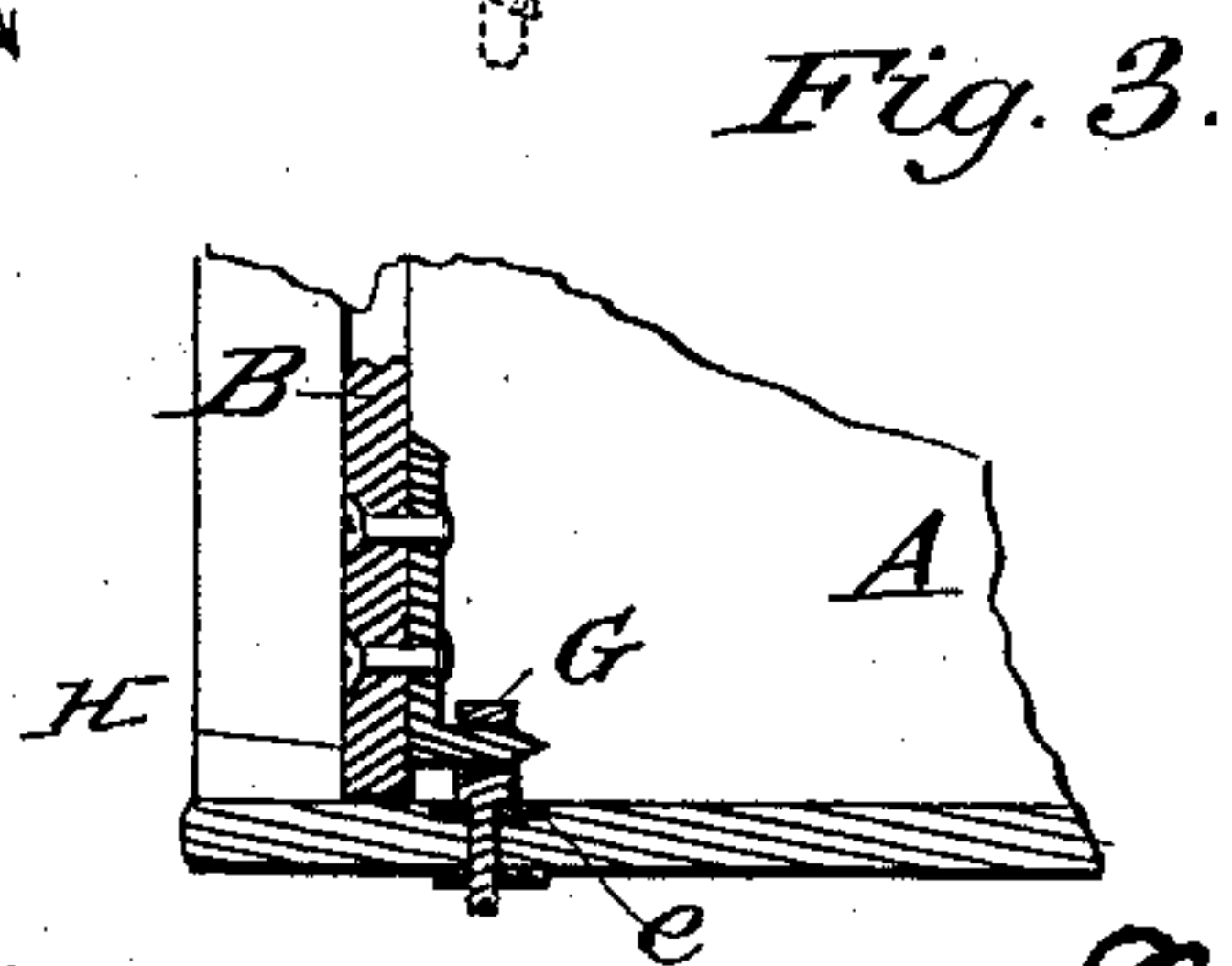
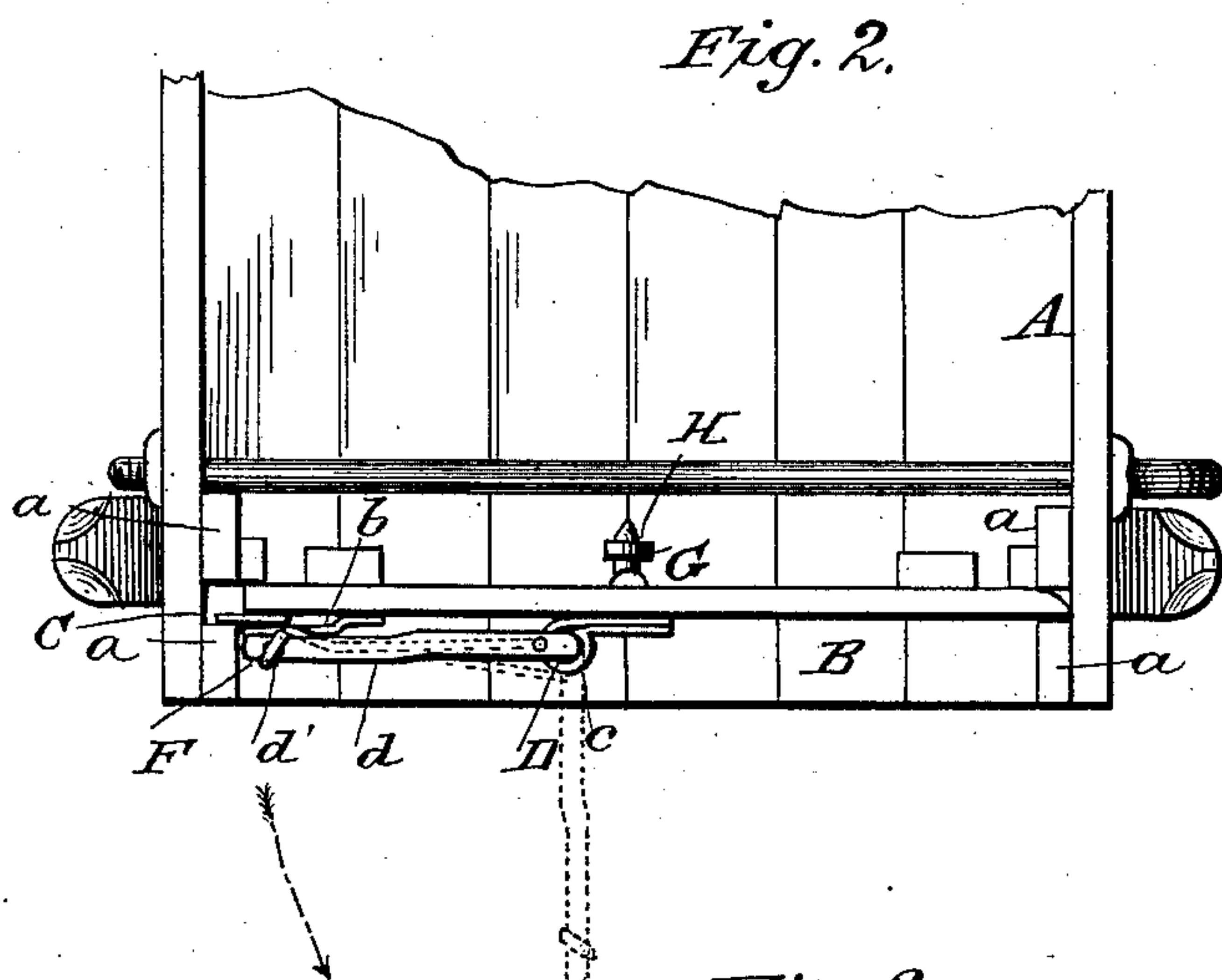
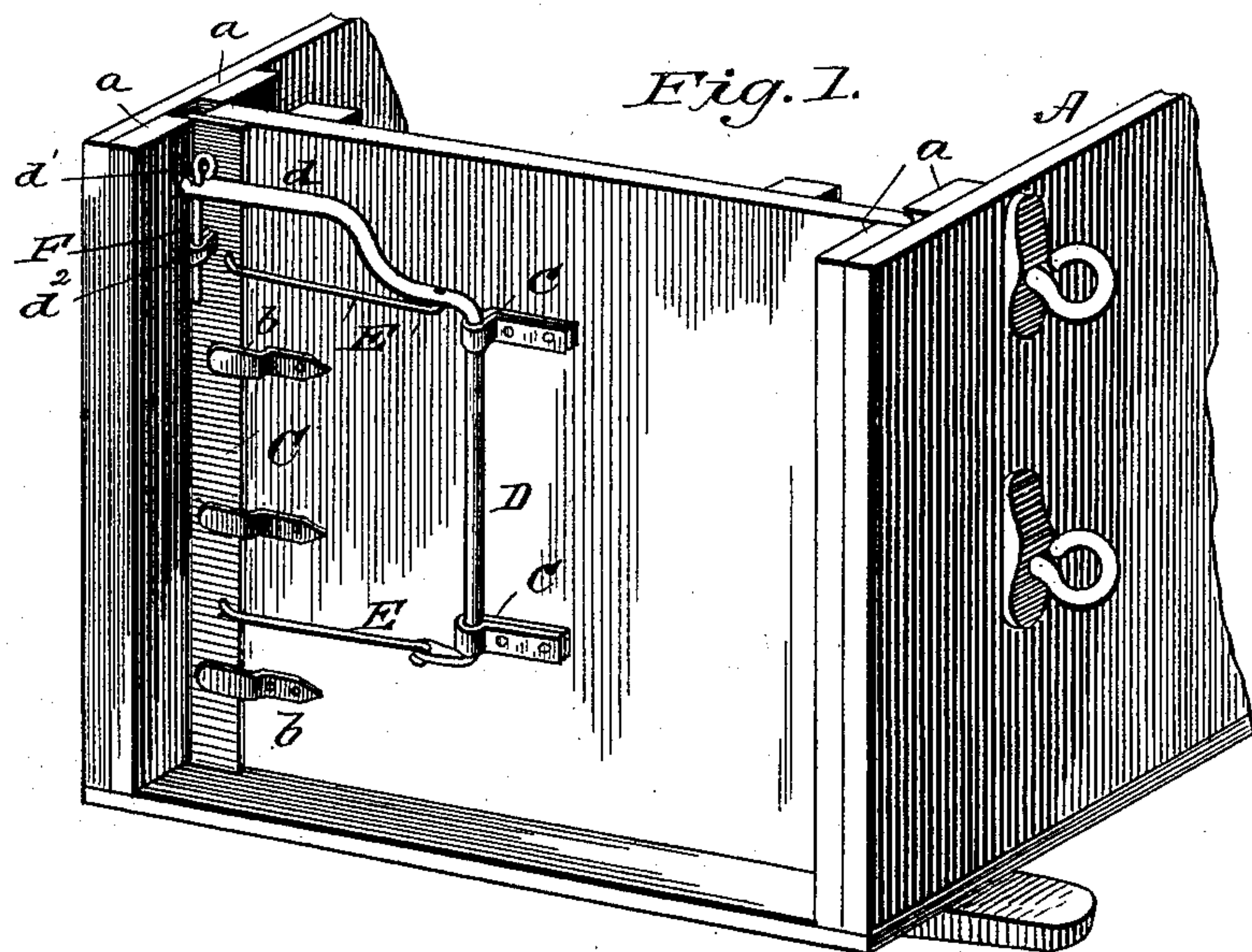


(No Model.)

U. S. TYM.
WAGON END GATE.

No. 389,679.

Patented Sept. 18, 1888.



WITNESSES:
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ULYSSES S. TYM, OF RIDGELEY, NEBRASKA.

WAGON END-GATE.

SPECIFICATION forming part of Letters Patent No. 389,679, dated September 18, 1888.

Application filed April 14, 1888. Serial No. 270,712. (No model.)

To all whom it may concern:

Be it known that I, ULYSSES S. TYM, of Ridgeley, in the county of Dodge and State of Nebraska, have invented a new and useful Improvement in End-Gates for Wagons, of which the following is a specification.

This invention contemplates certain improvements in end-gates for wagons, having for its object to provide for the ready removal of the gate, to effect which is desirable, especially when the wagon is loaded, and to permit of the ready replacement of the gate, as also to retain it in position against vertical displacement; and to these ends the nature of the invention consists of a peculiar locking contrivance applied to one end of the gate, and of an eyebolt secured in the bottom of the wagon-body, and which receives a bevel-ended hook secured to and holding the end-gate against rising, substantially as hereinafter more fully set forth, and pointed out in the claims.

In the accompanying drawings, Figure 1 is a perspective view of the end of a wagon with the end-gate in place; Fig. 2, a plan view, and Fig. 3 a detail view.

In carrying out my invention I secure, as usual, to the inner sides of the wagon-body A cleats *a a*, two being applied to each side.

B is the end-gate, one end or edge of which is received between the cleats upon one side of the body, while to the other end is applied an upright plate-like bar, C, being disposed and held between brackets or angle-irons *b b*, secured to the end-gate. The plate-like bar C is connected to an upright crank shaft, D, supported in eye plates or boxes *c c*, bolted to the end-gate. The connection between the bar C and the shaft D is effected by means of pitmen *E E'*. The pitman E connects the bar C near its lower end with one arm of the crank-shaft D, while the pitman *E'* connects the upper end of the bar C with the upper arm of the crank-shaft D. The upper arm of the crank-shaft D is formed with an extension or lever, *d*. The outer end of lever *d* is provided with an eye, *d'*, through which is inserted so as to depend therefrom a pin, F, which is enlarged at its ends, being thickened at one end and formed with an eye at its other end to prevent its accidental endwise displacement.

The plate-like bar C is provided with an eye or staple, *d''*, which receives the pendent portion of the pin F, in order to lock or secure the lever *d* in position. The plate-like bar C is forced or thrust in between the near or contiguous cleats upon the wagon-body by grasping the pin F, which also serves as a handle, and moving the same with the lever *d* to the right until the pin is brought into alignment with the eye or staple *d''*, the pin then being released, permitting it to enter or drop into said eye, thus effecting the securing or locking in place of the lever, together with the plate-like bar, which secures the end-gate against accidental endwise displacement.

G is an eyebolt, preferably made square in cross-section the greater portion of its length and passed through an apertured plate, *e*, let into the bottom of the wagon body or box A, said bolt passing below the apertured plate, through the bottom, and through an aperture in the rear end sill, it being secured in place by a nut applied to its lower screw-threaded end.

To the inner side of the end gate is applied a bevel-ended hook, H, projecting inward and entering the eye of eyebolt G, applied to the wagon-body bottom, the purpose of which is to prevent the accidental vertical displacement of the end-gate B. The application of the bevel-ended hook H is effected by riveting its shank to the end-gate.

In order to effect the removal of the end-gate, which can be readily done, it is only necessary to withdraw the pin or handle F from the eye or staple *d''*, and then move the lever *d* outward to its farthest extent, which will effect the withdrawal of the plate-like bar C from between its cleats. Now, by disengaging the hook H of the end-gate B from the eyebolt G of the wagon-body bottom and grasping the pitmen *E E'* as a convenient means of securing a hold upon the end-gate, and pulling outward and endwise at one end, the distant end of the gate is withdrawn from between its cleats, permitting the removal of the end-gate.

This invention is effective in holding in place the end-gate against accidental displacement in any direction, while it permits of the ready and easy removal and replacement of the same, and is also simple and inexpensive, being capable of production at a minimum cost.

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

1. In an end-gate lock, the combination, with the plate or bar having movement in the direction of its transverse section, of the crank-shaft connected by pitmen to said plate or bar and having its cranked portion provided with a lever adapted to be held to said plate or bar, substantially as set forth.

2. In an end-gate lock, the combination, with the plate or bar movable in the direction of its transverse section, of the crank-shaft having its lower end connected by a pitman to said plate or bar near its lower end, and its upper cranked portion formed with a lever, and which cranked portion of the shaft is connected by a pitman to said plate or bar near its upper end, substantially as set forth.

3. In an end-gate lock, the combination, with the plate or bar having movement in the direction of its transverse section or the length of the end-gate and provided with an eye, of the crank-shaft connected at one end to said

plate or bar near its lower end and having its upper cranked portion formed with a lever, which cranked portion of said shaft is also connected by a pitman with said plate or bar near its upper end, and which lever has a detachable pin-connection with the eye of said plate or bar, substantially as specified.

4. The combination, with the end-gate, of the bevel-ended hook entering an eyebolt, effecting a connection between the end-gate and wagon-body bottom, substantially as and for the purpose set forth.

5. The combination, with the end-gate, of the plate-like bar disposed at one end of the gate and connected by pitmen to the crank-shaft, the lever actuating said shaft and provided with a sliding pin or handle, and the bevel-ended hook entering an eyebolt, effecting a connection between the end-gate and wagon-body bottom, substantially as specified.

ULYSSES S. TYM.

Witnesses:

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