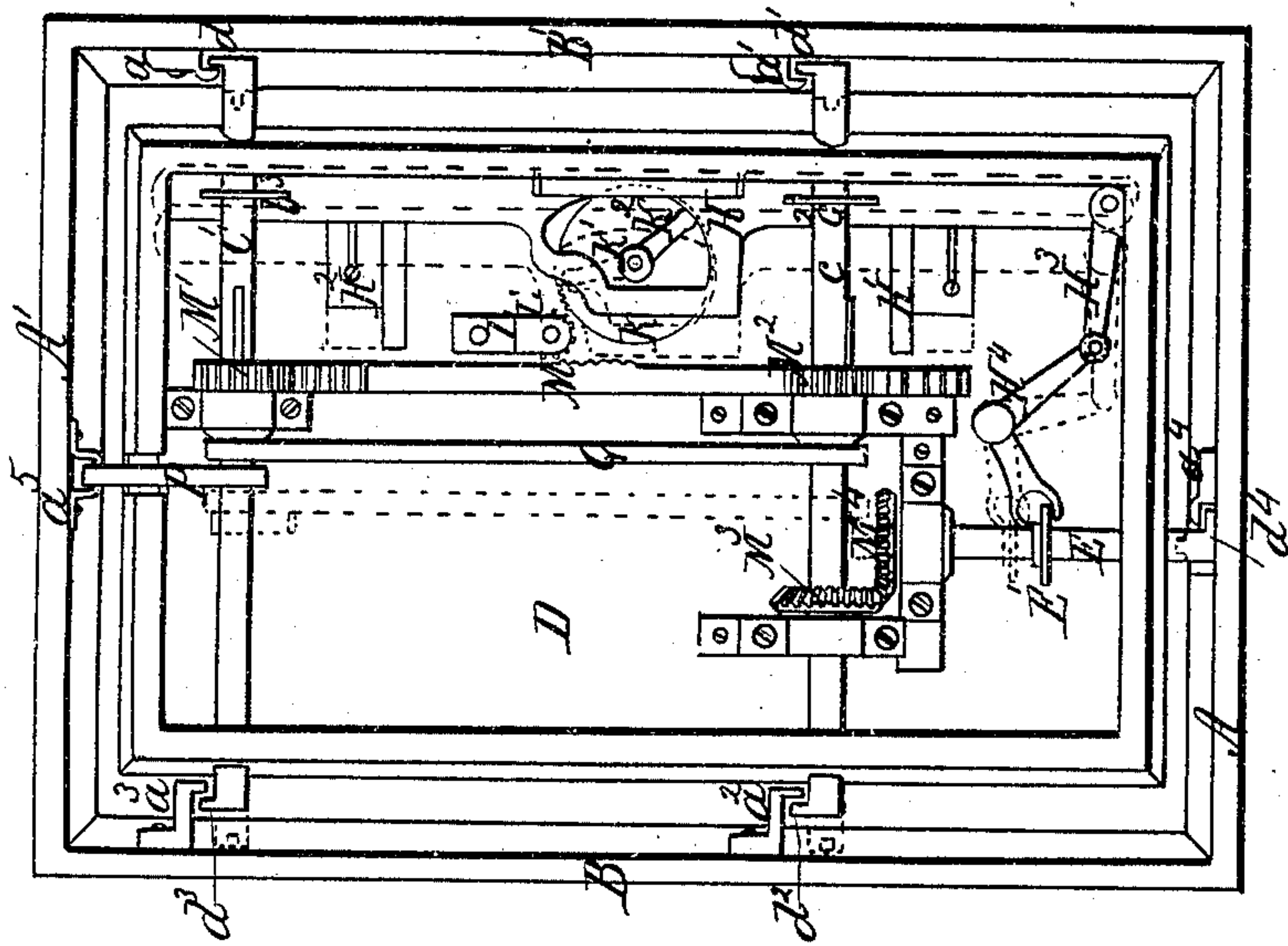


O. Gallagher
Safe Lock Bolt

N^o 94,735.

Patented Sept. 14, 1869.



Witnesses;
Frank L. Parker
William Edson

Inventor;
Oren Gallagher

United States Patent Office.

OWEN GALLAGHER, OF BOSTON, MASSACHUSETTS, ASSIGNOR TO
HIMSELF AND ANDREW BELL, OF SAME PLACE.

Letters Patent No. 94,735, dated September 14, 1869.

IMPROVEMENT IN DOOR-BOLTS FOR SAFES, &c.

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

To all whom it may concern:

Be it known that I, OWEN GALLAGHER, of Boston, in the county of Suffolk, and State of Massachusetts, have invented certain new and useful Improvements in Safe-Lock Bolts; and I do hereby declare that the following is a full and exact description thereof, reference being had to the accompanying drawings, and to the letters of reference marked thereon.

The nature of my invention consists in combining, with the bolts of a safe-lock, hooks, so arranged, in combination with sockets, formed in connection with the inner walls of the safe, that when the bolts are properly adjusted, they serve the ordinary purpose of lock-bolts, and also as stay-bolts, to hold the walls of the safe, and thus prevent them from being pried away from the door.

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

The drawing is an interior elevation, showing the walls A B of the safe, and the door D, to which my improvements are attached.

Construction.

A A' are the lower and upper walls of the safe.

B and B' are the sides of the walls of the same.

To these walls the sockets or brackets a a^1 a^2 , &c., are attached.

The principal bolts C C' are provided with projections d d^1 d^2 , &c., which, when the bolts are turned in one direction, catch into the sockets a a^1 a^2 , thus serving as stay-bolts for the sides of the safe.

The base-bolt E is provided with a similar projection, d^4 , which catches into a^4 , as shown.

P is a hook, attached to the bolt C', and catches into the socket a^5 , at the top of the safe.

The bolts C' and E are arranged so that they may slide back and forth, and also revolve on their axes.

The operation of my lock may be described as follows:

K¹ represents the spindle of the knob, to which is attached the segment spur-gear K and the arm K².

H represents a plate, provided with slides H¹ H², so

that when the arm K² is turned, it may move back and forth, as indicated by the dotted lines.

C² C³ are washers, attached to the bolts C and C', and play in corresponding slots made in the plate H, so that if the plate is moved back and forth, the bolts C and C' move with it.

M¹ M² are gear-wheels, attached to the bolts C C' by splines, so that the bolts may slip freely through, and yet be revolved by them.

M is a ratchet-bar, which serves to operate the gears M¹ M².

The bar M is operated by the spur-gear on the wheel K, acting through the small wheel L'.

The teeth on the wheel K are so located, in relation to the arm K², that they do their work, that is, they slide the bar M, thus revolving the bolts, so as to throw the projections d d^1 d^2 , &c., out of the sockets a a^1 a^2 , &c., before the arm K begins to act upon the slide H, so that when it does begin to act, the bolts are free to be pushed back in the operation of unlocking the safe.

To lock the safe, the reverse of this action takes place, that is, the bolts are first slid into place by the arm K², and afterward revolved to act as stay-bolts.

The bolt E is revolved by the bevel-gears M³ M⁴, and is made to slide back and forth by means of the arm H³, attached to the plate H, acting through the bent lever H⁴.

L is a stay-bar, serving to connect the bolts C and C', thus giving additional strength.

What I claim as my invention, and desire to secure by Letters Patent of the United States, is—

1. The combination of the arm K², slide H, flanges or washers C² C³, with the bolts C C', and bar M, substantially as herein shown and described.

2. The combination of the segment spur-wheel K with the spur-gear L', bar M, wheels M¹ M², and bolts C C', substantially as described and for the purpose set forth.

OWEN GALLAGHER.

Witnesses:

WILLIAM EDSON,

FRANK G. PARKER.