

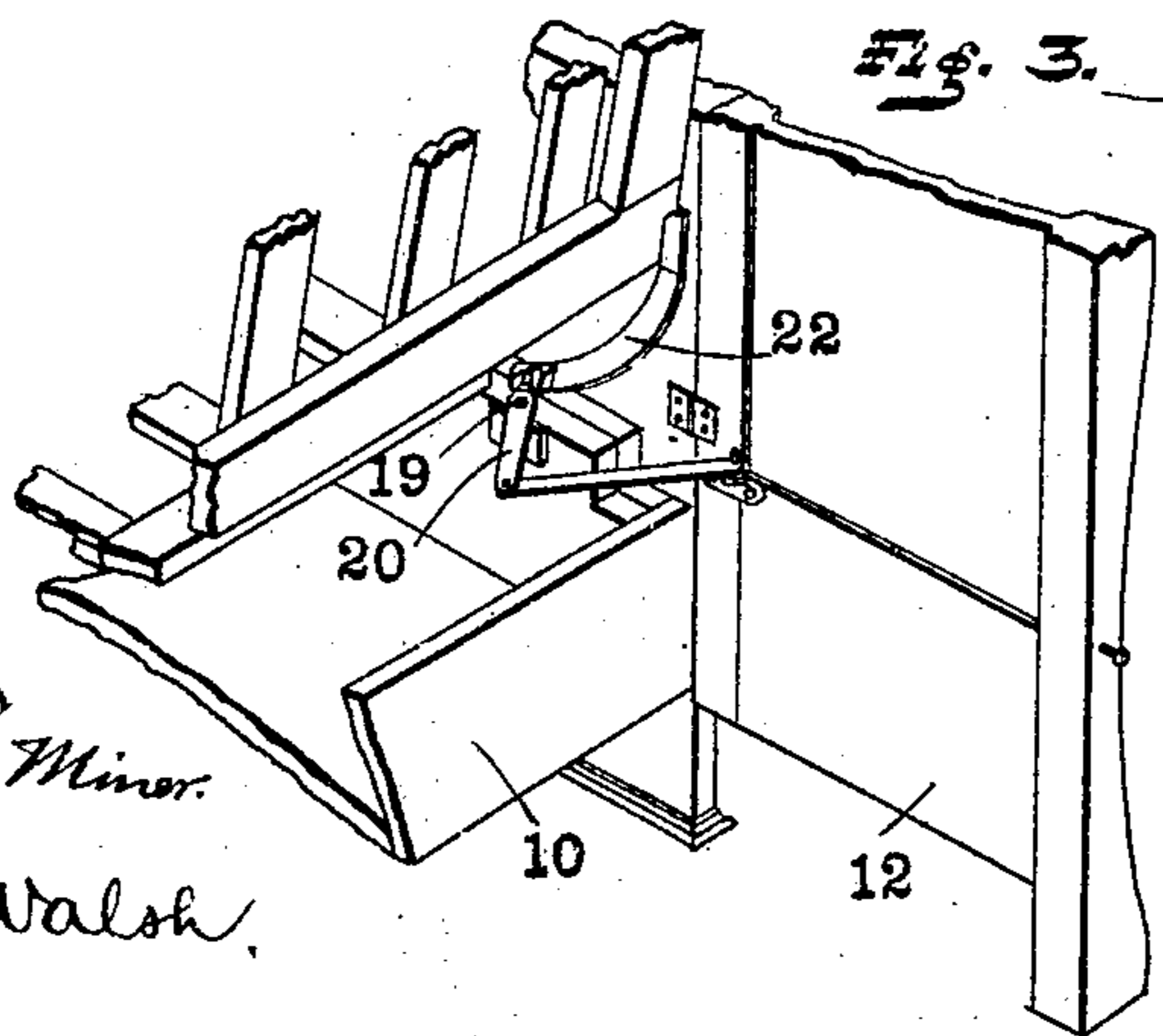
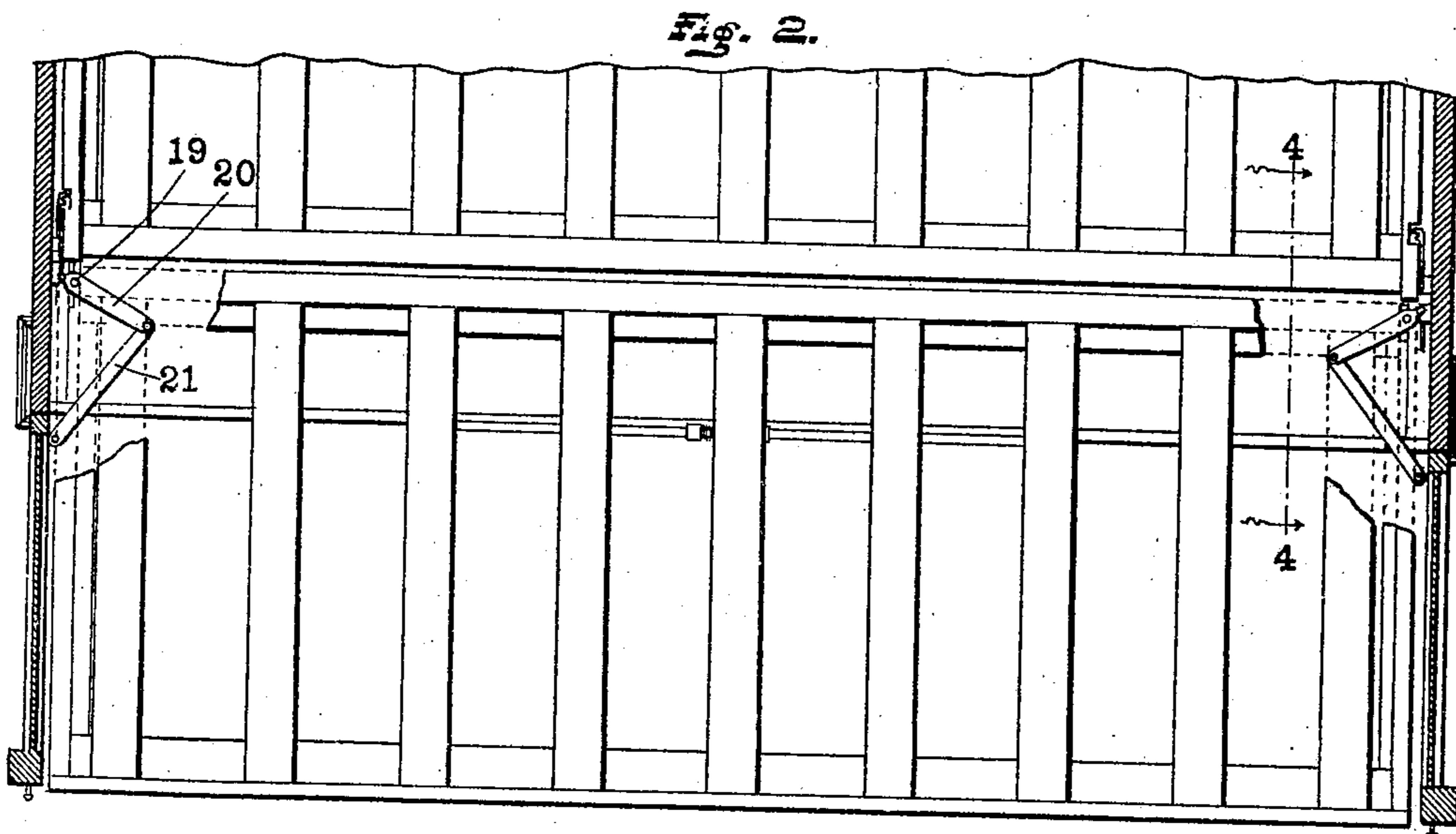
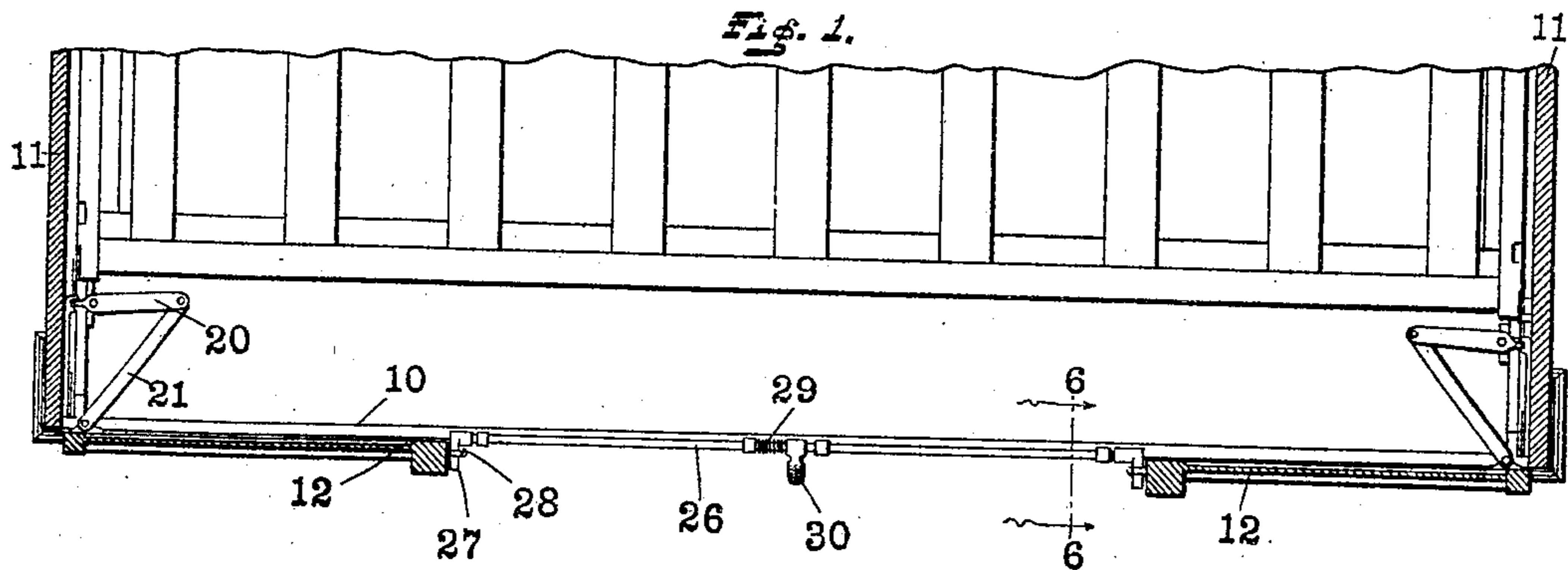
No. 814,606.

PATENTED MAR. 6, 1906.

F. A. JACOB.
DAVENPORT.

APPLICATION FILED AUG. 11, 1904.

2 SHEETS—SHEET 1.



Witnesses
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2 SHEETS—SHEET 2.

Fig. 4.

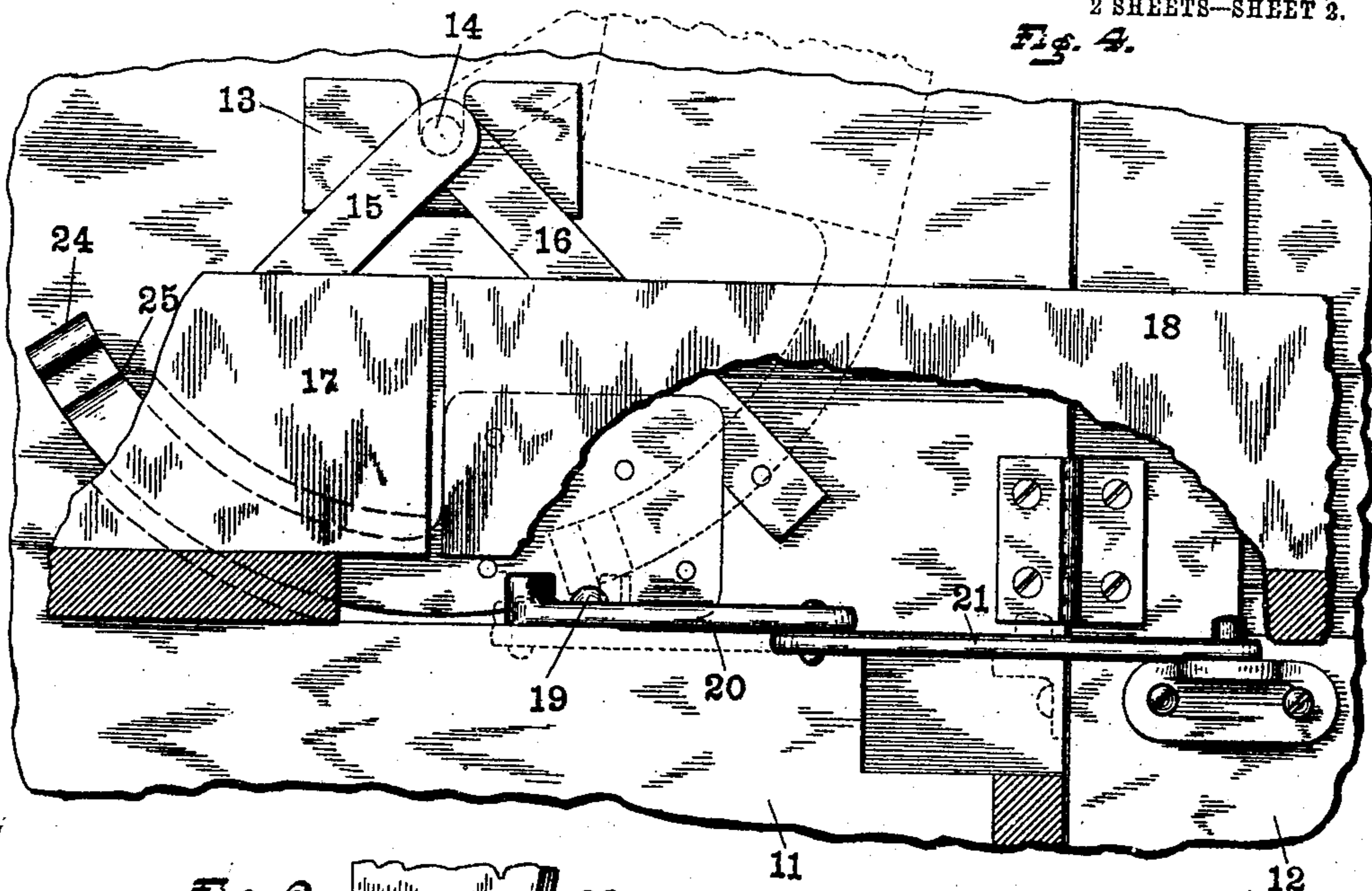


Fig. 6.

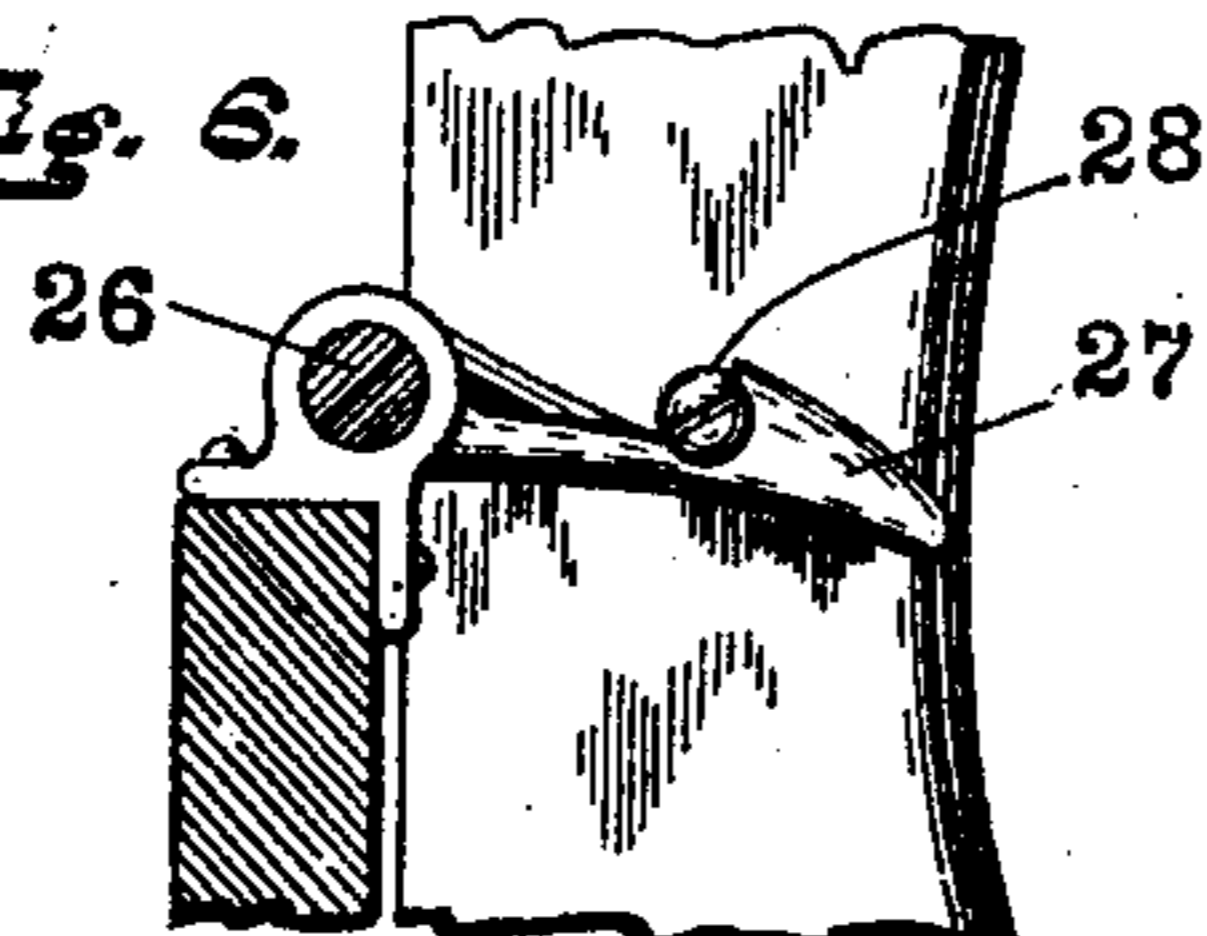


Fig. 7.

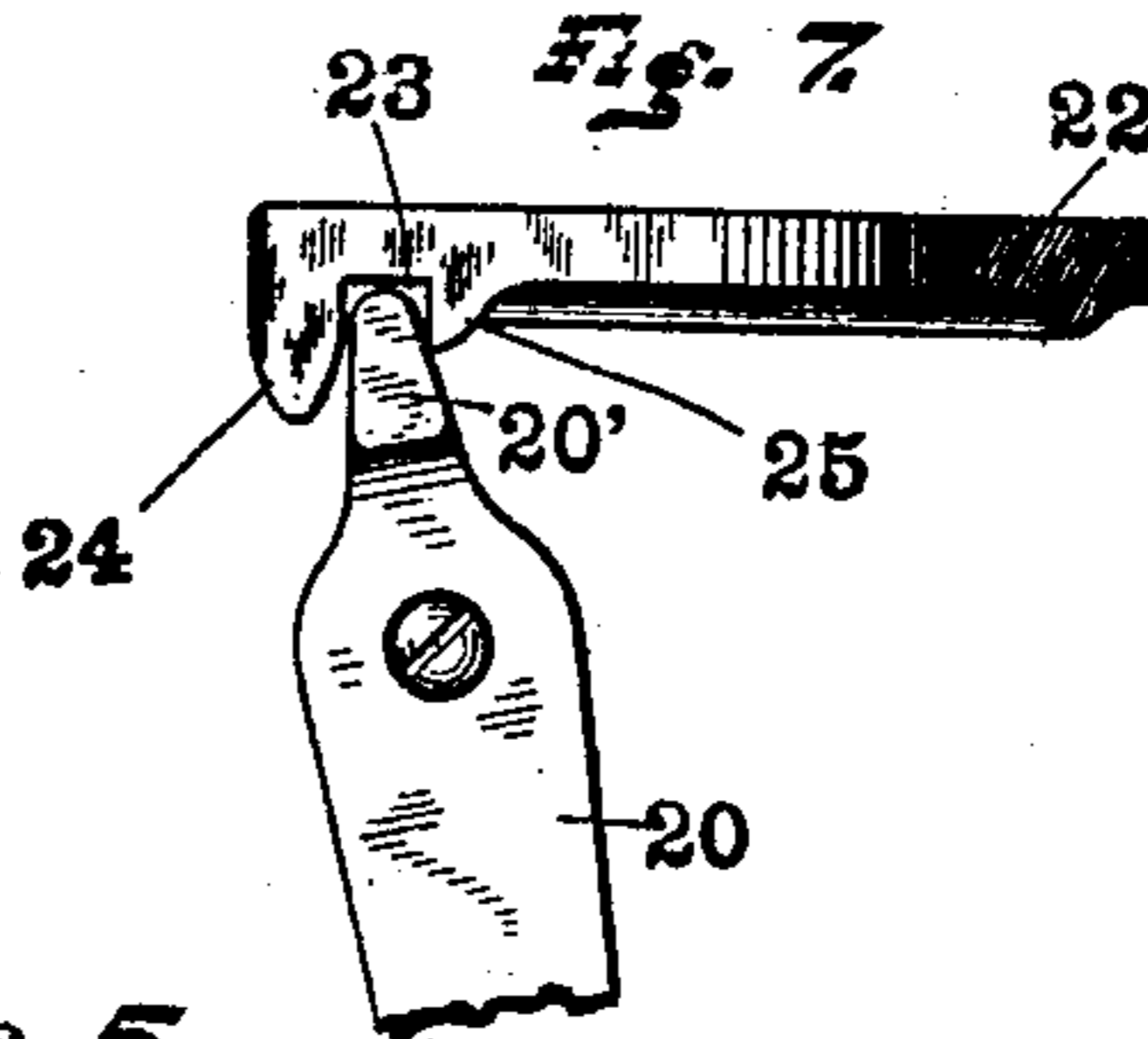
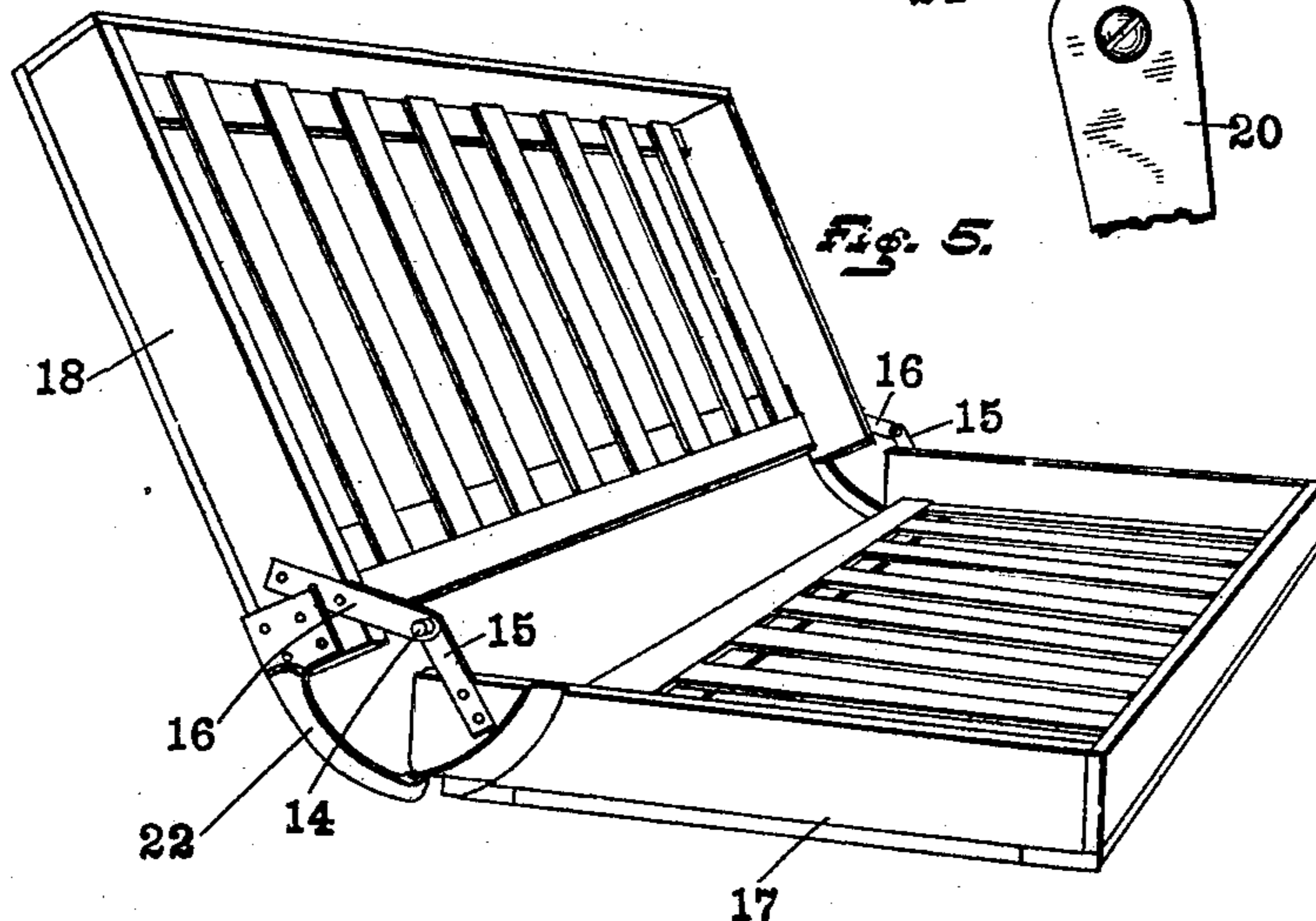


Fig. 5.



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UNITED STATES PATENT OFFICE.

FRANK A. JACOB, OF INDIANAPOLIS, INDIANA, ASSIGNOR TO FRANCIS P. BAILEY, OF INDIANAPOLIS, INDIANA.

DAVENPORT.

No. 814,606.

Specification of Letters Patent.

Patented March 6, 1906.

Application filed August 11, 1904. Serial No. 220,477.

To all whom it may concern:

Be it known that I, FRANK A. JACOB, a citizen of the United States, residing at Indianapolis, in the county of Marion and State of Indiana, have invented certain new and useful Improvements in Davenport, of which the following is a specification.

In many classes of davenports folding end gates are provided which when the bed members are arranged in position for a couch are folded back behind the upright bed member, while these end gates are straightened out in line with the fixed ends to form head and foot boards for the structure when the bed members are arranged in the same horizontal plane.

The object of my invention is to produce simple yet efficient means for automatically swinging the end gates upon a swinging of the upright bed member.

The accompanying drawings illustrate my invention.

Figure 1 is a partial horizontal section of a davenport provided with my invention, the upright bed member being omitted. Fig. 2 is a similar view with the upright member extended. Fig. 3 is a perspective detail with the parts in position just before the swinging bed member reaches the vertical. Fig. 4 is an enlarged vertical section on line 4 4 of Fig. 2. Fig. 5 is a perspective detail of the two bed members. Fig. 6 is an enlarged section on line 6 6 of Fig. 1, and Fig. 7 is a detail of the gate-operating means.

In the drawings, 10 indicates the usual lower box-like frame of a davenport, and 11 indicate the usual fixed ends. Hinged to the rear vertical edge of each end 11 is a gate 12 of the usual construction. Secured to the inside of each of the ends 11 is a bracket 13, adapted to receive the stud 14, which forms the pivotal connection between a pair of arms 15 and 16, which, as usual, are secured, respectively, to the horizontal bed member 17 and the upright bed member 18.

Thus far the construction is common and standard, and my invention relates to automatic means for swinging the end gates when the bed member 18 is swung.

Pivoted adjacent each end gate upon a vertical pivot 19 is a lever 20, the long arm of which is connected, by means of a link 21, to the adjacent end gate 12. The short arm of lever 20 is provided with a finger or tooth 20',

arranged to be engaged by a curved lever 22, 55 secured to the bed member 18. Arm 22 is provided at its end with a notch 23, adapted to receive the finger 20', and this notch is flanked upon one side by a long tooth 24 and on the other side by a short tooth 25, the arrangement being such that when the bed member 18 is in its upright position, as indicated by dotted lines in Fig. 4, the gate-operating means will be in the position shown by full lines in Fig. 1 and such that as the bed member 18 is swung to the position shown in full lines in Fig. 4 the short tooth 25 of arm 22 will swing lever 20 until finger 20' swings out beyond said tooth, and thus permits arm 20 to continue to the position shown in full lines in Fig. 4 without further movement of the lever 20. On the return or upward swing of the bed member 18, however, the long tooth 24 is still able to engage the end 20' of the lever 20, and thus swing it to normal position. As the lever 20 is swung the end gate 12 to which it is attached will also be swung. In order to hold the bed member 18 in its upright position and also to hold the gates 12 in folded position, I mount upon the rear side of the box 10 a rod or rock-shaft 26, which is provided at each end with a hook 27, adapted to engage a pin 28, carried by the free end of the adjacent gate 12. The hooks 27 are normally urged upward, so as to engage the pins 28 by means of a light spring 29, and the shaft may be rocked downward to withdraw the catches by means of a convenient foot-lever 30.

In operation when it is desired to make a bed from the davenport the operator presses upon foot-lever 30, and this withdraws catches 27 from pins 28. The bed member 18 is then swung downward, and as soon as the downward movement begins the levers 20 are engaged by the arms 22 and swung so as to quickly open the end gates 12 and bring them into alinement with the ends 11. As soon as the gates 12 have reached this position the ends 20' of the levers 20 have been thrown just past the line of movement of the tip of the operating-fingers 25, so that the arms 22 may continue in their movement, so as to permit the bed member 18 to be moved down to the plane of the bed member 17 without further movement of the end gate. On the return movement the bed member 18 is swung nearly to its upright position before

teeth 24 come into engagement with their co-operating lever ends 20'; but when this engagement does occur the levers 20 are swung quickly, so as to operate through links 21 to swing the gates 12 quickly and bring their pins 28 into engagement with the latches 27, thus locking the parts securely in position.

It will be noticed that by this construction the mechanism is of such character as to make the device easy to construct and easily shipped. The arms 22 may be attached to the frames 18 and the frames 18 and 17 connected and then sent to the upholstering department, where they may be finished. The links 21 may be easily disconnected from their gates and the gates detached and piled in the box 10 for shipment without disturbing the latch-rod 26. The parts may then be easily assembled, and, if desired, the bed-frames 17 and 18 upholstered in one color, may be easily removed from any frame, and a similar bed-frame, upholstered in another color, easily substituted by merely lifting the pins 14 from the brackets 15, the arms 22 of any bed-frame easily cooperating with the levers 20 of any main frame.

I claim as my invention—

1. In a davenport, the combination, of the main frame, the end gates hinged thereto, and the swinging bed member, of a pair of levers 20, a link connecting each lever with the adjacent end gate, an arm carried by said swinging bed member adjacent each lever for engaging and swinging the lever.

2. In a davenport, the combination, of the main frame, the end gates hinged thereto, and the swinging bed member, of a pair of levers 20, a link connecting each lever with the adjacent end gate, an arm carried by said

swinging bed member adjacent each lever for engaging and swinging the lever, a rock-shaft mounted on the main frame, a pair of catches carried by said rock-shaft and adapted to engage the end gates when in their folded position, and means for rocking said shaft to release the gates.

3. In a davenport, the combination, with a main frame, end gates hinged thereto, and the swinging bed member, of a pair of levers 20 each having a toothed end 20', a connection between each of said levers and the adjacent end gate, and a pair of arms carried by the swinging bed member each of said arms being provided with a short finger and a long finger between which the end 20' of the adjacent lever 20 may be engaged, substantially as and for the purpose set forth.

4. In a davenport, the combination with a main frame, end gates hinged thereto, and the swinging bed-frame mounted therein, of a driving element arranged in the lower part of the main frame, intermediate connection between said driving element and an end gate whereby operation of the driving element will swing the connected end gate, and means carried by the lower edge of the swinging bed-frame for engaging and moving said operating member during the short portion of the swing of the bed-frame immediately adjacent its vertical position.

In witness whereof I have hereunto set my hand and seal, at Indianapolis, Indiana, this 8th day of August, A. D. 1904.

FRANK A. JACOB. [L. s.]

Witnesses:

JAMES A. WALSH,
EMIL STEEB.