

(No Model.)

2 Sheets—Sheet 1.

J. KESSLER & D. R. NELSON.

MOSQUITO NET FRAME.

No. 549,516.

Patented Nov. 12, 1895.

Fig. 1.

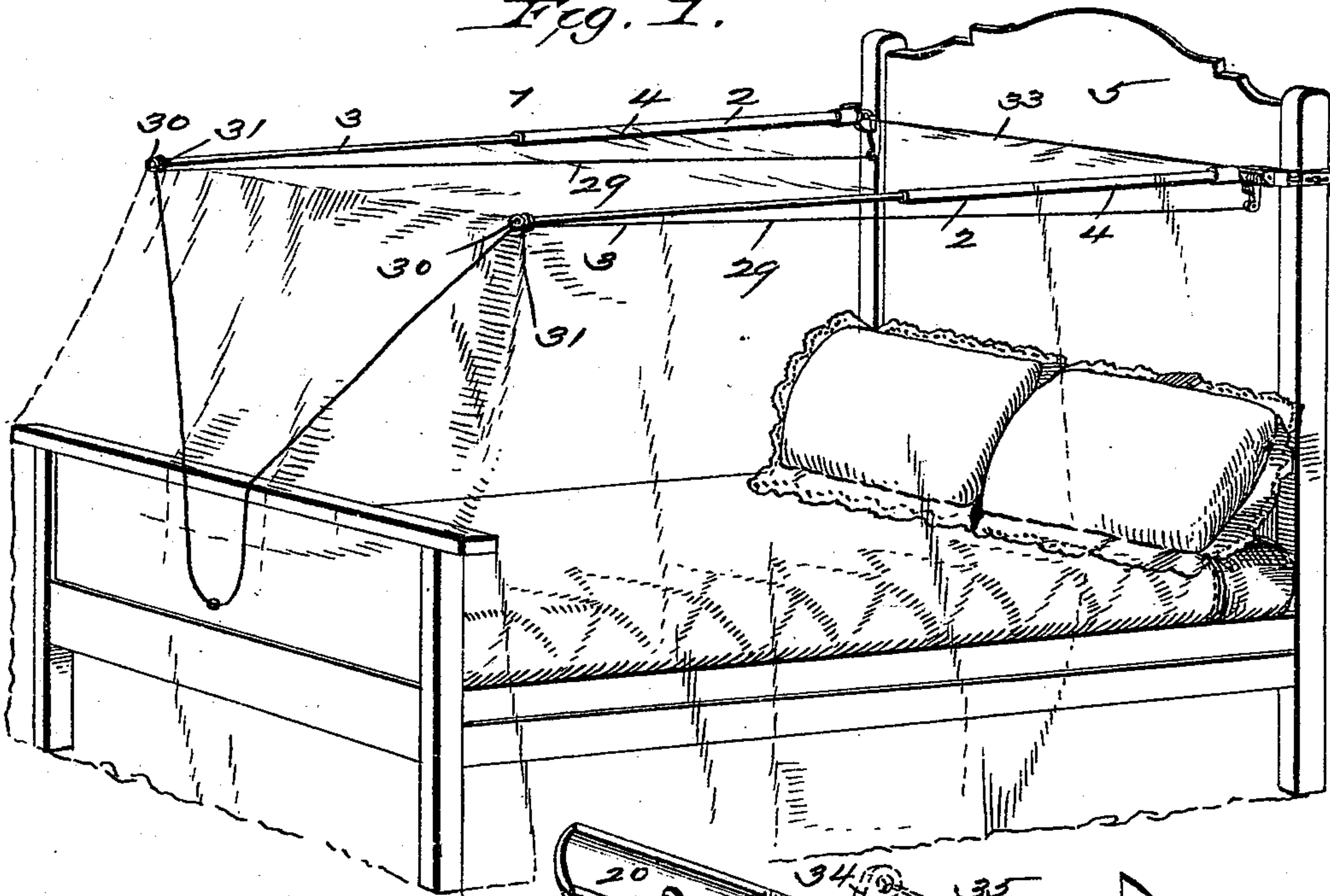


Fig. 2.

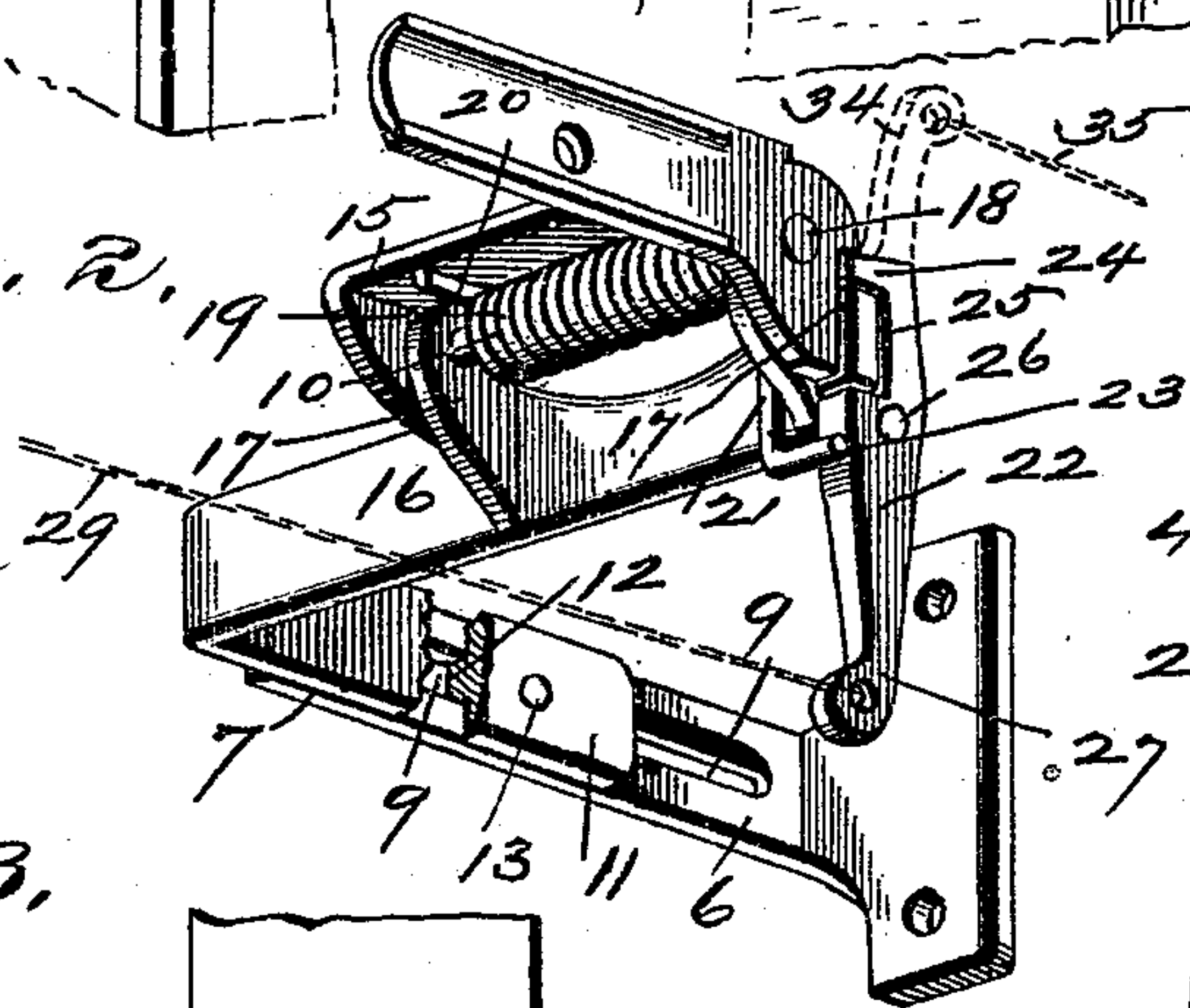


Fig. 3.

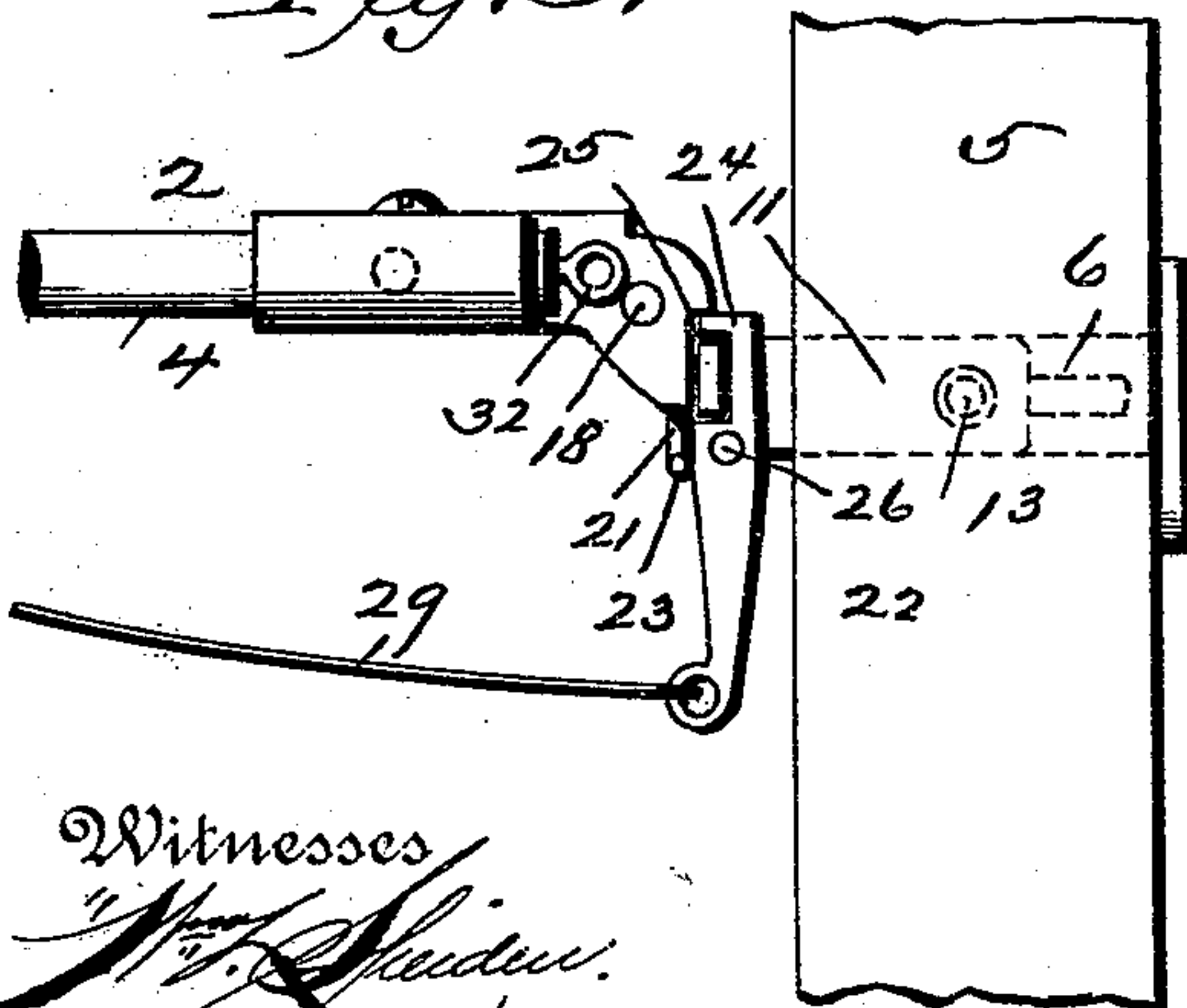
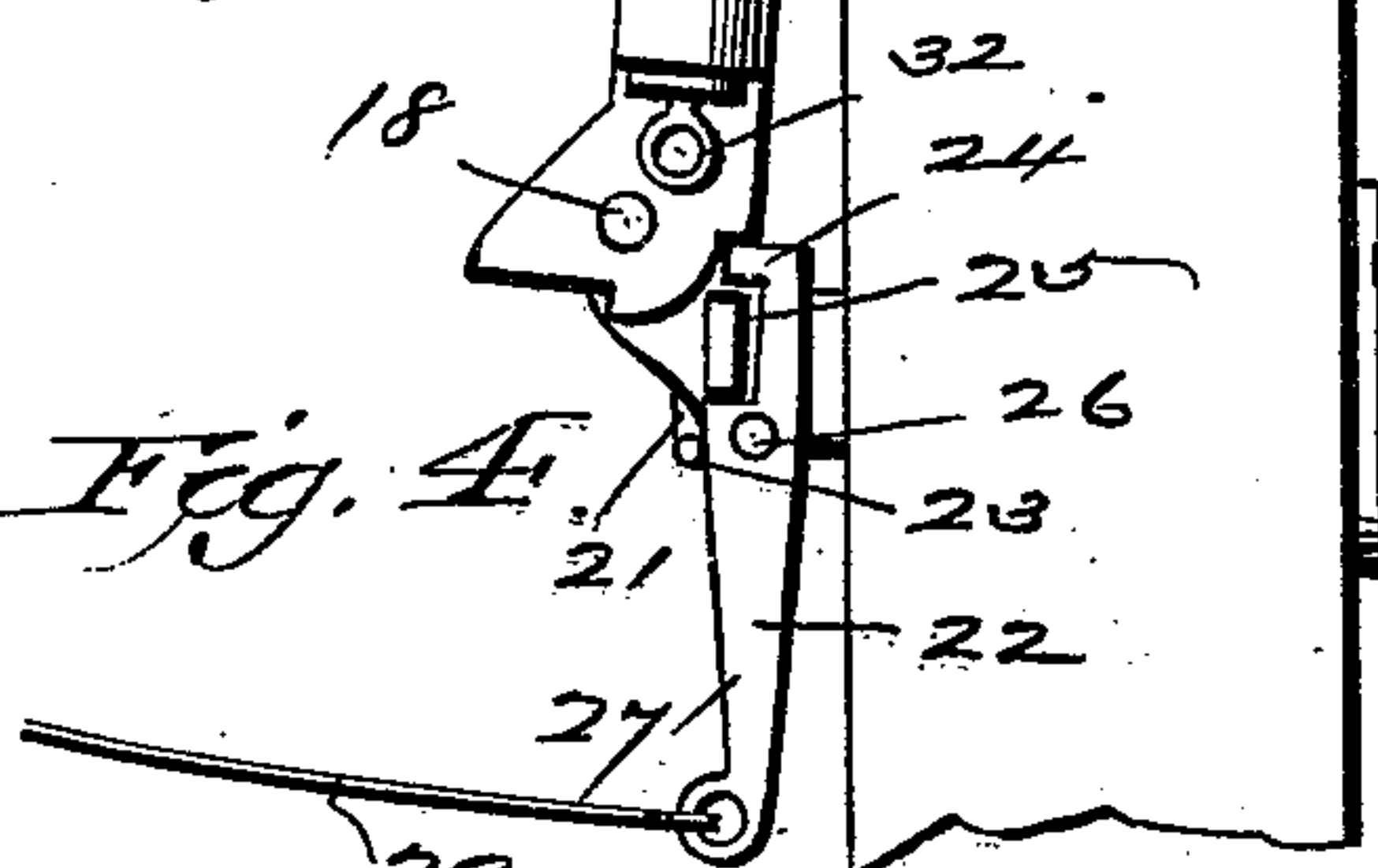


Fig. 4.



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Fig. 5.

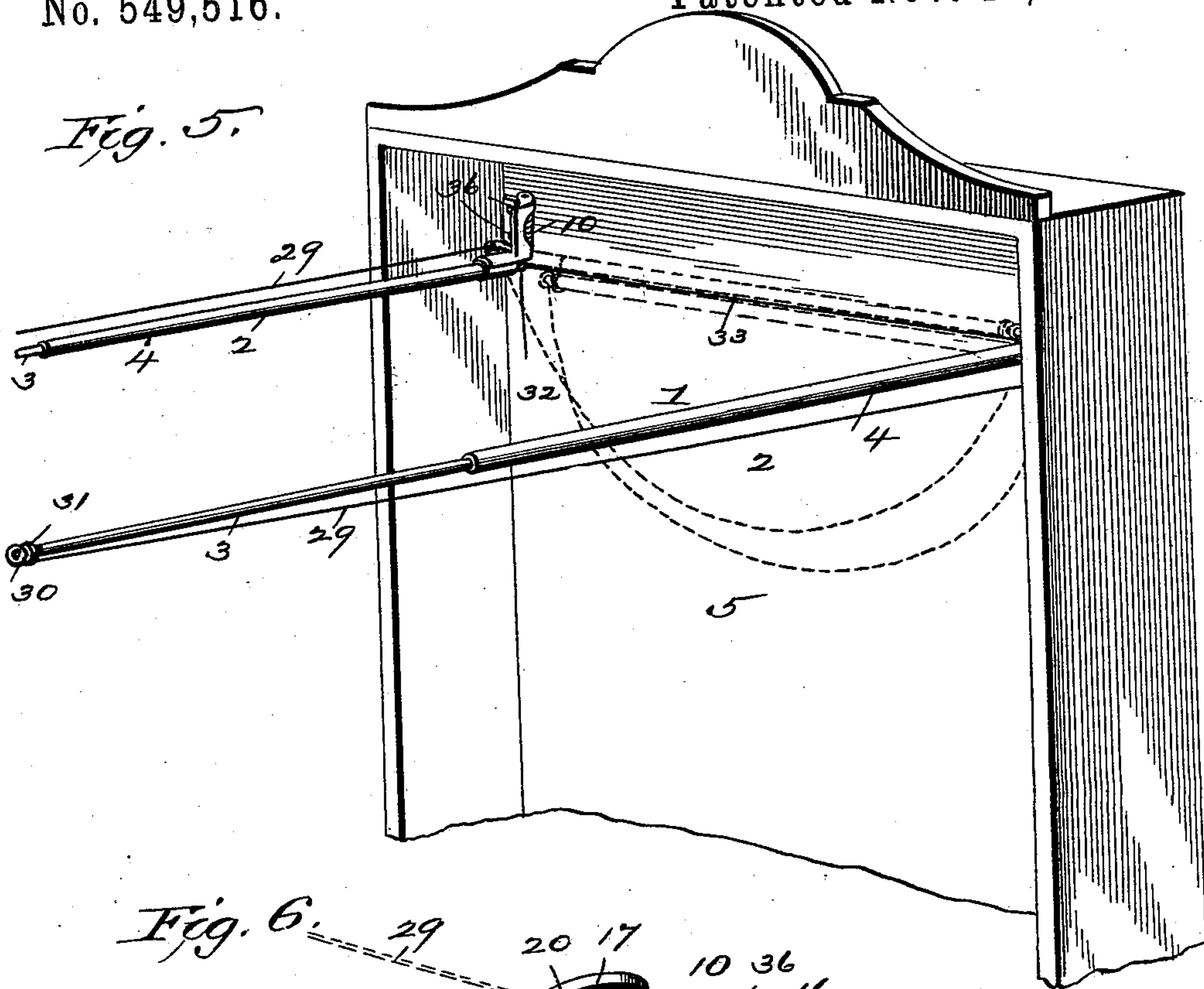


Fig. 6.

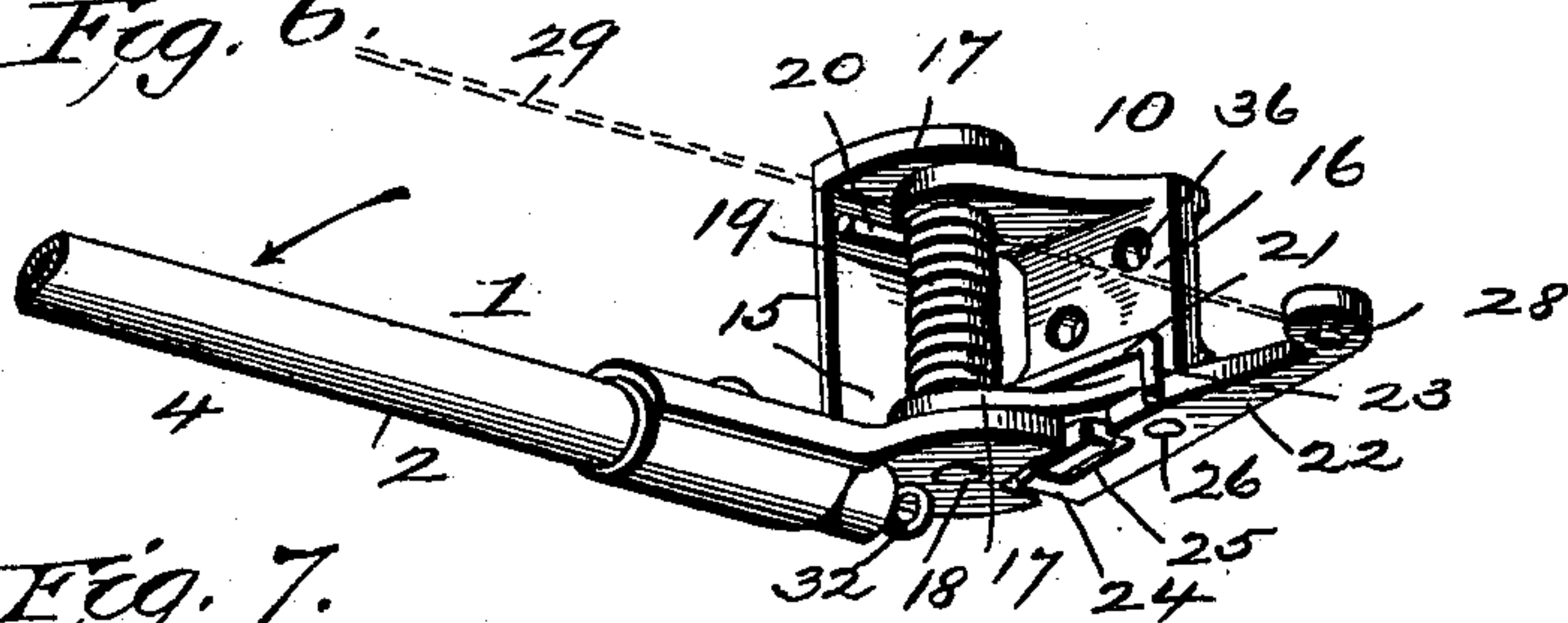
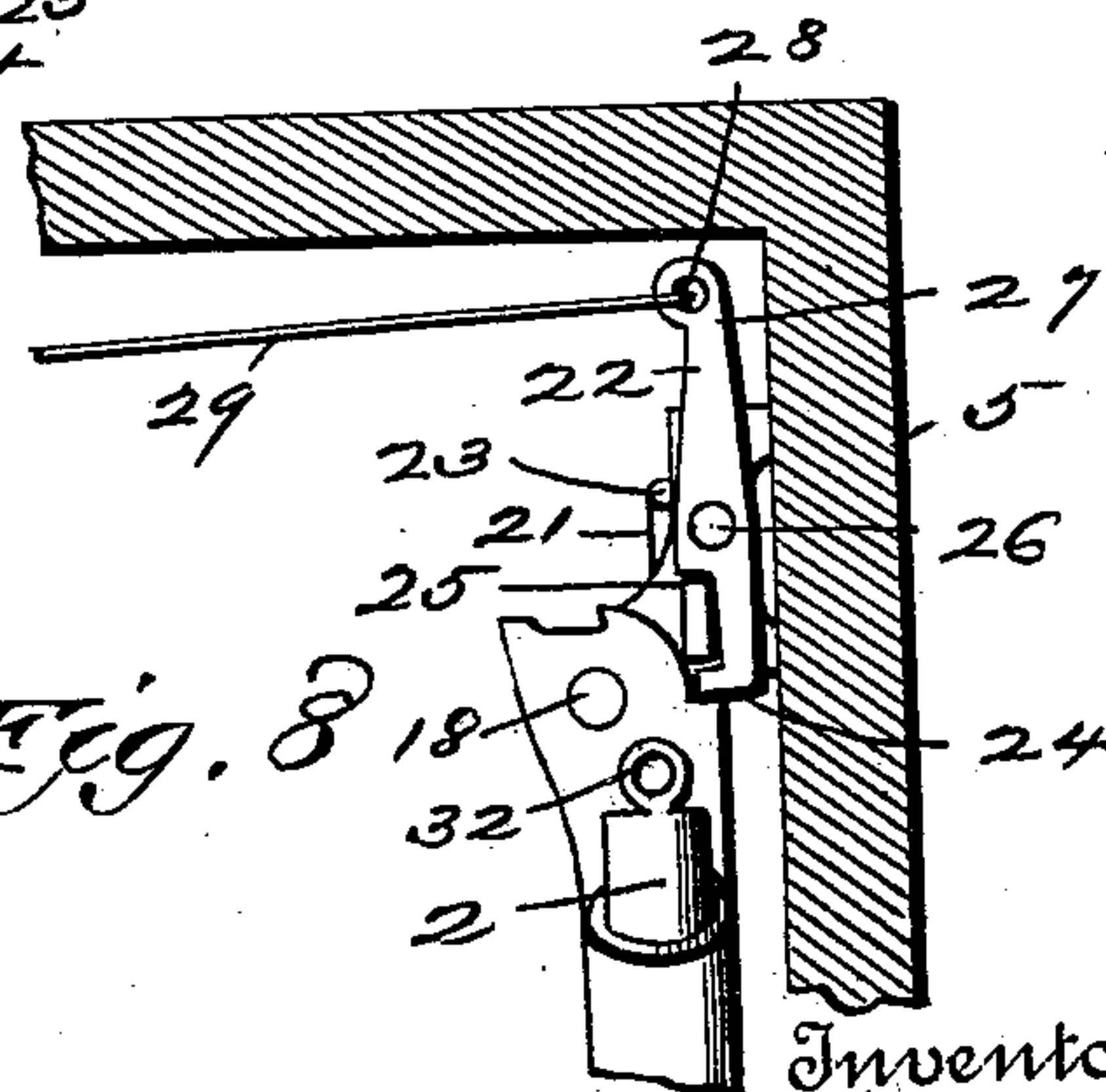
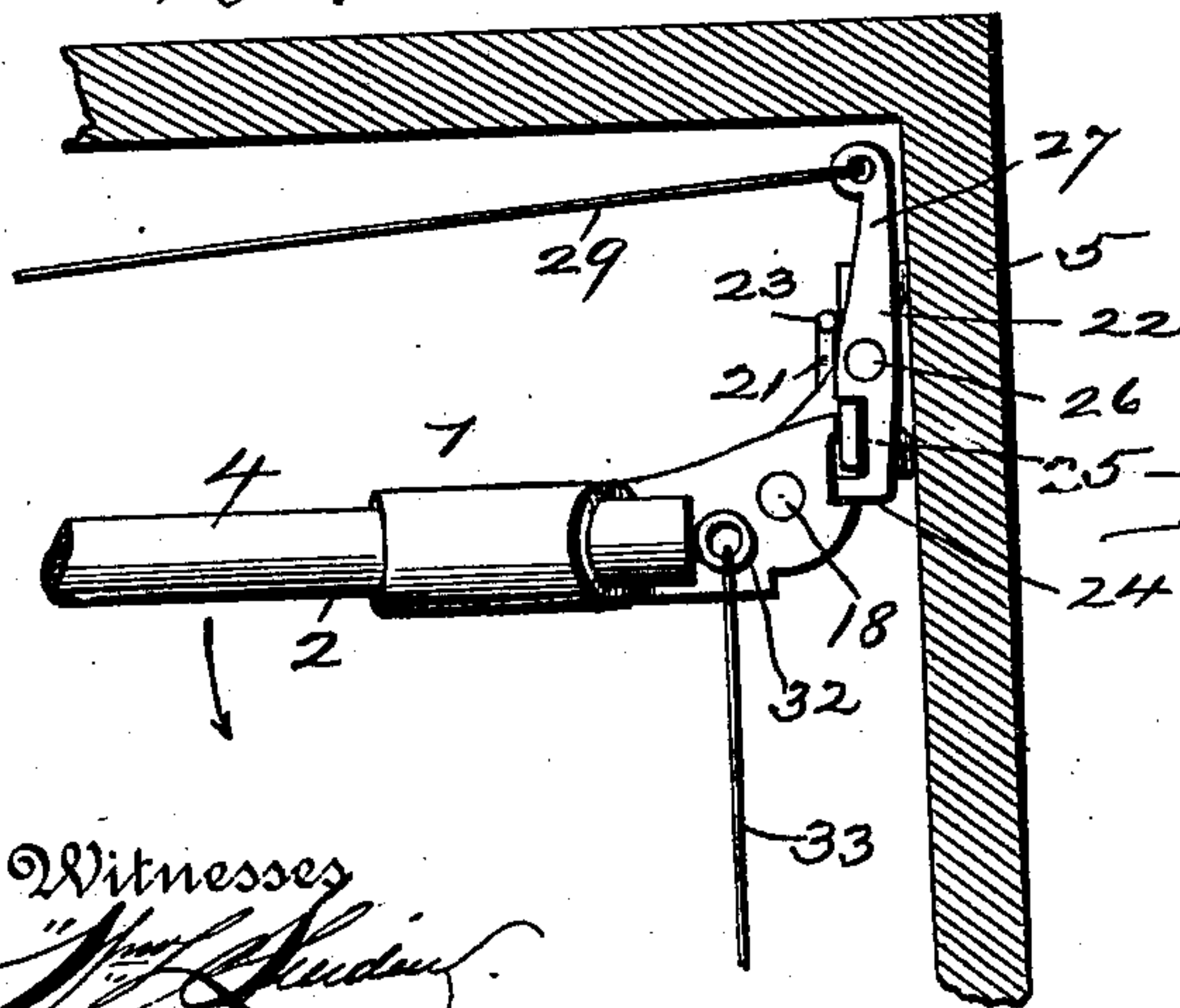


Fig. 7.



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UNITED STATES PATENT OFFICE.

JACOB KESSLER AND DAVID R. NELSON, OF KNOXVILLE, TENNESSEE.

MOSQUITO-NET FRAME.

SPECIFICATION forming part of Letters Patent No. 549,516, dated November 12, 1895.

Application filed July 13, 1895. Serial No. 555,872. (No model.)

To all whom it may concern:

Be it known that we, JACOB KESSLER and DAVID R. NELSON, citizens of the United States, residing at Knoxville, in the county of Knox and State of Tennessee, have invented certain new and useful Improvements in Mosquito-Net Frames; and we do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

This invention relates to mosquito-net frames adapted to support a mosquito or other netting over any desired place. It is particularly adapted for application to bedsteads of different designs and may be applied in any desired position or manner.

It has for its object to provide a supporting-frame which may be conveniently applied for use and which by the releasing of a latch thereon will automatically move the supports of the frame into a position to carry the netting from over the bed or other object and hold the net in a folded position until again desired for use.

The invention consists in the several novel and useful constructions, combinations, and arrangements of parts, as hereinafter set forth in the specification, and afterward more specifically defined by the claims.

In the drawings, which form part of this specification, Figure 1 is a perspective of a bedstead with the invention applied thereto. Fig. 2 is a perspective of the spring-actuated hinge for the support, looking upward from beneath the same. Fig. 3 is a side elevation, on an enlarged scale, showing the position of the hinge when the support is extended over the bed. Fig. 4 is a similar view showing the position of the hinge when the support is in a folded or elevated position. Fig. 5 is a perspective of a modification, showing the application of the invention to a folding bedstead. Fig. 6 is a perspective of the form of hinge used with the form of the invention shown in Fig. 5. Fig. 7 is a bottom plan view, on an enlarged scale, of the spring mechanism shown in Fig. 6, showing the position of the parts when the support is in its extended position over the bed; and Fig. 8 is a similar view showing the arm of the support in its

folded position adjacent to the casing of the bedstead.

In the drawings, the frame 1 consists of the two longitudinally-extending supports 2, which are formed in two parts 3 and 4, telescoping one within the other. This frame is secured to the head-board 5 of the bed by any suitable means, preferably by means of the angle-bracket 6, secured to the back of the head-board at each side of the bed and having the forward extension 7, provided with a slot 9.

The spring-hinge 10 is provided with a rearwardly-extending angle-arm 11, having thereon a rib 12, which fits into the slot 9, so as to prevent turning of the parts when secured together. A screw 13 or other suitable fastening means passes through the slot 9 and into the arm 11 to secure the parts in their adjusted position. This construction permits the adjustment of the securing means for any thickness of the head-board or other part to which the device is applied and also holds the spring-hinge slightly away from the head-board, so as to allow for the operation of the parts.

The spring-hinge 10 is composed of the two leaves 15 and 16, each of which have projecting lugs or ears 11, through which the pivoting-bolt 18 passes. The leaf 16 has formed integral therewith the rearwardly-extending arm 11, hereinbefore described. Surrounding the bolt 18 is a coiled spring 19, which normally has its ends 20 and 21 in contact with the frames of the leaves, and which when normally expanded holds the frames of both leaves in the same plane. In order to hold the supports in a horizontal position, as shown in Fig. 1, or in a plane at an angle to the opposite leaf, and the spring under tension, we provide a latch 22, pivoted at 26 on the frame of the leaf 16, and against the lower portion of which the end 23 of the coiled spring 19 bears, so as to normally throw the upper end 24 of the latch into contact with a depression or recess 25, formed in one of the lugs or ears 17 on the leaf 15 when the support is in a plane at an angle to the opposite leaf. By this means the leaves of the hinge and the latch are held under tension, so that when released they will automatically assume

their normal position. The latch is provided with an extended arm 27, provided with an aperture 28, to which any suitable means to operate the latch may be applied. For instance, as shown, a cord 29 may be secured thereto and pass thence to a ring 30 on the outer end of the extensible member 3 of the support 2. The cords from both of the latches located on each side of the bed may extend outwardly from the rings 30 and may be used to draw out the extensible member of the support and the mosquito-net secured thereto when the supports are in position over the bed. These cords may also be used to draw the extensible members inward; but in the construction where the supports fold into a vertical position the extensible members drop by gravity into the members 2 and hold the net in a compressed position over the head of the bed. A rubber or other suitable packing-ring 31 is interposed between the ring 30 on the member 3 and the outer end of the member 2 of the supports, so as to break the blow when the parts are telescoped together and prevent cutting of the net by the edges of the metal under such conditions. At the ends of the supports next to the head-board rings 32 are secured, between which a connecting cord or rod 33 passes and is connected thereto. The net extends downward in contact with the head-board and over this supporting-cord and also extends from the frame downward over the sides and foot of the bed when in use.

The operation of the parts thus far described is evident from the foregoing description and is usually effected by moving the latch to release the spring when it is desired to fold the supports and the net connected thereto out of position for use, and also at the same time the parts of the extensible supports are telescoped into each other, so as to reduce the length of the supports and occupy less room. When it is desired to place the frame in position for use, the supports are drawn from their folded position under the tension of the spring-hinges by means of the cords connected to the supports until the lug on one leaf is engaged by the spring-actuated latch located on the opposite leaf. The parts will then be held in extended position over the bed and the extensible members may be drawn out to the extent desired.

A modification of the latch 22 has been illustrated in dotted lines in Fig 2, whereby the same may be operated by electrical or mechanical means located behind the head-board of the bed or at a distance therefrom. Such a construction would be desirable for use in fire-engine houses or other places where it is desirable to automatically remove the mosquito-net from over a bed in the event of an alarm or at any given time. This modification consists of the upwardly-extending arm 34, from which connecting means 35 may extend to any suitable mechanism to exert pressure upon the latch and thereby release

the hinge and the support connected thereto, as shown by dotted lines in Fig. 2.

The invention is adapted for use with folding beds, and when applied to the casing thereof the supports 2 are arranged in slightly-different planes, so as to fold inward toward each other in a horizontal plane and to lie when folded one above the other, so that when the folding bed is folded into the casing the net and supports will lie between the bed and the casing. The construction to accomplish this object is shown in Figs. 5, 6, 7, and 8, and consists of the same form of supports, spring-hinges, and latches as shown in Figs. 1, 2, 3, and 4, save that the parts are in this instance held to the bedstead by means of fastening means 36, passing through a portion of the frame of the leaf 16. The securing means which passes to the rear of the head-board of the bed is consequently omitted in this form of the invention. The only difference in operation between this modification and the parts previously described is that in Fig. 1 the supports swing upward in a vertical plane, while in Fig. 5 the spring-hinge is placed in a vertical position and the supports swing inward in a horizontal plane.

While we have described what we consider to be the best form of this invention, still it is obvious that numerous changes and alterations may be made and other modifications devised without departing from the spirit of this invention.

While this invention has been illustrated and described for use in connection with bedsteads of different characters, still it is our purpose to apply the subject thereof to any of the various uses to which it may be adapted.

While the spring-hinges and latches have been shown as applied to both sides of a bedstead, still it is obvious that only one of the latches might be employed or one of the spring-hinges, in which latter case the supports on opposite sides of the bed would be suitably connected together. The number of the supports for the netting may also be varied, as convenience or necessity may suggest.

While we have shown and described the supports as formed of extensible members, still we may use a support formed of a single piece of material where the length of the bed and other circumstances will permit.

Having described our invention and set forth its merits, what we claim, and desire to secure by Letters Patent, is—

1. In a mosquito net frame, the combination with the supports for the netting, of the spring actuated hinges having one leaf connected to said supports and the other leaf secured to the bedstead, and a spring actuated latch pivoted adjacent to one of said leaves and adapted to engage the opposite leaf, substantially as described.

2. In a mosquito net frame, the combination with a bedstead, of supports for the netting, spring actuated hinges having one leaf connected to the bedstead and the other to

said supports, and a spring actuated latch located on one leaf and adapted to be normally held in contact with the opposite leaf, substantially as described.

5 3. In a mosquito net frame, the combination with a bedstead, of supports for the netting, spring actuated hinges having one leaf connected to the bedstead and the other to
10 said supports, a projection from one of said leaves, a latch pivoted on said projection, and a spring bearing against said latch to hold it normally in contact with the opposite leaf, substantially as described.

15 4. In a mosquito net frame, the combination with a bedstead, of a support for the netting pivoted to said bedstead, an extensible member telescoping into said support, a netting secured to said extensible member, and spring actuated mechanism adapted to move
20 said supports into a different plane, substantially as described.

5. In a mosquito net frame, the combination with the extensible support for the netting, of a hinge having one leaf connected to
25 the bedstead and its opposite leaf connected to said support, a spring adapted to retain said

leaves in one position, a latch adapted to hold said leaves in a different position against the tension of said spring, and connecting means secured to said latch and to the extensible
30 member of said supports so as to operate said parts, substantially as described.

6. In a mosquito net frame, the combination with the support for the netting, of a hinge composed of two leaves provided with lugs, a
35 pivot passing through said lugs, a coiled spring surrounding said pivot and having its ends bearing against said leaves to hold them in the same plane, a latch pivot to one of said
40 leaves and having an extended arm for operating the same, a recess on the opposite leaf to receive said latch, an extended portion of one end of said coiled spring adapted to bear
45 on said latch, and means to secure said parts in position for use, substantially as described.

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

JACOB KESSLER.

DAVID R. NELSON.

Witnesses:

RUTH KESSLER,

NORA KESSLER.