C. H. STEWART.

KEYS FOR LOCKS.

No. 188,827. Patented March 27, 1877.

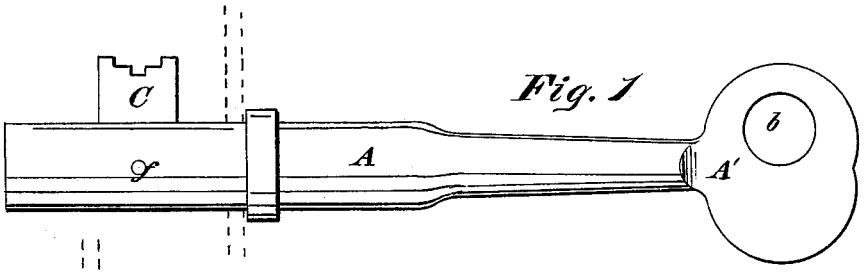

Fig. 1

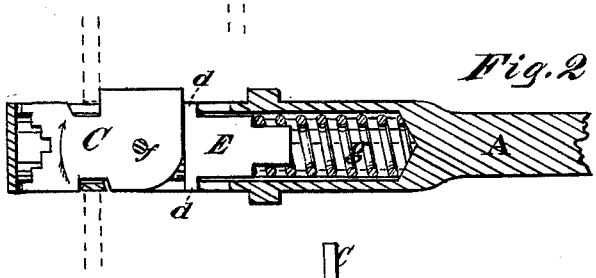

Fig. 2

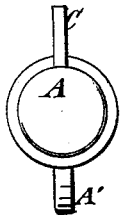

Fig. 3

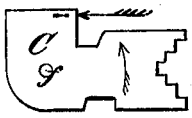

Fig. 4

Witnesses:

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Lev Griswold

Inventor,

Charles H. Stewart,

By J. W. Satcher

Atty.

UNITED STATES PATENT OFFICE.

CHARLES H. STEWART, OF JOHNSTOWN, NEW YORK, ASSIGNOR TO DAVID HAYS, OF SAME PLACE.

IMPROVEMENT IN KEYS FOR LOCKS.

Specification forming part of Letters Patent No. **188,827**, dated March 27, 1877; application filed April 7, 1876.

To all whom it may concern:

Be it known that I, CHARLES H. STEWART, of Johnstown, in the county of Fulton and State of New York, have invented a Key for Locks, of which the following is a specification:

My invention relates to that class of keys whose bits are pivoted to the key shaft or barrel, the object being to open and close the bit of the key by having it come in contact with the lock-case as the key is inserted into the lock; and it consists in providing the bit with a lateral projection, which engages with the lock-case as the key enters the lock, which gives the bit a quarter-turn on its pivot, and at the same time a plunger, operated by a spring, holds the bit perpendicular to the axis of the key, the key-bit having two of its edges at right angles to each other, each of which alternately abuts against the forward end of the spring-plunger in the two positions it occupies—viz., open or closed. When the key is withdrawn from the lock, the bit comes in contact with the inuer side of the lock-case, and is closed into the key-shaft.

Figure 1 exhibits a longitudinal side elevation, showing the bit open. Fig. 2 is a longitudinal central sectional view of my invention. Fig. 3 is a front-end view of the open bit and a slight portion of the bow, and Fig. 4 is a plan view of the bit.

Similar letters of reference indicate corresponding parts in the various figures.

To enable others skilled in the art to fully understand and construct my invention, I will give the following description:

A represents the shaft or barrel to which my invention is applied. Said barrel is also formed differently from others in general use. The bow A' has an opening, *b*, on one side, while on the opposite side is left a blank space of solid metal, as shown in the drawing, Fig. 1. This I do in order to determine the true position of the bit C, so that the key may be entered into the lock in the proper way, as will be readily inferred.

The cylindrical portion of the key may be cast solid and then bored out, as will be seen by reference to Fig. 2. Slots or openings should be made through the shell thus formed, for the free movement of the pivoted bit C, and lateral or guide projections *d d* on the plunger E.

The bit C is pivoted at the point *f*, and opens in the direction of the arrow through the bit coming in contact with the lock-case. (Represented by dotted lines, Fig. 2.)

The plunger E is forced against the bit C by the spiral spring *g*, as shown in Fig. 2. The projections *d d* on the plunger E slide in slots in the barrel A, as before described, in order that the forward end of the plunger may have a broad bearing-surface for the rectangular sides of the bit C, so as to hold the same open or closed, as shown in Figs. 1 and 2.

It will be fully understood by Fig. 1 that, on the withdrawal of the key from the lock, the bit C will be closed by the same coming in contact with the inner face of the lock-case, which is shown by dotted lines.

Having thus described my invention, what I claim as new, and desire to secure by Letters Patent, is—

The combination, in a key provided with a pivoted bit, of the plunger E. spring *g*, and stem A, operating substantially in the manner and for the purpose set forth.

C. H. STEWART.

Witnesses:

J. W. LATCHER,

D. MCMARTIN.