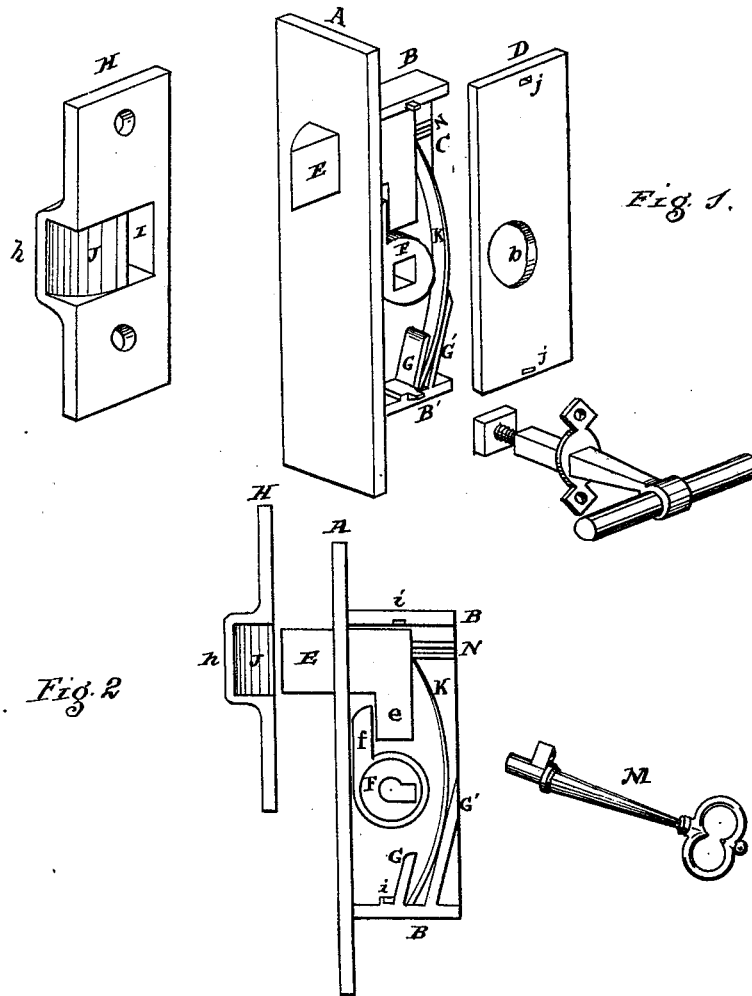


J. D. GOOD.
Carriage Door-Lock.

No. 197,215.

Patented Nov. 20, 1877.



WITNESSES:
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UNITED STATES PATENT OFFICE.

JOSIAS D. GOOD, OF MOUNT JOY, PENNSYLVANIA, ASSIGNOR OF ONE-HALF HIS RIGHT TO SAMUEL P. LYTLE, JR., OF SAME PLACE.

IMPROVEMENT IN CARRIAGE-DOOR LOCKS.

Specification forming part of Letters Patent No. **197,215**, dated November 20, 1877; application filed September 28, 1877.

To all whom it may concern:

Be it known that I, JOSIAS D. GOOD, of Mount Joy, in the county of Lancaster and State of Pennsylvania, have invented certain Improvements in Carriage-Door Locks or Latches, of which the following is a specification:

My invention relates to an improvement on a certain class of spring carriage-locks or turn-latches; and consists in so arranging the construction as to adapt it to neat and narrow door-rails of frames in light vehicles, and to relieve the hinges from the constant strain upon them, and thus to produce a better and cheaper lock, as a new article of manufacture to the trade.

The accompanying drawings, with the letters of reference marked thereon, and a brief description, will enable those skilled in the art to make and use the same.

In the drawings, Figure 1 is a perspective view of the several parts detached. Fig. 2 shows the plan of the interior and arrangement of the parts.

This lock or latch is to be set into a mortise so as to bring the selvage or edge plate A flush with the wood on the edge of the door.

The bolt and its operation are as in other locks and latches. It is operated with a turning knob or handle inserted into the tumbler F, so that its lever-arm *f*, prolonged on one side of the circular central enlargement, forms shoulders, against which the upper and lower plates C D set and confine it in its turning motion. This lever-arm *f* strikes the pendent arm *e* of the bolt E, in order to press it back against the spring K to release it from the catch-plate H, to open the door in the ordinary manner.

The novelty of my invention consists in the combined casting of the edge-plate A with the end flanges B B', pins *i*, and bottom plate C, with the guide-ledge N and raised oblique flanges G G', all of one piece, to form the body of the lock much narrower than other spring-locks in use.

The covering-plate D, with its opening *b*, serves as a bearing for the tumbler F, to correspond with that in the fixed back or bottom C for the like purpose, in which there is no special novelty.

In order to do away with a coiled spring,

so as to contract the parts, I use a simple flat or steel wire spring, K, so set down between the oblique flanges G and bent as to have its upper end directly bearing against the back part of the bolt E, which has a groove on its under side, that fits over the guide-ledge N, to hold it direct in its movement back and forth.

This is an arrangement that results in a much narrower case, so simple as to be much cheaper than, and equally as good and durable as, those now in use, while it supplies an article much wanted in panel carriage-doors having narrow frames.

The catch-plate H is also improved by being boxed out centrally at *h*, so as to form an inclined plane, J, for the beveled end of the bolt, which inclined plane is terminated by an open oblong slot, I, into which the bolt is shot by the spring *e*, and sustains the front of the door. Thus it relieves the strain on the hinges, so injurious when the ordinary inclined catch is used, without any support to the vertical action or play of the bolt.

The tumbler F may have a square opening for any kind of a handle, L, or knob, to turn the bolt in order to open the door; or it may be adapted for a key, M, if desirable.

This combination can be applied to a right or left hand door.

I am not aware that there is an article of the kind to be had that supplies the carriage-maker's wants as does this compact, narrow, and cheap combination, arranged as shown and specified.

I claim it as a new article of manufacture, resulting from the specific arrangement in the design of its parts, taken as a whole. In other words,

I claim—

The combination of the face-plate A, and back and side plates, when cast in a single piece, and furnished with guide-ledges N, oblique flanges G G', single bent spring K, working at one end against the depending portion of latch E, the whole arranged and operating substantially as and for the purpose specified.

JOSIAS D. GOOD.

Witnesses:

F. G. PENNELL,
A. B. LANDIS.