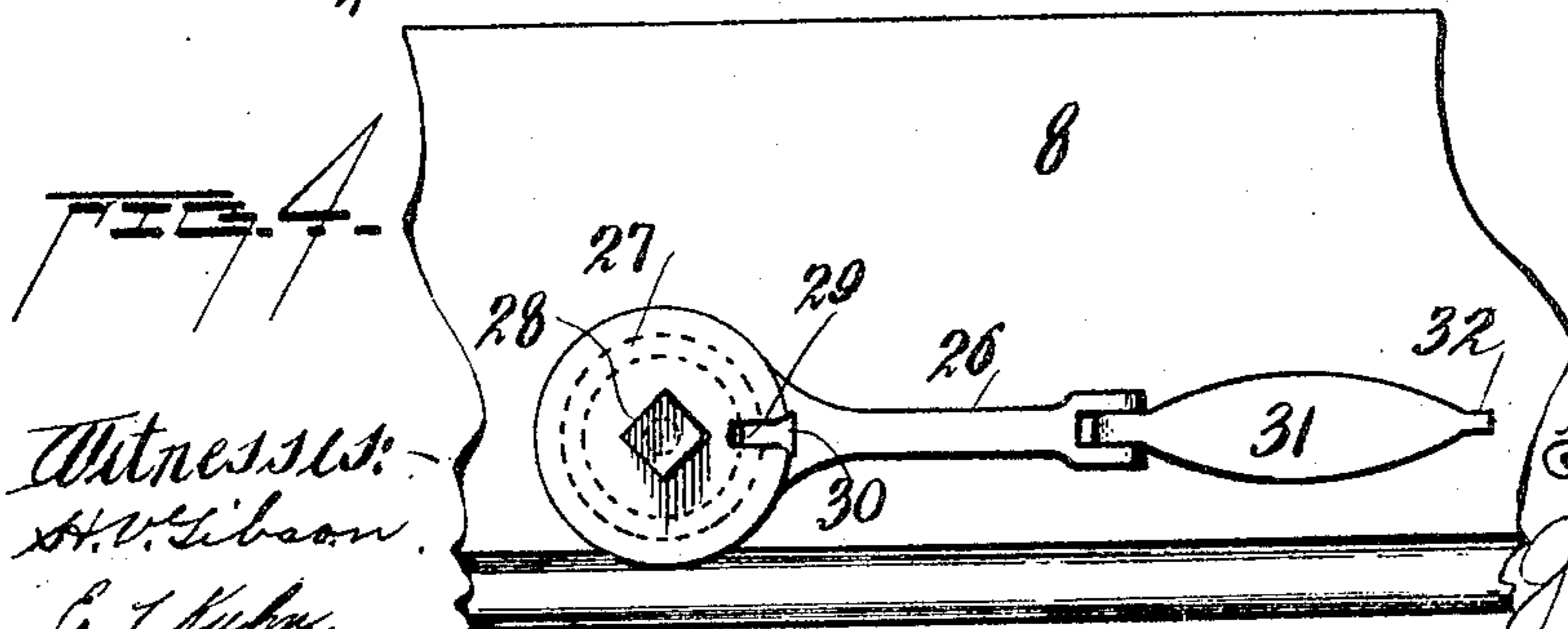
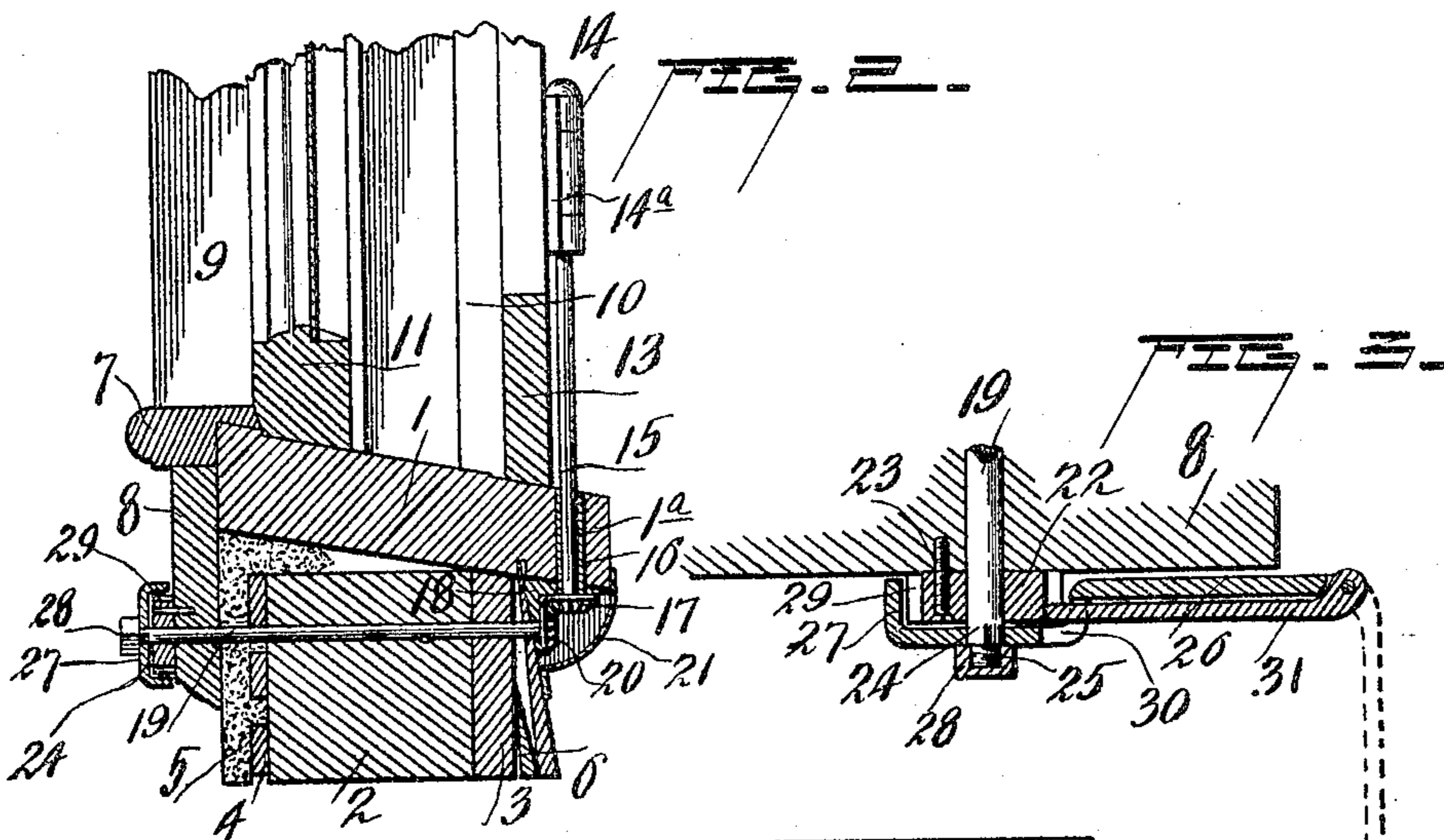
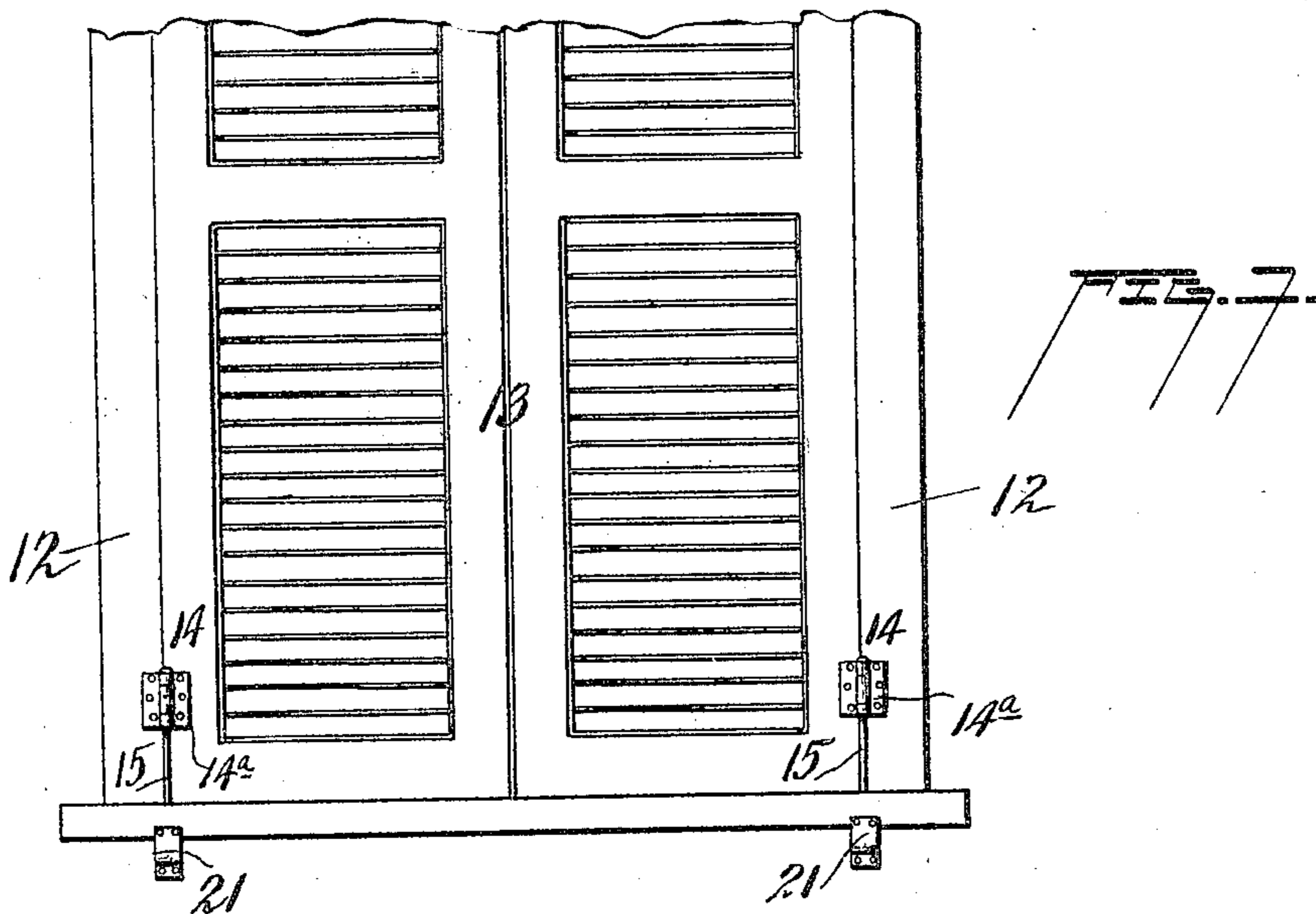


No. 808,519.

PATENTED DEC. 26, 1905.

G. E. & J. K. DIXON.  
BLIND OR SHUTTER OPENER.

APPLICATION FILED OCT. 10, 1904.



Witnesses:  
H. V. Gibson.  
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# UNITED STATES PATENT OFFICE.

GEORGE E. DIXON AND JOSEPH K. DIXON, OF PEORIA, ILLINOIS.

## BLIND OR SHUTTER OPENER.

No. 808,519.

Specification of Letters Patent.

Patented Dec. 26, 1905.

Application filed October 10, 1904. Serial No. 227,787.

*To all whom it may concern:*

Be it known that we, GEORGE E. DIXON and JOSEPH K. DIXON, citizens of the United States, residing at Peoria, in the county of Peoria and State of Illinois, have invented certain new and useful Improvements in Blind or Shutter Openers; and we do hereby declare that the following is a full, clear, and exact description of the invention, which will enable others skilled in the art to which it ap-  
10 pertains to make and use the same.

Our invention has reference to a blind or shutter opener.

The object of the invention is to open or  
15 close a blind or shutter from the inside of a dwelling without having to first open a window and to lock the position of the blind or shutters in different positions.

A further object of the invention is to provide a device which, while applicable to new dwellings and to different forms of shutters, is also applicable to old shutters or blinds—that is to say, to those blinds or shutters which are already attached to buildings.

A further object of the invention is to extend the pintle or stem of the lower hinges down through the sill, or "subsill," as it may be termed, the same forming a bearing for the lower end of the said pintle, and attach  
25 thereto beneath the sill a bevel-pinion, a shaft or spindle passing through the wall and stud beneath the sill and its ends having bearing in the apron and outer boards, respectively, a bevel-gear on its outer end in mesh with the gear on the pintle of the hinge,  
30 a closure or ornamental casing inclosing the gears, and a handle on the inner end of the shaft by means of which the same may be actuated to open or close the shutters through  
40 the connections described.

The invention has for its further object details of construction and combination to be hereinafter more specifically pointed out in the specification, claimed in the appended  
45 claims, and illustrated in the accompanying drawings, in which—

Figure 1 shows greatly reduced and in elevation the lower half of a casing surrounding a window and a pair of blinds or shutters  
50 closed with our improvements attached. Fig. 2 is an enlarged cross-section of a window, its casing-sill, blinds, and component parts with our improvements attached and their relation to the blinds and casing shown. Fig. 3  
55 shows detached and enlarged a plan in sec-

tion of the means of operating the gears and the mode of locking the gears; and Fig. 4 is a front elevation, enlarged, of the handle or lever for operating the gears, the said handle being jointed and extended its full length.

In the drawings, 1 denotes a sill supported by a wall consisting of the stud or plate 2, the outside boarding 3, the laths 4, and the plastering 5.

6 indicates the weather-boarding, secured to the boarding 3, while 7 denotes the window-stool, secured to the sill, and beneath the stool is secured the apron 8, extending from the lower edge of the stool down across the sill and covering a portion of the plastering 5.

The sill 1 supports the usual inner and outer window-casings 9 and 10, and 11 is the lower window-sash.

12 indicates the outside casing, while 13 denotes a pair of blinds or shutters which are suitably hinged to the outside casing to close over the sill and the windows, as seen in Fig. 1.

As indicated, the object of the present invention is to provide means whereby the blinds or shutters of dwellings or buildings  
80 may be opened or closed from the inside and locked at different angles when opening or closing the same. The above description relates to the usual construction of window-casing and component parts to give a clearer  
85 understanding of the arrangement and disposition of our improvements with reference thereto.

The hinges of the blinds or shutters are indicated as 14, of two half-sections 14<sup>a</sup>, the respective sections being secured to the blinds  
90 13 and casing 12, and the pintle or stem 15, which forms a pivot for the two sections of the hinges, (more particularly the lower hinges,) is made much longer than customary and is extended down and through what  
95 will be termed the "subsill" 1<sup>a</sup> of the main sill 1, the same forming a bearing for the lower end of the pintle, which passes through a sleeve or equivalent member 16, and on the  
100 lower end of the pintle beneath the sill is secured a bevel-pinion 17.

18 indicates an angle-plate forming a facing beneath the sill and for the outside of the weather-boarding 6, through which the pin-  
105 tle or stem 15 projects and also a shaft 19, which is carried or extended through the wall beneath the sill 1, the said shaft passing through the apron 8, the stud 2, and outside  
110 boarding 3, carrying on its outer end beneath

the sill a bevel-pinion 20, which intermeshes with the pinion 17 of the hinge-pintle 15.

A casing or ornamental covering 21 is shown inclosing the pinions or gears 17 and 20 and secured to the subsill 1<sup>a</sup> and the weather-boarding 6.

On the inner end of the shaft 19 is concentrically carried a disk 22, which is secured to the face of the apron 8 by a screw 23 or other suitable means. The end of the shaft 19 projecting through the disk is squared at 24 and threaded, as at 25. On the squared portion of the shaft 19 is carried a crank 26, provided with a cup-shaped portion 27, forming a casing or inclosure for the disk 22, and 28 is a nut adapted to be screwed onto the threaded end of the said shaft to retain the crank 26 on the shaft 19. The disk 22 referred to is provided with a series of radial slots 29, extending a suitable distance into the body of the disk from the periphery thereof, while the crank 26 and the cup portion thereof is provided with a slot 30, extending longitudinally of the length of the crank and adapted to coincide and lie parallel above the slots in the disk when the crank is revolved. To the outer end of the crank 26 is pivotally attached a handle or handhold 31, which is provided at its outer end with a projection, finger, or lug 32.

In assembling the parts the crank and the handhold is placed approximately in the position seen in Fig. 4—that is, with the center line of the crank passing horizontally through the axis of the shaft 19. In rotating the shaft 19 the handhold 31 would be placed at right angles to the crank, as in Fig. 3, when a half-turn of the shaft 19 is sufficient to open the blinds or shutters their full distances, being closed by reversing the rotation of the said shaft. When the blinds are opened, closed, or it is desired to lock them in any intermediate position, the handle 31 is folded over, as in Fig. 3, causing the lug or finger 32 to be passed through the slot 30 in the crank and engage a coinciding slot 29 in the disk 22, locking the position of the blinds, it being necessary to release the lug 32 from the disk before the shaft 19 can be again rotated.

It is understood that the devices described as relating to our improvement are intended

to be arranged in duplicate on each window for the purpose of operating the two blinds.

When attaching our improvements to blinds which are already up, the pintle of the lower hinges may be replaced by one of the length required by our device or the entire hinge replaced by one we use or the old ones left in place and ours attached near the lower end of the hinge, the placing of the remaining features being the same as though they were attached to a new building.

Having thus fully described our invention, what we claim, and desire to secure by Letters Patent of the United States, is—

1. In a device of the class described, the combination with a window-casing, sill and apron, a blind, a hinge for hanging the blind, the pintle of the hinge extending down through the sill and carrying a gear on its lower end, a shaft carried transversely beneath the sill and through the apron, a gear on the shaft meshing with the gear on the pintle, a disk having a series of notches concentrically carried on the said shaft and secured to the face of the apron, a crank attached to the end of the shaft and formed with a casing adapted to inclose the disk, and the casing having a slotted opening, a handle pivotally attached to the crank, when the handle is folded adapted to enter the slot of the casing and engage a slot in the disk, substantially for the purpose specified.

2. In a device of the class described, and in combination with the shaft 19, the disk 22 through which the shaft extends, the periphery of the disk provided with a series of notches, a crank attached to the end of the shaft and formed with a cup-shaped portion incasing the disk, and the said cup-shaped portion having a slot in its face, a handle pivotally attached to the end of the crank, and having an extended lug, all substantially as and for the purposes specified.

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

GEORGE E. DIXON.  
JOSEPH K. DIXON.

Witnesses:

CHAS. W. LA PORTE,  
H. V. GIBSON.