A. C. WOOLMAN.

LATCHES FOR DOORS, &c.

No. 191,216. Patented May 22, 1877.

Fig. 1.

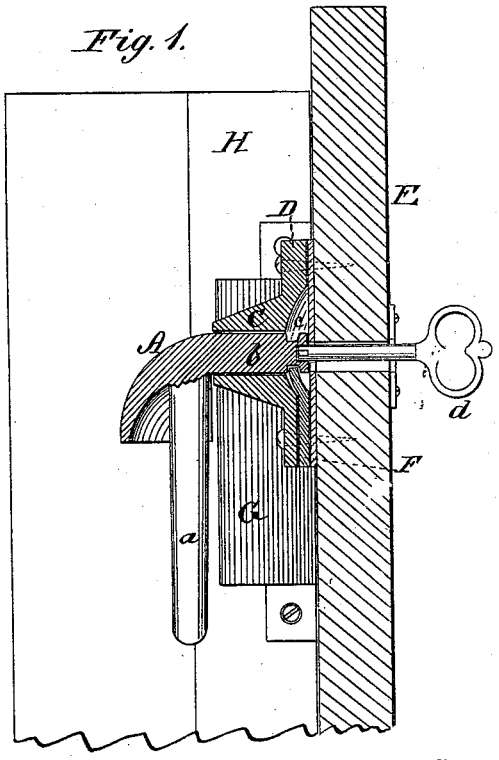
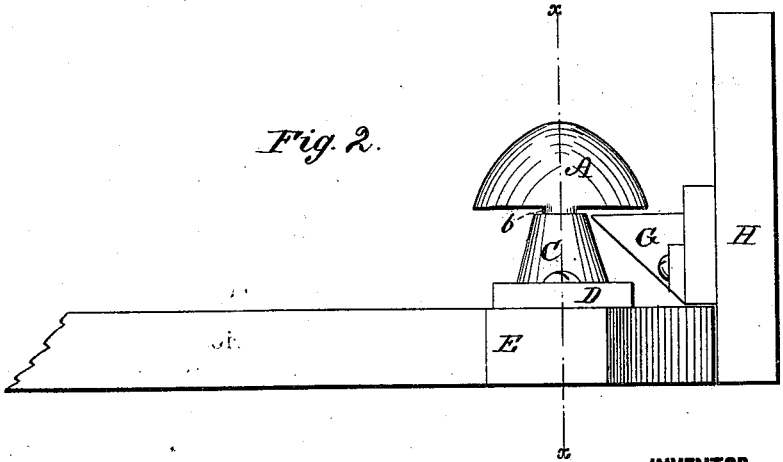


Fig. 2.



WITNESSES:

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AUGUSTUS C. WOOLMAN, OF BELLEFONTAINE, OHIO.

IMPROVEMENT IN LATCHES FOR DOORS, &c.

Specification forming part of Letters Patent No. **191,216**, dated May 22, 1877; application filed March 23, 1877.

To all whom it may concern:

Be it known that I, AUGUSTUS C. WOOLMAN, of Bellefontaine, in the county of Logan and State of Ohio, have invented a new and Improved Combined Latch and Lock; and I do hereby declare that the following is a full, clear, and exact description of the same.

My invention has for its object to provide an improved gravitating latch and lock for swinging or sliding gates and doors. To this end the construction and arrangement of parts are as hereinafter described, and as shown in accompanying drawing, forming part of this specification, in which—

Figure 1 is a vertical section of Fig. 2 on line *x x*. Fig. 2 is a top-plan view of the device, showing its application to a door or gate.

The latch or locking device proper has the form of a quarter-section of a sphere, and is provided with a handle, *a*, and journal *b*, which stand at right angles to each other. The journal projects from the middle of one side of the part A, and enters a tubular socket, C, projecting from, and formed in one piece with, the plate D, which is secured to the inner side of a gate or door, E. The inner end of journal *b* is provided with a circumferential groove, *c*, which receives the edge of a plate, F, secured beneath the plate D. The journal is thereby prevented from being withdrawn from the socket C, but may rotate freely.

The gravitating tendency of the latch A causes it to assume a horizontal position, as shown in Fig. 1; hence, when the gate or door E is closed, the round side or edge of the latch A will strike the incline or bevel of a catch, G, attached to the post or jamb H, and cause the latch to rotate part way around its pivot or journal *b*, so that it will pass the catch G, and on resuming its former position will pass behind the catch G, and thus secure the gate or door shut. The latch is, therefore, automatic in its operation.

If the gate or door E has no slot or aperture through which the hand may be thrust to release the latch, it is obvious that the latter becomes practically a lock, and that some device is required by which to operate it from the outside of the gate or door, in order to open the latter. For this purpose I may employ a key, *d*, and construct the inner end of latch-journal *b* with a suitable slot or recess, to receive the key-bit, so that, by inserting the key and turning it, the latch A will be turned also, and thus allow the gate or door to be opened.

In some cases, as when the locking device is applied to a wardrobe-door, I propose employing an ordinary knob for turning the latch.

The handle *a* is useful for operating the device A in certain cases, and also assists in imparting the required gravitating tendency to it.

What I claim is—

1. The combination, with socket C and catch G, of the latch or locking device A, having the rounded smooth exterior surface, and provided with the arm or handle *a* and journal *b*, projecting from diagonally-opposite sides thereof, as shown and described.

2. The combination of locking-plate F with the socket C, the device A, and the journal *b*, having a circumferential groove, as shown and described.

AUGUSTUS C. WOOLMAN.

Witnesses:

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