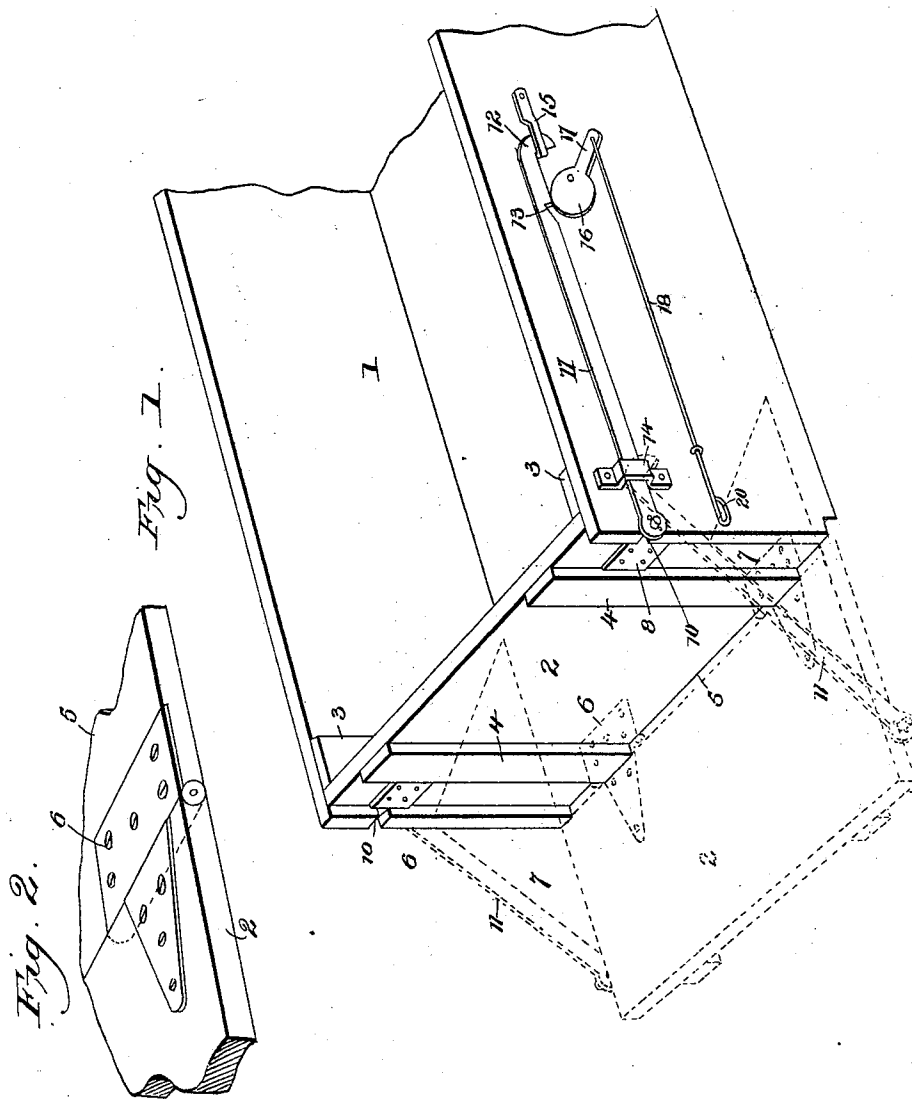


(No Model.)

F. SETCINGER.
END GATE.

No. 525,120.

Patented Aug. 28, 1894.



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UNITED STATES PATENT OFFICE.

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END-GATE.

SPECIFICATION forming part of Letters Patent No. 525,120, dated August 28, 1894.

Application filed June 7, 1894. Serial No. 513,800. (No model.)

To all whom it may concern:

Be it known that I, FREDERICK SETCINGER, a citizen of the United States, and a resident of Sandusky, in the county of Erie and State of Ohio, have invented certain new and useful Improvements in End - Gates; and I do hereby 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.

This invention relates to end gates for farm wagons and other vehicles, and has for its object to provide simple and effective means for securing the gate in closed position, releasing the same for the purpose of opening it, and also of providing a close joint between the lower edge of the gate and the body of the wagon.

With these and other objects in view, the invention consists of the construction and arrangement of the several parts which will be more fully hereinafter described and claimed.

In the drawings: Figure 1 is a perspective view of an end gate embodying the invention, showing it applied to a portion of the body of a vehicle, and opened in dotted lines. Fig. 2 is a detail perspective view of a portion of the gate and floor board of the body, showing the manner of applying the hinges.

Similar numerals of reference are employed to indicate corresponding parts in both views.

Referring to the drawings, the numeral 1 designates a wagon body of either heavy or light structure, it being understood that the end gate and its attachment are increased in strength proportionate to the structure of the body, and in view of the purposes to which the wagon may be employed. To this body 1 is hinged an end gate 2, which closes against the inside vertical strips 3 on opposite sides of the body 1 and has strengthening battens 4 on the back thereof. The gate 2 is secured to the rear end of the floor board 5 of the body by means of T-hinges 6 which are respectively applied to the floor board 5 and the gate in such manner as to leave a very small opening between the edge of the gate and the end of the floor board at the point of application of the hinges, the said hinges being secured in position on the inside of the gate and the adjacent upper portion of the floor board. The said hinges are applied in inverted position

in view of the customary mode of application and a very small crack or crevice is formed between the gate and the body or the wagon box when the gate is opened and also, a strong connection is provided. The gate has also secured thereto on opposite sides adjacent to the inner portion thereof opposite angular guards 7 which close into and lie adjacent to the opposite sides of the body or box when the gate is closed, but open outwardly and form shields when the gate is opened, as shown in dotted lines.

The upper opposite portions of the outer side of the gate have metallic plates 8 secured thereto which are provided with trunnions 9 fitting in slots 10 in the upper portion of the ends of the sides of the body or box when the gate is closed. To the said trunnions 10 are pivotally attached the outer ends of elongated arms 11 having hooks 12 on their inner ends and along the under edge of said arms 11 are one or more angular notches 13. The said arms 11 have free movement through keepers 14 on the opposite sides of the body or box adjacent to the ends of the latter, and the said notches 13 are adapted to engage the lower edge portion of the said keepers to hold the gate in an angularly adjusted position, or said keepers 14 may be engaged by the hooks 12 when the gate is entirely lowered as shown in dotted lines. These arms 11 are located on the outer portions of the opposite sides of the body or box and when the said arms are moved inwardly and the gate is closed, the hooks 12 are adapted to engage spring or other catches 15. Adjacent to the catches 15 are eccentrically mounted cams 16 which normally engage the under edges of the arms 11 when the latter are in closed position and have depending arms 17 to which are attached operating rods 18, each extending longitudinally and passing through an eye 19 near the end of the outer portion of each side of the body or box, and are then formed into loops or grips 20 to be engaged by the hand of the operator. By drawing the cam 16 into the position shown in dotted lines on opposite sides of the body, the elongated arms 11 are raised so that the hooks 12 become disengaged from the catches 15, thereby permitting the gate to be lowered without requiring a backward and forward movement on opposite sides of the body or

box to disengage said hooks 12 from the catches. It will be understood that the guards 7 are intended to keep grain and other materials from falling onto the ground when the gate is only partially opened, and when the gate is closed the said guards move between the sides of the body or box and the strips or cleats 3.

The several parts of the device are simple and effective in their construction and arrangement and many advantages will appear from time to time to those using the device.

Having thus described the invention, what is claimed as new is—

15 The combination with a wagon body of an end gate hinged thereto, as set forth, guards on the opposite sides of the gate, elongated arms movably attached to the gate, said arms having inner hooked ends and notches in the under side thereof adjacent to said hooked

ends, keepers with which said arms have free movement, catches for the hooked ends of the said arms, cams engaging the under edges of the said arms to release the hooked ends of the same from the catches, and rods attached 25 to said cams for operating the same to release the said elongated arms, the hooked ends of the said elongated arms also engaging the keepers when the gate drops, or said keepers are adapted to be engaged by the notches in 30 said arms, substantially as and for the purposes specified.

In testimony whereof I have signed this specification in the presence of two subscribing witnesses.

FRED. SETCINGER.

Witnesses:

GEO. HENDERSON,
GEO. C. BERS.