2 Sheets—Sheet 1.

G. C. SMITH.
Alarm-Register.

No. 201,295. Patented March 12, 1878.

Fig. 1.

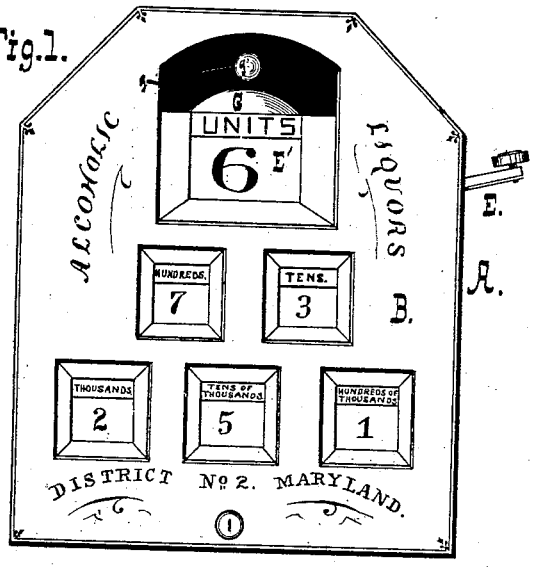
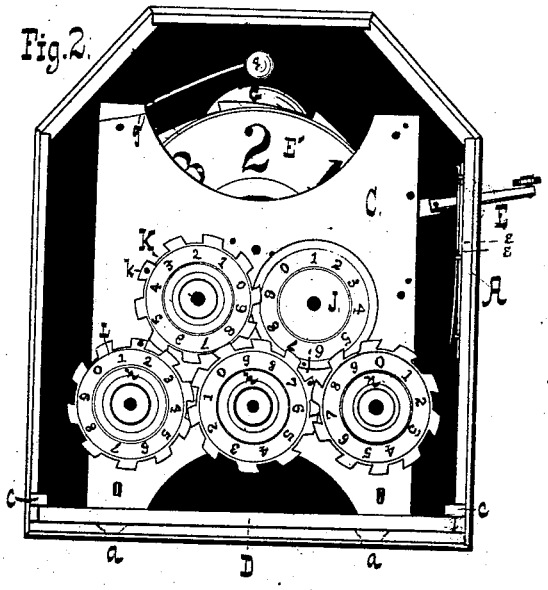


Fig. 2.



WITNESSES,
David G. Weems
W. D. Bertram.

INVENTOR,
George C. Smith
BY
R. W. Williams
ATTORNEY.

2 Sheets—Sheet 2.

G. C. SMITH.

Alarm-Register.

No. 201,295. Patented March 12, 1878.

Fig. 3.

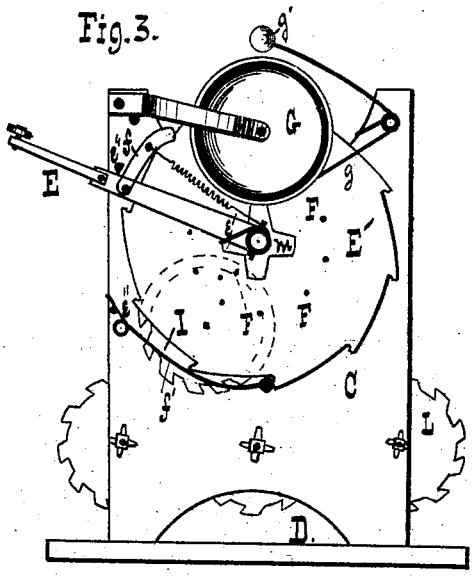
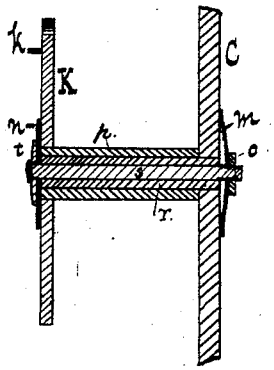


Fig. 4.



WITNESSES,

David G. Weems

W. A. Bertram,

INVENTOR,

George C. Smith.

BY

R. W. Williams

ATTORNEY.

UNITED STATES PATENT OFFICE.

GEORGE C. SMITH, OF BALTIMORE, MARYLAND.

IMPROVEMENT IN ALARM-REGISTERS.

Specification forming part of Letters Patent No. **201,295**, dated March 12, 1878; application filed February 8, 1878.

To all whom it may concern:

Be it known that I, GEORGE C. SMITH, of the city of Baltimore, State of Maryland, have invented certain new and useful Improvements in Alarm-Registers; and I hereby declare the same to be fully, clearly, and exactly described as follows, reference being had to the accompanying drawings, in which—

Figure 1 represents a front elevation of my device; Fig. 2, a similar view of the same, the cover being removed; Fig. 3, a similar view from the rear; and Fig. 4, a sectional view, illustrating certain details of construction on an enlarged scale.

This invention relates to that class of devices in use for registering numbers or quantities of any kind, but is designed especially for registering drinks under the new excise laws now in force in some States, and about to be enacted in others.

In a device for the above purpose, the essential prerequisites are, that it shall be perfectly accurate, not liable to get out of repair, and of such construction as to defy all attempts to fraudulently alter its registration. These ends are fully attained in the apparatus about to be described, which especially commends itself by reason of the extreme simplicity of its construction and mutual adaptation of its parts.

In the accompanying drawings, A represents the outer case, preferably of cast-iron, lacquered or painted, and having a cover, B, adapted to be sealed or locked in any desired manner. The cover B is provided with glazed apertures, through which the indications of the device, as well as the stroke of the bell-hammer, can be seen.

The case is provided with screw-holes *a a* in its bottom, through which screws are passed for the attachment of the register to the counter or fixed support.

The registering mechanism is mounted upon a suitable plate, C, which is attached to a base, D, that fits under the ledges *c c* in the sides of the case.

The lever E projects through a slot in the side of the case, closed on the inside by sliding plates *e e*, which prevent access to the registering mechanism through the slot.

At the rear of the plate C is mounted the large unit-wheel E′, the periphery of which is formed into a ratchet having ten teeth, with which the spring-pawl *f*, carried by the lever E, engages. Another pawl, *f′*, attached to the plate C, engages with the teeth of the unit-wheel at the end of the stroke of the lever E, and prevents any reverse rotation on the part of the wheel. The latter carries ten pins, F, one of which, at the end of each stroke of the lever, rings the bell G by lifting and releasing the tail *g* of the hammer *g′*. On the opposite side of the wheel E′ is attached a single pin, which, at each complete revolution of the wheel, engages with the small wheel I, and moves it through a single cog-space. Upon the shaft of the wheel I, on the opposite side of the plate C, is mounted the tens-wheel J, which carries a pin, *j*, adapted at each revolution of the tens-wheel to engage with the hundreds-wheel K, and move it through a single cog-space. The wheel K has also a pin, *k*, which actuates in the same manner the wheel L, representing thousands, and so on through the train. In the case in point the wheels all have ten cogs, so as to register decimally; but it is obvious that in using the device to register barrels or gallons of liquids, or bushels, of which the subdivisions are not decimals, the wheels must be appropriately cogged.

The lever E is mounted upon the pivot of the wheel E′, and is furnished with a spring, *e′*, to effect the return stroke. Suitable stops *e″* serve to limit the stroke of the lever, and are secured to the plate C.

All the wheels are secured to their pivots by springs *m*, and are provided with rubbers of felt or chamois-skin *n n*, whereby they are immovable, except upon and during the application of power, thus obviating the possibility of surplus motion due to impetus. Their mode of attachment to the plate C is shown in detail in Fig. 4. To the wheel K is attached a sleeve, *p*, which fits closely over another sleeve, *r*, upon the plate C, through which latter the threaded bolt *s* passes.

A washer, *t*, compresses the chamois-leather or felt rubber *n* against the wheel, being drawn close by the nut *o*, between which and the

plate C a spring, *m*, is placed. By these means the maximum of durability and stability of the bearings is secured.

Having thus described my invention, what I claim is—

1. In an alarm-register, a prominent revolving unit-wheel bearing numerals upon its face, and having on one side a single pin for actuating a tens-wheel at each complete revolution, and on the other a number of pins corresponding to the numerals for actuating a gong-hammer at each registration, substantially as described.

2. A register contained in a case adapted to be secured from within to a suitable support, and subsequently sealed, whereby the unauthorized change of position or removal of the register is prevented, substantially as set forth.

3. In combination with the plate C, having sleeve *r*, and wheel K, having sleeve *p*, the bolt *s*, washers *t n*, nut *o*, and spring *m*, substantially as described.

GEO. C. SMITH.

Attest:
R. D. WILLIAMS,
DAVID G. WEEMS.