

No. 686,581.

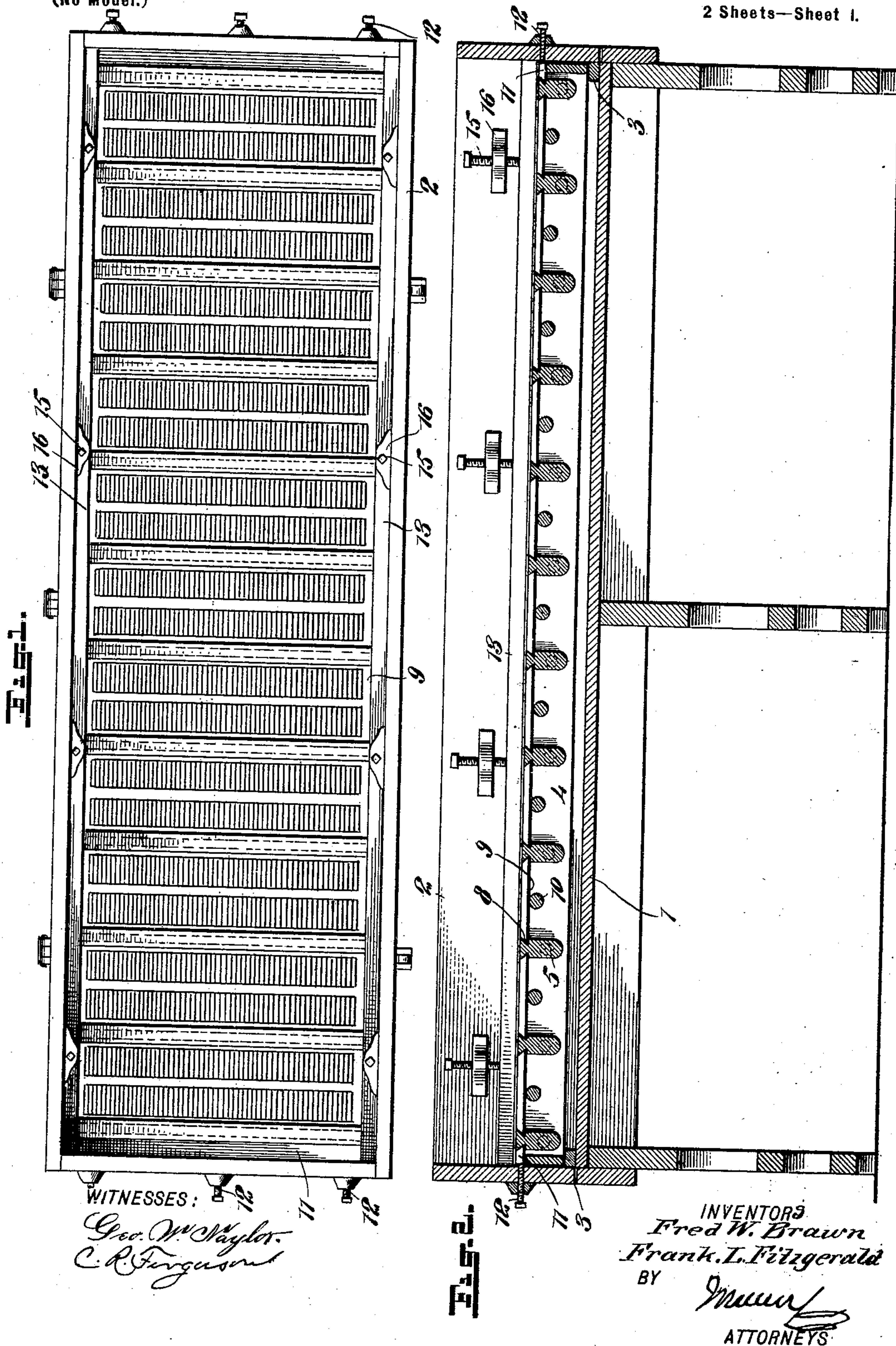
Patented Nov. 12, 1901.

F. W. BRAUN & F. L. FITZGERALD.  
SCREEN PLATE HOLDER.

(Application filed Apr. 11, 1901.)

(No Model.)

2 Sheets—Sheet 1.



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2 Sheets—Sheet 2.

Fig. 3.

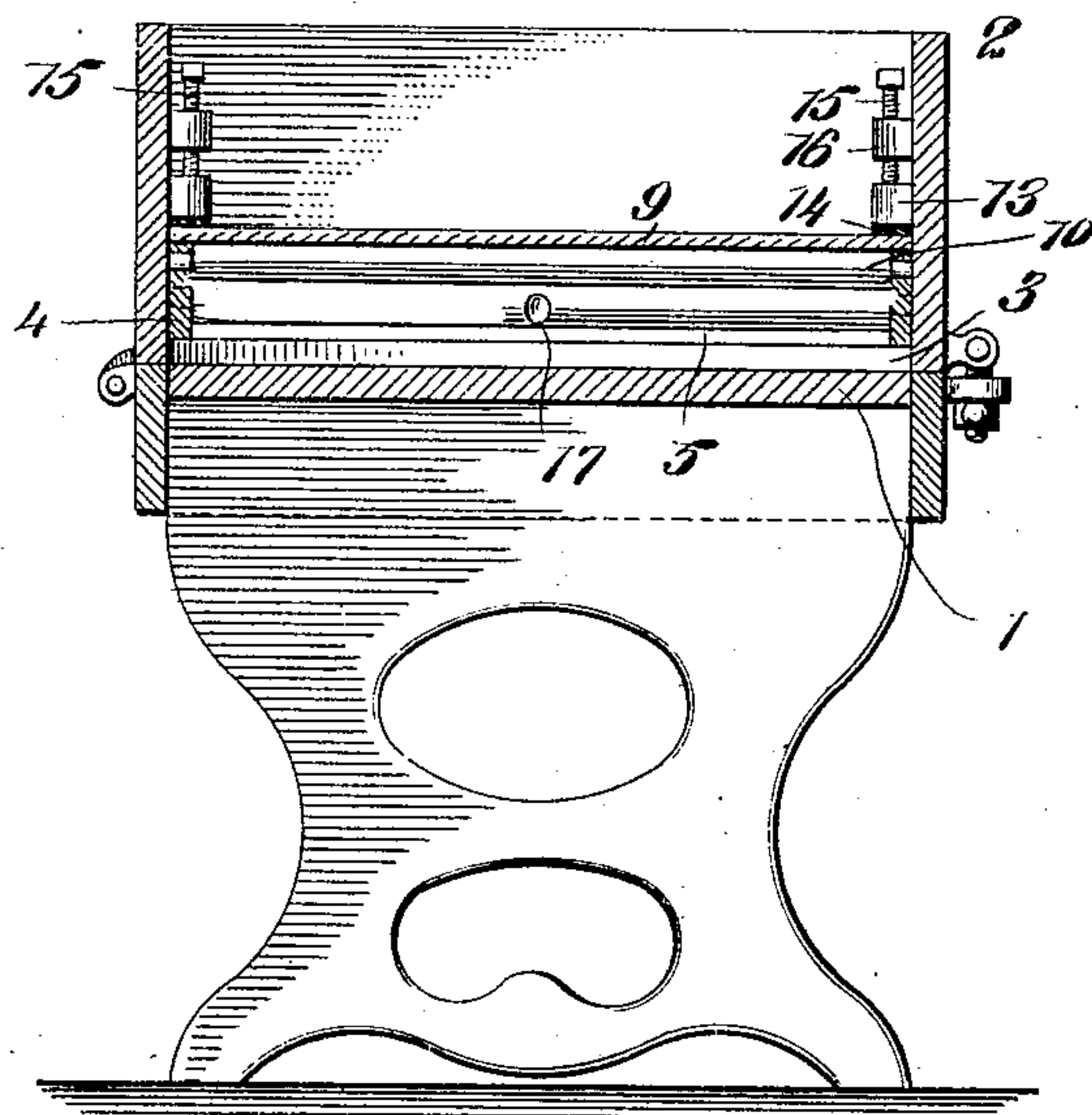


Fig. 4.

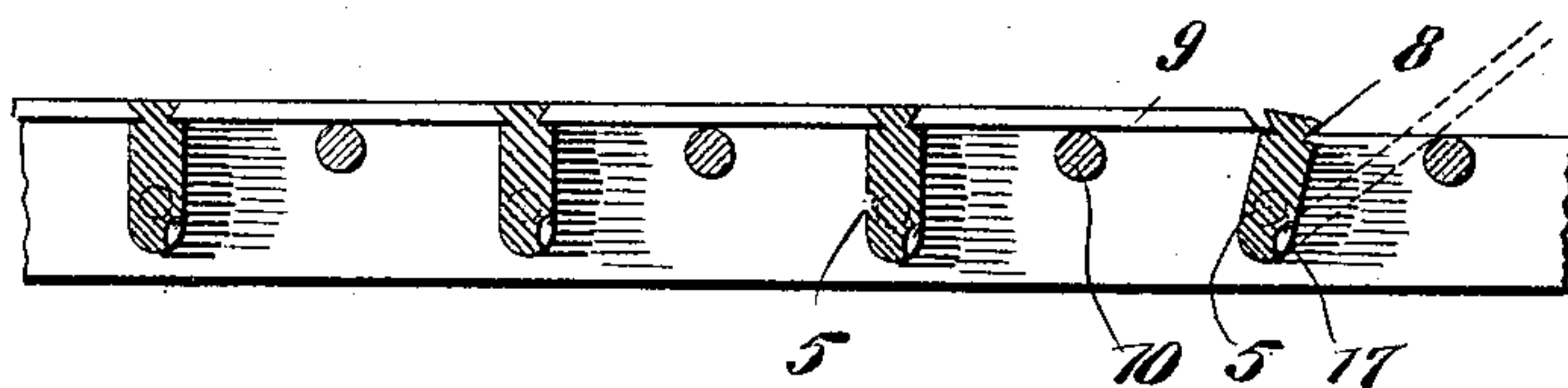
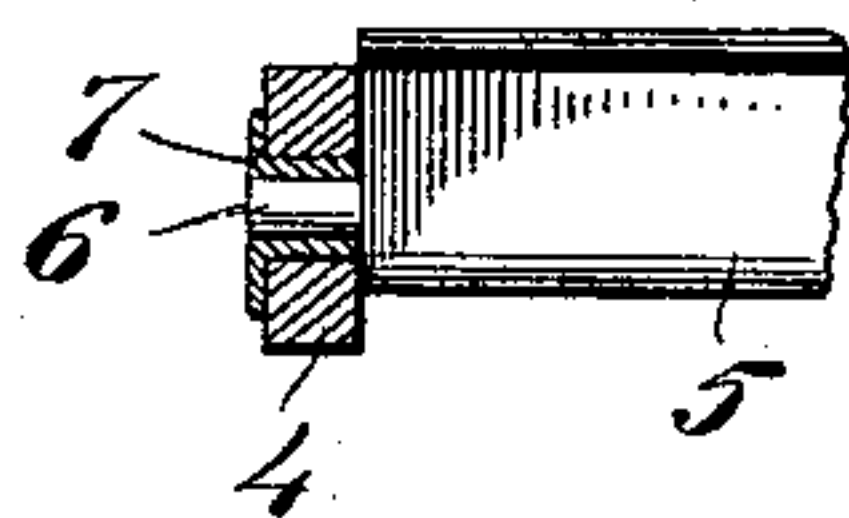


Fig. 5.



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# UNITED STATES PATENT OFFICE.

FRED W. BRAWN AND FRANK L. FITZGERALD, OF WATERVILLE, MAINE,  
ASSIGNORS OF ONE-THIRD TO JOHN H. BLAISDELL, OF OAKLAND, MAINE.

## SCREEN-PLATE HOLDER.

SPECIFICATION forming part of Letters Patent No. 686,581, dated November 12, 1901.

Application filed April 11, 1901. Serial No. 55,347. (No model.)

*To all whom it may concern:*

Be it known that we, FRED W. BRAWN and FRANK L. FITZGERALD, citizens of the United States, and residents of Waterville, in the  
5 county of Kennebec and State of Maine, have invented a new and Improved Screen-Plate Holder, of which the following is a full, clear, and exact description.

This invention relates to improvements in  
10 holders for screens in paper and pulp mills; and the object is to provide a holder so constructed that the plates will be held solid, with perfectly tight joints, without the use of a great number of screws or bolts, as is ordi-  
15 narily the case, and, further, to so arrange the parts that the several plates can be removed or inserted in much less time than is required when screws or bolts are to be manipulated.

20 We will describe a screen-plate holder embodying our invention and then point out the novel features in the appended claims.

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

Figure 1 is a plan view showing a screen-plate holder embodying our invention. Fig. 2 is a longitudinal section thereof. Fig. 3 is  
30 a cross-section thereof. Fig. 4 is a detail view illustrating the manner of releasing the plates, and Fig. 5 is a detail view showing a manner of mounting the rocking bars employed.

35 Referring to the drawings, 1 designates a table on which a frame 2 is mounted to swing. Resting within the frame 2 and upon blocks 3 at the ends of the table, so as to support the same slightly above the table, is a screen-  
40 plate frame 4. Extended transversely in the screen-plate frame and suitably spaced apart are rocking bars 5. These rocking bars have trunnions or journals 6, extended into the side rails of the frame 4, and as this frame 4  
45 is usually made of wood we preferably employ metal bushings 7 for the bearings. At the upper edge and at opposite sides each rock-bar is provided with an undercut longitudinal channel 8 to receive the correspond-

ingly-shaped edges of the screen-plates 9. 50  
Between the rock-bars and rigidly supported in the side strips of the frame 4 are rods 10, which support the centers of the screen-plates.

In inserting the plates the frame 2 is to be 55  
swung upward and the plates 9 slid into the channels of the rock-bars. It will be noted that these channels of the rock-bars are on a plane with the top edges of the side rails of the frame 4. End strips 11 are placed in en- 60  
gagement with the end rock-bars, and these end strips are designed to be engaged by clamping-screws 12, passed through tapped openings in the end walls of the frame 2. We  
have here shown three of these clamping- 65  
screws at each end. By tightening these clamping-screws it is evident that a very tight joint will be made between the edges of the screen-plates and the rock-bars, and the de-  
vice may be made water-tight at the ends of 70  
the plates by means of presser-bars 13, having a packing 14, of rubber or the like, on the under side for engaging with the upper sur-  
faces of the plates, and these presser-bars are  
forced downward by screws 15, operating in 75  
lugs 16 on the inner sides of the frame 2.

When it is desired to change one or more of the plates, upon loosening the screws 12 the frame 2 may be swung upward and then  
a rock-bar at one end may be rocked out of 80  
engagement with its screen-plate, so that said screen-plate may be removed. Then the next rock-bar may be rocked by engaging the end of an iron bar or the like in a depression 17,  
formed at the lower edge of the rock-bar, as 85  
clearly indicated in Fig. 4.

The rocking bars may be of iron, brass, bronze, or wood, with a metal facing provided with a channel at the under side to slide in  
bolt-heads. 90

Having thus described our invention, we claim as new and desire to secure by Letters Patent—

1. A screen-plate holder, comprising a frame, bars mounted to rock in said frame, 95  
the said bars having longitudinal channels at their upper sides, said channels being undercut, screen-plates having their edges fitted

to said channels, and means for clamping the several plates and bars, substantially as specified.

2. A screen-plate holder, comprising a  
5 frame, bars mounted to rock in said frame, said bars having channels at opposite sides near their upper edges, said channels being undercut, screen-plates having their edges adapted to said channels, fixed supporting-  
10 bars between the rock-bars, and means for clamping the rock-bars and plates, substantially as specified.

3. A screen-plate holder, comprising a table,  
15 a frame mounted to swing on said table, a plate-holding frame, bars mounted to rock in said plate-holding frame, the upper edges of said bars being adapted to receive the edges of the screen-plates, clamping-screws ex-

tended through the ends of the swinging frame, and supporting-bars between the rock- 20 ing bars, substantially as specified.

4. A screen-plate holder, comprising a table, a frame mounted to swing on said table, a plate-holding frame, plate-supporting bars in said frame, presser-bars for engaging with 25 the ends of the supported plates, and clamping-screws for engaging the said presser-bars, substantially as specified.

In testimony whereof we have signed our names to this specification in the presence of 30 two subscribing witnesses.

FRED W. BRAWN.

FRANK L. FITZGERALD.

Witnesses:

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