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A.D. 1798 . . . . . N° 2277.

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Locks.

TURNER'S SPECIFICATION.

TO ALL TO WHOM THESE PRESENTS SHALL COME, I, THOMAS TURNER, of Grevill Street, in the Parish of Saint Andrew, Holborn, in the County of Middlesex, Ironmonger, send greeting.

WHEREAS His most Excellent Majesty King George the Third, by His  
5 Letters Patent under the Great Seal of Great Britain, bearing date at Westminster, the Eighth day of December, in the thirty-ninth year of His reign, did, for Himself, His heirs and successors, give and grant unto me, the said Thomas Turner, His special licence, that I, the said Thomas Turner, my executors, administrators, and assigns, or such others as I, the said Thomas  
10 Turner, my executors, administrators, or assigns, should at any time agree with, and no others, from time to time and at all times during the term of years therein expressed, should and lawfully might make, use, exercise, and vend, within England, Wales, and the Town of Berwick-upon-Tweed, my Invention of "**CERTAIN NEW IMPROVEMENTS IN THE CONSTRUCTION OR MAKING**  
15 **OF LOCKS;**" in which said Letters Patent there is contained a proviso obliging me, the said Thomas Turner, by an instrument in writing under my hand and seal, particularly to describe and ascertain the nature of my said Invention, and in what manner the same is to be performed, and to cause the same to be enrolled in His said Majesty's High Court of Chancery within one calendar

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month next and immediately after the date of the said recited Letters Patent, as in and by the same, reference being thereto had, will more fully and at large appear.

**NOW KNOW YE**, that in compliance with the said proviso, I, the said Thomas Turner, do hereby declare that the nature of my said Invention, and 5 the manner in which the same is to be performed, are described and ascertained in the Drawing of the different parts of the lock in the margin of these Presents, and the following explanation thereof:—

First, the key, described in No. 1 of the Drawing, the hole of which, called the drill'd hole, is of three different sizes or diameters to correspond with the 10 drill'd pin, and round the shank over the two innermost sizes or diameters are two grooves sunk, the bottoms of which are in circumference smaller than the largest size or diameter of the drill'd hole; and to such grooves one or two slits or passages are made from the end of the shank or drill'd hole to enable the key to pass the extremities of the bridges or bridge wards. The key-bit con- 15 sists of 4, 5, 6, 7, 8, or more, different lengths and breadths, and from the nose end of the key-bit there are two slits or passages to the grooves for the bridges or bridge wards to pass through.

Secondly, the drill'd pin, described in No. 2 of the Drawing, is of three sizes, corresponding with the drill'd hole of the key. 20

Thirdly, the bolt, described in No. 3 of the Drawing, the heads of which are let into the selvage of the plate, and in the tail part of the bolt there is an opening or passage in the form described in the Drawing for the drill pin to pass through and assist in working the bolt. There are also two notches or passages on the outside of the bolt, and two stumps on the plate to guide it; 25 and there is a round pin or stump fixed to the tail end of the bolt, which projects about the eighth part of an inch, and goes into a slide hole in the moving cup or rimmed wheel.

Fourthly, the moving peg, described in No. 4 of the Drawing, which is let into the selvage of the plate like a bolt, and performs by means of a pin 30 going through the bolt, and also through the foot of the peg, which is shorter than the space in which it is set, and which pin is fast in the bolt, but loose in the foot of the peg, to admit the bolt, after raising the peg perpendicular, to leave it so, and the bolt to move cross ways.

Fifthly, the moving cup or rimmed wheel, described in No. 5 of the Drawing, 35 has a round hole in the center of the bottom for the drilled pin to pass through and as a guide for it to turn; there is also a slide hole at the bottom to admit the peg upon the bolt, and a groove sunk round the bottom of the inside to receive the rim; and there is a slit or passage through each side

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of the moving cup or rimmed wheel to admit the heads and tails of the tumblers or spring bolts to pass, and a peg or stump in the bottom of the moving cup or rimmed wheel for the key-bit to bear against.

Sixthly, the fixed rim, described in No. 6 of the Drawing, is fitted into the moving cup or rimmed wheel, and should be of a thickness equal to the purchase of the tumblers or spring bolts. The inner part of the rim is grooved to admit and keep the springs of the tumblers separate; also there is a slit or passage through each side of the rim almost to the bottom to admit and conduct the heads and tails of the tumblers or spring bolts to the slits or passages in the moving cup or rimmed wheel.

Seventhly, the tumblers or spring bolts, only two of which (the others being on the same plan) are described in No. 7 of the Drawing, and of which there may be four or more. These tumblers or spring bolts consist of a head, a body, and a tail each. The heads and tails are of different lengths, to admit the different purchases from the key-bit, and through the bottom of the head next the body there is a hole to admit a round wire or steel spring, as in the Drawing. The body is less in circumference than the inside of the fixed rim, and has an opening for the key-bit to work in. These tumblers or spring bolts are placed in the fixed rim, with the heads and tails through the slits or passages therein, and the springs are put into the grooves wherein they act.

Eighthly, the bridges or bridge wards, described in No. 8 of the Drawing, are fixed in the rim between the tumblers or spring bolts, to correspond with the slits or passages in the key-bit, through which they pass.

The manner of setting the lock or putting the parts together.—First, the drill pin is fixed in the plate (which is like other lock plates) in the common way; secondly, the bolt is set as usual into the selvage of the plate, with the drill pin through the tail; thirdly, the moving peg is let into the selvage like the bolt; fourthly, the moving cup or rimmed wheel goes upon the drill pin and upon the stump in the bolt; fifthly, the fixed rim is fitted into the moving cup or rimmed wheel; sixthly, the tumblers or spring bolts are placed and the bridge or bridge wards fixed in the rim; seventhly, the cap or covering goes over the moving cup or rimmed wheel, and there are two screws through the cap into the rim to make it fast to the cap; there are also two screws through the cap into the plate to make the cap fast to the plate, and through the cap or covering is a passage to admit the key into the lock, and the plate is as in other locks.

The manner in which the lock performs.—The key is put into the lock and turned upon the bridge wards three quarters round, then the various

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lengths of the key-bit bear against the tumblers or spring bolts, and draw the heads of the tumblers out of the moving cup or rimmed wheel within the circumference of the rim, which sets the moving cup or rimmed wheel at liberty, and the key-bit, bearing against the stump in the moving cup or rimmed wheel, turns the same, and the sides of the slide hole in the moving cup or rimmed wheel bearing against the stump in the bolt, the bolt is moved crossways and brought down with the moving peg flush with the selvage; by turning the key the contrary way, the bolt and peg are put in a locket position. Both the lock and key may be made of any kind of metal, such as brass, iron, &c., either cast or wrought. 10

In witness whereof, I, the said Thomas Turner, have hereunto set my hand and seal, the Fifth day of January, in the year of our Lord One thousand seven hundred and ninety-nine.

THO<sup>S</sup> TURNER. (L.S.)

AND BE IT REMEMBERED, that on the same Fifth day of January, in the year above mentioned, the aforesaid Thomas Turner came before our Lord the King in His Chancery, and acknowledged the Specification aforesaid, and all and every thing therein contained, in form above written. And also the Specification aforesaid was stamped according to the tenor of the Statute in that case made and provided. 20

Inrolled the same Fifth day of January, in the year above written.

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