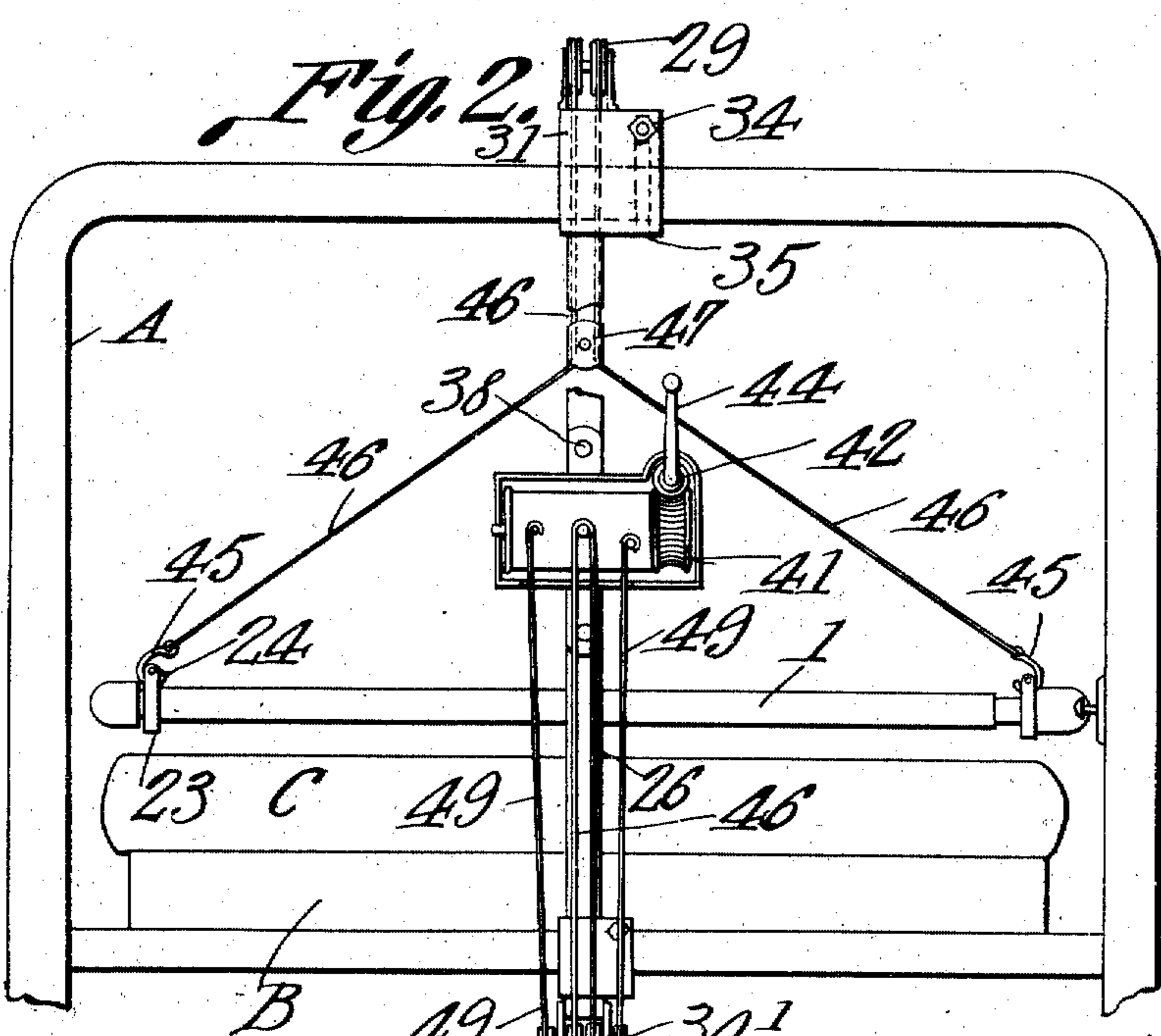
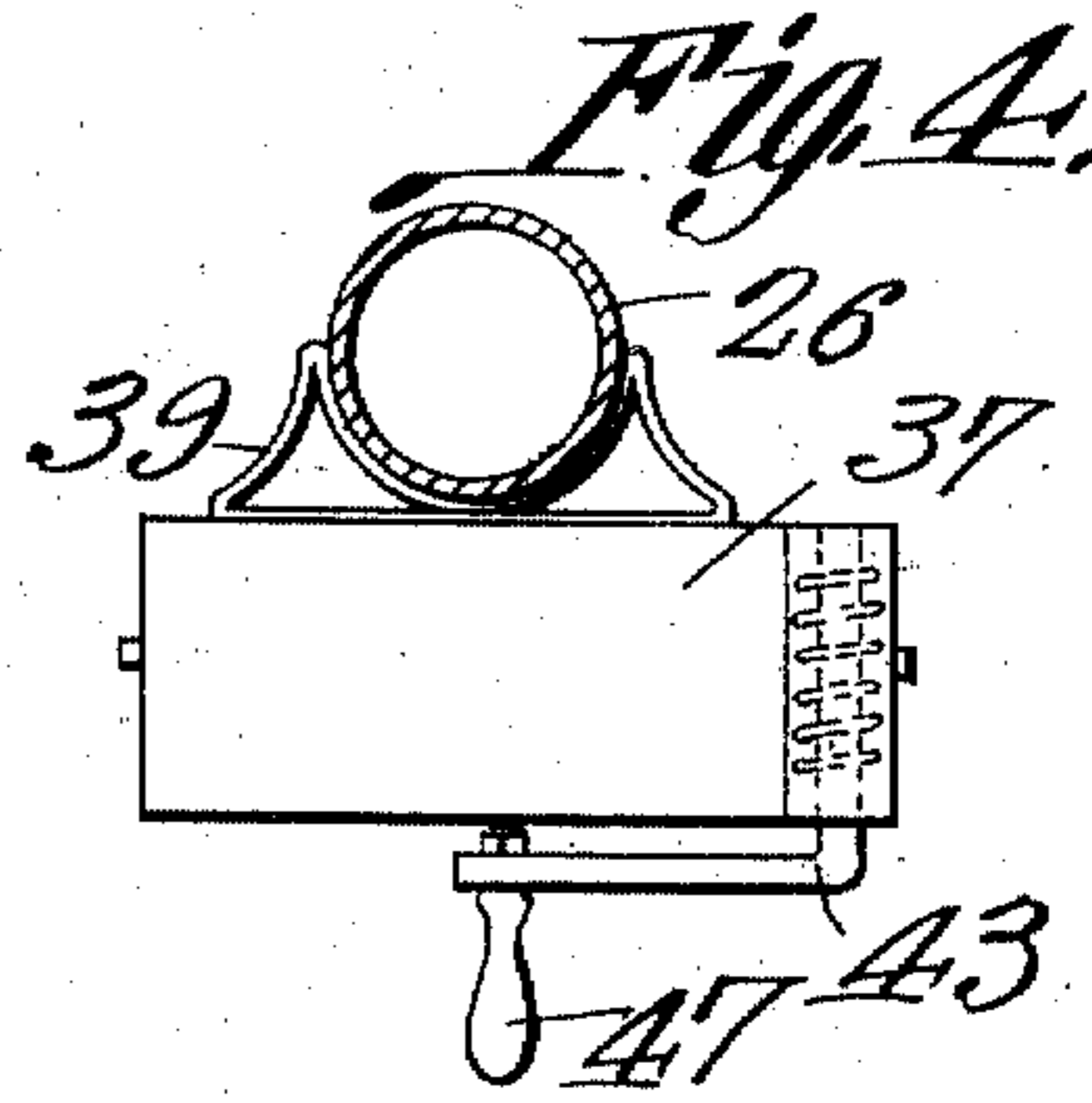
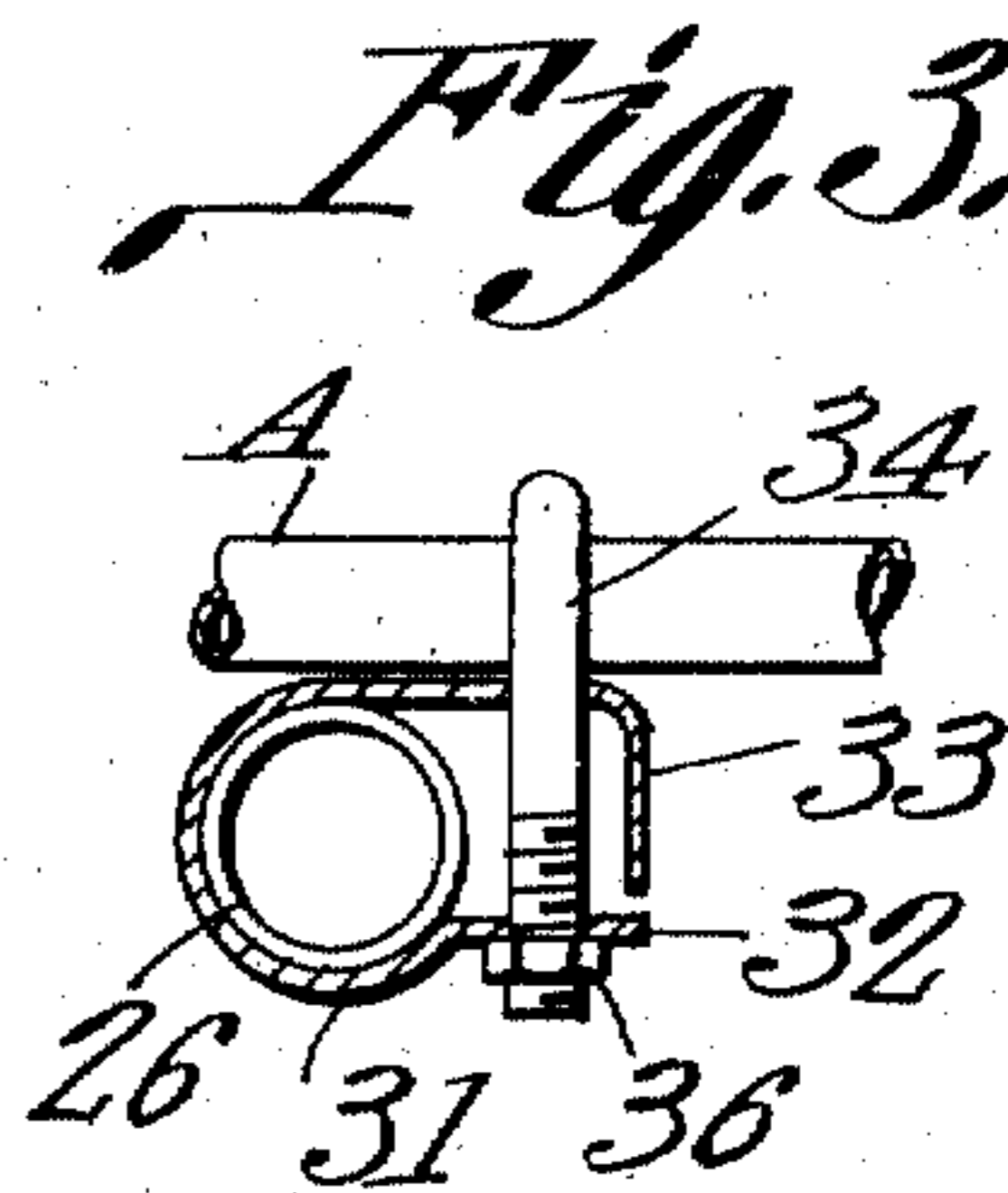
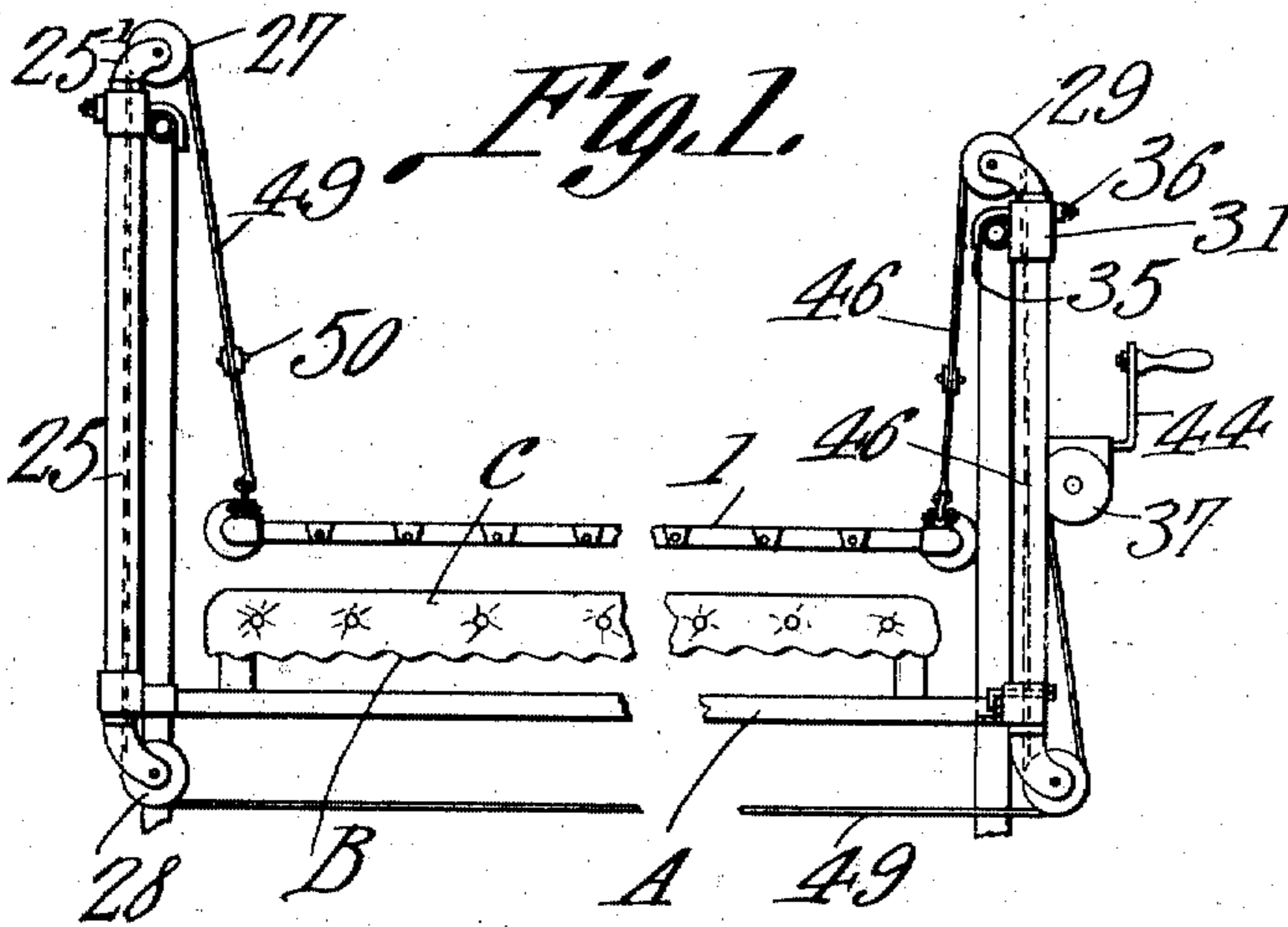


J. C. VAN SLYKE.
ATTACHMENT FOR INVALID BEDS.
APPLICATION FILED JUNE 25, 1910.

985,307.

Patented Feb. 28, 1911.



Witnesses
John C. Van Slyke, Inventor
by C. A. Snow & Co. Attorneys

UNITED STATES PATENT OFFICE.

JOHN C. VAN SLYKE, OF FORT COLLINS, COLORADO.

ATTACHMENT FOR INVALID-BEDS.

985,307.

Specification of Letters Patent.

Patented Feb. 28, 1911.

Original application filed March 14, 1910, Serial No. 549,079. Divided and this application filed June 25, 1910. Serial No. 568,879.

To all whom it may concern:

Be it known that I, JOHN C. VAN SLYKE, a citizen of the United States, residing at Fort Collins, in the county of Larimer and State of Colorado, have invented a new and useful Attachment for Invalid-Beds, of which the following is a specification.

This invention relates to attachments for beds and is more particularly a device for handling helpless persons, the invention being a division of that disclosed in an application filed by me on March 14, 1910, Serial No. 549,079.

One of the objects of the invention is to provide a hammock like structure designed to normally rest upon the mattress of the bed and which has means whereby the said structure can be elevated relative to the mattress without disturbing the person lying upon said structure.

A further object is to provide simple means whereby the said structure can be readily raised or lowered relative to the mattress, means being provided for quickly and securely attaching the same to the head and foot structures of the bed.

With these and other objects in view, the invention consists of certain novel details of construction and combinations of parts hereinafter more fully described and pointed out in the claims.

In the accompanying drawings the preferred form of the invention has been shown.

In said drawings, Figure 1 is a side elevation of a bed having the present improvements applied thereto, the middle portion of the bed and attachment being removed. Fig. 2 is an enlarged front elevation of the attachment and of the bed to which it is attached. Fig. 3 is an enlarged section through one of the bed frame engaging clamps and showing one of the standards of the attachment in section therein. Fig. 4 is a plan view of the casing of the winding apparatus and showing the standard in section.

Referring to the figures by characters of reference A designates an all metal bed of the usual or any preferred type, the same supporting a spring bed bottom B on which is arranged a mattress C.

The invention includes a body consisting of a frame made up of adjustably connected tubular members, this frame being indicated by the numeral 1. A fabric cover 17 is buttoned on the frame and split collars 23 are

secured to the frame 1 adjacent its corners, the ends of each collar being connected by a bolt 24.

Elongated tubular standards 25 and 26 are mounted upon the head board and foot board respectively of the bed, the standard 25 being provided at its upper end with swiveled brackets 25' having grooved wheels or sheaves 27, there being also sheaves 28 at the lower end of the standard. The standard 26 is similarly provided with a swiveled bracket carrying sheaves 29. Two intermediate sheaves 30 and two side sheaves 30' are connected to the lower end of standard 26. The upper end portion of each standard is embraced by a metal band 31 having a flat extension 32 and an L-shaped extension 33, there being a bolt 34 which extends transversely through the two extensions and has a curved terminal finger or head 35 extending at right angles therefrom. The bolts 34 are designed to rest upon the top rails of the head board and foot board respectively and with the fingers 35 extending downwardly, it being obvious that, by screwing a nut 36 onto the bolt, the top rails of the head board and foot board can be clamped between the fingers 35 and the L-shaped extensions 33 and at the same time the band 31 can be caused to tightly engage the standards on which they are mounted. Each bolt 34 thus constitutes sufficient means for securing its standard to the bed structure. The lower portion of each standard 25 and 26 is also provided with means, such as has been described, for attaching it to an end cross rail of the bed.

A casing 37 is mounted upon the standard 26 and is secured thereto in any preferred manner, as by means of ears 38 through which screws or other fastening devices extend into the standard. Moreover the casing has extension 39 thereon designed to straddle the standard as clearly indicated in Fig. 4 and thus relieve the fastening devices of lateral strain.

A drum 40 is journaled within the casing 37 and is provided at one end with a worm gear 41 meshing with a worm 42. This worm is arranged on a shaft 43 extending transversely of the casing at one end and a crank 44 or other suitable actuating device is located at one end of the shaft.

The bolts 24 connecting the ends of the collars 23 at one end of the body frame are

detachably engaged by hooks 45 formed at the ends of upwardly converging ropes 46. These ropes are held together against independent movement by a clip 47 of any suitable form and from this clip the ropes extend along parallel lines over the sheaves 29 and down through standard 26 to sheaves 30 from which they extend upward and are secured to and adapted to be wound upon the drum 40. Another pair of ropes 49 is connected in the same way to the bolts 24 attached to the other end of the body frame, these ropes also converging upwardly and being held together by a clip 50. The said ropes 49 extend along parallel lines from the clip 50 and over the sheaves 27 and thence downwardly under sheaves 28. They then extend longitudinally under the bed structure to the sheaves 30' and thence upwardly to the drum 40 to which they are secured. It is to be understood that under normal conditions the frame of the body rests upon the mattress C. Should it be desired, for any reason to elevate the occupant of the bed without compelling a change of position, the shaft 43 and worm 42 are rotated and motion thus transmitted to the drum 40 through gear 41. The four cables connected to the drum will thus be simultaneously wound thereon and the frame will be elevated from the mattress.

What is claimed is:—

1. An attachment of the class described consisting of supporting standards, a flexible band embracing each standard and having an angular extension formed by one end of the band and a flat extension formed by the other end thereof, a bed-engaging element extending loosely through the extensions, means adjustably engaging each element for drawing the extensions toward

each other to bind the band upon the standard and to bind one of the extensions upon the bed, a winding device supported by one of the standards, a body, and flexible connections between the winding device and the ends of the body, said connections being supported by the standards.

2. An attachment for invalid beds including a standard, a flexible band embracing the same and having a flat and an angular extension, said angular extension being projected toward the flat extension, a bolt loosely mounted within the extension and having a terminal finger for engaging a bed structure, means for engaging the bolt to shift the extensions of the band toward each other and bind said band upon the standard and against the bed structure, sheaves carried by the end portions of the standard, flexible elements guided by the sheaves, and winding means carried by the standards and connected to said elements.

3. An attachment for invalid beds, including a tubular standard, brackets swiveled in the ends of the standard, guide sheaves carried by the brackets, a flexible band embracing the standard, means for binding the band upon the standard and upon a bed structure to support the standard fixed relative to the structure, a winding element carried by the standard, and flexible hoisting devices connected to said element and mounted on the sheaves.

In testimony that I claim the foregoing as my own, I have hereto affixed my signature in the presence of two witnesses.

JOHN C. VAN SLYKE.

Witnesses:

JOSEPHINE SHARMER,
CLAIR VAN SLYKE.