

**No. 685,001.**

**Patented Oct. 22, 1901.**

**W. M. McEVILLY.**

**SLIDING GATE.**

(Application filed June 12, 1900.)

(No Model.)

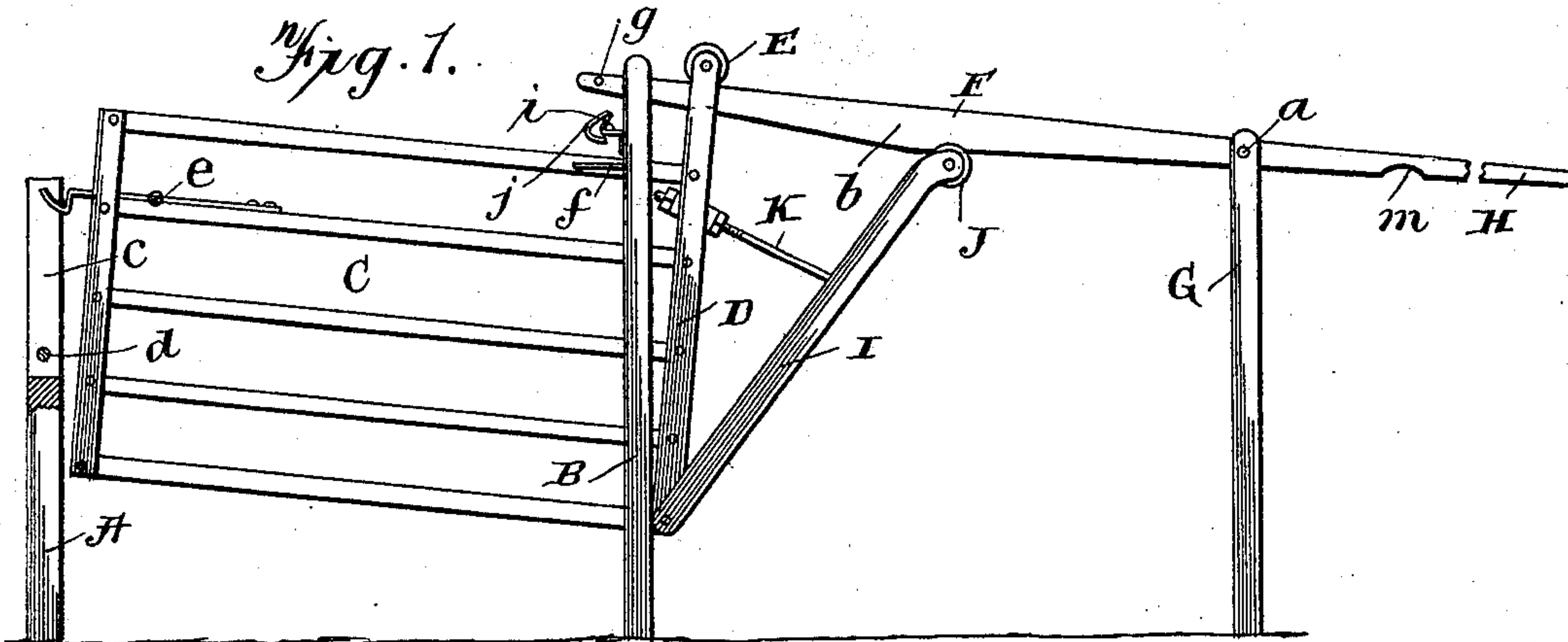


Fig. 2.

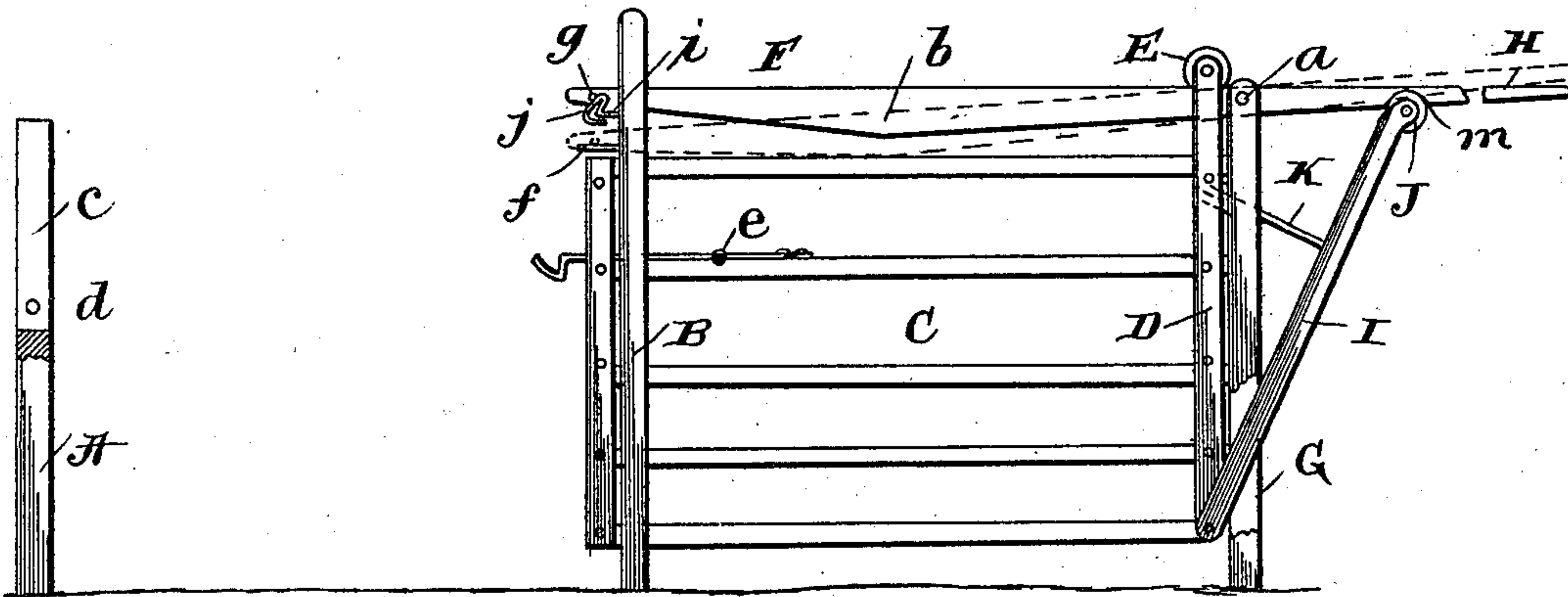
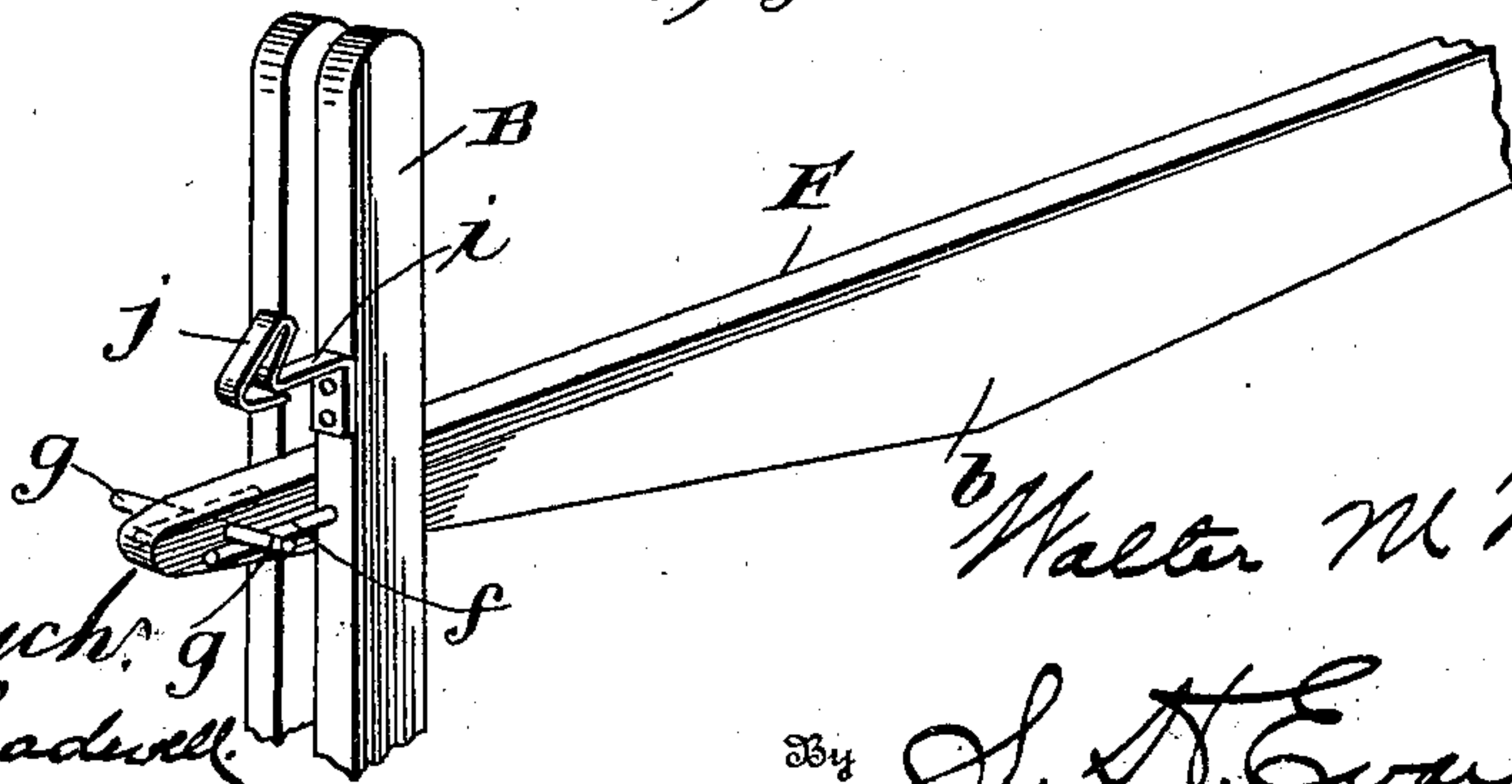


Fig. 3.



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# UNITED STATES PATENT OFFICE.

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## SLIDING GATE.

SPECIFICATION forming part of Letters Patent No. 685,001, dated October 22, 1901.

Application filed June 12, 1900. Serial No. 20,065. (No model.)

*To all whom it may concern:*

Be it known that I, WALTER M. McEVILLY, a citizen of the United States, residing at Champaign, in the county of Champaign and State of Illinois, have invented certain new and useful Improvements in Sliding Gates; and I do declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to the letters of reference marked thereon, which form a part of this specification.

My invention relates to improvements in sliding gates, and pertains to a gate which is supported upon a tilting track, whereby the gate is caused to automatically open and close by the tilting of the track, all of which will be fully described hereinafter and particularly pointed out in the claims.

In the accompanying drawings, Figure 1 is a side elevation of the gate embodying my invention, the track being tilted upward and the gate in the act of opening. Fig. 2 is a side elevation of my gate, showing it open in solid lines with the track horizontal and in dotted lines the track lowered and the gate in the act of closing. Fig. 3 is a top perspective view of the inner free end of the track and the posts between which it passes and the coacting stops carried by the posts.

Referring now to the drawings, A indicates a latch-post, and B two vertical parallel gate stopping and guiding posts.

C is the gate, which is constructed of the usual form, but has at its rear end a vertical projecting standard D, carrying at its upper end a groove-wheel E. This groove-wheel E rotates upon the upper straight edge of a tilting track or beam F, which is pivoted to the vertical parallel post G at the point *a*. As here shown, this track or beam F has its outer end H projecting beyond the post G, and the lower edge of the track F is inclined both ways, as shown, to bring its widest portion at the point *b*, which is about the center of the distance between the posts B and G. Projecting upwardly and rearwardly from the bottom of the rear end of the gate is a brace I, which carries at its upper end a groove-wheel J, engaging the under inclined edge of the

track F. For the purpose of strengthening this brace I a connecting-rod K has its ends connected, respectively, with the said brace and the upper portion of the standard B at the rear end of the gate. The latch-post A has in its upper end a vertical slot *c*, which is spanned by a pin *d*, and projecting from the front of the gate is a spring *e*, which is adapted to disengage itself automatically from the said pin when the track F is elevated into the position shown in Fig. 1 for the purpose of causing it to run down the inclined track and to open. The inner end of the track F projects through and between the posts B, and the edges of these posts are provided with projecting pins *f*, with which a transverse pin *g*, passing through the projecting end of the track F, engages when the gate is in a closed position. Situated above the pin *f* and projecting from one of the posts B is a spring *i*, having an inwardly-inclined end *j*, with which the pin *g* of the track is also adapted to engage, for the purpose which will be presently explained.

The outer projecting end H of the track F has its under edge provided with a notch *m*, with which the wheel J, carried by the bracket I, engages when the gate is open for the purpose of supporting the gate in a horizontal position and serving also as a means of locking the gate open when the track is in a horizontal position. (Shown in full lines in Fig. 2 of the drawings.) The inner end of the track can be raised and lowered by hand or by means of a lever in any suitable manner, and as the method of raising and lowering the track forms no part of my present invention I do not show any means therefor.

In the operation of my gate when it is desired to open it the track is elevated, as shown in Fig. 1. When the gate is open, the track is then let gently down to a horizontal position, (shown in solid lines in Fig. 2,) which brings the pin *g* of the track in engagement with the inclined surface or end of the spring *i*. This spring is sufficiently strong to support the track and the gate in its horizontal position until it is desired to close the gate. When it is desired to close the gate, the inner end of the track is depressed, forcing the spring inward and causing the pin *g* to pass over the spring portion, or the track



may be elevated and let suddenly drop, when it will pass over the said spring and fall into the position shown in dotted lines, Fig. 2, thus inclining the track downward and causing  
 5 the gate to close. When the track is dropped downward, the lower portion of the front end of the gate will strike the post B and cause the disengagement of the wheel J from the notch *m*, and thus permit the gate to close by  
 10 running down the inclined track.

When the gate is to be opened by pedestrians, the latch E is raised by a laterally-projecting handle or pin projecting therefrom for the purpose of disengaging it from the  
 15 pin *d* of the latch-post A, and when the gate is closed it will automatically lock, as before stated.

The post B serves to limit the opening movement of the gate by the engagement of the  
 20 front stile with the said post and also serves to limit the closing movement of the gate by the engagement of the standard D with the opposite or rear edges of the post B.

The object of the inclined lower edge of the track F is that when the gate is closing the wheel J goes down the track and owing to the increased thickness of the inclined lower edge thereof is depressed, and consequently raises the lower forward corner of  
 25 the gate and keeps the gate level when shutting. The pins *f*, carried by the post B, are situated at such a point that the front lower corner of the gate will not rub on the ground when the gate is closed.

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

1. A sliding gate comprising an interme-

diately-pivoted track, the gate having a standard at its rear end carrying a wheel en- 40 gaging the upper side of the track, a rearwardly-extending bracket carrying a wheel engaging the under side of the track the lower edge of the rear end of the track having a notch for the engagement of the bracket- 45 wheel, substantially as described.

2. A sliding gate comprising a guiding-post, a track supported at a point in the rear of the guiding-post, the gate having a standard in the rear of the guiding-post, said standard 50 carrying a wheel engaging the upper edge of the track, and a rearwardly-extending bracket carrying a wheel engaging the under side of the track, the inner end of the track and the guiding-post having engaging stops, sub- 55 stantially as described.

3. The combination of a pivotally-supported track, a post situated at the free end of the track and forming a support therefor, a gate provided with a wheel engaging the up- 60 per side of the track, and with a bracket projecting rearwardly from the said gate and carrying a wheel in engagement with the under side of the track, a laterally-projecting stop at the front end of the track, a rigid stop on 65 the post to engage therewith, and a yielding stop carried by the post situated above the said rigid stop to operate substantially as described.

In testimony whereof I affix my signature 70 in presence of two witnesses.

WALTER M. McEVILLY.

Witnesses:

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 W. W. SHAWBAR.