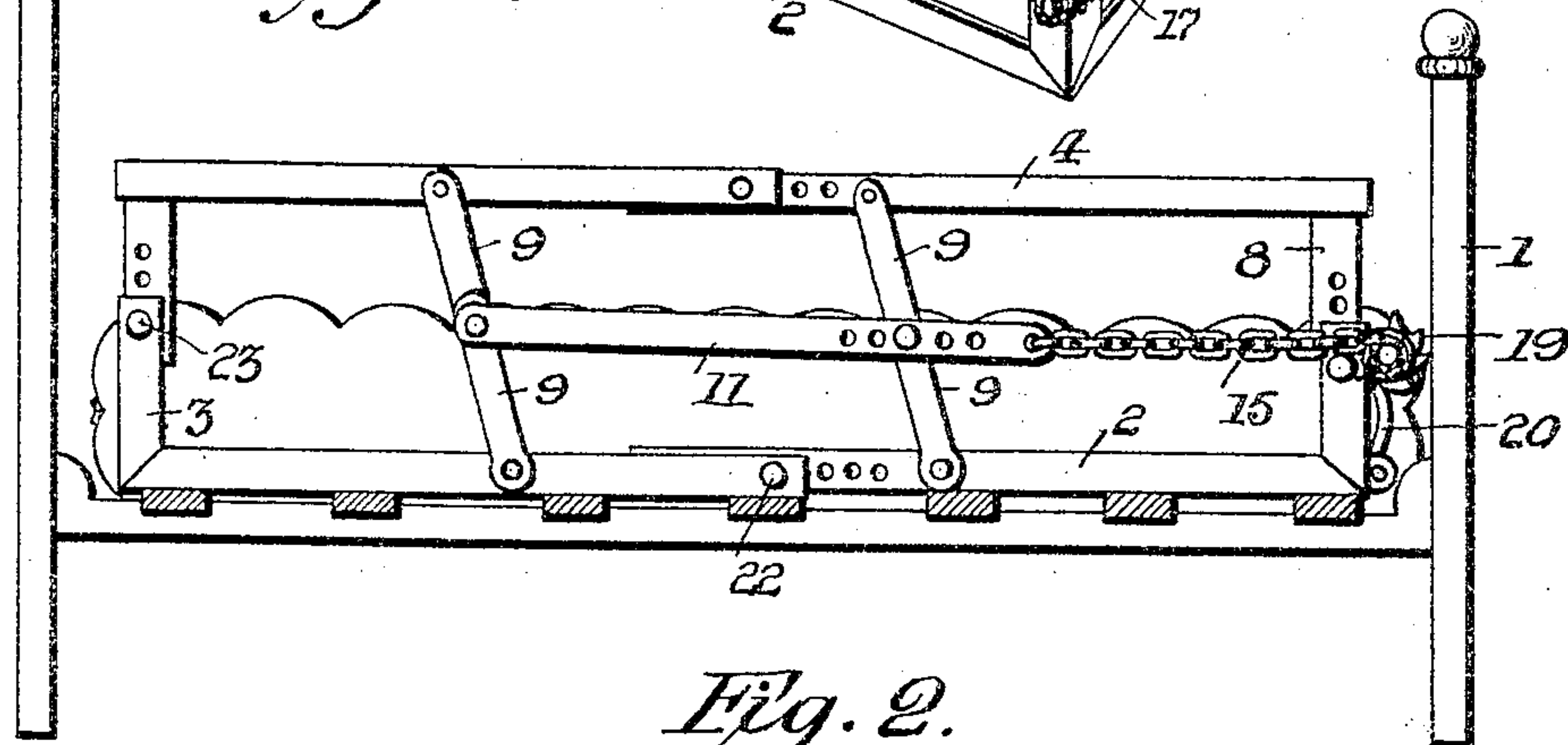


Fig. 2.

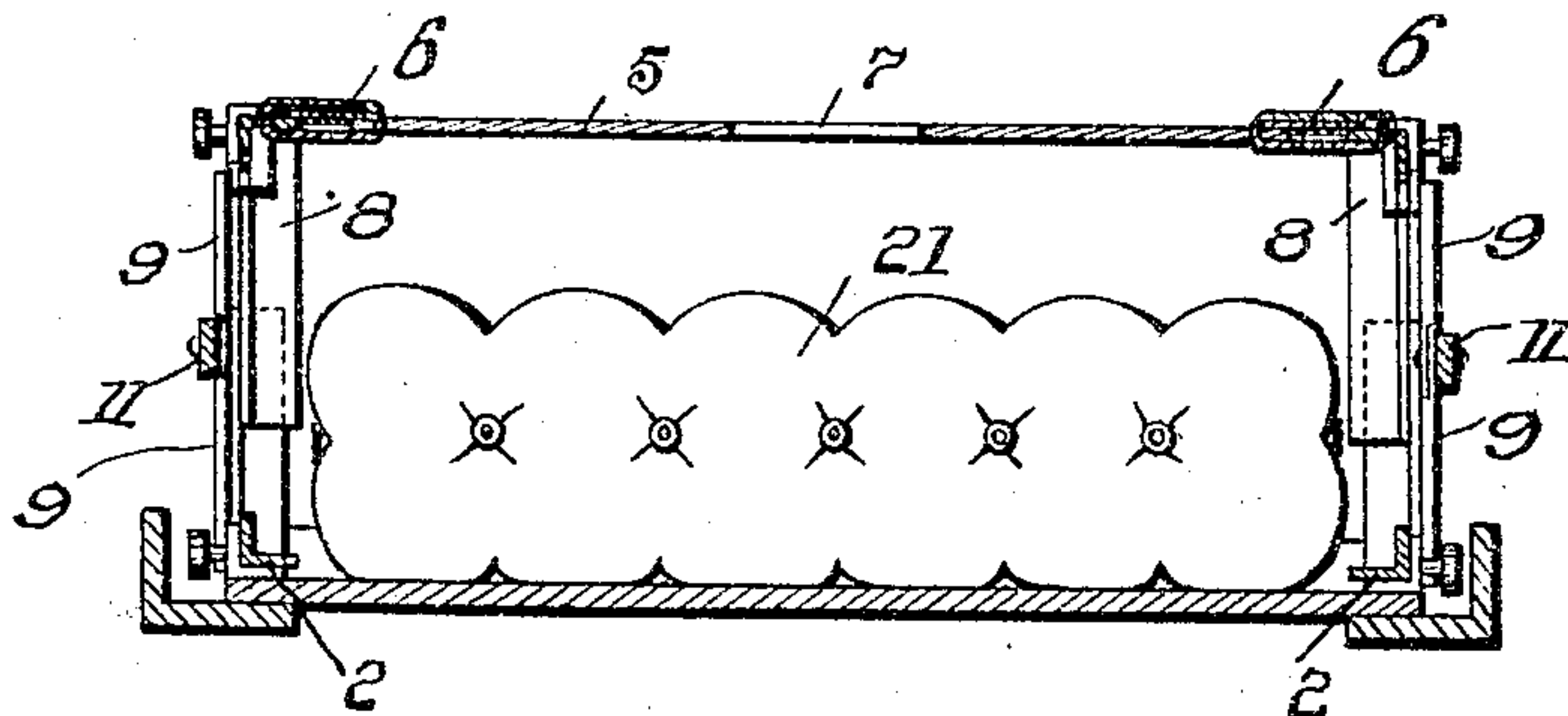


Fig. 3.

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UNITED STATES PATENT OFFICE.

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INVALID-BED.

SPECIFICATION forming part of Letters Patent No. 778,570, dated December 27, 1904.

Application filed April 5, 1904. Serial No. 201,624.

To all whom it may concern:

Be it known that we, JAMES A. DEVORE, residing at Pittsburg, and SAMUEL C. YOUNT, residing at Wilksburg, in the county of Allegheny and State of Pennsylvania, citizens of the United States of America, have invented certain new and useful Improvements in Invalid-Beds, of which the following is a specification, reference being had therein to the accompanying drawings.

This invention relates to certain new and useful improvements in invalid-beds, and has for its object the provision of novel means whereby a stretcher may be conveniently raised or lowered from the mattress and retained in the desired position.

Our invention further aims to provide novel means whereby a patient may be easily raised from the mattress without causing a jar or any inconvenience whatsoever.

Our invention still further contemplates to provide a bed-bottom for an invalid that may be readily applied to any form of bedstead now in use.

With the above and other objects in view the invention consists in the novel construction, combination, and arrangement of parts to be hereinafter more fully described and claimed.

In describing the invention in detail reference is had to the accompanying drawings, forming a part of this application, and wherein like numerals of reference indicate like parts throughout the several views, in which—

Figure 1 is a perspective view of our improved bed-bottom. Fig. 2 is a side elevation thereof, showing the same secured upon a bedstead. Fig. 3 is a vertical sectional view of the bed-bottom.

In the drawings the reference-numeral 1 represents the ordinary bedstead of the well-known construction. Upon this bedstead is placed an invalid-bed bottom, which consists of a rectangular extensible frame 2, carrying corner-posts 3. A frame 4 has secured thereto the stretcher 5 by laces 6 or other suitable fastening means. This stretcher 5 is preferably formed of waterproof material and

has an opening 7 formed therein. At the corners of the stretcher-frame 4 are provided corner-posts 8. A pair of toggle-levers 9 are secured on each side of the bed-bottom and serve to connect the frames 2 and 4. These toggle-levers are arranged on each side and are connected together by means of a connecting-rod 11. These connecting-rods are pivotally connected at 12 to the toggle-levers, the connecting-rod 11 having formed therein a series of openings 14 for the purpose of permitting an adjustment, and at the end of the connecting-rod 11 is secured a chain or like connection 15, which is adapted to wind over the ends of the shaft 16, secured in bearings 17, rigidly attached to two of the corner-posts 3. A like chain winds upon the opposite end of the shaft 16 in order to operate both sides simultaneously. The end of the shaft carries a crank-lever 18, whereby the shaft may be easily rotated. Upon the shaft 16 is also secured a ratchet-wheel 19, which engages the locking-pawl 20, secured upon the frame 2. The mattress is indicated by reference-numeral 21. Set screws or pins 22 are arranged at various points upon the frames 2 and 4 in order to obtain both a lateral and lineal adjustment of the frames when desired. Like pins 23 are secured in the corner-posts 3, the latter being removed when it is desired to raise or lower the frame 4, carrying the stretcher 5.

The operation of our improved invalid-bed is as follows: Normally the stretcher 5 will lie flat upon the mattress, and when it is desired to raise the patient the pins 23 are removed and the crank 18 is operated, thereby straightening the toggle-levers 9 and raising the stretcher a sufficient distance from the mattress to insert a vessel. When it is desired to lower the stretcher, the reverse operation takes place and the patient will be gradually lowered to a position that will permit the patient to again lie upon the mattress.

It will be understood that the locking-pawl 20 will secure the parts in a locked position when the stretcher is in the raised position. The many advantages obtained by the use

of our improved bed will be readily apparent from the foregoing description, taken in connection with the accompanying drawings.

It will be obvious that various slight changes
5 may be made in the details of construction without departing from the general spirit of our invention.

Having fully described our invention, what we claim as new, and desire to secure by Letters Patent, is—

1. In a removable attachment for bedsteads the combination of a lower frame adjustable in length and width and having rigid upwardly-extending corner-posts, with an upper frame
15 adjustable in length and width and having rigid depending corner-posts telescoping in the corner-posts of the lower frame, and means for locking both frames and the corner-posts thereof in adjusted position, a stretcher
20 secured to the upper frame, a shaft journaled to the lower frame, toggle-levers pivotally attached at one end to the lower frame and at the other end to the upper frame, a horizontal rod pivotally attached at the central
25 hinged portions of the toggle-levers to the said toggle-levers, and a flexible connection at-

tached to the end of said horizontal rod and winding around said shaft.

2. In a removable attachment for bedsteads, the combination of a lower frame having rigid
30 upwardly-extending corner-posts, an upper frame having rigid depending corner-posts telescoping in the corner-posts of the lower frame, means for separately locking each of the corner-posts in adjusted position, a
35 stretcher secured to the upper frame two separate pairs of toggle-levers on the frames, each pair having one end pivotally attached to the upper frame and the other end pivotally attached to the lower frame, a rod connecting
40 the two pairs of toggle-levers, a shaft journaled on the frame and a flexible connection attached to said rod and winding around the said shaft.

In testimony whereof we affix our signatures
45 in the presence of two witnesses.

JAMES A. DEVORE.
SAMUEL C. YOUNT.

Witnesses:

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