

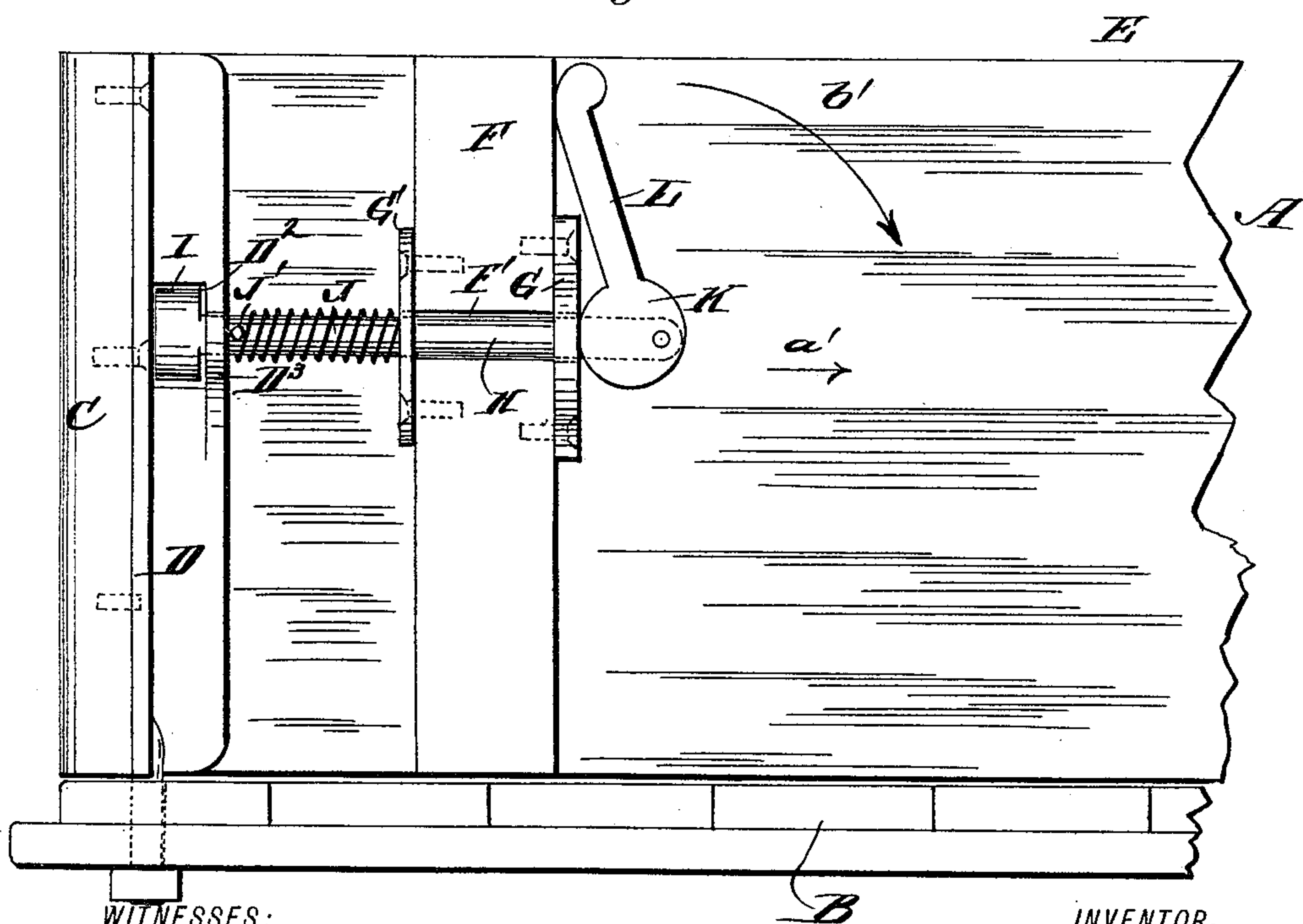
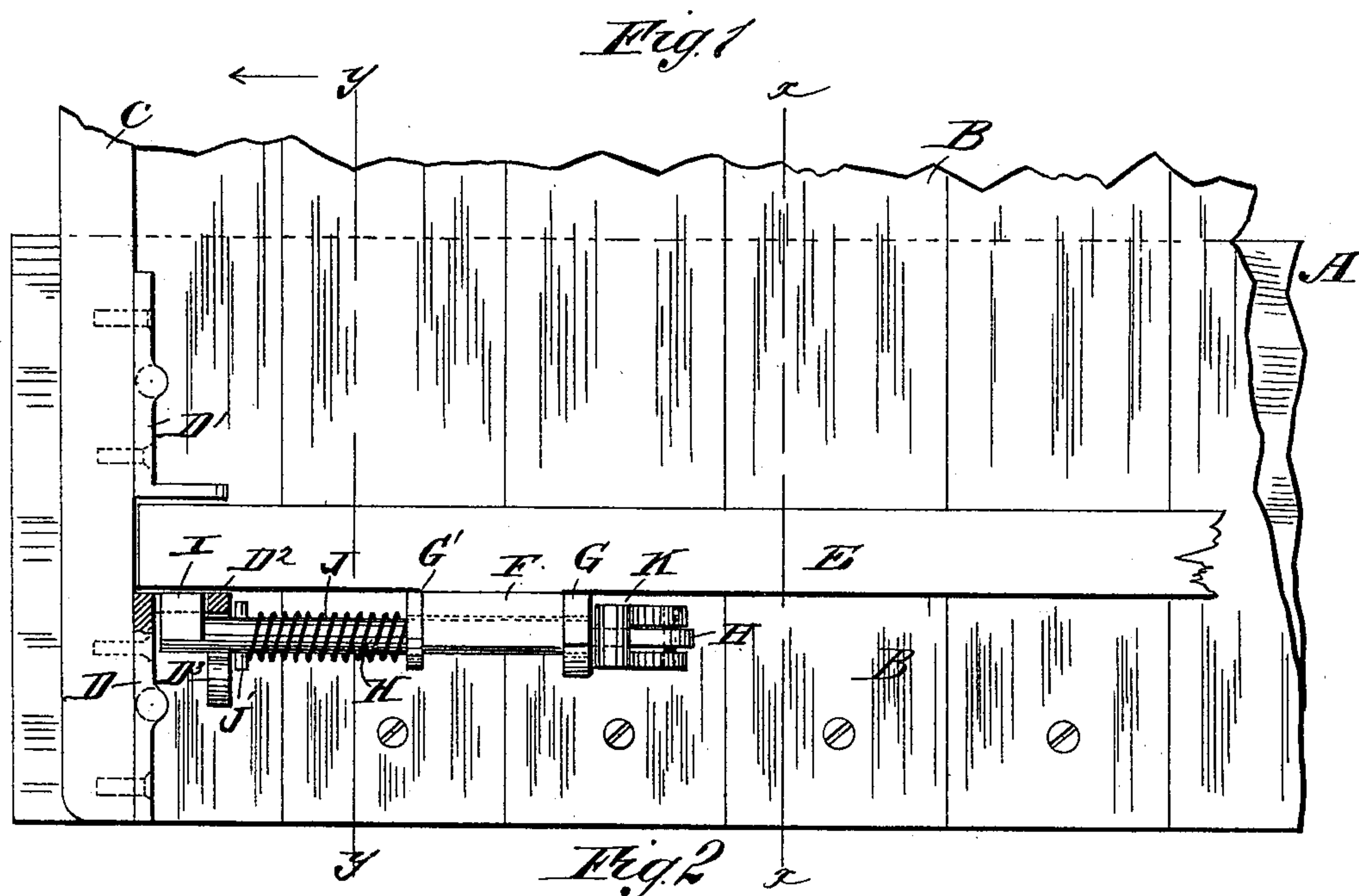
(No Model.)

2 Sheets—Sheet 1.

W. R. WATT.
END GATE FOR WAGONS.

No. 403,628.

Patented May 21, 1889.



WITNESSES:

Francis McArdle.
C. Bedgwick

INVENTOR.

W. R. Watt

BY

Munn & Co

ATTORNEYS.

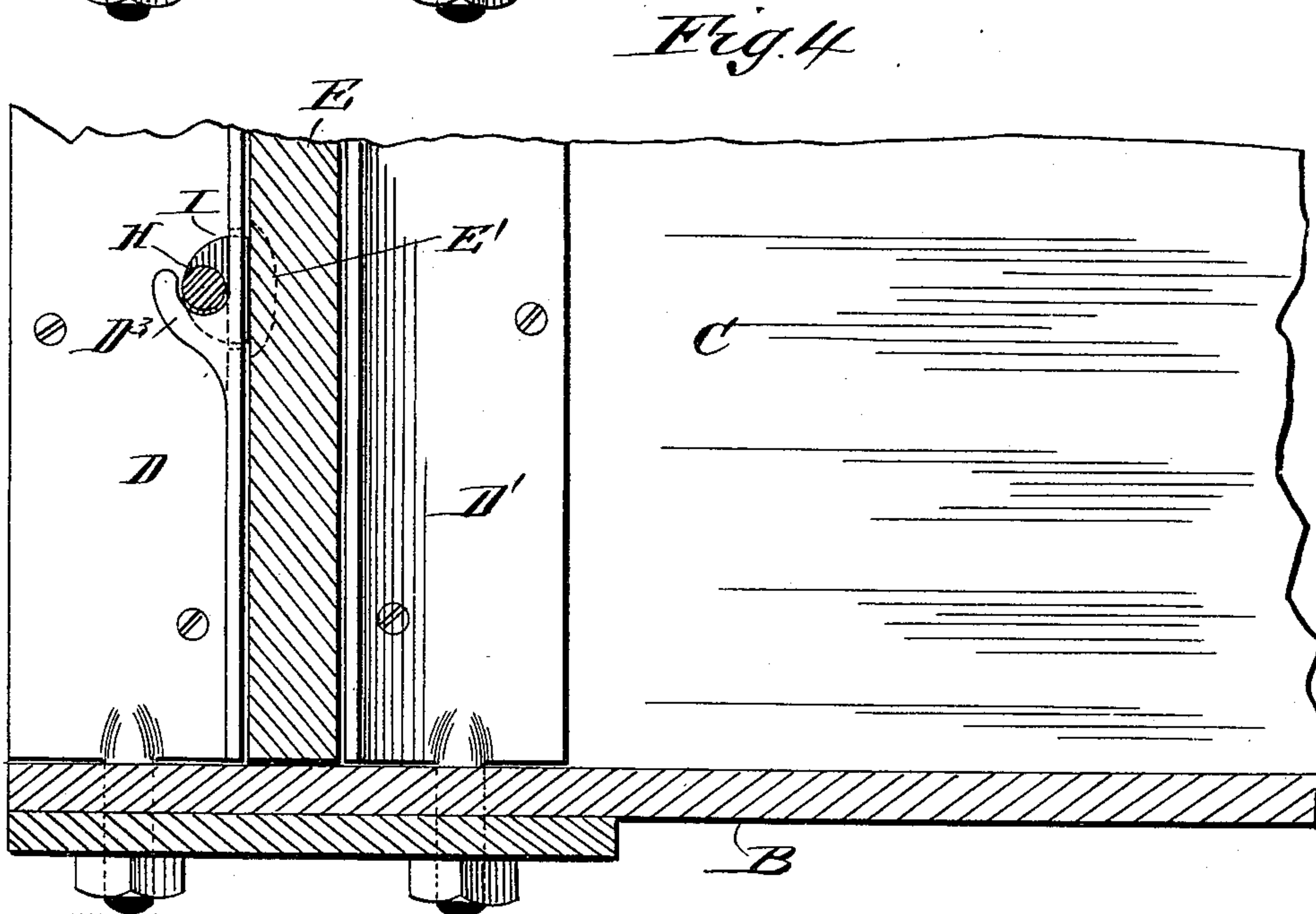
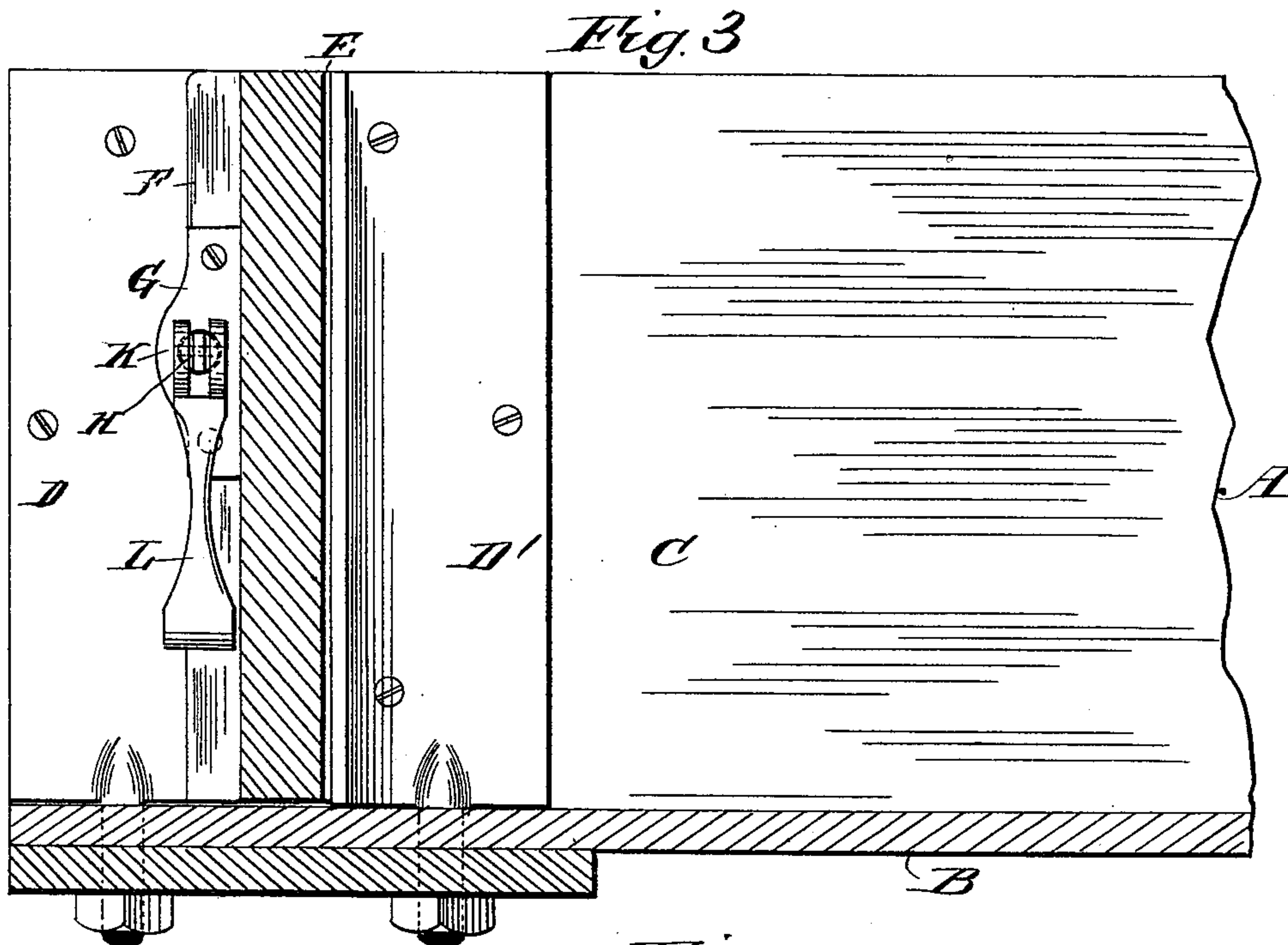
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UNITED STATES PATENT OFFICE.

WILLIAM RUFUS WATT, OF SOMERVILLE, TENNESSEE.

END-GATE FOR WAGONS.

SPECIFICATION forming part of Letters Patent No. 403,628, dated May 21, 1889.

Application filed February 20, 1889. Serial No. 300,517. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM RUFUS WATT, of Somerville, in the county of Fayette and State of Tennessee, have invented a new and Improved End-Gate Fastening, of which the following is a full, clear, and exact description.

The object of the invention is to provide a new and improved fastening, which is simple and durable in construction, very effective in operation, and specially designed for securely locking end-gates to wagons.

The invention consists of a shaft mounted to turn and to slide in the end-gate and provided with a fixed head adapted to engage a recess in the cleat holding the end-gate.

The invention also consists of certain parts and details and combinations of the same, as will be hereinafter described, and then pointed out in the claims.

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

Figure 1 is a plan view of the improvement as applied and with parts in section, a part only of the wagon and end-gate being shown. Fig. 2 is an end elevation of the same. Fig. 3 is a sectional side elevation of the same on the line $x x$ of Fig. 1, and Fig. 4 is a like view of the same on the line $y y$ of Fig. 1.

The wagon-bed A is provided with the usual bottom, B, and the sides C, each of which is provided with the L-shaped cleats D and D', in which is fitted the end-gate E. To the latter at each end is secured a vertical beam, F, carrying the bearings G and G', in which is mounted to turn a transversely-extending shaft, H, carrying on its outer end a semicircular head, I, adapted to pass into an opening, D², formed in the transversely-extending part of the cleat D. The shaft H is also adapted to pass into a semicircular bearing, D³, extending from the transverse part of the cleat D next to the opening D².

On the shaft H is coiled a spring, J, resting at one end against the bearing G' and at its other end pressing against the pin J', secured in the shaft H. On the inner end of the shaft H is pivoted a cam, K, adapted to operate against the bearing G, and provided with a handle, L, for conveniently operating said cam

K, so as to cause the shaft H to turn and to slide transversely in its bearings.

The operation is as follows: When the end-gate E is to be inserted between the cleats D and D', the fixed head I is in an outermost position, so that the end-gate is permitted to slide downward between the cleats D and D'. The outer end of the shaft H then passes into the semicircular bearing D³, and the operator now swings the handle L downward, the shaft H moves a half-turn, and the fixed head I swings inward into the opening D² in the transverse part of the cleat D. The operator then swings the lever L upward into the position shown in Fig. 2, whereby the cam K presses against the bearing G, and consequently draws the shaft H inward in the direction of the arrow a' . The head I is thus securely pressed against the transverse part of the cleat D, whereby the said shaft is securely locked in place. It will be seen that the end-gate is also locked in place, as the fixed head I, engaging the opening D², is prevented from being moved upward. When the operator desires to unlock the end-gate, he swings the arm L downward in the direction of the arrow b' , (see Fig. 2,) so that the cam K unlocks the shaft H, and then the operator turns the handle L upward, so as to give the shaft H a half-turn, whereby the head I again swings outward and disengages the cleat D. The gate can then be lifted upward out of the cleats D and D'. In order to conveniently turn the head I into the opening D², I provide the end-gate with a recess, E', directly behind the said opening E², as is plainly shown in dotted lines in Fig. 4. Thus it will be seen that by a very simple operation the end-gate is securely locked in place on the wagon-bed.

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

1. In an end-gate fastening, the combination of L-shaped cleats secured on the sides of the wagon-bed, one of the said cleats being provided with an opening in its transversely-extending part, an end-gate fitting between the said cleats, and a shaft mounted to turn and slide on the end-gate and provided with a head adapted to enter the opening in the cleat, substantially as described.

2. In an end-gate fastening, the combination of L-shaped cleats secured on the sides of the wagon-bed, one of the said cleats being provided with an opening and a bearing in its transversely-extending part, an end-gate fitting between the said cleats, and a shaft mounted to turn and slide on the end-gate and provided with a head adapted to enter the opening in the cleat, substantially as described.

3. In an end-gate fastening, the combination, with L-shaped cleats secured on the sides of the wagon-bed, of an end-gate fitted between the said cleats, a shaft mounted to turn and to slide on the said end-gate, a fixed head secured on one end of the said shaft and adapted to engage an opening in one of the said cleats, and a cam-lever secured on the said shaft and serving to turn the said shaft

and to cause it to slide laterally, substantially as shown and described.

4. In an end-gate fastening, the combination, with L-shaped cleats secured on the sides of the wagon-bed, of an end-gate fitted between the said cleats, a shaft mounted to turn and to slide on the said end-gate, a fixed head secured on one end of the said shaft and adapted to engage an opening in one of the said cleats, a cam-lever secured on the said shaft and serving to turn the said shaft and to cause it to slide laterally, and a spring held on the said shaft and operating in conjunction with the said lever, substantially as shown and described.

WILLIAM RUFUS WATT.

Witnesses:

HENRY A. WASHINGTON,
WALTER F. ANDERSON.