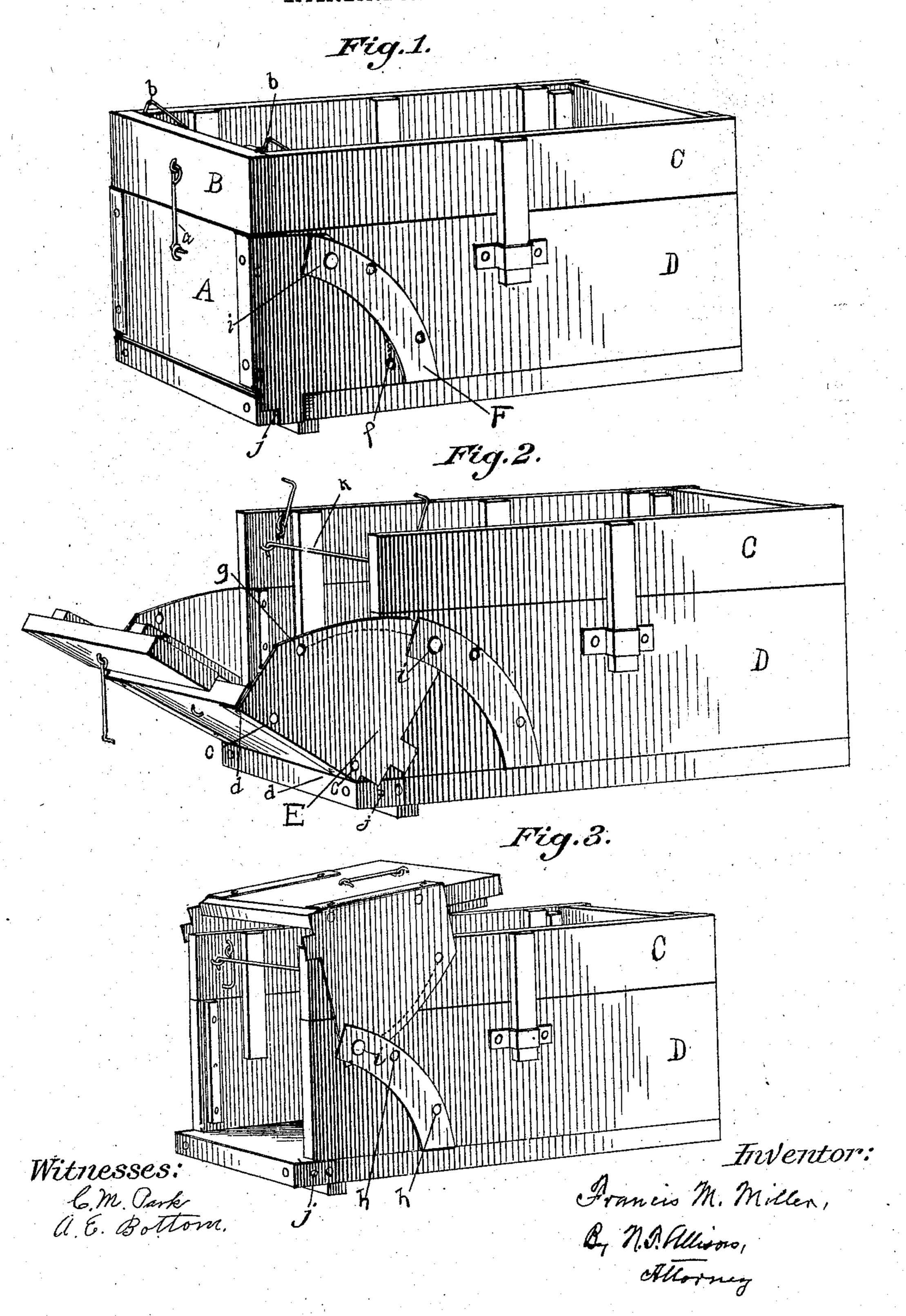
F. M. MILLER.
END GATE.
APPLICATION FILED JULY 6, 1905.



## UNITED STATES PATENT OFFICE.

FRANCIS M. MILLER, OF NEUTRAL, KANSAS.

## END-GATE.

No. 815,454.

Specification of Letters Patent.

Patented March 20, 1906.

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To all whom it may concern:

Be it known that I, Francis M. Miller, a citizen of the United States, residing near Neutral, in the county of Cherokee, in the State 5 of Kansas, have invented an Improvement in End-Gates to Wagon-Beds, of which the following is a specification.

My invention relates to an improvement in end-gates for wagon-beds in the use of 10 which time may be saved and work more easily done in discharging the contents of a wagon-bed provided with such improved end-

gate. The objects of my improvement are, first, 15 to provide an end-gate for wagon-beds, which end-gate when closed and holding the contents of the wagon-bed can be quickly and easily thrown back to such an angle as will enable the operator easily to scoop out 20 the grain, mineral, or other material contained in the wagon-bed; second, to provide an end-gate for wagon-beds, which end-

gate may be quickly and easily disengaged from the end of the wagon-bed or entirely 25 removed therefrom, so that the contents of the wagon-bed may be quickly and easily discharged by tilting the same or by the use of a scoop or other means.

The purposes of my invention are attained 3° through the mechanism illustrated in the accompanying drawings, in which-

Figure 1 represents the end-gate closed against the wagon-bed. Fig. 2 represents the end-gate tilted back to enable the opera-35 tor quickly and easily to scoop out the contents of the wagon-bed. Fig. 3 represents the end-gate entirely disengaged from the end of the wagon-bed for the still speedier discharge of the contents of the same.

Similar letters refer to similar parts

throughout the several views.

The end-gate (designed to be made either of wood or of metal) consists of the two principal parts A and B, held together by means 45 of the hook a, provided with staples, as shown in Fig. 1, and the two parts A and B are detachable, so that the part B may be taken off with the side-board C of the wagonbed when such side-board is not necessary 5° for containing the contents of the wagon-bed. When the side-board C is used, the section or part B of the end-gate is made secure thereto by means of the hooks b b, as shown in Fig.1.

Part A of the end-gate is provided with the 55 rigid steel or sheet-iron plate E, made fast

thereto by means of the bolts c c and the rivets d d, as shown in Fig. 2, and the rigid steel or sheet-iron plate E is provided with the hole f, as shown in Fig. 1, and with the hole g, as shown in Fig. 2, and the rigid steel or 60 sheet-iron plate E is further provided with a projection of said plate at the bottom thereof, as shown in Figs. 2 and 3.

The wagon-bed D is provided with the spring-steel plate F, as shown in Fig. 1, made 65 fast to the wagon-bed D by means of the rivets h h, as shown in Fig. 3, and the springsteel plate F is provided with the pin i, which projects inwardly, for the purpose of engaging the holes f and g in the rigid steel or 70 sheet-iron plate E, thereby holding the rigid steel or sheet-iron plate E in the positions shown in the several views.

The bottom of part A of the end-gate when in the position shown in Fig. 1 is held in 75 place by means of the projection on the lower edge of the rigid steel or sheet-iron plate E engaging with the pin j, made fast to and projecting from the wagon-bed D.

Each side of the wagon-bed D is provided 80 alike with the several means for the improvement shown in the perspective views of Figs. 2 and 3, and each end of the end-gate or part A thereof is provided alike with the rigid steel or sheet-iron plate E.

The curved dotted line on the rigid steel or sheet-iron plate E is designed merely to show the direction over which the projecting pin i passes from the hole g to the hole f in the rigid steel or sheet-iron plate E in changing 90 the end-gate from the position shown in Fig. 1 to the position shown in Fig. 2 and is not claimed as a part of this improvement.

The part A of the end-gate, together with the rigid steel or sheet-iron plate E, made 95 fast thereto, as shown, may be disengaged from the wagon-bed D by pressing out the spring-steel plate F on each side of the wagonbed D until the projecting pin i is disengaged from the hole f in the rigid steel or sheet-iron 100 plate E.

The rod k (shown in Fig. 2) may be disengaged from the side-boards C, so that the operator when the end-gate is entirely removed from the wagon-bed may have no hindrance 105 in discharging the contents of the wagon-bed.

That which I claim as my invention, and upon which I desire to secure Letters Patent,

The combination of an end-gate with a 110

wagon-bed, the end-gate being held in place when closed, as shown in Fig. 1, by means of the pin j, engaged with the projection on the lower edge of the rigid, steel or sheet-iron plate E, and the engagement of the projecting pin i, of the spring-steel plate F, with the hole g in the rigid, steel or sheet-iron plate E, substantially as shown in Fig. 1.

In testimony whereof I have hereunto signed my name to this specification in the ropresence of two subscribing witnesses.

FRANCIS M. MILLER.

Witnesses:

S. L. Walker, B. Stevens.