

A. GRANDJEAN.  
BEDCLOTHES CLAMP.  
APPLICATION FILED OCT. 17, 1906.

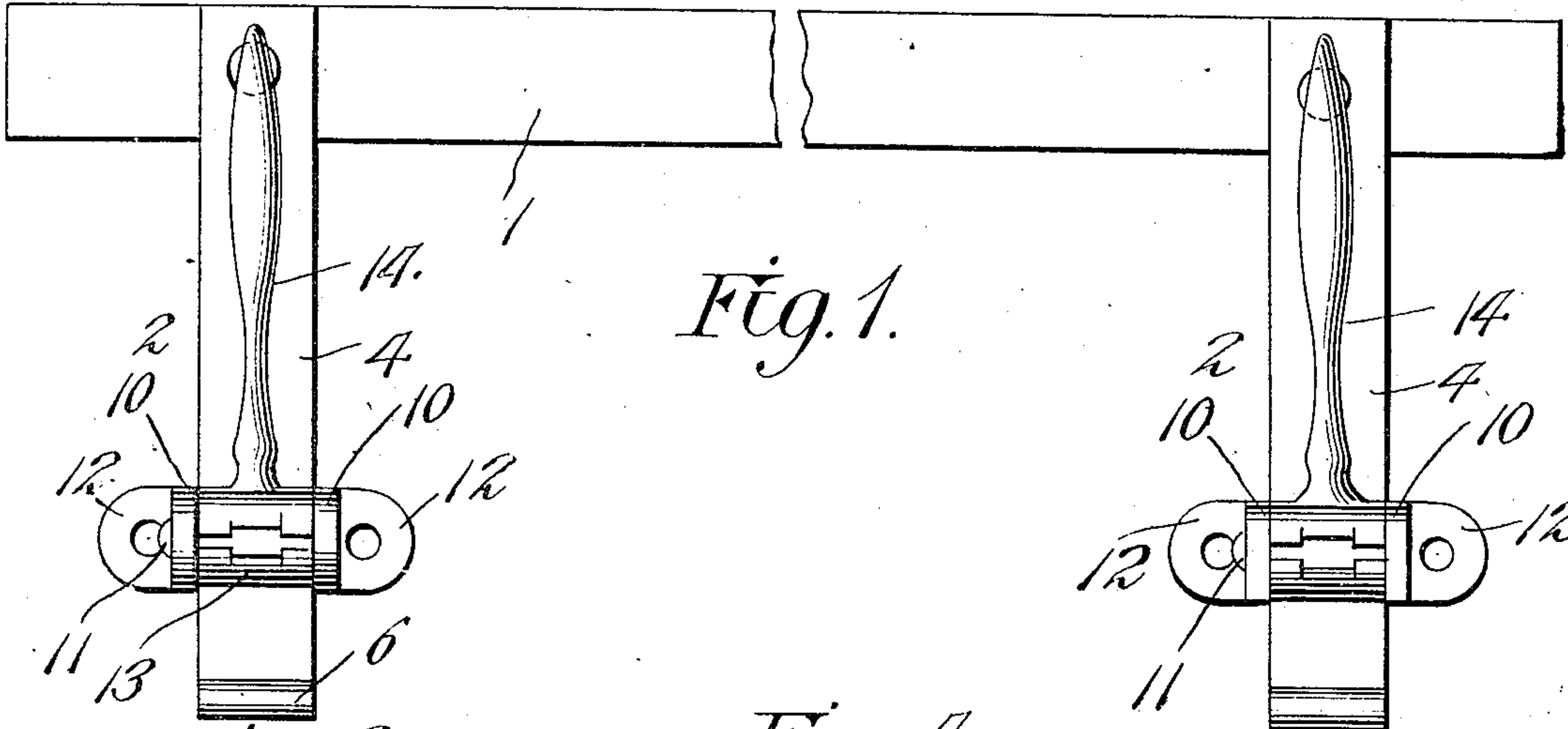


Fig. 1.

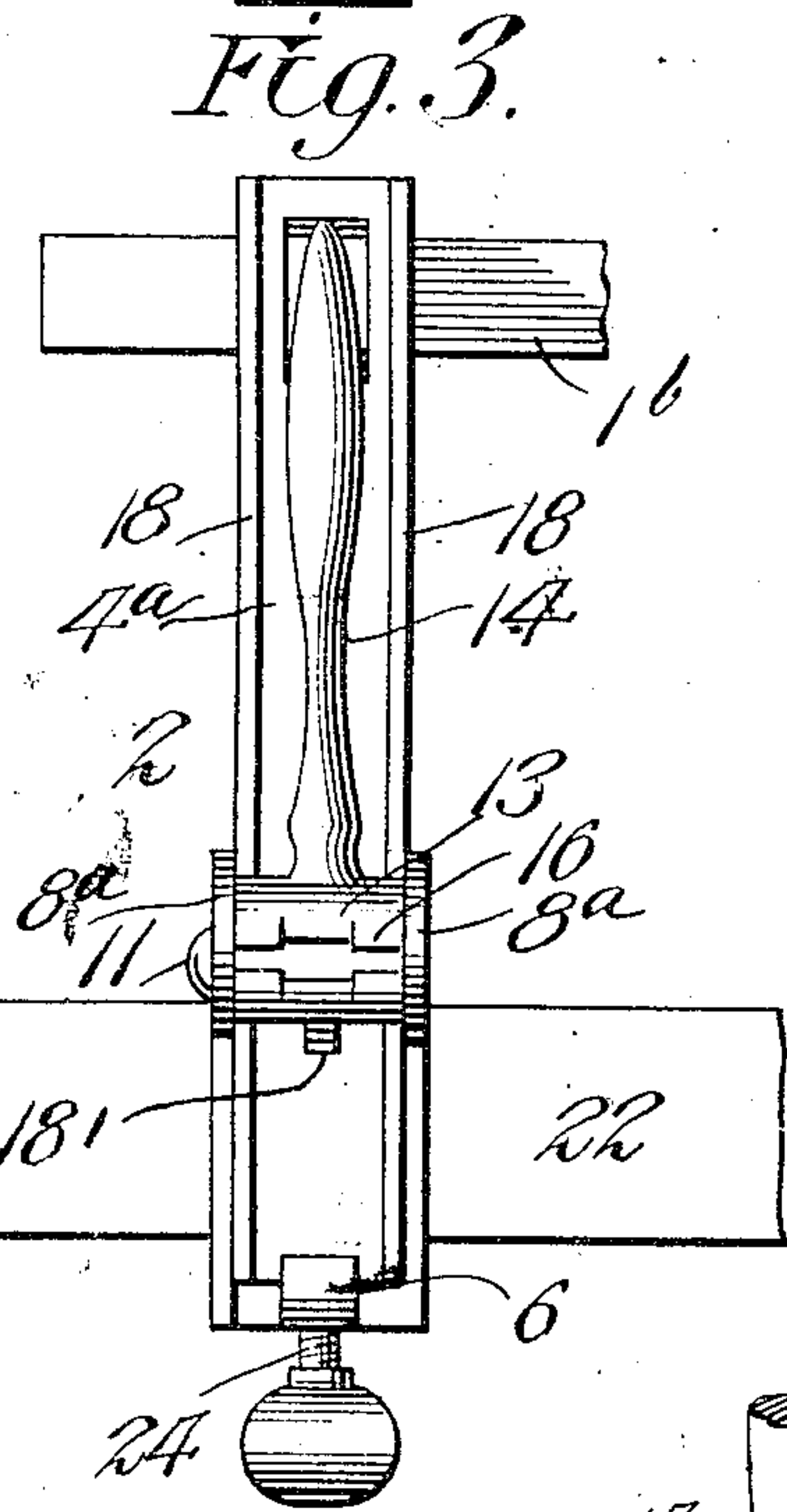


Fig. 3.

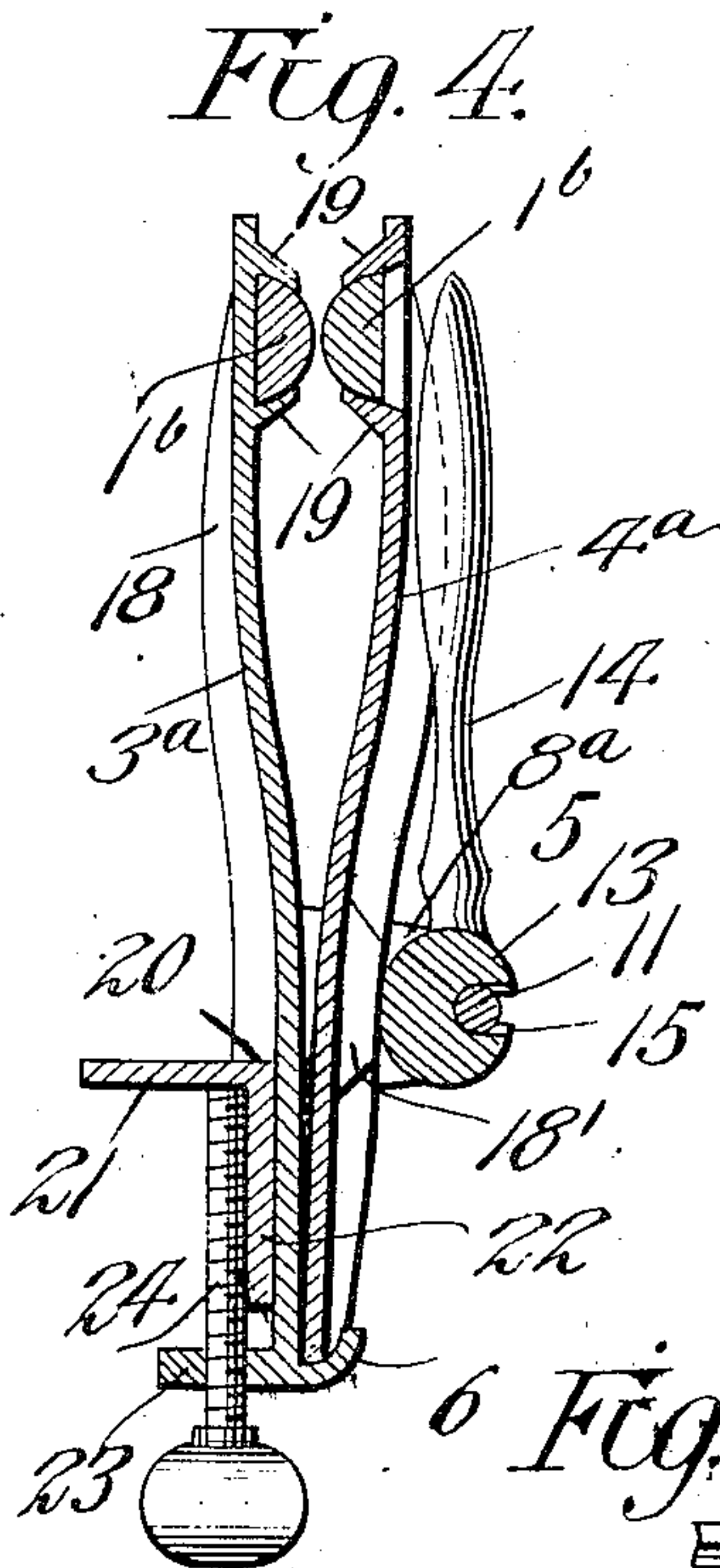


Fig. 4.

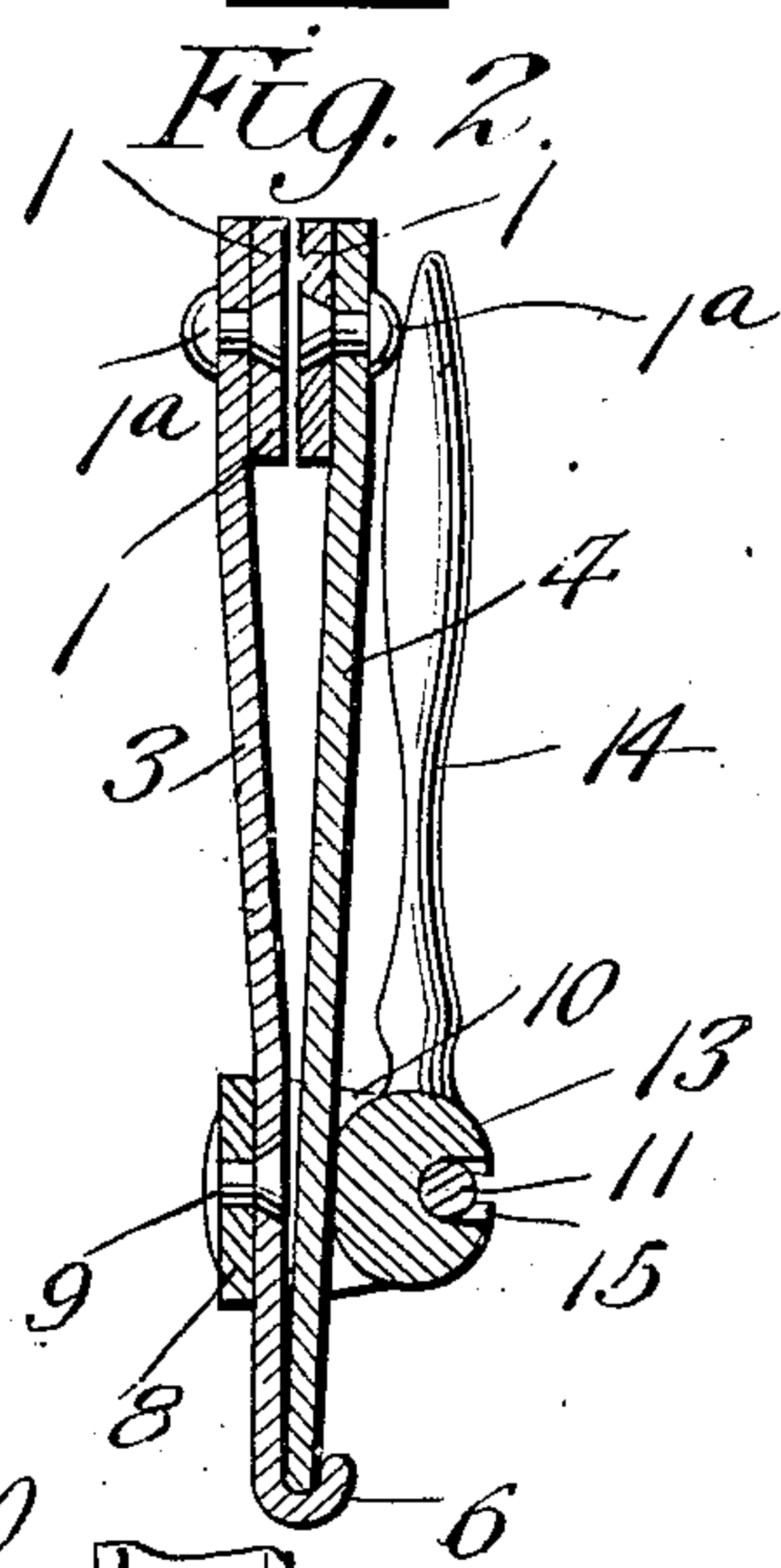


Fig. 2.

Fig. 6.

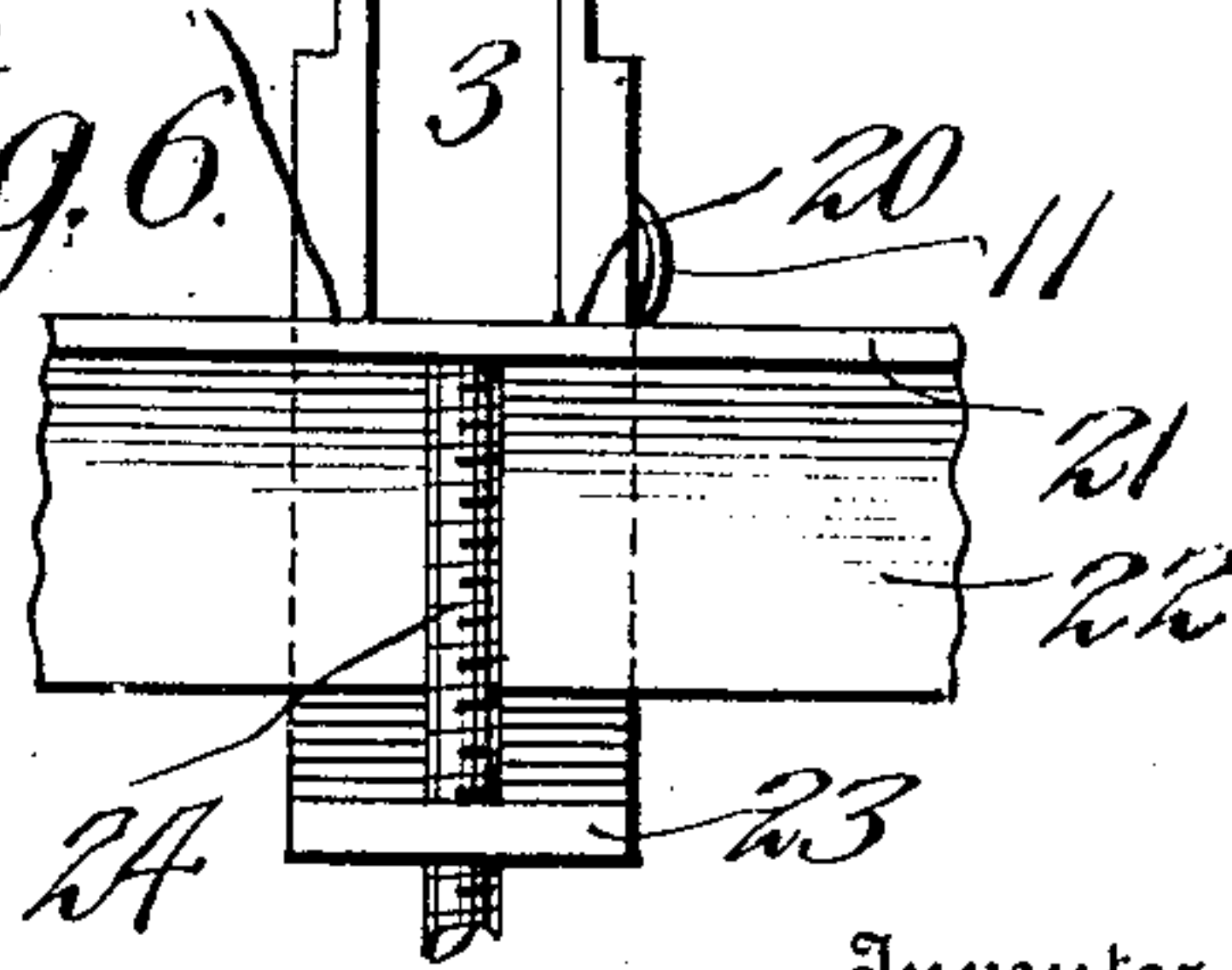
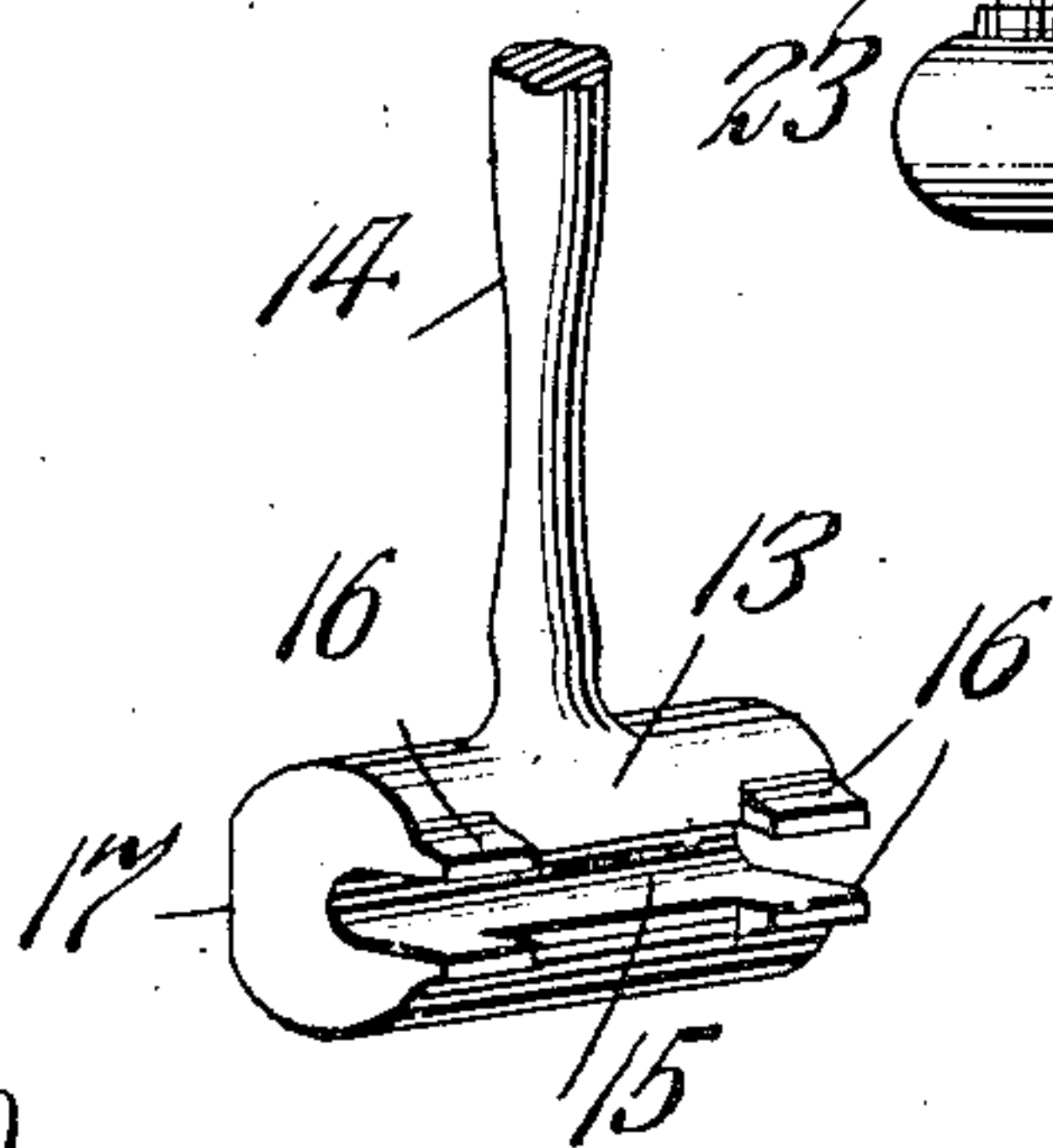


Fig. 5.



Witnesses

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## BEDCLOTHES-CLAMP.

No. 856,052.

Specification of Letters Patent.

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*To all whom it may concern:*

Be it known that I, ARTHUR GRANDJEAN, a citizen of the United States of America, residing at San Diego, in the county of San Diego and State of California, have invented new and useful Improvements in Bedclothes-Clamps, of which the following is a specification.

This invention relates to bed clothes clamps designed to prevent the accidental displacement of the bed clothes or covering from a bed.

One object of the invention is to provide a clothes clamp which is readily applicable to beds, couches, lounges, cots and the like for the stated purpose, and which is inexpensive of construction and adapted to be conveniently manipulated and to clamp the clothes in an effective manner.

Another object is to provide a construction wherein the clamping bars are readily adjustable on and removable from their actuating jaws, and wherein an improved tensioning or adjusting device is provided to force the jaws in clamping engagement.

A still further object is to provide a construction of clamps which will admit of the ready removal of the front clamping bar to afford greater space in removing and replacing the bedding, and also to provide a construction which adapts the parts of the clamp to be inexpensive of manufacture.

With these and other objects in view, the invention consists of the novel construction, combination and arrangement of parts hereinafter fully described and claimed, reference being had to the accompanying drawing, in which:—

Figure 1 is a front elevation of a bed clothes clamp constructed in accordance with my invention. Fig. 2 is a vertical section of the clamp shown in Fig. 1. Fig. 3 is a front elevation of a modified form of clamp. Fig. 4 is a vertical section of the same. Fig. 5 is a detail view of the eccentric. Fig. 6 is a fragmentary elevation of the clamp shown in Figs. 3 and 4.

Referring to Figs. 1 and 2, the numeral 1 indicates bars between which the clothes of a bed are adapted to be clamped in order to prevent the accidental displacement thereof from the bed. The clamping bars are supported by a plurality of clamping devices indicated generally by the reference numeral

2. Each of the clamping devices 2 comprises two cooperating jaws 3 and 4 cast or stamped from a suitable kind of metal. The jaws are adapted to be forced together by an adjusting or tensioning device indicated generally by 5, which acts upon the jaw 4 and in addition to forcing said jaw toward the jaw 3 holds the same from removal.

In the form shown in Figs. 1 and 2 the clamping bars consist of flat strips fastened upon the inner faces of the jaws by rivets or equivalent fastenings 1<sup>a</sup>. The lower end of the jaw 3 is provided with a hook or projection 6 to hold and support the lower end of the jaw 4, which is adapted to be applied and removed by vertical movement. This feature of the removability of the jaws 4 enables the same and the bar 1 carried thereby to be detached to afford greater space in removing and replacing the bedding.

Each compression device 5 comprises a bracket plate 8 which may be integral with the jaws 3 or formed independent thereof and secured thereto by a rivet or like fastening 9. This bracket plate carries a pair of supporting lugs 10 arranged on opposite sides and projecting in advance of the jaw 3 and perforated for the reception of a pivot pin or screw 11 arranged transversely on the outer side of the jaw 4. The bracket plate carries apertured ears 12 projecting laterally beyond the lugs 10 and designed for the passage of screws or other fastenings to secure the clamping device to one of the side or end rails of a bed or the side or end of a couch, cot or similar article of furniture. This type of attaching means also permits of the application of the clamp to the spring frames of spring cots and spring beds. Disposed between the lugs 10 is an eccentric comprising a head 13 carrying an actuating handle 14 and formed in its outer side with a longitudinal groove or recess 15 receiving the pin 11, whereby said eccentric is pivotally mounted thereon. Pairs of projections 16 are formed upon the head on opposite sides of the groove and adjacent the ends of the head, as shown in Fig. 5, which illustrate the eccentric as initially formed and before it is applied in position. The rear side of the eccentric head is provided with a flat face 17 to bear directly against the outer face of the jaw 4, as shown in Figs. 1 and 2, or against a boss formed on said jaw, as hereinafter



described. When the handle 14 is turned to an upright position the face 17 is brought into engagement with the jaw 4 to force the same toward the companion jaw 3, as will be readily understood.

In Figs. 3 and 4 the outer faces of the jaws 3<sup>a</sup> and 4<sup>a</sup> are provided with side strengthening flanges 18, and the clamping bars 1<sup>b</sup> are preferably of semicircular form, their outer opposing faces being curved to clamp the clothes without injury. These bars are held between retaining fingers 19 formed on the jaws, which fingers extend over and grip the curved faces. The bars are insertible within and withdrawable from the fingers by a longitudinal sliding movement and are hence adapted to be readily removed and adjusted to clamp the clothes at any position along the bottom or side of the bed to which the clamping device is applied. When the jaws are cast these fingers may be so formed that they may be bent to grip the clamping bars with any desired degree of force. The jaw 4<sup>a</sup> is arranged and supported in this embodiment of the invention in the same manner in which the jaw 4 in Figs. 1 and 2 is supported and arranged, and is consequently removable to enable the outer clamping bar to be detached to prevent its interference with the free removal and adjustment of the bedding. In Figs. 3 and 4 the clamp is provided with a special fastening for securing the same to the rails of a metallic bed. As shown, the lower end of the jaw 3<sup>a</sup> is provided with shoulders 20 to rest upon the horizontal web 21 of the rail and below said shoulders bears against the outer side of the vertical web 22 of the rail and carries at its lower end a horizontal extension 23, having a screw-threaded opening for the reception of a clamping screw 24 extending parallel with the jaw and adapted to impinge at its upper end against the web 21 and bear against the inner face of the web 22. The distance between the shoulders 20 and extension 23 is sufficient to admit of the reception between the same of the vertical webs 22 of rails of different sizes, and the screw 24 has the requisite range of adjustment to accord therewith and acts to force the shoulders 20 into firm clamping engagement with the rail. Preferably the jaw 4<sup>a</sup> is provided between its flanges 18 with a boss 18' against which the head of the eccentric bears. The construction of the compression device in Figs. 3 and 4 is the same as that previously described, except that the pivot pin 11 is carried by supporting lugs 8<sup>a</sup> which are integral with the jaw 3<sup>a</sup>.

In each form of the invention it will be seen that the jaws are connected and supported in a similar manner and operated by a like type of compression device, the movable jaw being supported by the retaining hook 6 from downward movement and held

from lateral movement by the eccentric and supporting lugs 10. The construction in either case adapts the movable jaws to be forced forward or released by the eccentric so as to throw the clamping bars into and out of engagement with the bed clothes, as well as admits of the ready removal of said movable jaws and the clamping bars carried thereby so that the clothes can be removed and replaced without interference therefrom.

The construction of the jaws is such as to adapt them to be readily cast or stamped from sheet metal, while the described form of the eccentric with the projections 16 initially arranged, as shown in Fig. 5, permits said eccentric to be employed for the production of duplicate cores for use in the operation of casting such eccentrics and obviates the necessity of drilling or carrying out any finishing operations thereon.

Having thus described the invention, what is claimed as new, is:—

1. A bed clothes clamp comprising cooperating clamping jaws, provided with retaining fingers, clamping bars held by said fingers and slidably removable therefrom, and means for adjusting the jaws to move the bars into and out of clamping position.

2. A bed clothes clamp comprising cooperating jaws, clamping bars carried by the jaws and having outer curved faces, retaining fingers on the jaws engaging said faces and forming keepers for the bars on which the latter are slidably removable, and means for adjusting the jaws to move the bars into and out of clamping position.

3. A bed clothes clamp comprising cooperating jaws, one of said jaws being provided with means for fastening the clamp to a bedstead, a pivot pin supported by said jaw, and an eccentric having a groove engaging said pin and arranged to operate on the other jaw, said eccentric being provided with projections extending across the groove to retain the pin therein.

4. A bed clothes clamp comprising a pair of clamping devices, each consisting of a stationary and a movable jaw, the stationary jaw of each device being provided with means for securing the same to a frame of a bed, means for adjusting the movable jaws of each clamping device, and clamping bars carried by said clamping devices, said bars being slidably connected with the jaws.

5. A bed clothes clamp comprising a relatively stationary jaw having means for securing the same to a bed, said jaw being provided at its lower end with a supporting projection and above the same with supporting lugs, a pivot pin carried by said supporting lugs, a movable jaw substantially coextensive in length with the stationary jaw, said movable jaw being arranged between the supporting lugs and held at its lower end by said projection, and an eccentric journaled on said



pivot pin outside of said adjustable jaw and operative to force said jaw toward the stationary jaw.

5 6. A bed clothes clamp comprising relatively stationary and movable jaws, the former being provided with attaching means and having at its lower end a supporting hook, lugs upon said jaw above the hook, a stationary jaw arranged between the lugs  
10 and held at its lower end by the hook, a pivot pin carried by said supporting lugs, and an eccentric journaled on said pin and arranged to hold the movable jaw from outward movement, said eccentric being adjustable to  
15 force said jaw toward the stationary jaw.

7. A bed clothes clamp comprising relatively stationary and movable jaws, the former having at its lower end a supporting hook projecting in one direction and an extension projecting in the opposite direction,  
20 a clamping screw supported by said extension and extending upwardly parallel with the stationary jaw, supporting lugs upon the stationary jaw above the hook, a pivot pin  
25 carried by said lugs, a movable jaw held at its lower end by said hook and arranged between the supporting lugs on the inner side of the pivot pin, and an eccentric pivoted to said  
30 pin and arranged to bear against the movable jaw to force the same toward the stationary jaw.

8. In a device of the class described, a clamping device comprising a pair of spaced clamping jaws adapted for movement toward

and from each other, one of said jaws being 35 provided with a fastening wholly mounted thereon to engage a bedstead rail, clamping bars carried by the jaws for engagement with the bed clothes, a bracket embracing the jaws and comprising a pair of spaced side 40 portions, said bracket being attached to one of the jaws and having a pair of projecting perforated attaching lugs, and a compression device on the bracket for acting upon the adjacent jaw to move the same to clamping position, said adjacent jaw being independent 45 of fixed connection with the other jaw and removably mounted upon the same and between the attaching lugs.

9. A clamping device for the purpose described comprising a stationary clamping jaw 50 provided with attaching means and having at its lower end a supporting hook, spaced lugs upon said jaw above the hook, a pin carried by said lugs, a movable jaw held at its lower 55 end by the hook and extending upwardly between the supporting lugs, and an eccentric having a groove engaging said pin and arranged to operate upon the adjustable jaw, said eccentric being provided with projec- 60 tions extending across the groove to retain the pin therein.

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

ARTHUR GRANDJEAN.

Witnesses:

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