

G. FINLEY.
Key for Locks.

No. 199,969.

Patented Feb. 5, 1878.

Fig. 3.

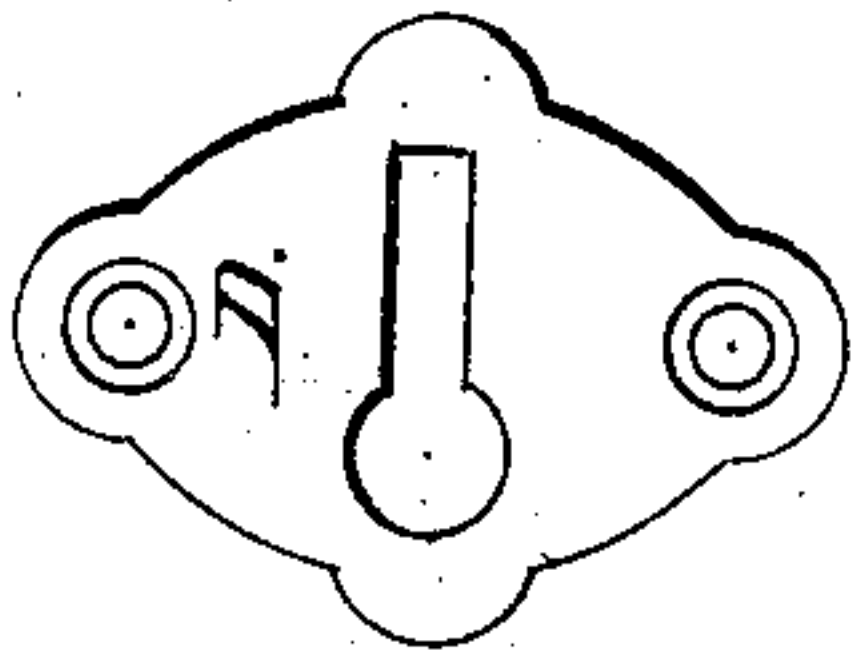


Fig. 2.

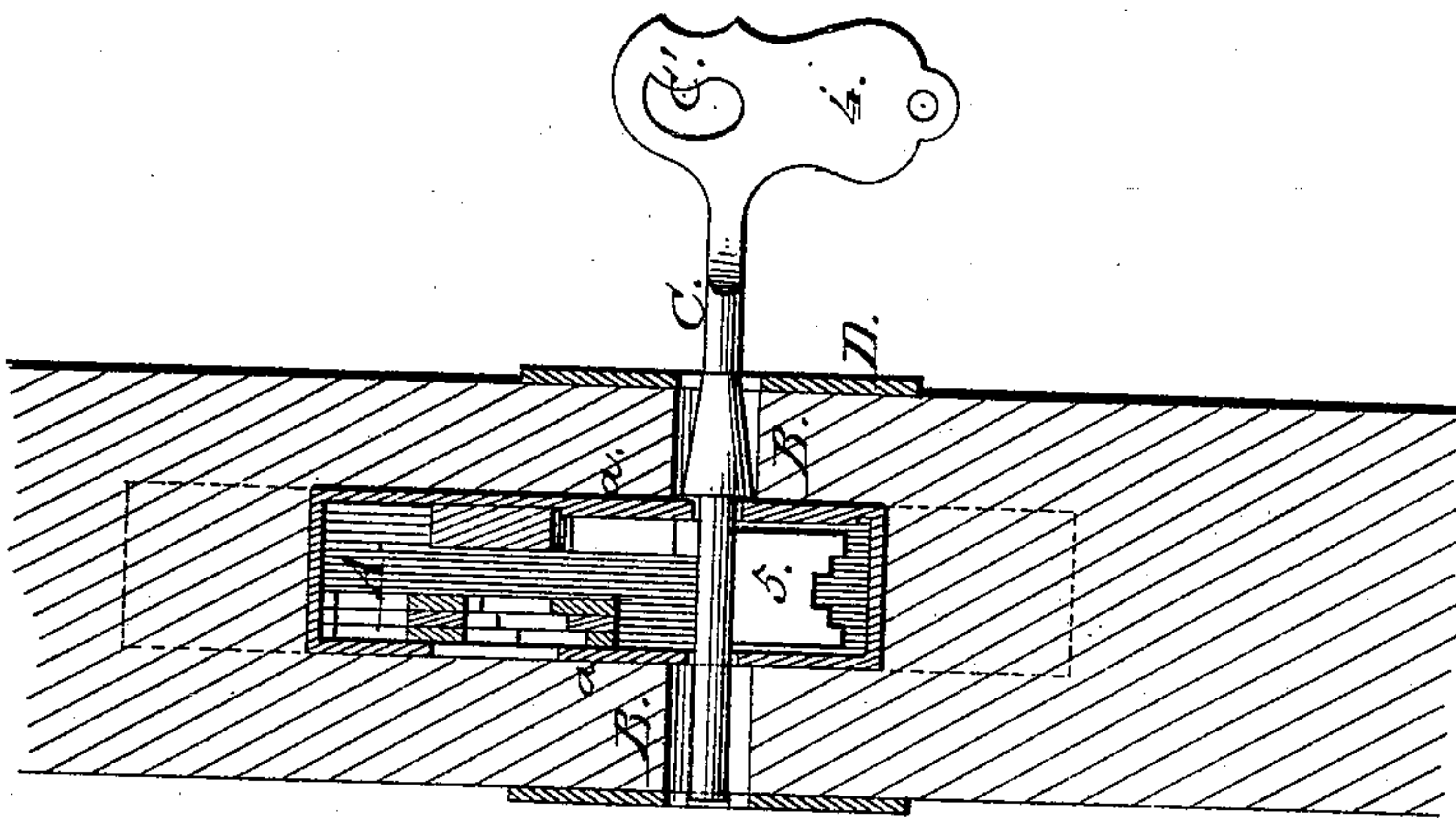
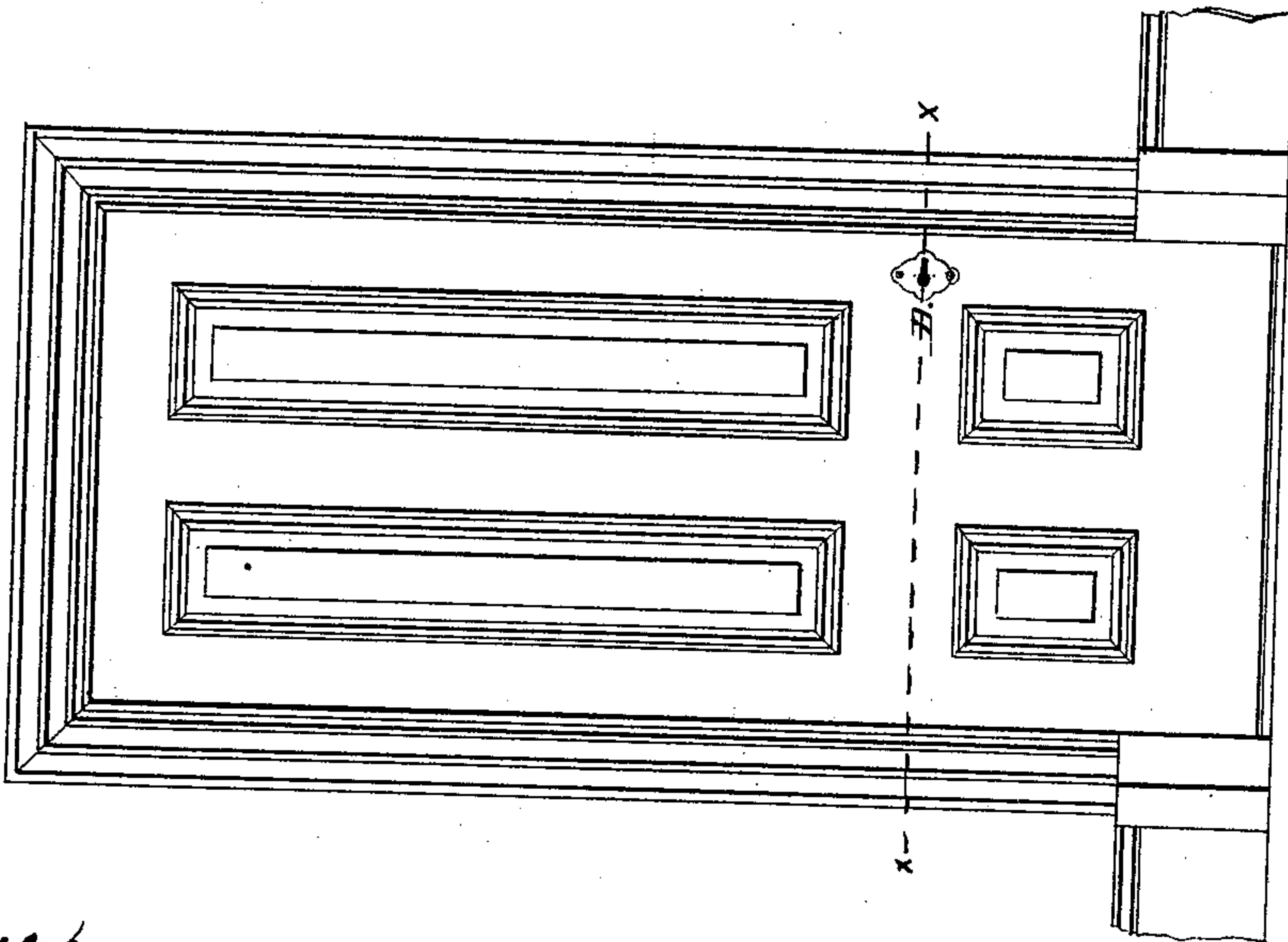


Fig. 1.



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UNITED STATES PATENT OFFICE.

GEORGE FINLEY, OF PITTSBURG, PENNSYLVANIA.

IMPROVEMENT IN KEYS FOR LOCKS.

Specification forming part of Letters Patent No. **199,969**, dated February 5, 1878; application filed September 18, 1877.

To all whom it may concern:

Be it known that I, GEORGE FINLEY, of the city of Pittsburg, in the county of Allegheny and State of Pennsylvania, have invented a new and useful Improvement in Locks, and the keys and escutcheons therefor, which improvement is fully set forth and described in the following specification and accompanying drawings.

A serious defect in the present construction of locks and keys is the liability of the key to jar or jump out of the lock from the jar to the door or drawer to which the lock may be attached when it is being closed, frequently resulting in the loss of the key.

My invention relates to, and has for its object, the securing the key in the lock so that it cannot be jarred out, no matter how often or how hard the door or till may be closed.

This I accomplish by the combination of a horizontal key-hole in place of the usual vertical key-hole, and a key having about two-thirds of its head, or ring portion, below the shaft, in the same line of projection as the wing, this portion being made solid to weight the key, so that the combined weight of the head and the wing will, by gravitation, cause the wing to gravitate or turn away from the key-hole and become securely hooked in the lock.

When a key is in the act of moving the bolt and tumblers it usually has its bearing on the lower side of the round portion of the key-hole, and if a flat key, which is the most convenient form for a key, is used, it will be forced down into the slotted portion of a vertical key-hole. This, it will be seen, cannot take place if the hole is horizontal, as it gives a solid bearing at that point.

The solid portion of the key-head is made flat, so as to form a tablet, as before mentioned, and saves the expense of a metal tag, such as is usually attached, when it is desired to number the key to the lock or room.

My invention is illustrated in detail in the accompanying drawings, in which Figure 1 is a front view of a door, a portion of it being removed, so as to expose the front plate of the lock and show the key-hole cut horizontally.

Fig. 2 is a vertical transverse section taken at the line *x x* in Fig. 1, and shows the key in the lock, the wing down by force of the gravitation of the weighted portion of the key; also shows the tablet portion of the key-head. Fig. 3 is a front view of the escutcheon, the key-hole of which is the same as and relates to that in the lock.

In the drawings, A is the lock; *a a*, the shell or walls. B is the key-hole, cut horizontal. C is the weighted, or, as I term it, "gravity" key, C' being the head, having the tablet 4, or solid portion, on the same line of projection as the wing 5. D is an escutcheon, provided with and showing the horizontal key-hole.

It will be seen that by this combination of the gravity-key and the horizontal key-hole in the lock, the wing automatically assumes a vertical position at right angles to the key-hole, and is thus secured between the walls *a a* so it cannot be lost out by accident.

I also desire to say that the first object of the invention might be accomplished by making the tablet portion much heavier than the wing, and changing its line of projection to an angle with the wing, and leaving the key-hole vertical. This I claim as an equivalent, and is open to the serious objection of useless weight, extra cost, and inconvenient shape. Also, the vertical key-hole would not give the bearing to the flat key, and on this account it would have to be furnished with the usual bulb where it bears in the key-hole, for the reasons before stated. Also, I do not wish to be understood as confining myself to a horizontal key-hole.

Having thus described my invention and its operation, what I claim, and desire Letters Patent for, is—

A key provided with a stem heavier upon one side than the other, for the purpose of keeping the key-bit at an angle with the key-hole, as and for the object described and set forth.

GEORGE FINLEY.

Witnesses:

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