

(No Model.)

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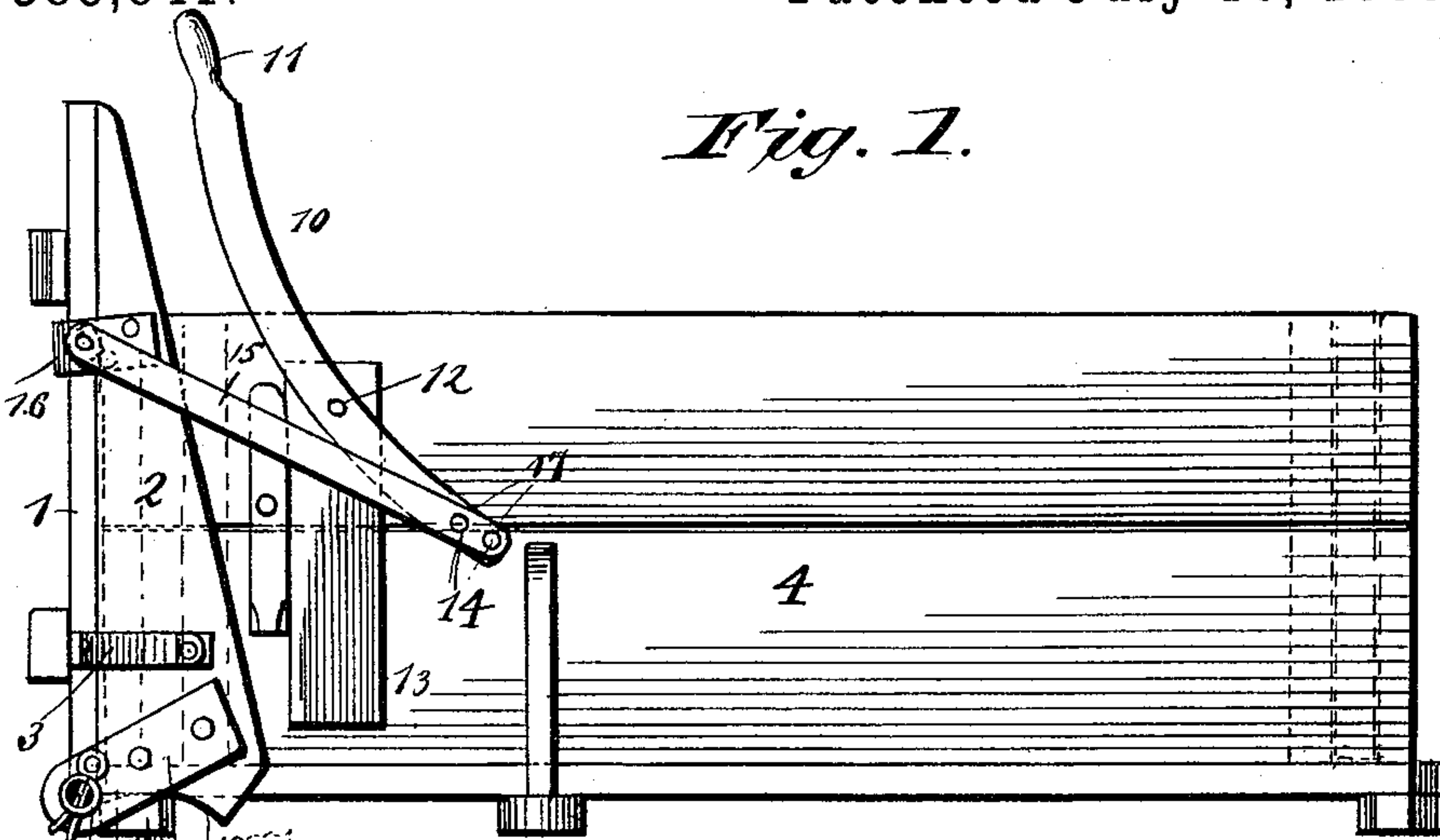
E. L. BURKLUND.

END GATE.

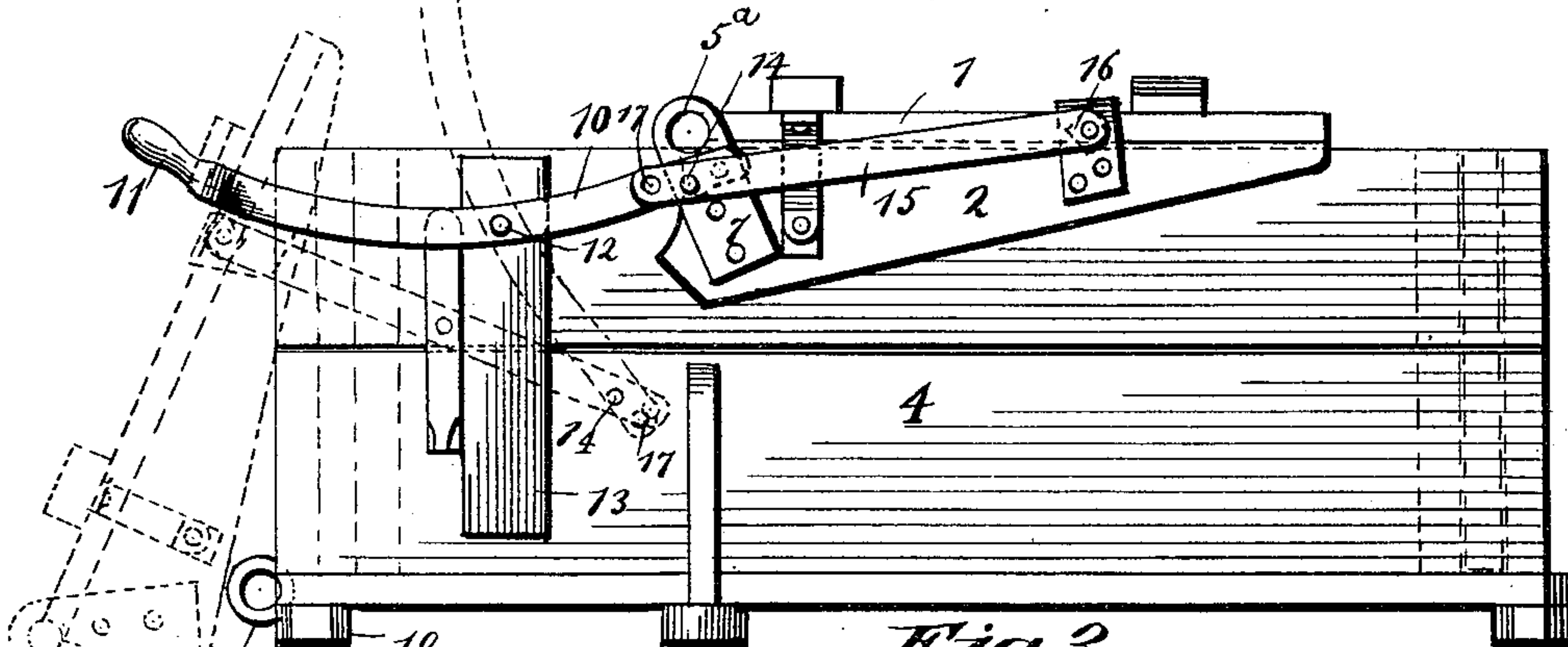
No. 385,841.

Patented July 10, 1888.

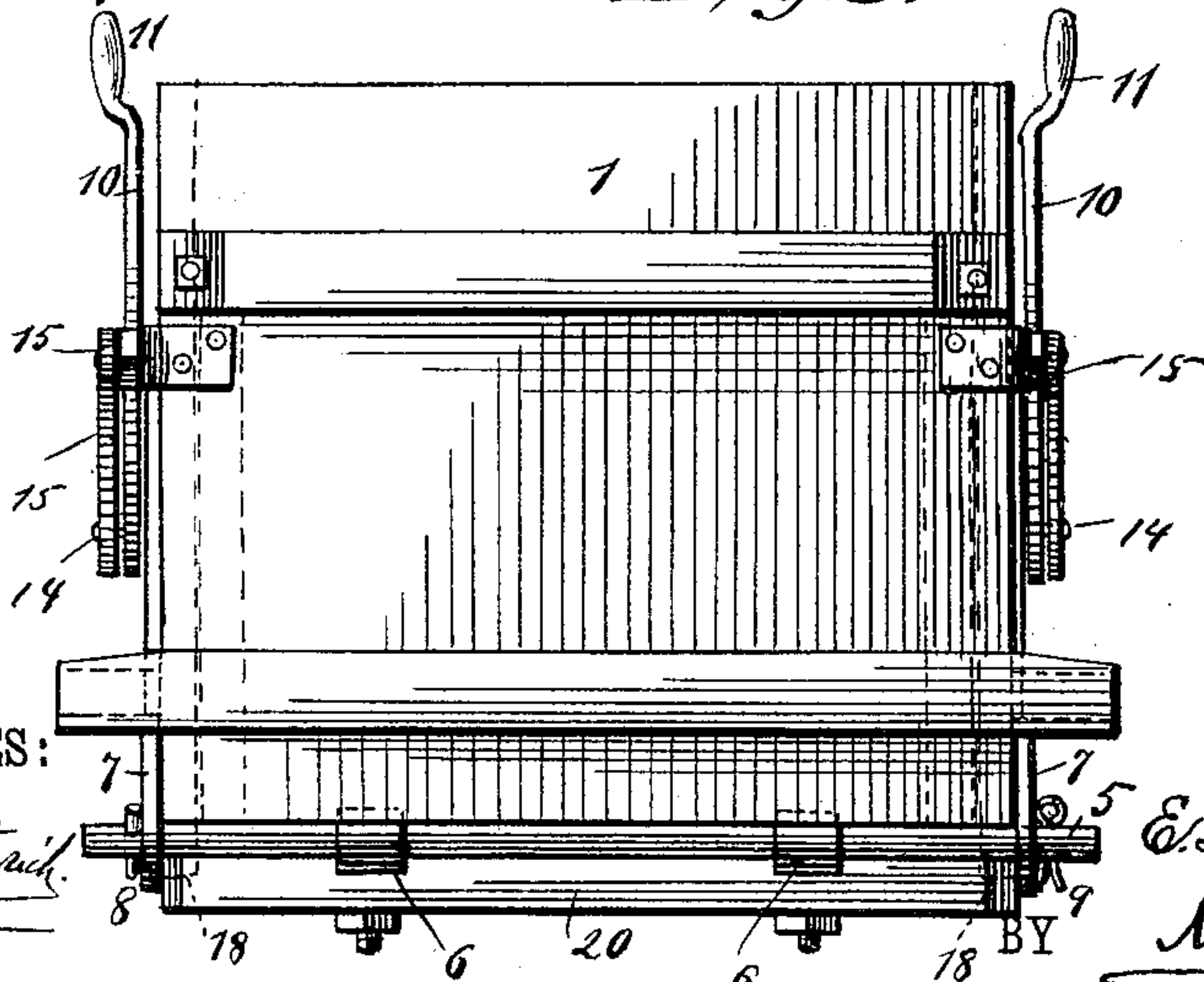
*Fig. 1.*



*Fig. 2.*



*Fig. 3.*



WITNESSES:

*Phil. C. Dietrich.*  
*C. Sedgwick.*

INVENTOR:

*E. L. Burkland.*  
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ATTORNEYS.

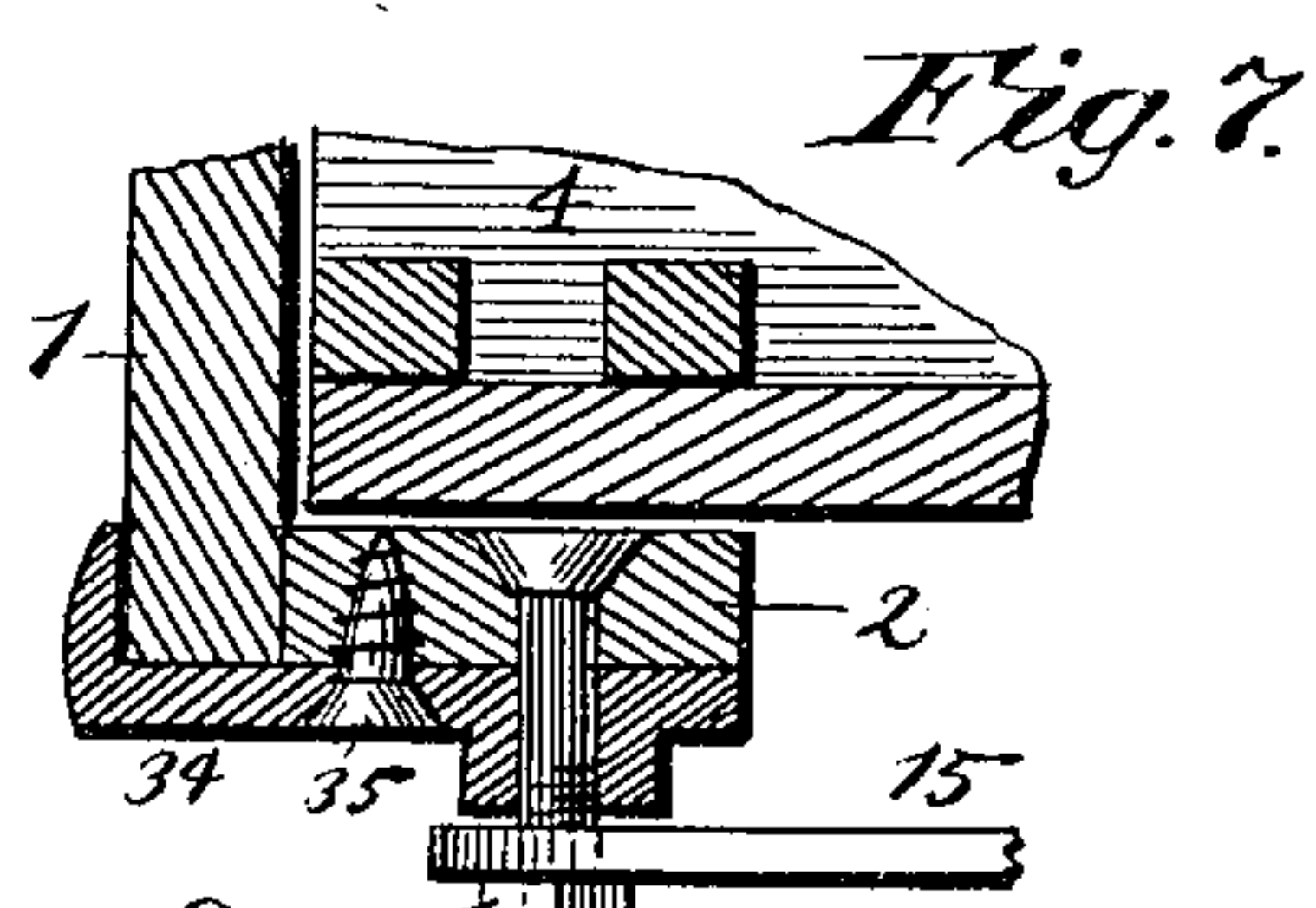
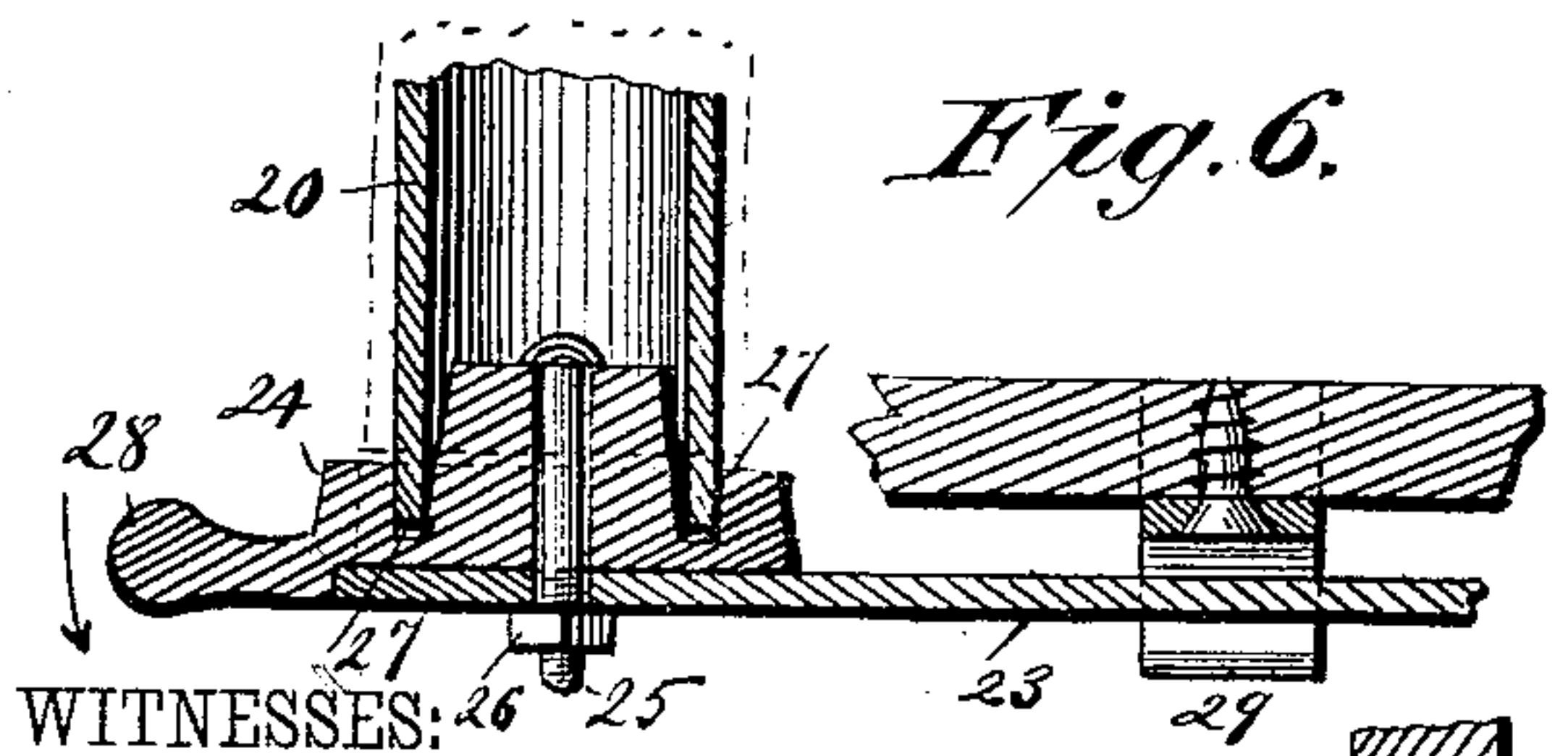
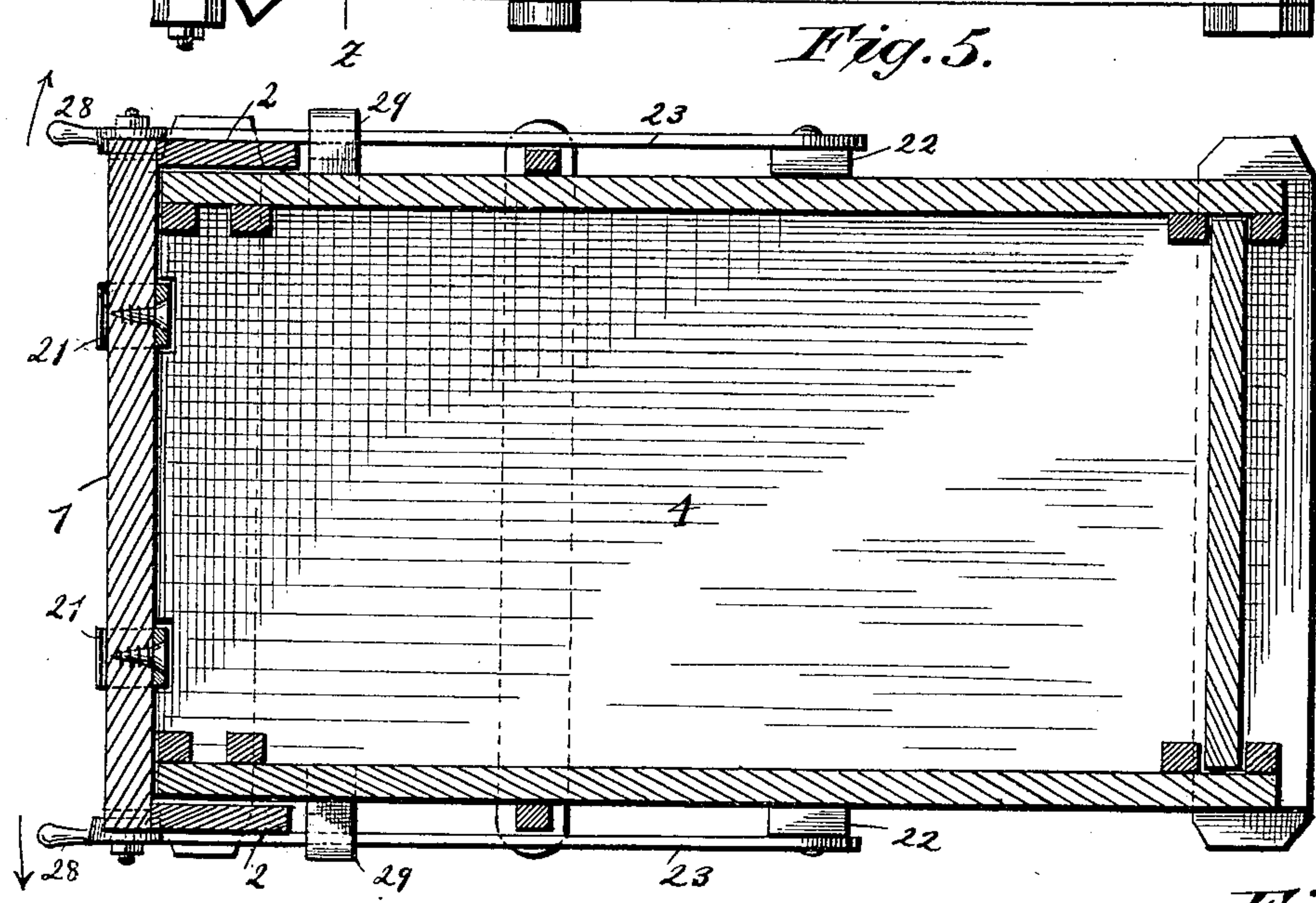
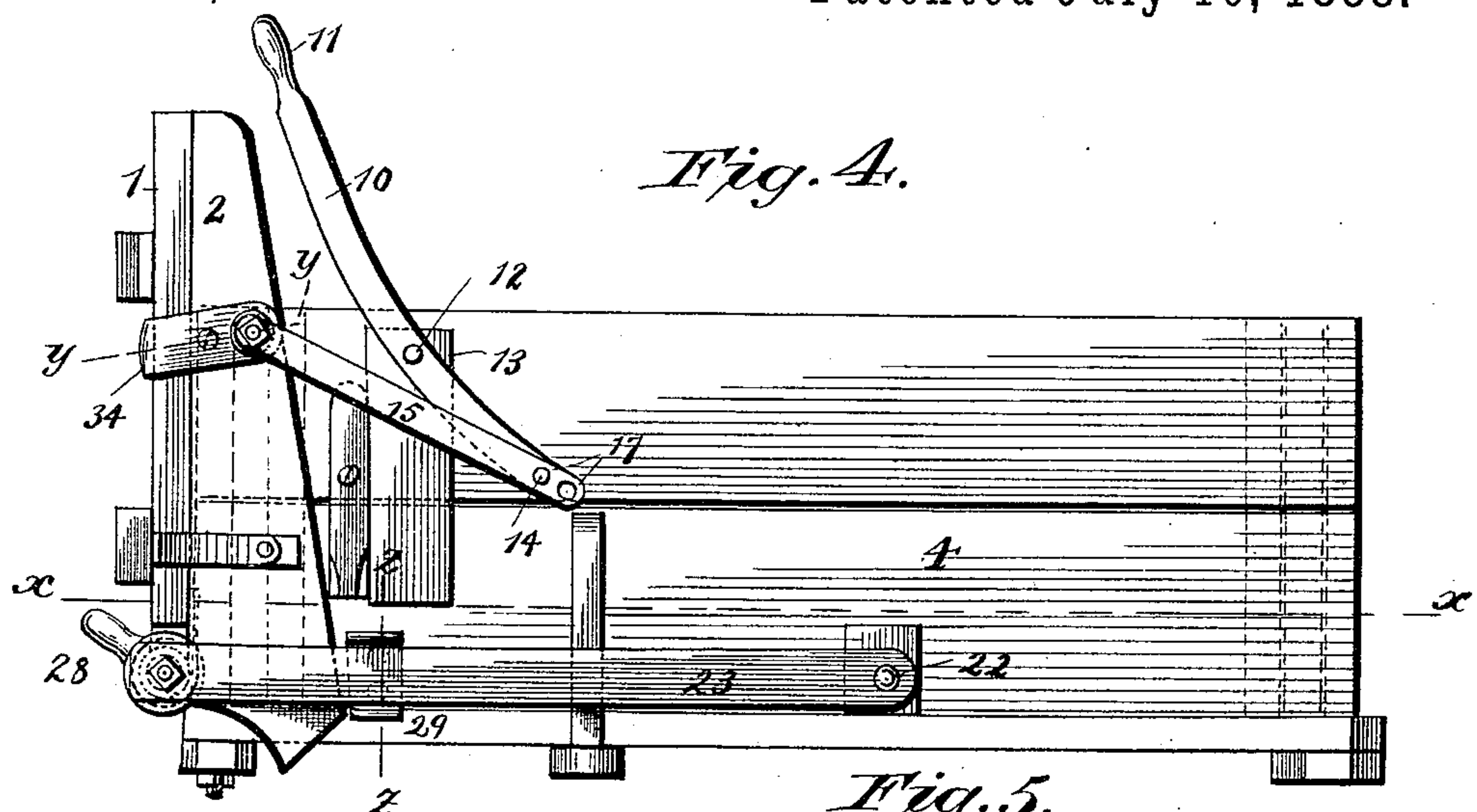
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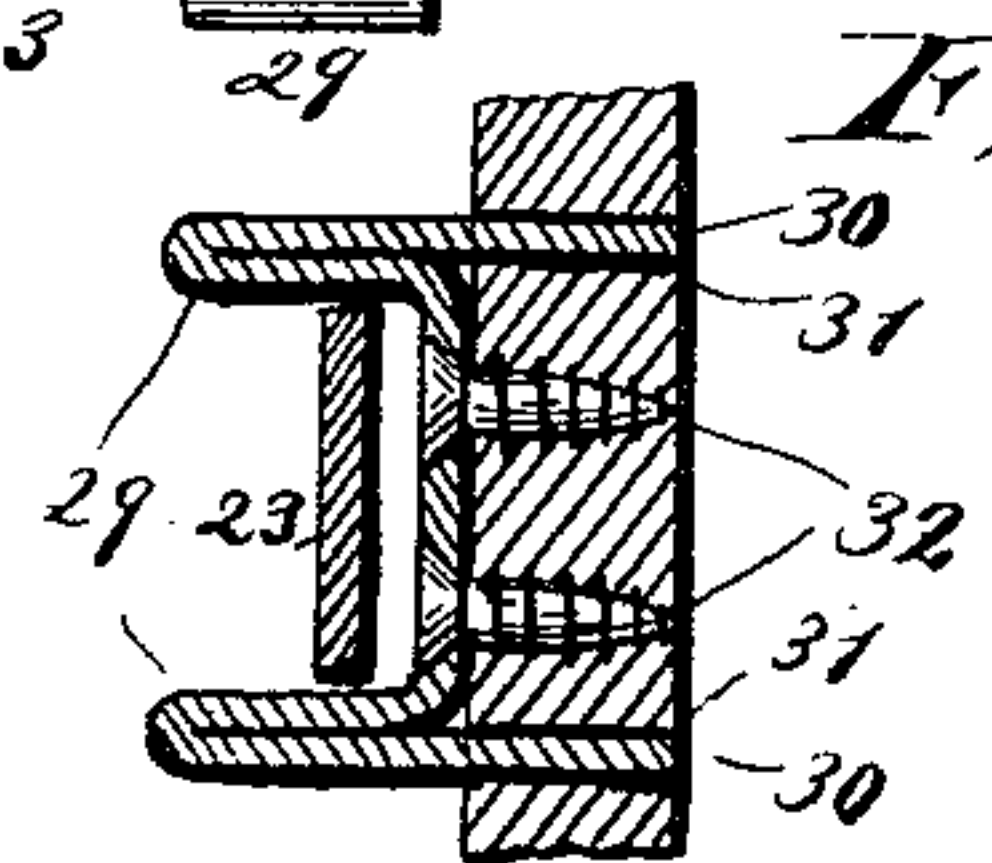
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INVENTOR:  
*E. L. Burkland.*  
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# UNITED STATES PATENT OFFICE.

EMIL L. BURKLUND, OF WAHOO, NEBRASKA.

## END-GATE.

SPECIFICATION forming part of Letters Patent No. 385,841, dated July 10, 1888.

Application filed November 3, 1887. Serial No. 254,172. (No model.)

*To all whom it may concern:*

Be it known that I, EMIL L. BURKLUND, of Wahoo, in the county of Saunders and State of Nebraska, have invented a new and Improved End-Gate, of which the following is a full, clear, and exact description.

This invention relates to an improvement in end-gates, and has for its object to provide an end-gate which may be operated without descending from the wagon.

The invention consists in an end-gate constructed as hereinafter described and claimed.

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

Figure 1 a side view of a wagon-body, showing the end-gate in closed position. Fig. 2 is a similar view showing the end-gate serving as a seat on the wagon-body, and Fig. 3 is an end view of the end-gate in closed position. Fig. 4 is a side view of a wagon-body, showing a modification in the removable hinge-connection. Fig. 5 is a horizontal section on line *x x*, Fig. 4. Fig. 6 is a detail in section and parts broken away of the modified hinge-connection. Fig. 7 is a detail section on line *y y*, Fig. 4. Fig. 8 is a detail section on line *z z*, Fig. 4.

In this invention an end-gate is removably pivoted at its lower edge to a wagon-body, and is provided with levers connected to the wagon-body, whereby it is moved in and out of position by a person in the wagon.

1 indicates the end-gate constructed in any suitable manner, and, as here shown, formed with side parts, 2, braced by metallic straps 3 and overlapping a wagon-body, 4. The gate 1 is pivoted to the body 4 by means of a rod, 5, which may be tubular to render it light, and passes through sleeves or loops 6 on the wagon-body and through an opening, 5<sup>a</sup>, in the strips 7, fastened to the side parts, 2. The rod 5 is secured in place by a pin, 8, passing through it at one end, and a split pin, 9, inserted through it at the other end. The lower ends of the side parts, 2, are curved, as at 18, and rest upon the ends 19 of a strip, 20<sup>a</sup>, secured to the rear edge of the wagon-body, whereby the gate may rock on its lower edge independently of rod 5 and sleeves 6.

The gate is operated and held in closed position by means of a lever mechanism, as follows: A lever, 10, with handle 11, is pivoted at 12 to a strip, 13, formed or secured on the wagon-body. At the end of the lever 10 is pivoted, by means of a removable pin, 14, a bar, 15, which in turn is pivoted to brackets 16, projecting from the side edges of the end-gate 1. The joint between the lever 10 and bar 15 may be made adjustable by means of holes 17, in which the pin 14 may be secured, by which adjustment greater range of movement of the end-gate 1 is obtained. By means of the lever mechanism above described the gate 1 may be tilted backward on its lower edge, so as to afford greater load capacity, the side parts, 2, serving to form an extension of the lower side of the wagon-body. When it is desired to use the end-gate for dumping or unloading, the pin 9 is removed, and the rod 5 is slipped out of the sleeves 6. The gate may then be thrown out at its lower end, as shown in dotted lines in Fig. 2, being held in place at the lower end by the curved ends 18 of the sides 2, bearing on the ends 19 of strip 20<sup>a</sup>. If it is desired to move the end-gate out of the way, it may be thrown or carried by means of the lever 15 and bar 10, so as to be brought down upon the top of the wagon-body and serve as a seat, as shown in Fig. 2. It will be observed in all these operations that the gate may be handled by a person in the wagon catching hold of the handle 11.

In some wagons the location of the wheels would interfere with the ready removal of the hinge-connection. To obviate this objection I may use the construction shown in Figs. 4 to 8, in lieu of the hinge-connection shown in other figures. The end-gate 1 has a tubular rod, 20, inserted in metallic eyes or bent strips 21, secured, as shown, to the lower edge of end-gate. The ends of the rod 20 will be about even with the side edges of the end-gate.

To a block, 22, on each side of the wagon-body 4 is fastened a metallic spring-strip, 23, extending past the end of rod 20, and having a block, 24, secured thereto by a bolt or pin, 25, and a nut, 26. The block 24 is formed with a groove, 27, to receive the end of tubular rod 20, and a handle, 28, to release the block 24 therefrom. Metallic strips 29, bent



as shown, with their ends 30 inserted in slots 31 in the side 4 and secured by screws 32, serve to retain the strips 23 in horizontal position.

The end of arm 15 is pivoted to a bolt, 33, 5 passing through side 2 of end-gate, and an angle-plate, 34, with fastening-screw 35, held in place by a nut, 36. By means of this hinge-connection, just described, the lower edge of the end-gate may be easily detached and en- 10 gaged in hinged position.

By means of this invention an end-gate is provided which is easily handled without descending from the wagon, and which can be moved without difficulty and placed on the 15 wagon-body to form a seat.

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

1. An end-gate supported upon the wagon 2 and having a lever mechanism pivoted to the wagon-body, whereby it may be tilted to dump or release a load or be moved to the top of the wagon-body to be out of the way and serve as a seat, substantially as described.

25 2. An end-gate pivoted at its lower edge to a wagon-body and connected with the latter at its upper end by means of a lever mechanism, whereby it may be closed or inclined outward at the end of the wagon-body, substantially as 30 described.

3. An end-gate connected by a removable hinge at its lower edge to a wagon-body and at its upper part to the wagon-body by means of a lever mechanism pivoted to the latter, substantially as described.

4. The combination, with a wagon-body, of 35 an end-gate pivoted thereto, having extended side portions overlapping the wagon-body, and a lever mechanism pivoted to the wagon-body and connecting the gate therewith, whereby the 40 gate is inclined outwardly or closed against the wagon-body, substantially as described.

5. The combination, with a wagon-body, 4, lever 10 and bar 15, connected therewith, of the end-gate 1, having extensions 2, the remov- 45 able hinge-rod 5, and the sleeves 6, substantially as described.

6. The combination, with the wagon-body 4, having cross-strip 20<sup>a</sup>, of the end-gate 1, hav- 50 ing sides 2, curved at 18 and removably hinged to the wagon-body, the lever 12, fulcrumed to the body, and the connecting-bar 15, substantially as shown and described.

EMIL L. BURKLUND.

Witnesses:

T. J. HOLLANDER,  
C. A. JOHNSON.