

No. 768,966.

PATENTED AUG. 30, 1904.

F. M. STURGIS.  
END GATE HANGER FOR WAGONS.

APPLICATION FILED APR. 22, 1904.

NO MODEL.

2 SHEETS—SHEET 1.

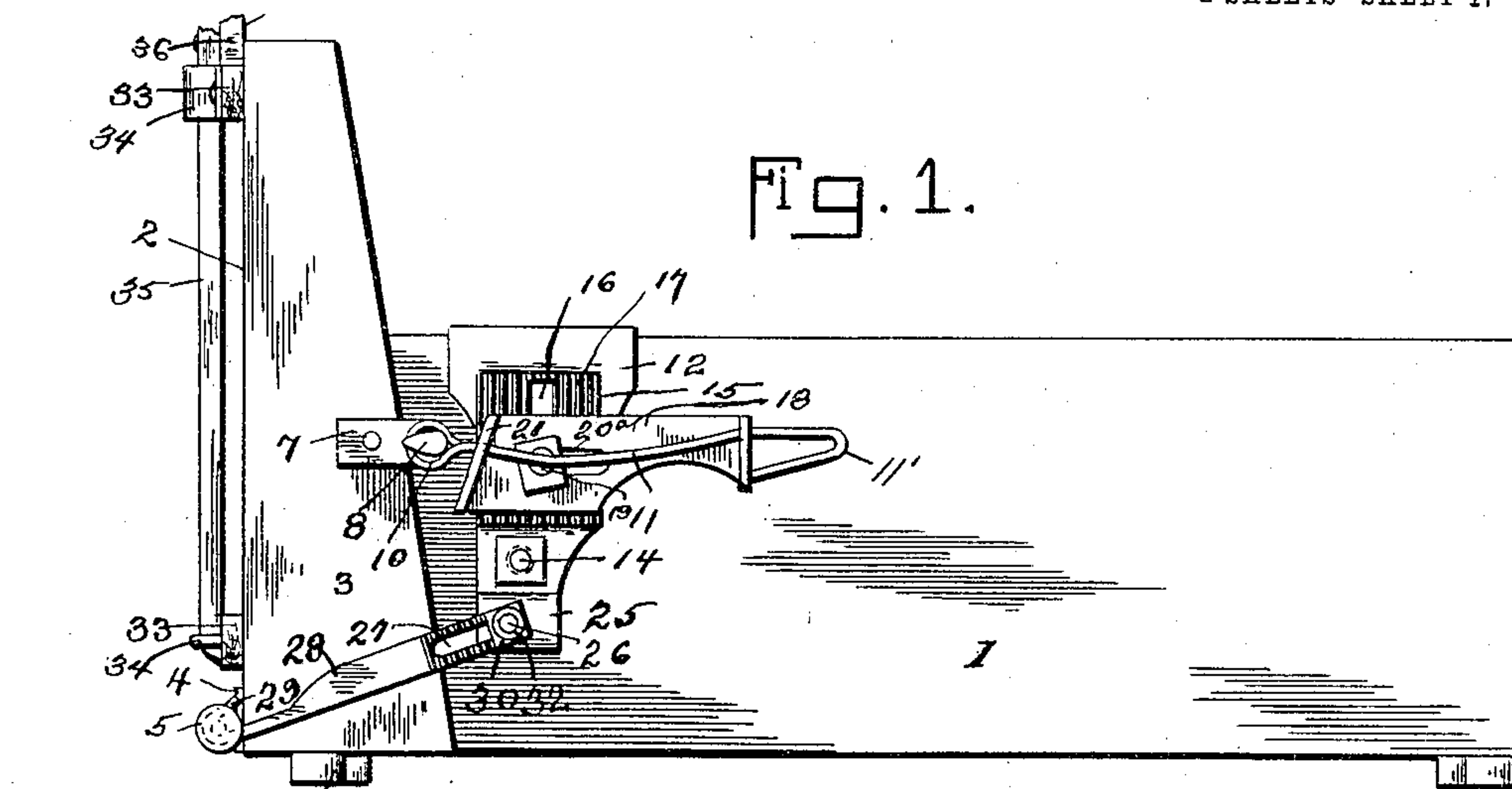


Fig. 3.

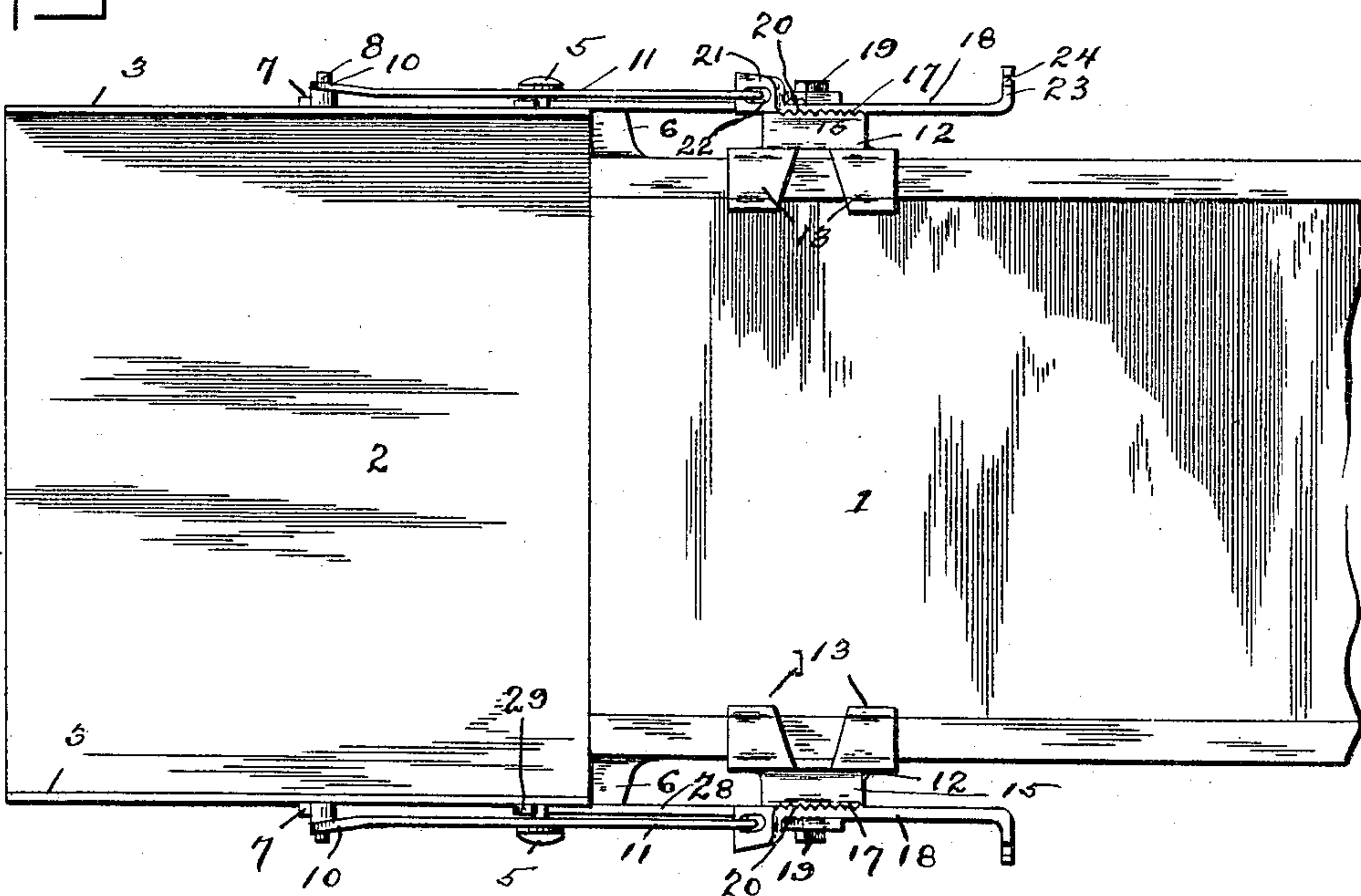
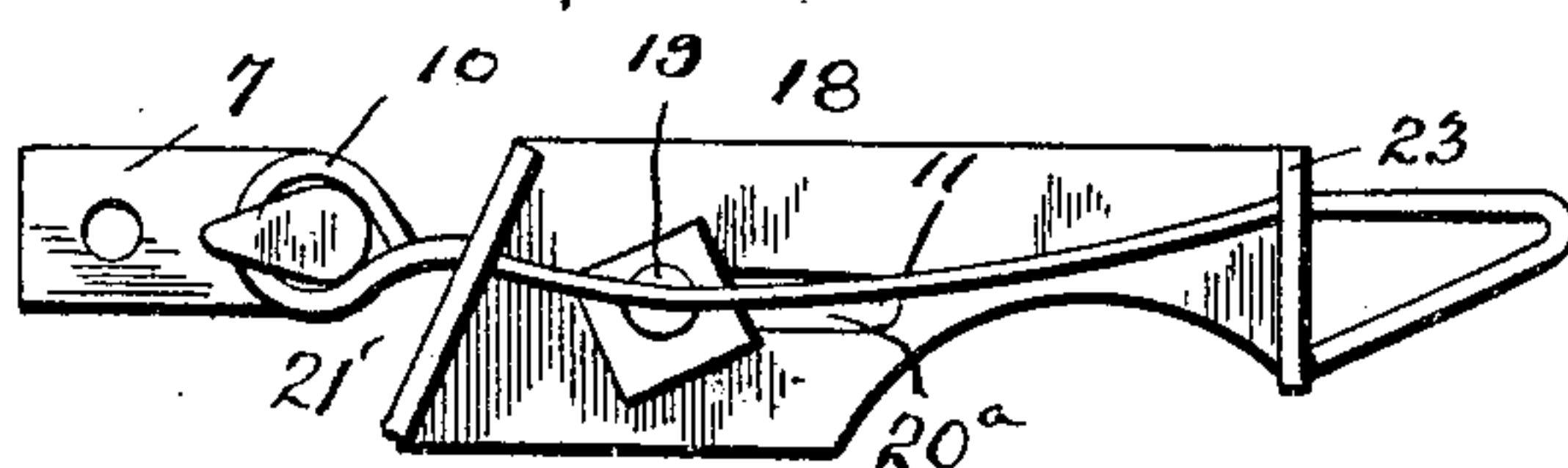


Fig. 4.



Witnesses  
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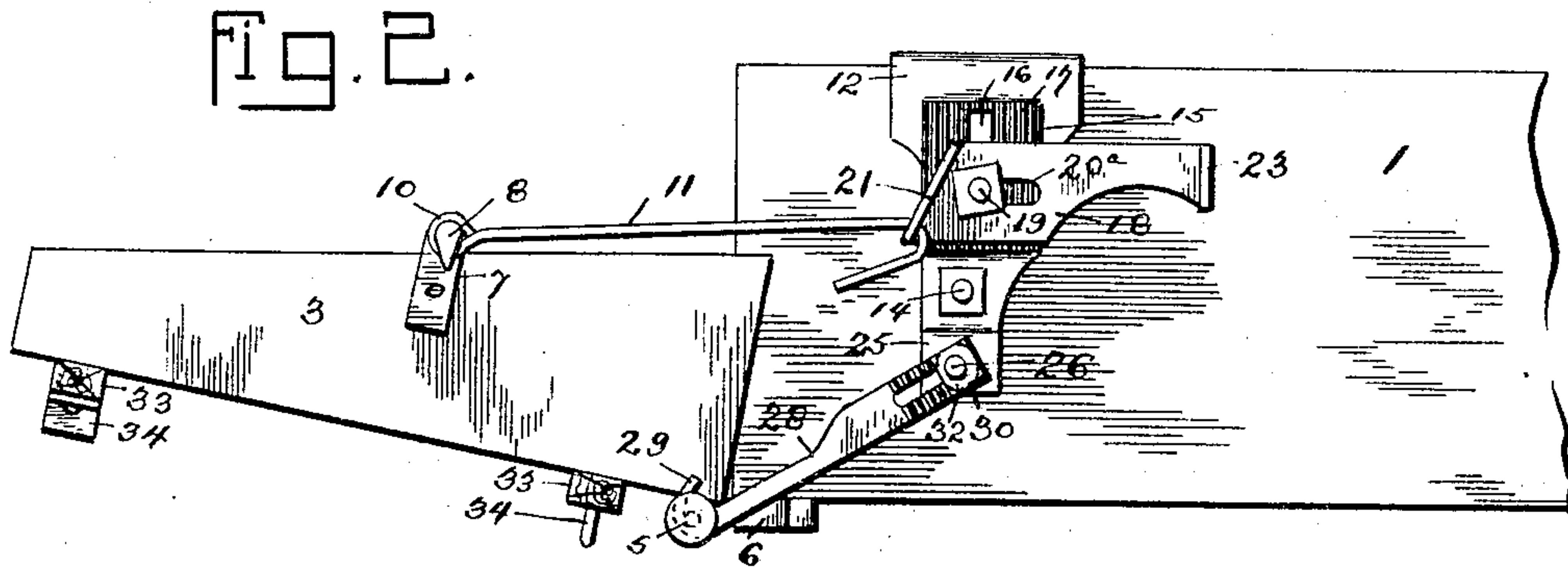


Fig. 5.

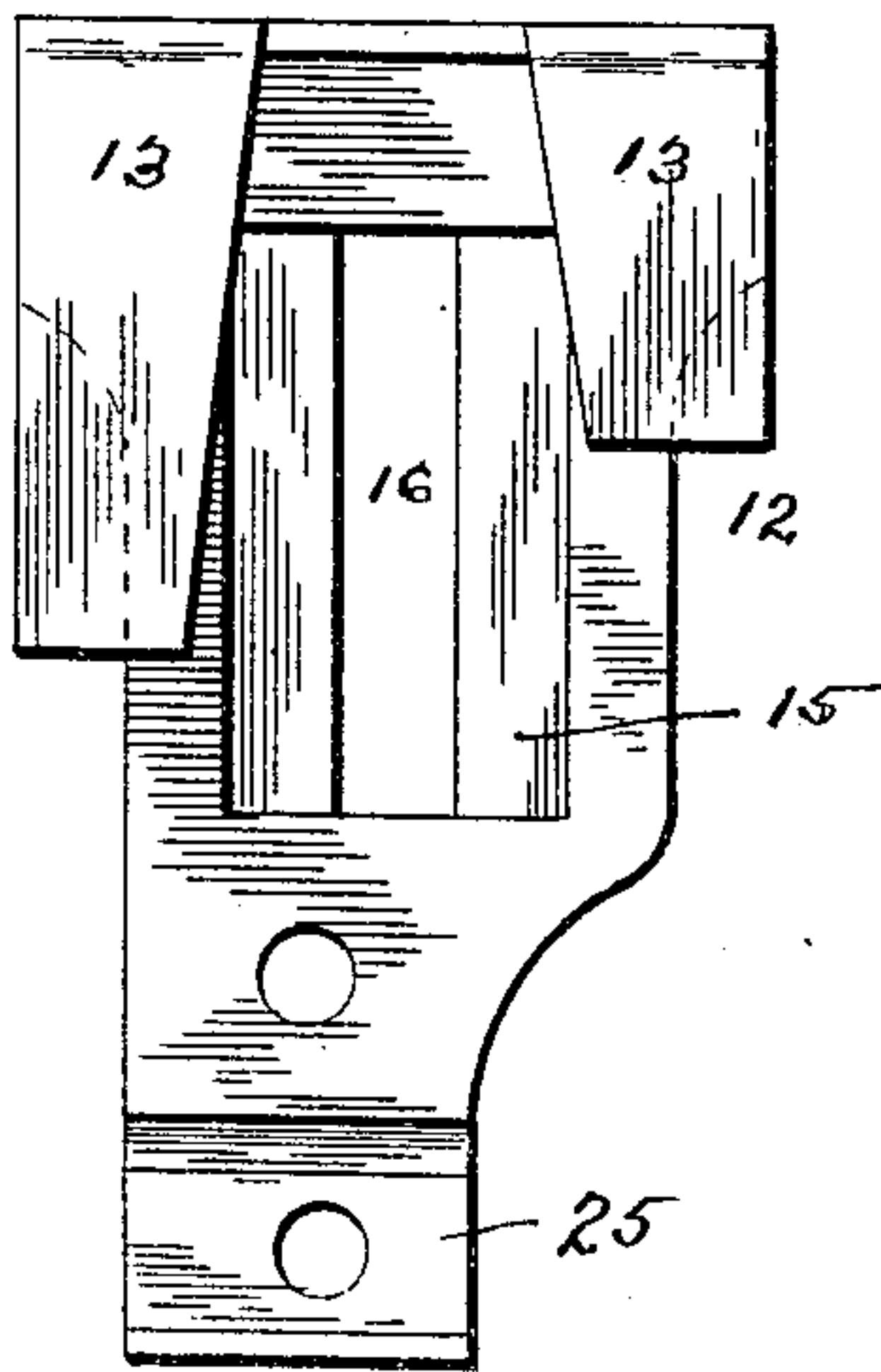
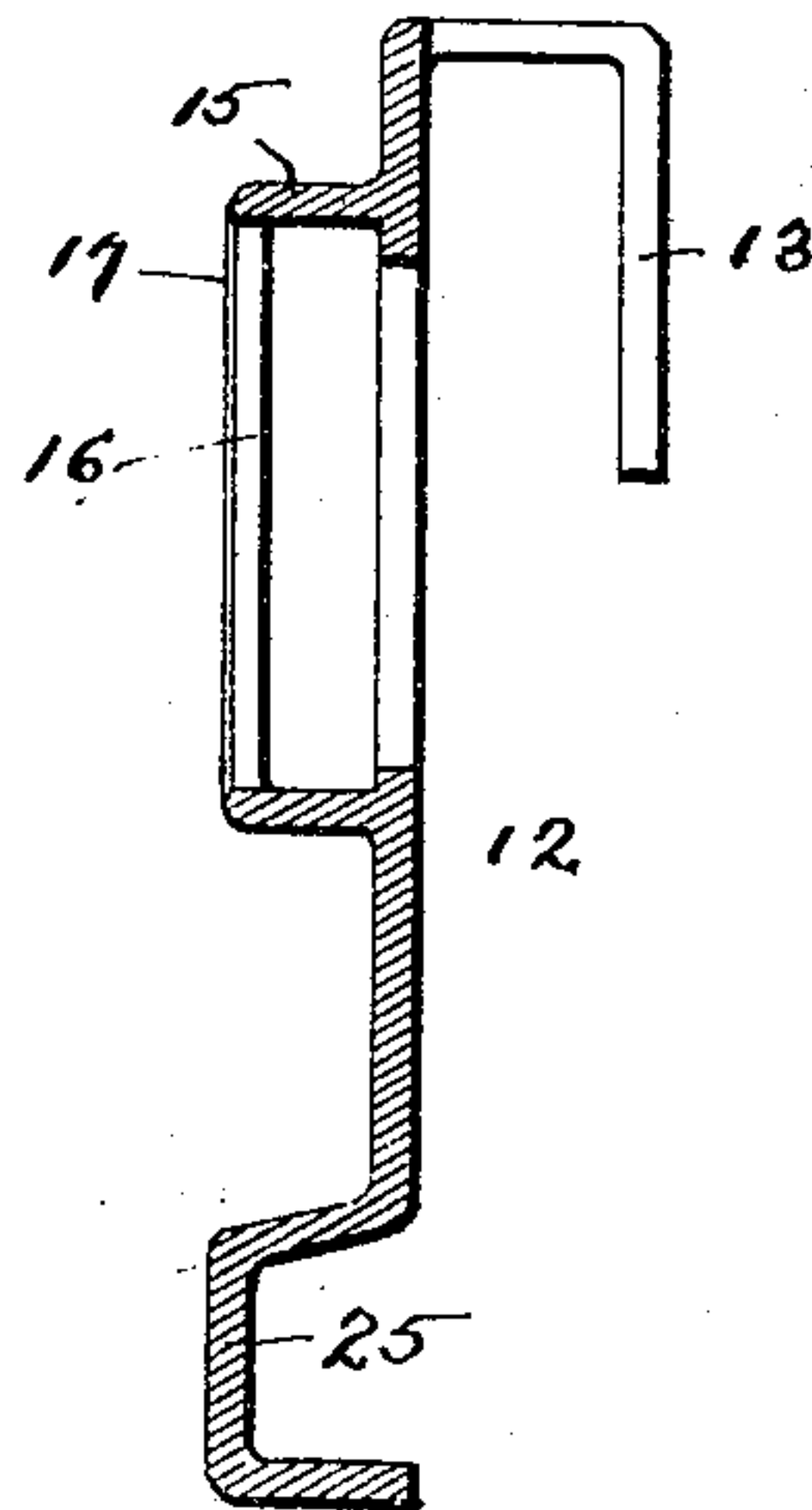


Fig. 6.



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# UNITED STATES PATENT OFFICE.

FRANCIS M. STURGIS, OF SHELBYVILLE, ILLINOIS, ASSIGNOR OF TWO-THIRDS TO FRANKLIN P. BIVINS AND HARRY L. BIVINS, OF SHELBYVILLE, ILLINOIS.

## END-GATE HANGER FOR WAGONS.

SPECIFICATION forming part of Letters Patent No. 768,966, dated August 30, 1904.

Application filed April 22, 1904. Serial No. 204,475. (No model.)

*To all whom it may concern:*

Be it known that I, FRANCIS M. STURGIS, a citizen of the United States, residing at Shelbyville, in the county of Shelby and State of Illinois, have invented certain new and useful Improvements in End-Gate Hangers for Wagons, of which the following is a specification.

My present invention relates to improvements in end-gate hangers for wagons, and has for its object an adjustable pivot for the end-gate and adjustable means for holding the end-gate in various positions with relation to the wagon-body.

Another object of my invention is the provision of an end-gate or scoop-board hanger by which the same is rigidly secured in place or detached from the wagon-body and which is rigidly secured to any wagon-body in general use and which further dispenses with the employment of an unnecessary number of bolts in securing the same in place upon the wagon-body.

With this end in view my improved construction of end-gate hanger for wagons consists of novel features of construction and combination of parts, substantially as disclosed herein.

In the accompanying drawings, Figure 1 is a side elevation of a wagon-body provided with the end-gate or scoop-board equipped with my invention, the end-gate or scoop-board being shown in closed position. Fig. 2 is a similar view of the gate or scoop-board in open position. Fig. 3 is a top plan view of the device as shown in Fig. 2. Fig. 4 is an enlarged detail view of one of the fasteners removed from the device to more clearly show the construction. Fig. 5 is an interior view of one of the supporting-plates. Fig. 6 is a vertical central sectional view of one of the supporting-plates.

Referring to the drawings, the numeral 1 designates the wagon-body, and 2 the end-gate or scoop-board, the scoop-board being preferably provided with the two inclined sides or flanges 3 and with the two securing-plates 4, provided with the headed studs 5, said headed studs projecting beyond the outer faces of the

end-gate or scoop-board and being secured thereto upon its lower outer face.

Secured to the bottom of the wagon-body, at the rear thereof, is an ordinary sill 6, which allows the lower edge of the flanges of the end-gate or scoop-board to rest upon the projecting ends thereof when the end-gate or scoop-board assumes the position shown in Fig. 1. Secured intermediate of the flanges of the end-gate or scoop-board and projecting therefrom are the plates 7, each of which is provided with the projections or studs 8, having the cam-shaped heads for the purpose of receiving the eyed ends 10 of the spring securing or locking rods 11. In order that the end-gate may be properly held with relation to the wagon-body and be locked in such position, I provide a pair of supporting plates or castings 12, which are each provided with the two hooked ends 13, which fit over and upon the upper edge of the sides of the wagon-body and project upon the inner face thereof, the body of the casting resting upon the outer face of the side of the wagon-body and being held in the proper adjusted position by means of the bolt 14, which passes through the body of the wagon and the body of the casting.

Formed upon the casting, substantially intermediate thereof, is the integral hollow casing 15, which is provided with the vertical slot 16 and the corrugated surfaces 17. Passing through this vertical slot and adjustably holding the plate 18 in its adjusted position is a bolt 19. The inner face of this plate at 20 is corrugated to correspond with the corrugations of the casing, and in order that the same may be adjusted to or from the rear of the wagon-body I provide a horizontal slot 20<sup>a</sup>, through which the bolt passes.

Provided upon the rear and projecting outwardly from the body of the plate is a flange 21, which is provided with a substantially elliptical slot or opening 22, through which the spring-rod 11 is adapted to pass and have its hooked end 11' engage the body of the plate, as shown in Fig. 2, to properly support the end-gate or scoop when the same is swung



open or rearward. In order to lock the spring-rod so as to hold the parts in the position shown in Fig. 1, I provide upon the opposite end of the plate 18 a projecting flange 23, provided with a recess or notch 24 for the reception of the spring-rod 11, the said notch being at such an angle above the upper portion of the elliptical opening upon the opposite end of the plate as to cause the tension of the rod to be exerted downward into the notch 24, thus locking the parts, as shown in Fig. 1.

Provided upon the lower end of each one of the castings is a hooked portion 25, in which is mounted and projects outwardly an adjusting-bolt 26, which is adapted to pass through the elongated slot 27 of the adjustable pivot support or arm 28, whose other hooked end 29 engages the headed studs 5 of the end-gate or scoop-board.

Provided upon each side of the slot of the pivot-support are a series of corrugations, and mounted upon the adjusting-bolt for supporting the same is a clamping block or plate 30, which is provided with a corrugated inner surface to engage the corrugations of the pivot-support and by means of the nut 32 be held so as to engage the plate and rigidly hold the pivot-support in its adjusted position.

Upon the outer face of the scoop-board or end-gate I provide the two parallel strips 33, upon whose outer faces I provide the alining eyes or staples 34 for the reception of the stationary supporting-arms 35 of the auxiliary end-gate or scoop-board 36.

From the foregoing description, taken in connection with the drawings, it is evident that I provide an end-gate or scoop-board which is provided with means whereby the same is rigidly secured to and detached from the sides of the body of a wagon and which is provided with means whereby the lower pivotal point of the end-gate may be adjusted to assume any desired position with relation to the wagon-body and with a separate means whereby any inclined adjustment may be given to the end-gate or scoop-board, so that the same may be held at that adjusted position open or in a locked position when closed.

What I claim as new, and desire to secure by Letters Patent, is—

1. In combination with an end-gate provided with flanged sides, a pivot carried upon the lower outer face of the end-gate, and oppositely - extending pivots connected to the flanged sides of the end-gate, of means for adjustably supporting the end-gate with relation to the wagon-body, consisting of a pair of sup-

ports carried by the sides of the wagon-body, a hooked arm engaging the lower pivots of the end-gate, means for pivotally and adjustably securing the opposite ends of said hook-supports to the lower end of the plates, means intermediate of the plates for adjustably engaging the pivots of the flanges of the end-gate, a spring-rod having one end engaging the pivots secured to the flanges of the end-gate, and an adjustable guide and locking means secured to the plates intermediate of their lengths.

2. In combination with an end-gate, of a device for fastening and supporting the same relatively to the wagon-body, consisting of a pair of supporting-plates adjustably secured to and supported by the sides of the wagon-body, a projection having a slot, a corrugated outer surface formed integral with the intermediate portion of each supporting-plate, a spring-rod connected to the end-gate intermediate of its length for holding the same in open or closed position, a plate adjustably secured to a projecting casing provided with means for locking the spring-rod so as to hold the end-gate in closed position, means for engaging the spring-rod to limit the open position of the end-gate, and means adjustably connected to the lower end of the supporting-plates for engaging the lower end of the end-gate.

3. In combination with an end-gate, of a device for fastening and supporting the same relatively to the wagon-body, consisting of a pair of supporting-plates adjustably secured to and supported by the sides of the wagon-body, a projection having a slot and a corrugated outer surface formed integral with the intermediate portion of each supporting-plate, a spring-rod connected to the end-gate intermediate of its length for holding the same in open or closed position, a plate adjustably secured to a projecting casing provided with means for locking the spring-rod so as to hold the end-gate in closed position, means for engaging the spring-rod to limit the open position of the end-gate, a pair of arms provided with hooked ends engaging the lower end of the end-gate, and means for engaging opposite ends of said arms for adjustably securing the same to the lower ends of the supporting-plates, for the purpose set forth.

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

FRANCIS M. STURGIS.

Witnesses:

CHAS. KNIGHT,  
WILL T. LAYMAN.