No. 683,020. Patented Sept. 24, 1901.

J. E. CAMP.

CATCH FOR END GATES.

(Application filed July 5, 1901.)

(No Model.)

Fig. 1.

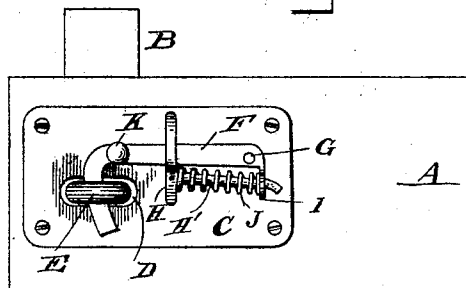


Fig. 4.

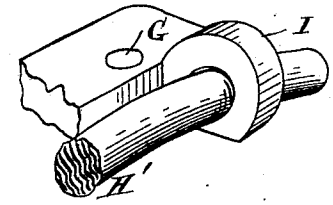


Fig. 2.

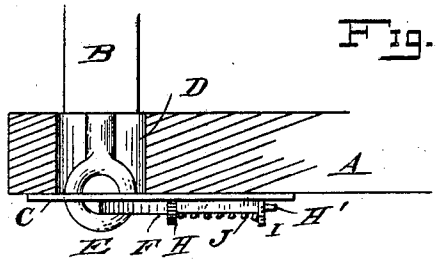
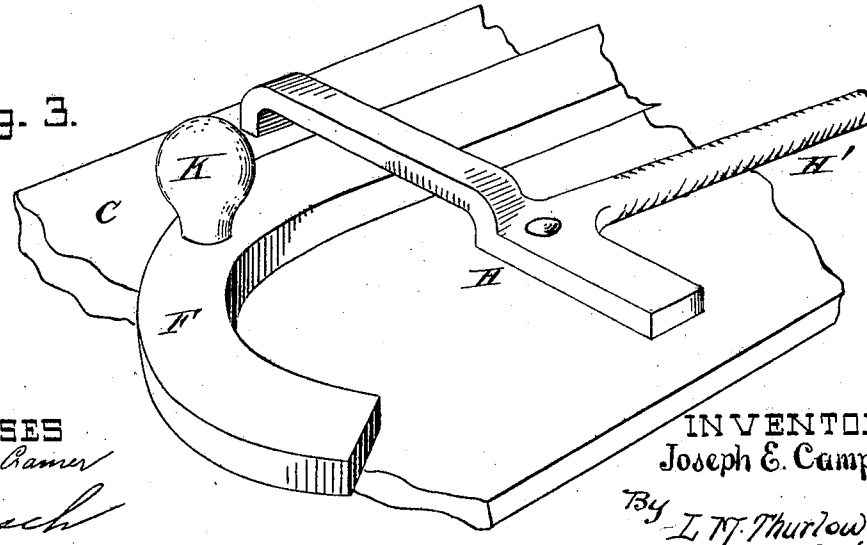


Fig. 3.



WITNESSES

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JOSEPH E. CAMP, OF WASHINGTON, ILLINOIS.

CATCH FOR END-GATES.

SPECIFICATION forming part of Letters Patent No. 683,020, dated September 24, 1901.

Application filed July 5, 1901. Serial No. 67,226. (No model.)

To all whom it may concern:

Be it known that I, JOSEPH E. CAMP, a citizen of the United States, residing at Washington, in the county of Tazewell and State of Illinois, have invented certain new and useful Improvements in Catches for End-Gates; and I do hereby declare that the following is a full, clear, and exact description of the invention, which will enable others skilled in the art to which it appertains to make and use the same.

This invention pertains to a new improved locking device for wagon end-gates and kindred devices.

The object of the invention is to provide a simple, cheap, and effective lock which will not become easily unfastened.

The further object is to provide a new construction having certain details of construction, which will be pointed out in the following specification and in the claims.

In the appended drawings, Figure 1 is a rear view of a portion of an end-gate and the end of the wagon-box. Fig. 2 is a plan view thereof in part section. Fig. 3 is a perspective view of a portion of the lock. Fig. 4 is also a perspective view of a portion of the device.

In the several figures, A is the end-gate, and B the side, of the wagon-box.

C is a plate secured in the top corner of the end-gate, one being placed in each corner, as will be readily understood. Said plate is bolted or otherwise secured in place and is provided with a slot at D. In the end of the wagon-box or attached to the side thereof is an eye E, which projects through the slot in the plate and the end-gate when the latter is closed. A latch F, which consists of an arm, substantially as shown, is pivoted at one end at G to the plate C, the bend of the arm being concentric with its pivot. Just here will now be described the important feature of my invention. A pivotal arm H is attached to the plate C immediately below the arm or latch F, and consists of a T-shaped portion, the top bar of which is preferably flat and pivoted at the juncture of the two portions to the plate, as shown in Fig. 3. One end of the top bar is shorter than the other and is provided for the purpose of forming a bearing upon the plate and serves to make the arm move smoothly on the pivot with no strain. The opposite long end is bent up over the arm F and down at the other side, thereby forming a limiting-stop at each extreme movement of said arm F. The free arm of the T (indicated at H′) extends through a lug I at the pivotal end of the latch F and is bent in a curve away from the pivotal point of the arm F, as shown in Figs. 1 and 4. A spring J surrounds the said arm H′, bearing at one end against the top arm of the T, adjacent to the pivot, and at the other against the said lug I of the latch. The effect of the spring-pressure of course will be to throw the latch on its pivot and depress the bent end of the latch, as viewed in Fig. 1. In order to decrease the friction of the arm H′ and the lug I where they engage one another, I provide the outward bend in the former and pivot the T portion, so that when said latch is moved on its pivot by means of the knob K the said T portion will be free to move, and thereby reduce the friction, as stated, the curve in the arm H′ allowing the lug I to move within it on the pivot G with perfect freedom. Evidently the curve or bend could be placed in the opposite direction and still accomplish the desired end, however. As before stated, the top arm of the T portion being bent, as shown, limits the movement of the latch in both directions, and in addition to this the latch is prevented from bending by undue strains or accidents. The device may be arranged in slightly-different manner, if desired, as is evident. Normally the latch F extends across the slot D, and when the gate is to be closed the latch must be raised against the pressure of the spring. Then the gate is pushed into place, and the latches on being released will enter the eyes E, from which they cannot be removed except by choice.

The particular arrangement and construction of the parts of my device are new, in so far as I am aware, and therefore

I claim—

1. In a locking device of the character described, a supporting-plate secured to the device to be locked in place, a latch pivoted at one end to the plate, an eye secured to the body with which the device is to be attached, a lug at the pivotal end of the latch, the same

having an aperture therethrough, a T-shaped arm pivoted to the plate, one limb thereof extending through the said lug, the other extremity extending over the latch and limiting the movement thereof and forming a guide therefor, and a spring located upon the extremity of said arm which passes through the lug of the latch, said spring arranged to keep pressure against the lug to normally depress the latch as described.

2. The combination of the end-gate A, the plate C secured thereto, a slot D through the gate and plate, the wagon-box side B, the eye E therein passing through the said slot, the latch F having one end bent substantially at right angles thereto, the lug I at its opposite end, said latch being pivoted to the plate near the end having the lug, the bent end of the latch adapted to engage the eye E while moving on its pivot, the T-arm pivoted to the plate, its top arm arranged to inclose the latch and limit the movement thereof, the free arm H′ of the T-arm being curved, and a spring surrounding the said arm H and bearing between the top bar and the lug I of the latch all substantially as and for the purposes described.

3. In a locking device for end-gates, the plate C secured to the said end-gate, the latch F pivoted thereto, the lug I on the latch, the T portion pivoted on the plate C, the spring J surrounding the arm H′ of the T portion in combination with the eye E with which said latch F engages as set forth.

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

JOSEPH E. CAMP.

Witnesses:
HARRY J. CRAMER,
A. KEITHLEY.