

G. M. Zahm,

Lock and Key.

N^o 2,638.

Patented May 26, 1842.

Fig: 2.

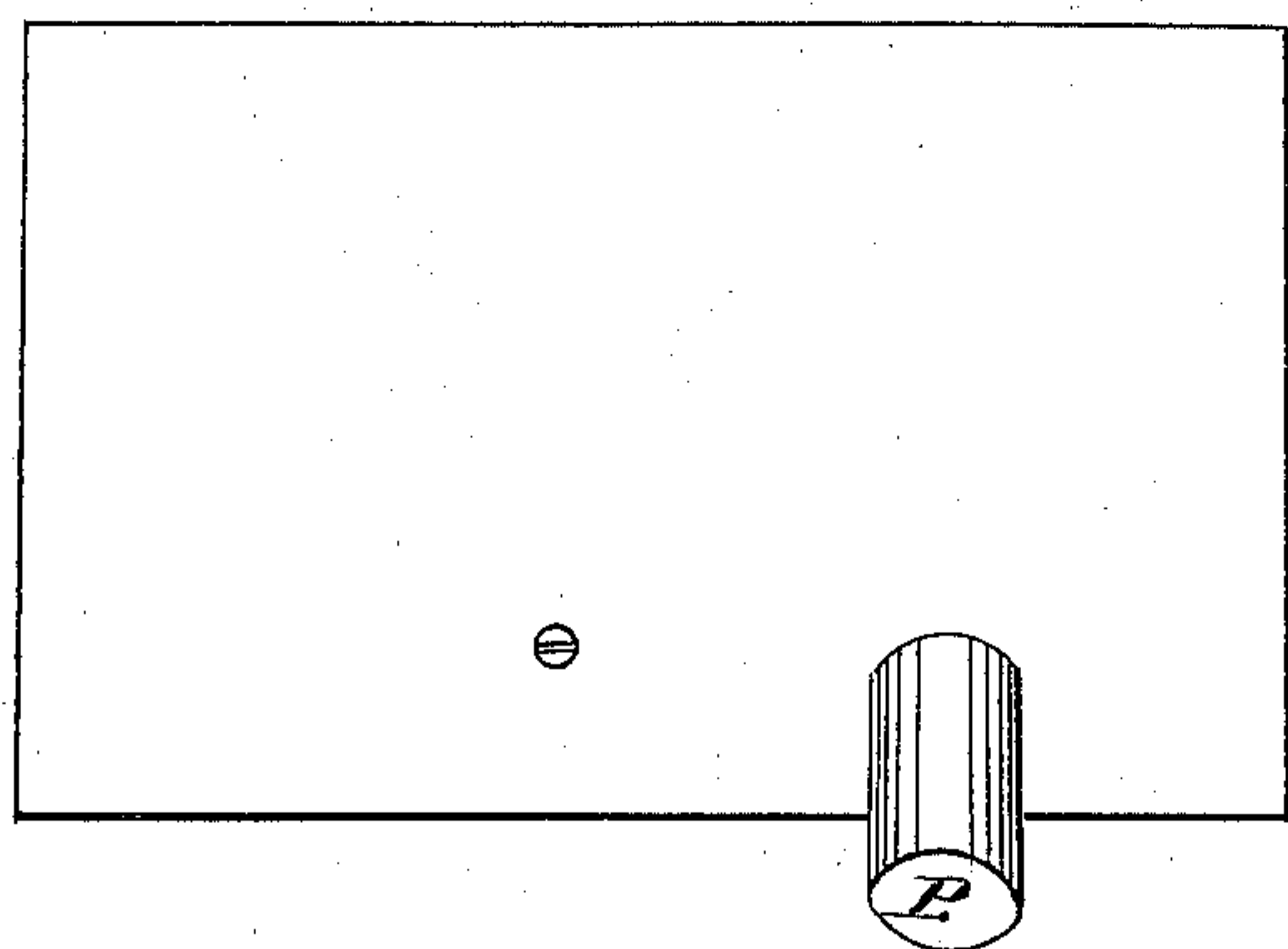


Fig: 1.

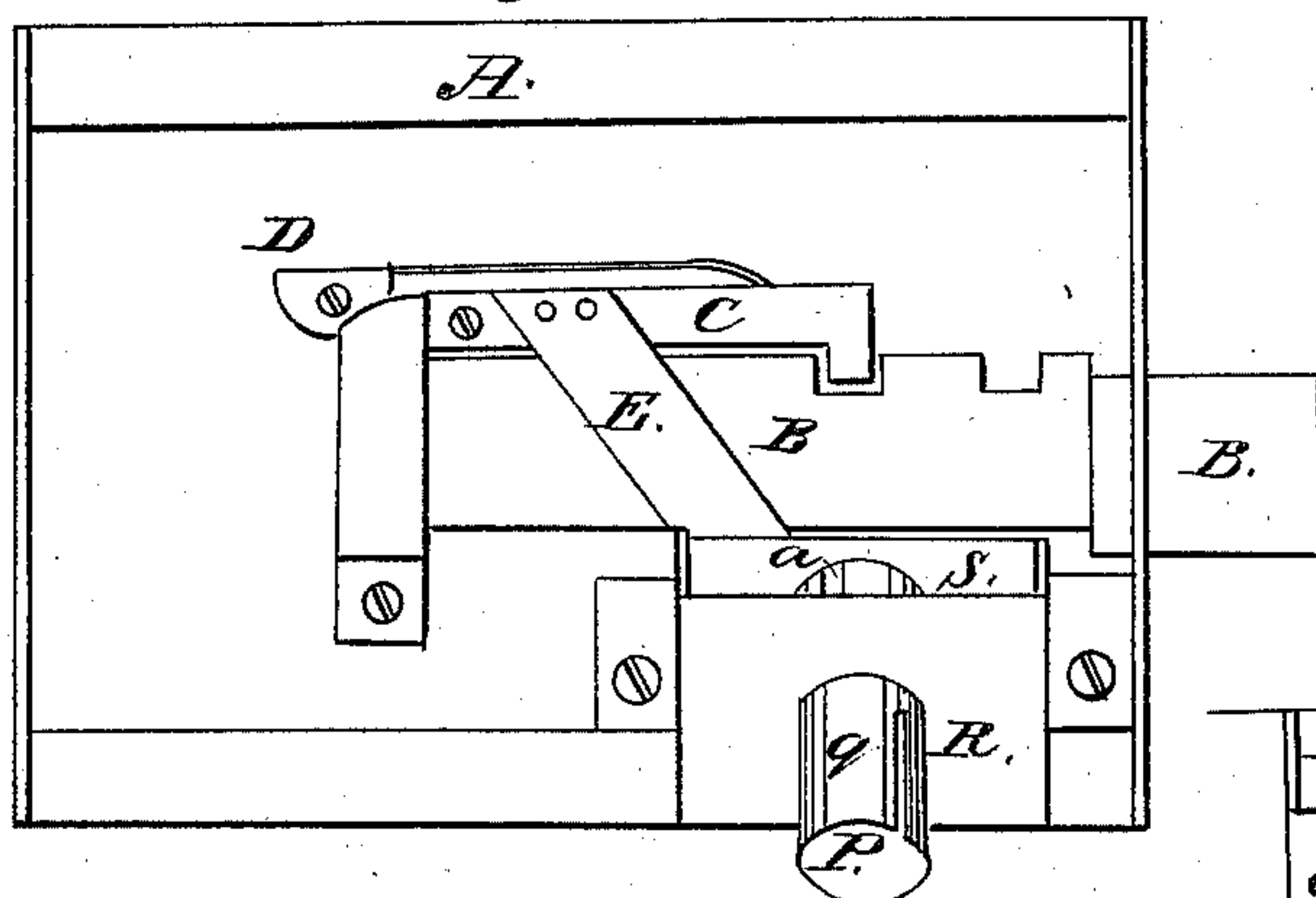


Fig: 5.

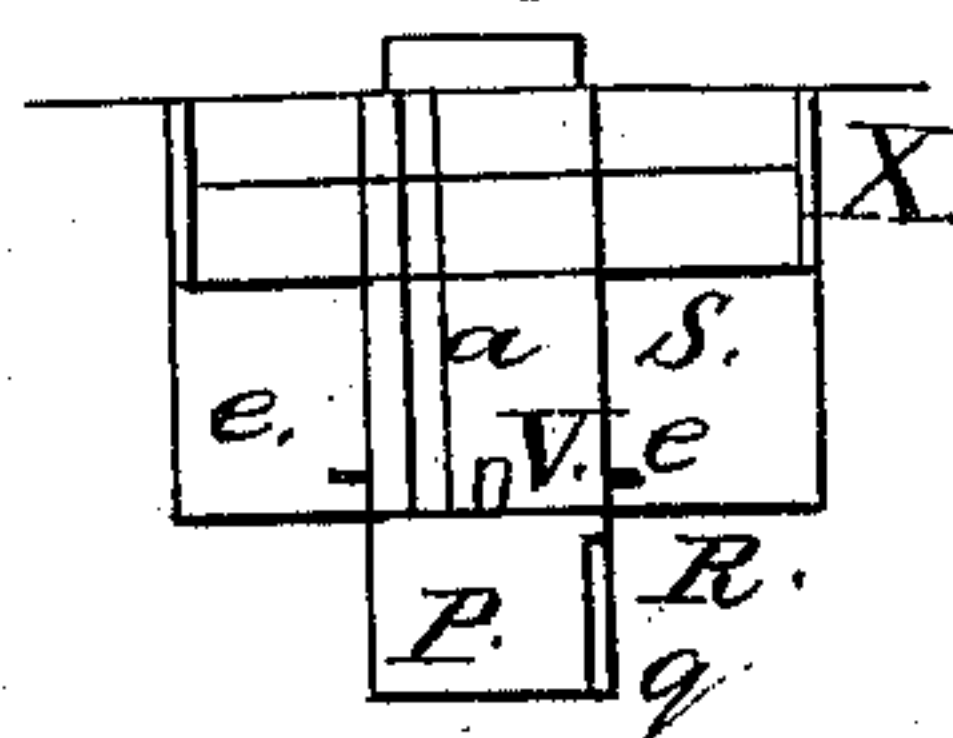


Fig: 3.

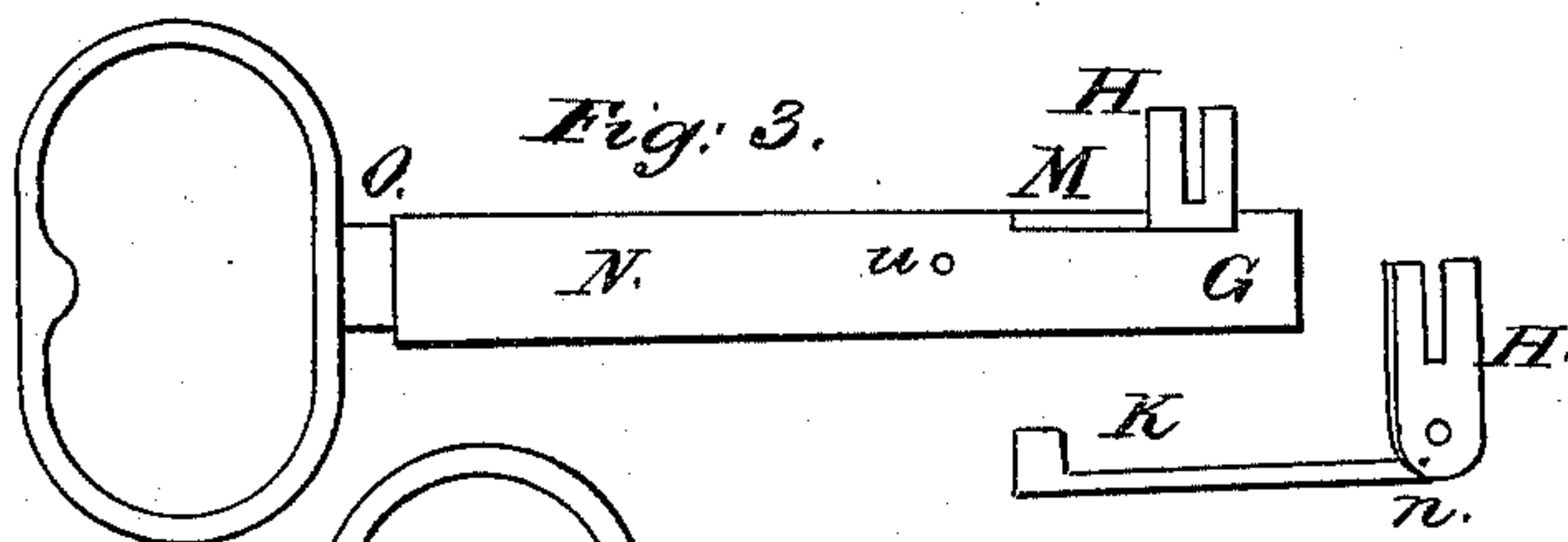
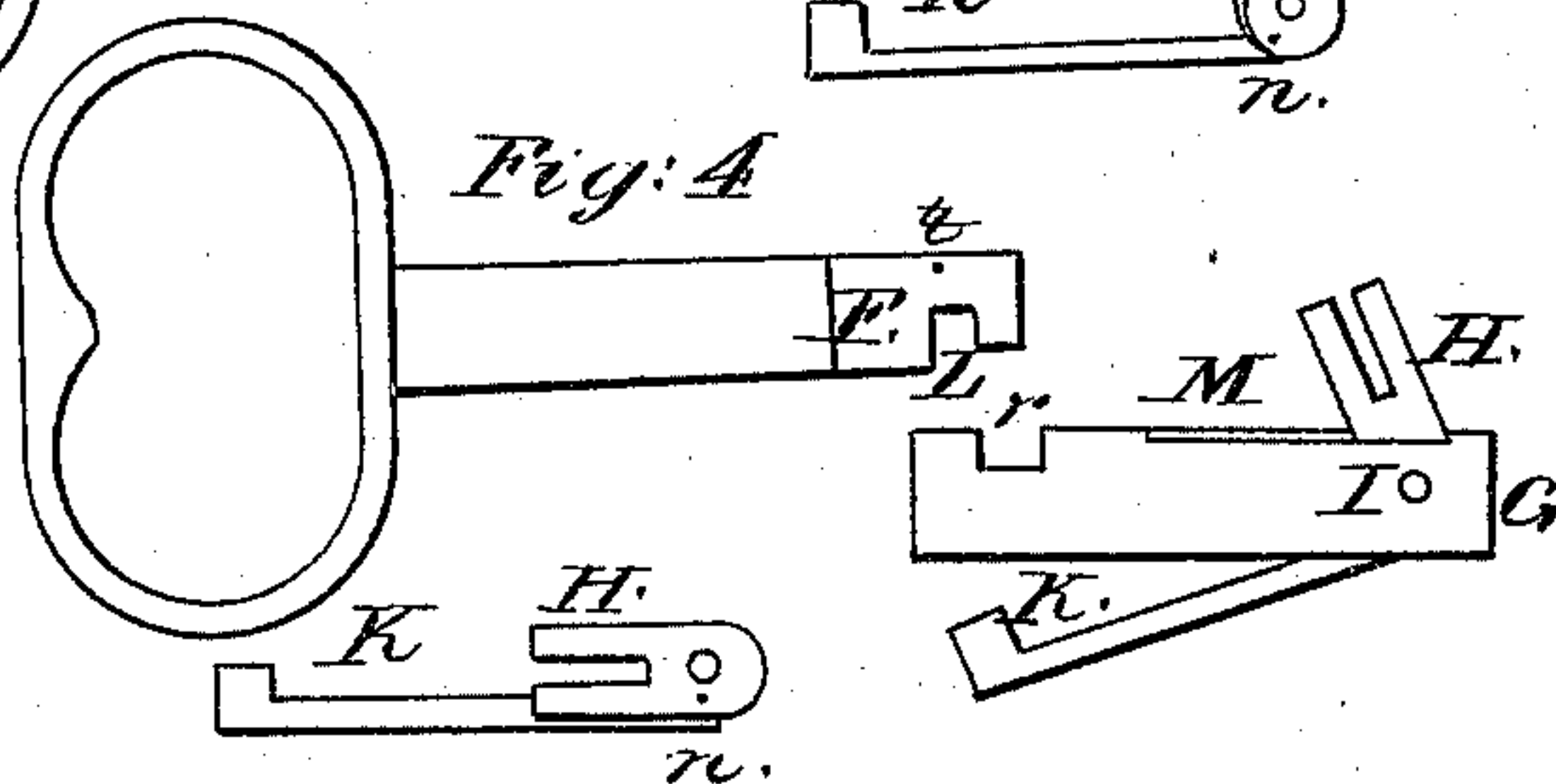


Fig: 4.



UNITED STATES PATENT OFFICE.

GODFRIED M. ZAHM, OF LANCASTER, PENNSYLVANIA.

DOOR LOCK AND KEY.

Specification of Letters Patent No. 2,638, dated May 26, 1842.

To all whom it may concern:

Be it known that I, GODFRIED M. ZAHM, of the city of Lancaster, in the county of Lancaster and State of Pennsylvania, have
5 invented a new and useful Improvement on the Door-Lock, Called Zahm's Improved Door-Lock; and I do hereby declare that the following is a full and exact description, to wit.

10 A box A, is made of brass or sheet iron, in the common form of making door locks, and of the size necessary for the purpose wanted; the bolt B, shoots out above the
15 middle of the end leaving room for a latch above, and for the key, and its fixtures below; on the upper side a dog c, is fixed, which falls into two small square notches on the side of the bolt, the one to hold it when
20 locked, and the other when unlocked; this dog is pressed down by a spring D, on the upper side, and has a projection E, from the dog down to the key for the purpose of removing the dog in the act of locking, or un-
25 locking. The key is made, the stem of which is cut crosswise, in about two equal parts; the end of the piece with the bow, is spliced into the other part as at F. The end G,
30 which enters the lock, is split so as to admit a loose bit H, to be put in. A small bolt I, is put through the key and through this bit permitting it to turn easy on that bolt. At the back end, and side next the bow of this
35 bit a small link, or rod of metal K, is let into the bit, which also works on a bolt n, and extends up a groove in the back part of the key, the end of it fitting into a notch L,
40 in the lower end of the first described part of the key, so that when you stretch the key by the joint between the two parts, the bit is thrown out at right angles from the stem of the key, and when you push the two parts
45 together again, the bit is thrown lengthwise up into the stem of the key, in the groove M, on the front of the key. A small pin is put through the spliced part of the bow section of the key, as at t, projecting a little out on both sides, which slides up and down in the notch r, in the other section of the key, and serves as a stop in drawing apart or pushing
50 together the two sections of the key. A tube N, is made to fit over this key, and is fastened by a screw nail u, to the section containing the bit. When the key is put into

the lock, by drawing this tube from the bow of the key about one fourth of an inch as at 55 o, the bit is thrown out of the groove or split at the lower end, and by turning the key you lock, or unlock. The key hole is a perfect cylinder p, with a small cut or notch q, in one side to admit the passage of the head 60 of the screw nail u; the head of this screw, serves for a guide to the key when entering the lock; this entrance for the key, or cylinder has another cut or opening x, near the lower end, out through which the key bit 65 passes. The key can at no time be turned more than half way around in the operation of locking or unlocking so that the bit is thrown out, or drawn up, on opposite sides. The key is prevented from turning more 70 than half way around by a small stop V, fastened in the under part of the bridge R, which supports the cylinder, and by two pins e, e, fastened nearly opposite each other on the cylinder, immediately under the 75 bridge R, which strike against the stop fastened in the bridge, in the act of locking or unlocking. Under the aforementioned bridge, and fastened to it is a small bridge S, under which the bit of the key enters; the 80 space under this bridge is divided into two parts by plate X, by means of a split down its center; one half of the bit works on one side of this plate, and the other half on the other. The one moves the dog, and the 85 other the bolt.

No. 1, is the lock; No. 2, plate covering the lock; No. 3, the key; No. 4, four sections of the key; No. 5, side sections of the 90 bridges, cylinder, &c.

What I claim as my invention and desire to secure by Letters Patent is—

1. The combination of the jointed key bit with the piece of metal or link K, and the divided stem of the key as described, and 95 these, thus combined.

2. I claim also in combination with the tube N, inclosing them, for the purpose and in the manner described.

3. I also claim the key constructed as 100 herein described with the key hole cylinder as described.

G. M. ZAHM.

Witnesses:

SAML. DALE,
LEAH L. DALE.