(No Model.)

L. BARTELMES.

HINGE.

No. 573,197. Patented Dec. 15, 1896.

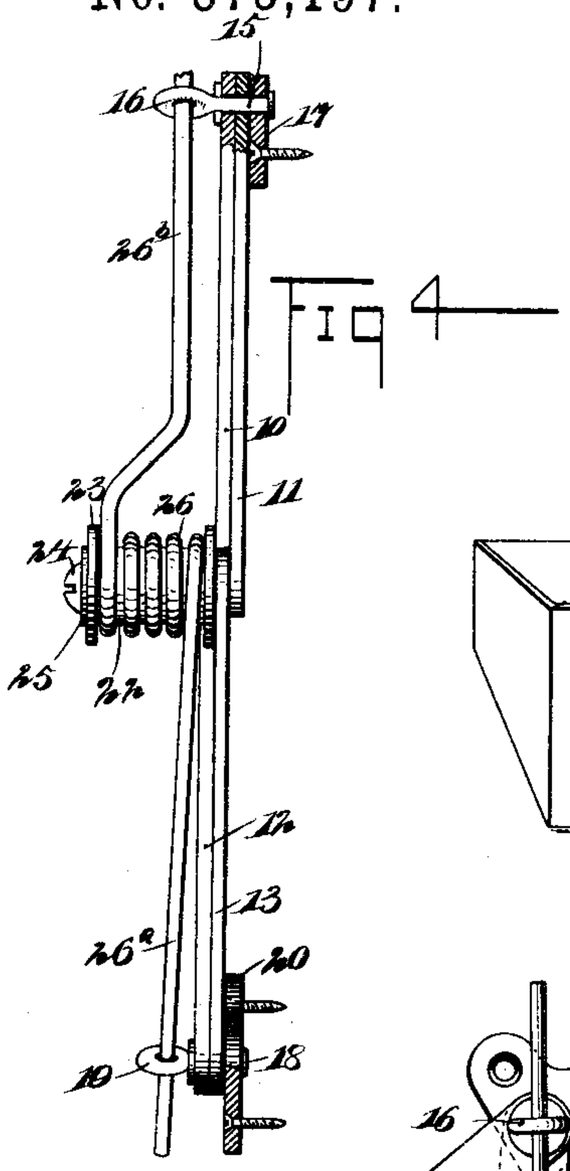

FIG 4

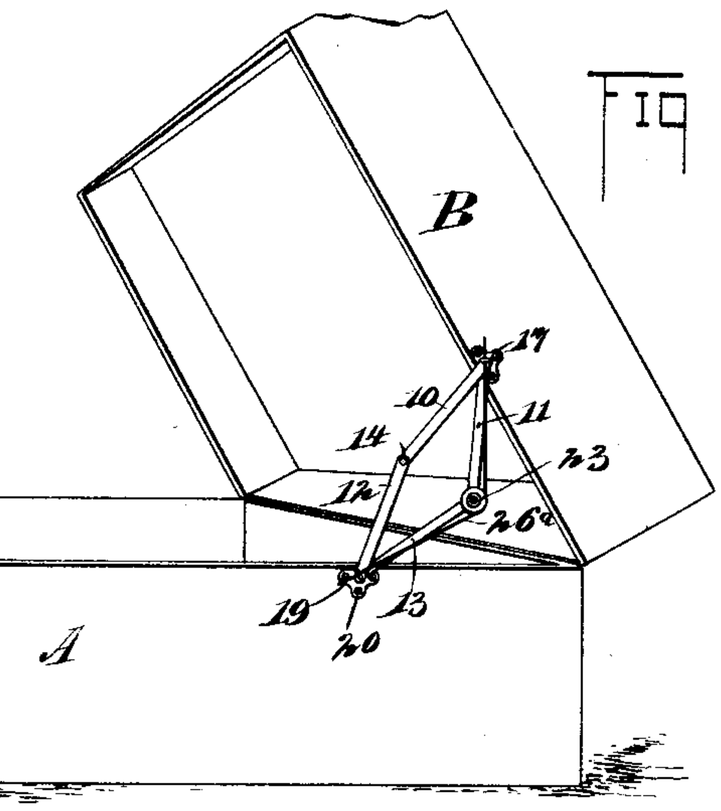

FIG 1

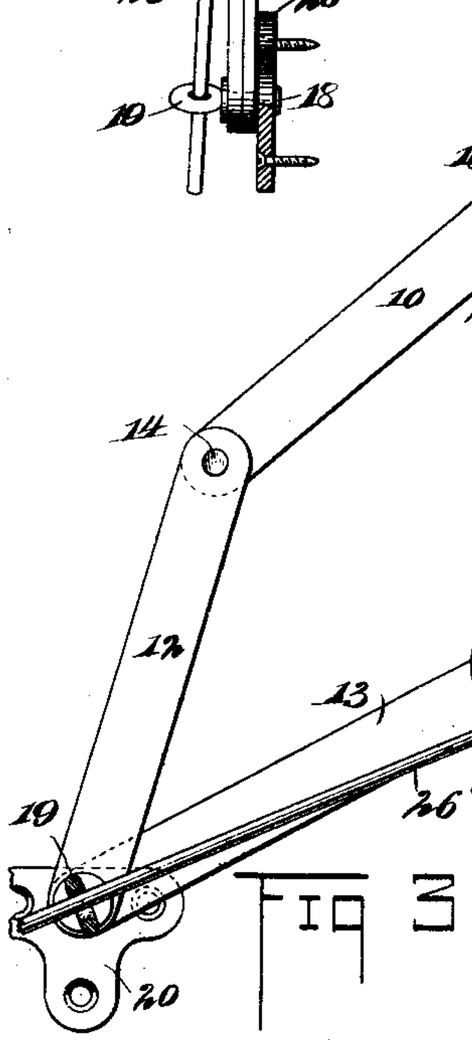

FIG 3

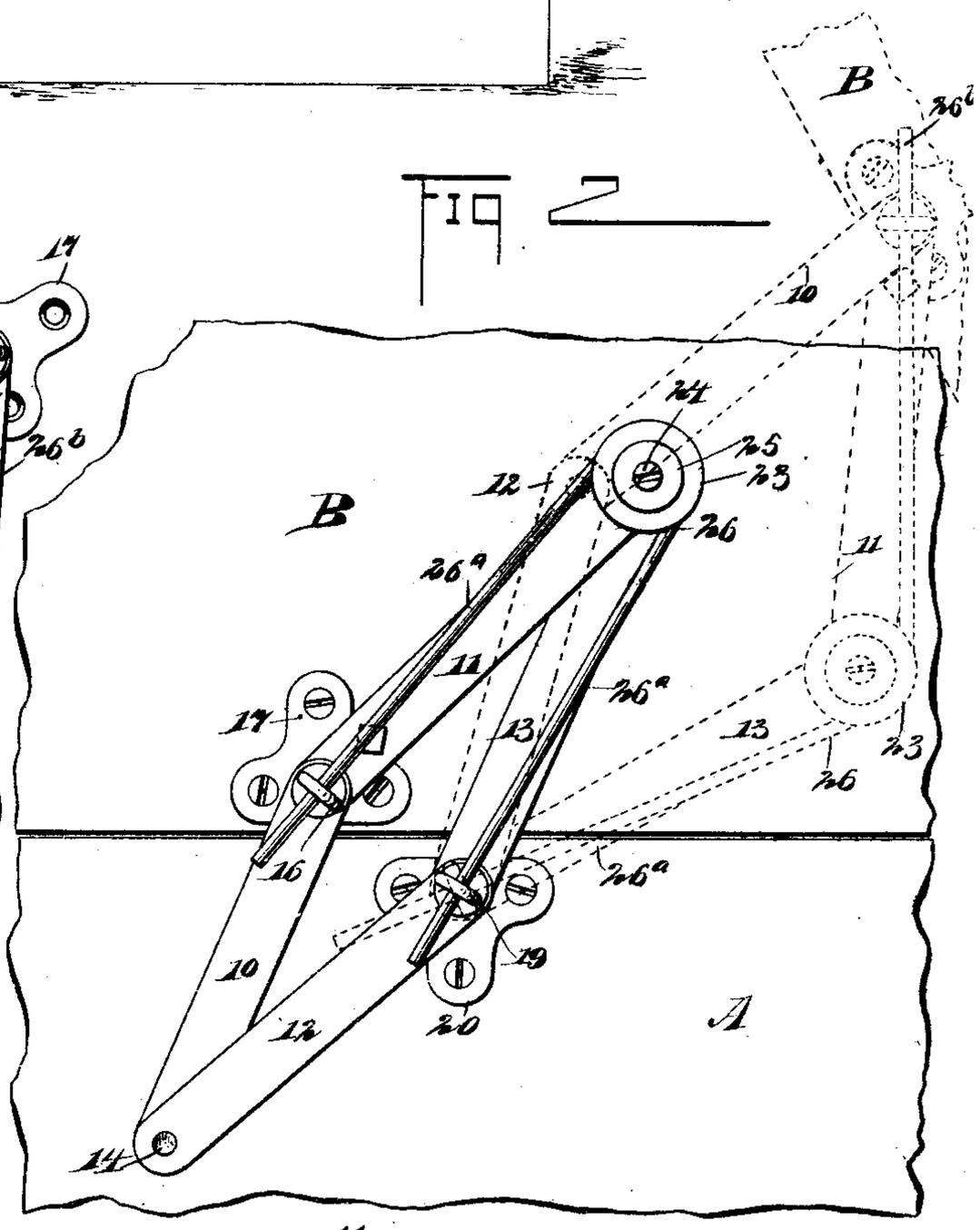

FIG 2

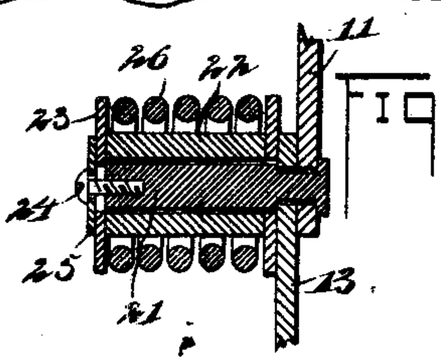

FIG 5

WITNESSES:

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BY

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UNITED STATES PATENT OFFICE.

LOUIS BARTELMES, OF BROOKLYN, NEW YORK.

HINGE.

SPECIFICATION forming part of Letters Patent No. 573,197, dated December 15, 1896.

Application filed June 24, 1896. Serial No. 596,709. (No model.)

To all whom it may concern:

Be it known that I, LOUIS BARTELMES, of Brooklyn, in the county of Kings and State of New York, have invented a new and useful Improvement in Hinges, of which the following is a full, clear, and exact description.

The object of my invention is to provide a hinge especially adapted for connection with a box or like receptacle and its cover, the hinge serving in addition to control the throw of the cover to hold the said cover locked in either an open or in a closed position, the hinge being particularly adapted for use in connection with the box-section of couches.

A further object of the invention is to construct a hinge of the above-mentioned description which will be exceedingly simple, durable, and economic and which may also be readily applied.

The invention consists in the novel construction and combination of the several parts, as will be hereinafter fully set forth, and pointed out in the claims.

Reference is to be had to the accompanying drawings, forming a part of this specification, in which similar characters of reference indicate corresponding parts in all the figures.

Figure 1 is a perspective view of a box and cover for the same with the improved hinge connecting the two, the cover being shown in an open position. Fig. 2 is a side elevation of a portion of the body of the box and its cover, the cover being shown as closed and the hinge in position to hold the said cover closed, the said Fig. 2 likewise illustrating in dotted lines the position of the hinge when the cover is opened. Fig. 3 is a partial side elevation and partial sectional view of the improved hinge in the position it occupies when the cover is open. Fig. 4 is an edge view of the hinge, parts being in section; and Fig. 5 is a longitudinal section through the support on the hinge for the spring which controls its members.

In carrying out the invention the body portion of the hinge is of a toggle construction, comprising two upper links 10 and 11 and two lower links 12 and 13. The upper link 10 and the lower link 12, which are at the front portion of the hinge, are pivotally connected by means of a pin 14 of any suitable description, and the two upper links 10 and 11 are pivotally united by means of a pin 15, which extends beyond the front of the hinge and terminates at its forward end in an eye 16, a plate 17 being loosely secured to the rear end of the aforesaid pin 15, as shown in Fig. 4, and this plate 17 is adapted to be screwed or otherwise secured to a side portion of the cover B of the box A or other receptacle to which the hinge is to be applied.

The two lower links 13 and 12 are pivotally connected through the means of a pin 18, which terminates also at its outer end in an eye 19, and at the inner end of the pin a plate 20 is loosely mounted, adapted to be secured to the side of the box A, as shown in Figs. 1 and 2.

The pivotal connection between the two rear links 11 and 13 is effected through the medium of a post 21, which extends a predetermined distance beyond the front or the outer face of the hinge, as shown particularly in Fig. 5. On the post 21 a sleeve 22 is loosely mounted, and a disk 23 is secured to the outer end of the post 21, through the medium of a screw 24 or like device, which is usually passed through a washer 25 and an opening in the central portion of the disk 23, as is also shown in Fig. 5.

A spring 26 is coiled around the sleeve 22, and the said spring is carried, preferably, from the lowermost coil along the lower rear link 13, and this member 26^a of the spring is passed loosely through the eye 19 on the lower pivot 18, while a second member 26^b is carried from the upper coil of the spring downward and along the upper rear link 11 and loosely through the eye 16 on the upper pivot-pin 15.

When the box-cover is opened a predetermined distance, the members 26^a and 26^b of the spring will be carried rearward of a center line and the cover will be held open, the forward links being prevented from dropping rearward by means of a suitable stop 27, (shown in Fig. 3,) and when the cover is closed, as shown in Fig. 2, the members of the spring will be carried at the opposite side of a center line to such an extent that the tension will be in a forwardly direction, as shown in the said Fig. 2, tending to hold the cover closed, and after the cover is raised slightly the tendency of the member 26^b of the spring

will be to assist in raising the cover, and when the cover is fully open the spring will be free from tension, both members 26^a and 26^b of the spring being practically at the rear of a central line drawn between the front and rear links.

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

1. A hinge consisting of front and rear links pivotally connected at their inner ends and at their outer ends, and a spring coiled around a support projected from the connection between the inner ends of the rear links, the ends of the spring being carried loosely through keepers at the outer end pivots of the said links, as and for the purpose specified.

2. In a hinge, the combination, with a pair of front and a pair of rear links, each pair of links being pivotally connected at their inner ends, and the links of the front and of the rear pairs being pivotally united at their outer ends, the outer pivot-pins having eyes at their outer ends, of attaching-plates loosely mounted upon the inner ends of the outer pivot-pins, a sleeve loosely mounted upon the connecting pivot-pin of the rear links, and a spring coiled around the said sleeve, the ends of which spring are carried through the eyes belonging to the end pivot-pins of the said links, substantially as and for the purpose specified.

3. A hinge, having two toggle-links, each composed of two pivotally-connected members, the adjacent ends of the toggle-links being pivoted to each other, and a coiled spring carried by one link and having its terminals respectively connected to the outer portions of the members of said link, substantially as described.

LOUIS BARTELMES.

Witnesses:
HARTMAN BARTELMES,
MARTIN LIVINGSTON.