(No Model.)

H. E. RUSSELL, Jr.

KEY.

No. 450,340. Patented Apr. 14, 1891.

Fig. 1.

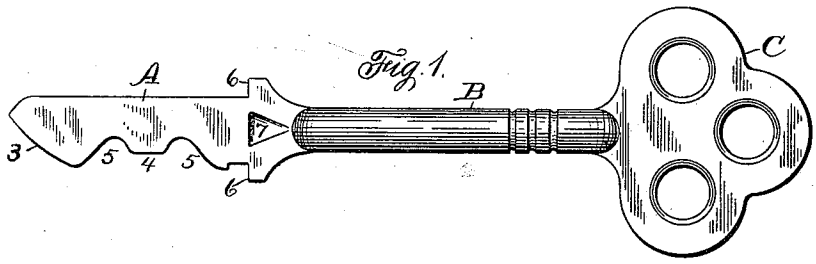


Fig. 2.



Witnesses.
John Edwards Jr.
E. V. Tracy.

Inventor.
Henry E. Russell Jr.
By James Shepard
Atty.

THE NORRIS PETERS CO., PHOTO-LITHO., WASHINGTON, D. C.

UNITED STATES PATENT OFFICE.

HENRY E. RUSSELL, JR., OF NEW BRITAIN, CONNECTICUT.

KEY.

SPECIFICATION forming part of Letters Patent No. 450,340, dated April 14, 1891.

Application filed November 11, 1890. Serial No. 371,043. (No model.)

To all whom it may concern:

Be it known that I, HENRY E. RUSSELL, Jr., a citizen of the United States, residing at New Britain, in the county of Hartford and State of Connecticut, have invented certain new and useful Improvements in Keys, of which the following is a specification.

My invention relates to improvements in keys of the class which set tumblers in a rotary cylinder or hub by the insertion of the key; and the main objects of my improvements are to bit the flat plate or blade portion for operating the tumblers from either side of the lock and to give to the key a general form to specially adapt it for a mortise-lock of this class.

In the accompanying drawings, Figure 1 is a side elevation of my key, and Fig. 2 is an edge view.

The lock for which my key is specially adapted is made the subject-matter of another application of even date herewith.

A designates the flat blade or plate portion of my key, B its round shank, and C the handle. The flat plate or blade portion is provided with the tumbler-lifting cam at its forward end 3 for moving the tumblers endwise against their springs upon inserting the key, while its edge is provided with a central bit 4 and upon both sides thereof the bits 5, which are like each other and unlike the central bit. There may be any number of bits on each side of the central one, provided the same rule is followed of making the bits on one side of the central one like the set on the other side. I also provide said key with stop-shoulders 6 at the edge of the blade and a side stop 7, which may be changed for any ordinary form of stop, or part of them omitted entirely, if desired. I have represented the sides of the flat plate or blade portion as plain; but it may be ribbed or grooved in any desired manner. By making a central bit with bits on each side which are different therefrom but like each other the bits may be made to set the tumblers when the key is inserted from either side of the lock. By means of the round shank the key is specially adapted for passing through a thick door to reach a mortise-lock and to permit of the rotation of the key without liability of contact with the sides of the key-hole through the door, as would be the case if the key had a broad flat shank. The ordinary handle C at the outer end of the shank is substantially the same as the handles of the keys in general and serves the same purpose.

I claim as my invention—

A key of the class adapted to set lock-tumblers by its insertion, having the long round shank B and a flat plate or blade portion with stops, the tumbler-lifting cam 3 at its forward end, a central bit 4, and bits on each side thereof which are like each other, but different from said central bit, whereby said key is adapted to operate the lock when inserted sometimes from one side and sometimes from the opposite side, substantially as described, and for the purpose specified.

HENRY E. RUSSELL, JR.

Witnesses:
JAMES SHEPARD,
JOHN EDWARDS, Jr.