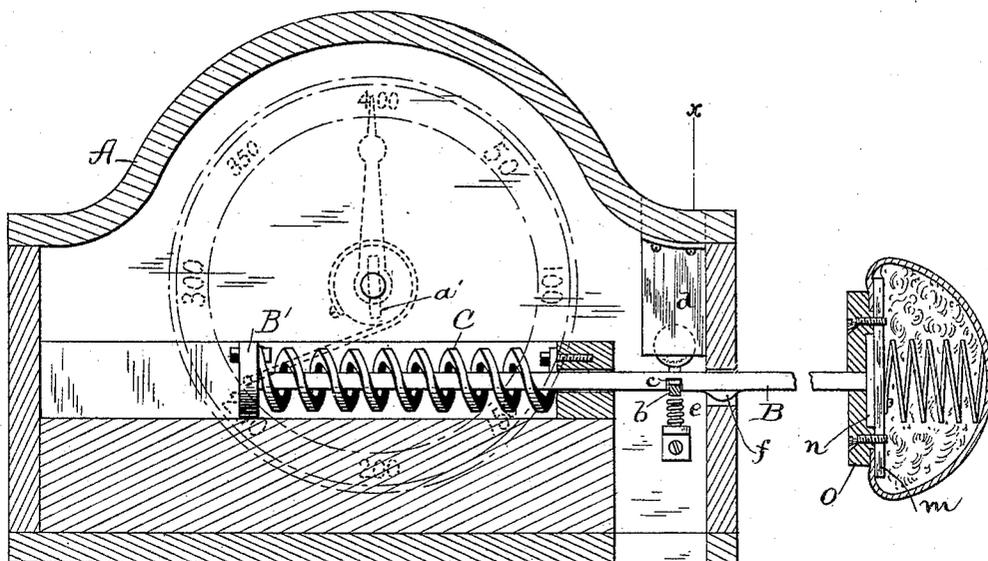


(No Model.)

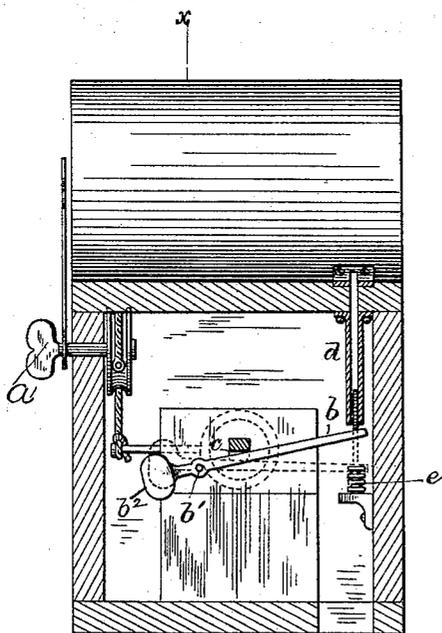
T. F. O'CONNOR.  
COIN OPERATED BLOW TESTER.

No. 395,578.

Patented Jan. 1, 1889.



*Fig. 1.*



*Fig. 2.*

WITNESSES:

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# UNITED STATES PATENT OFFICE.

THOMAS F. O'CONNOR, OF NEW YORK, N. Y.

## COIN-OPERATED BLOW-TESTER.

SPECIFICATION forming part of Letters Patent No. 395,578, dated January 1, 1889.

Application filed February 6, 1888. Serial No. 263,087. (No model.)

*To all whom it may concern:*

Be it known that I, THOMAS F. O'CONNOR, a citizen of the United States, residing in the city, county, and State of New York, have invented certain new and useful Improvements in Coin-Operated Blow-Testers; and I do hereby declare that the following is a full, clear, and exact description of my invention, such as will enable others skilled in the art to which it appertains to make and use the same.

The invention has reference to apparatus for testing and registering the force of a blow or of pressure, the object being to produce an apparatus of this kind which is normally locked so that it cannot be used, and which can only be put into condition for use by the insertion of a coin of a certain denomination.

The invention consists in the construction hereinafter described, and pointed out in the claim.

In the drawings, Figure 1 represents a vertical central section of the device along line  $xx$  of Fig. 2, showing the dial and pointer in dotted lines. Fig. 2 is an end view of the apparatus or section along line  $xx$  of Fig. 1.

Referring to the drawings by letter, A represents the case or box. It may be made as ornamental as desired and may form part of a cabinet or be built in with another structure. It should, however, be provided with a dial or scale on the outside. Within the box and extending to the outside is a drive-rod, B. It is supported in suitable bearings in a frame. The inner end of the rod has fixed to it a disk or cross-head, B', and the outer end carries a cushioned knob of peculiar construction, which will be fully described.

C is a coil-spring encircling the rod, having one end secured to the cross-head and the other to the forward bearing of the rod. From the cross-head or a bracket thereon extends a cord which passes over and is secured to a grooved pulley. The pulley is mounted on a stud fixed in the front of the casing in the center of the dial and carries the pointer at its outer end. With this construction a movement of the drive-rod will cause a corresponding movement of the pointer. The pulley is mounted a little tight on its shaft, so that after it has been rotated it will remain in the position to which it was carried and allow the

pointer to register. By means of the thumb-nut  $a'$  the hand may be carried back to zero. The mechanism for locking and unlocking the rod is located at one end of the box, and consists of a tilting balanced lever,  $b$ , pivoted at  $b'$ . The weight  $b^2$  is just sufficient to tilt the rod upward and hold it in the transverse notch  $c$  in the drive-rod. The end of the lever opposite the weight stands under the outlet of the coin-chute  $d$  and over a cushioning-spring,  $e$ . The opening to the chute is in the top of the box. The drive-rod is provided with a cam or projection,  $f$ , for a purpose hereinafter described.

To operate the apparatus a coin—say a five-cent piece—is dropped into the slot. It falls onto the end of the lever and carries it down against the spring  $e$ , where it rests, a small portion of the coin still remaining in the chute. A blow may now be struck against the knob, or pressure may be put against it in any way, to drive the rod in. The force of the blow is taken up by the spring and is registered on the dial by the pointer. When the rod moves in, the cam  $f$  strikes against lever  $b$  and drives it down onto the spring  $e$ . The downward motion of the lever releases the coin and the rebound of the spring flips it off and it falls into any suitable receptacle.

The knob is constructed so that the upholstered portion may be removed and renewed. The removable portion consists of a disk,  $m$ , on which the cushion is made. The fixed part consists of the disk  $n$  on the end of the shaft and the perforated disk  $o$  on the shaft, provided with threaded holes. Screws pass through these holes and into disk  $m$  to hold the cushion in place.

Having now described my invention, what I claim is—

The drive-rod provided with cam  $f$  and notch  $c$ , the spring C, the lever  $b$ , and the spring  $e$ , substantially as described.

In witness whereof I have hereunto signed my name in the presence of two subscribing witnesses.

THOMAS F. O'CONNOR.

Witnesses:

AUGUSTUS MERRITT,  
G. H. STOCKBRIDGE.