C. W. BLACKMAN.

LATCHES FOR CARRIAGE-DOORS.

No. 186,074. Patented Jan. 9, 1877.

Fig. 1.

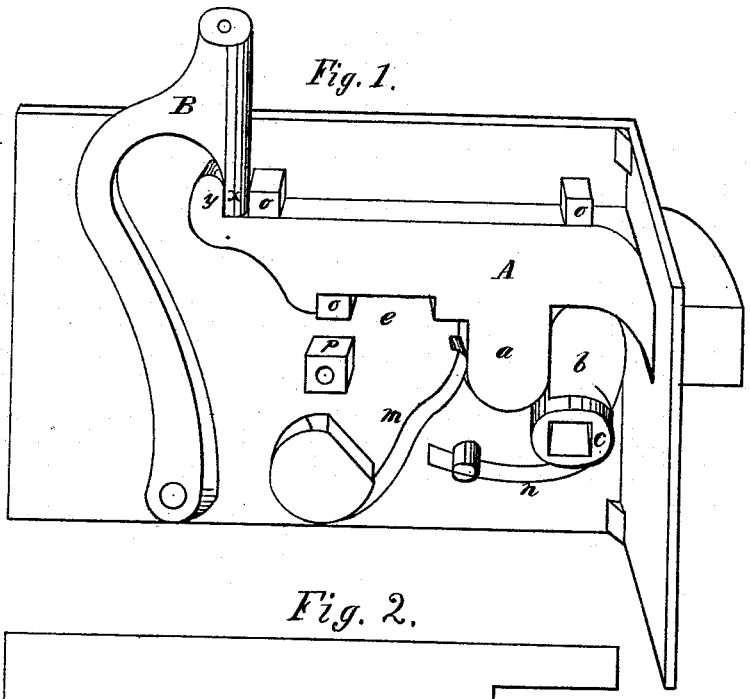
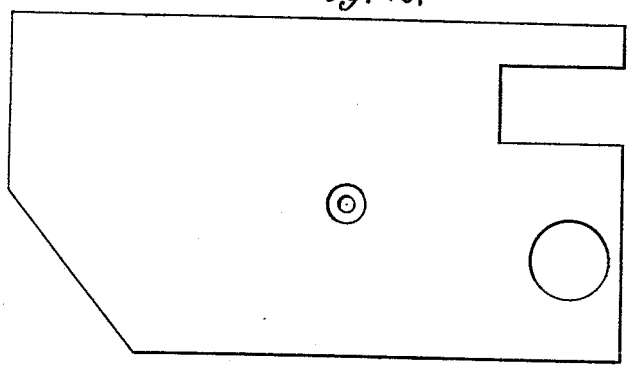


Fig. 2.



Witnesses
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UNITED STATES PATENT OFFICE.

CARLOS W. BLACKMAN, OF NEW HAVEN, CONNECTICUT, ASSIGNOR OF ONE-HALF HIS RIGHT TO WILLIAM SCHOLLHORN, OF SAME PLACE.

IMPROVEMENT IN LATCHES FOR CARRIAGE-DOORS.

Specification forming part of Letters Patent No. **186,074**, dated January 9, 1877; application filed October 18, 1876.

To all whom it may concern:

Be it known that I, CARLOS W. BLACKMAN, of the city and county of New Haven, and State of Connecticut, have invented a new and Improved Carriage-Door Latch; and I 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 it, reference being had to the accompanying drawing, which forms a part of this specification.

My invention relates to carriage-door latches; and consists in making the latch with a projection on its upper edge, and in making the lever with a projection and with a curvature around the end of the latch.

The object of my invention is to make the latch as thin as possible—a great desideratum in latches for carriage-doors.

Figure 1 is a perspective view of the latch with the back of the latch-case removed, showing the parts of the latch. Fig. 2 is a view of the back of the latch-case.

In the drawing, A, Fig. 1, is the latch, the head of which is beveled or curved in the usual way. The tail of the latch extends from the side of the head, and is formed with the projection *a* on its lower edge, against which the spring *m* bears, and also the lug *b* on the hub *c*. It is also made with the indenture *e*, for limiting its movement, and with the projection *y* on its upper edge. It is held in its place between the front and back of the latch-case by the studs, indicated by the letter *o*.

The lever B extends from the lower edge of the case, where it is pivoted to the case, across it and through the upper edge, and has a knob on its upper end, which is not shown in the drawing. It is curved around the end of the latch, and is made with the projection *x*, to engage the projection *y* on the end of the latch.

As it is curved around the end of the latch, it can be made of the same thickness as the tail of the latch, and the only space required between the front and back of the case is room for the latch-tail.

By this arrangement the latch can be made very thin, which is a very important feature in latches for carriage-doors, as there must be room for the latch and for the sash to pass it. The lever, also, engaging the latch on its upper edge, moves the latch with the least possible motion of its upper end.

The hub *c* is made substantially in the same way as the hubs in door-latches, and has the lug *b*, which moves back the latch as the hub is turned. Through the square hole in the hub an ordinary latch-spindle passes, on the outer end of which a handle is fastened, the spindle and handle not being shown in the drawing. The spring *n* is a strip of sheet-steel, one end of which is attached to the hub, and the other supported by a stud in the case. It is formed and adapted to allow the hub to turn one-fourth of a revolution, and to hold the lug *b* against the front of the case to prevent the rattling of the hub. The spring *m* is a piece of sheet-steel, one end of which comes against the projection *a* on the lower edge of the latch, forcing the latch out, and the other end is secured to a stud in the case, as shown; or it may be coiled around and secured to the stud.

The case is made of cast metal, its front end making with the front of the case an angle greater than a right angle to fit the edge of the door. The back is held to the front of the case by a screw passing through its central part into the stud *p*.

The latch being thus constructed and arranged, and being put on the door with the end of the lever above the bottom of the sash, the lever can be readily moved, and the door opened by an occupant of the carriage, the sash being lowered and opened by a person outside in the usual way.

I claim as my invention—

The curved lever B, pivoted to the case at its lower end, provided with the projection *x*, and extended through an opening in the upper edge of the case, in combination with the latch A, having the projection *y*, and the spring *m*, substantially as shown and described.

CARLOS W. BLACKMAN.

Witnesses:

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