



# United States Patent Office.

SHEPHERD H. WHEELER, OF DOWAGIAC, MICHIGAN.

Letters Patent No. 113,377, dated April 4, 1871.

## IMPROVEMENT IN COMBINED LOCKS AND LATCHES.

The Schedule referred to in these Letters Patent and making part of the same.

I, SHEPHERD H. WHEELER, of Dowagiac, in the county of Cass and State of Michigan, have invented certain Improvements in Knob-Latches, of which the following is a specification.

The nature of my invention relates to that class of knob-latches known as gravitating-latches, in which the weight or gravity of some of the parts performs the office of springs to impel the latch; and consists principally in the construction of a single piece in such manner as to serve the triple purpose of a latch, lock, and bolt; the object being to produce a combined latch, lock, and bolt, that will be equally suitable for a right or left-hand door, more simple in construction and more durable in operation than has hitherto been done.

To enable others skilled in the art to which my invention relates to make and use it, I will proceed to describe its construction and operation.

The accompanying drawing making a part of this specification is a side elevation of a device embodying my invention, having the face-plate of the case and knob-stem removed in order to show more distinctly the parts to which my invention is mainly confined.

The letters of reference marked on the drawing refer to similar letters in the specification, in which—

A represents the case. This case is constructed much in the form of a common combined latch and lock, and should be made Janus-faced, or alike on both sides. This will allow it to be used either as a right or left-hand case.

B represents a U-shaped bolt. This bolt should have sufficient weight to insure prompt action. The larger arm of this bolt is pivoted to the case A near the front and upper corner, as shown at c. This ar-

rangement causes the end of the smaller arm of the bolt B to swing forward out of the case as promptly as if impelled by a spring, but is stopped from passing too far out by dropping onto the cam D. This cam is actuated by the knob-stem in the usual manner.

The bolt B has a shoulder at a which engages with one arm of the cam D.

A circular slot, F, allows the larger arm of this bolt to be raised and moved forward. This may be accomplished by means of the stem G. This stem projects through the top of the case sufficiently to be grasped by the thumb and fingers, for the purpose of bolting and unbolting the door; but when it is desirable to lock the door a key should be introduced through suitable openings in the case so as to engage with the notch d in the recess H, by means of which the bolt B may be moved and the door locked and unlocked.

A suitable catch must be provided to receive the bolt B, but this need not differ materially from those in common use, and need not be described here.

Having thus described my invention in such exact terms as I can give,

What I claim as new, and desire to secure by Letters Patent, is—

The combination of the U-shaped bolt B, having the shoulder a, slot F, stem G, recess H, and notch d, with the case A, cam D, and any suitable catch and knob, all substantially as and for the purposes hereinbefore set forth.

SHEPHERD H. WHEELER.

Witnesses:

HENRY MICHAEL,  
BYRON E. COON.