

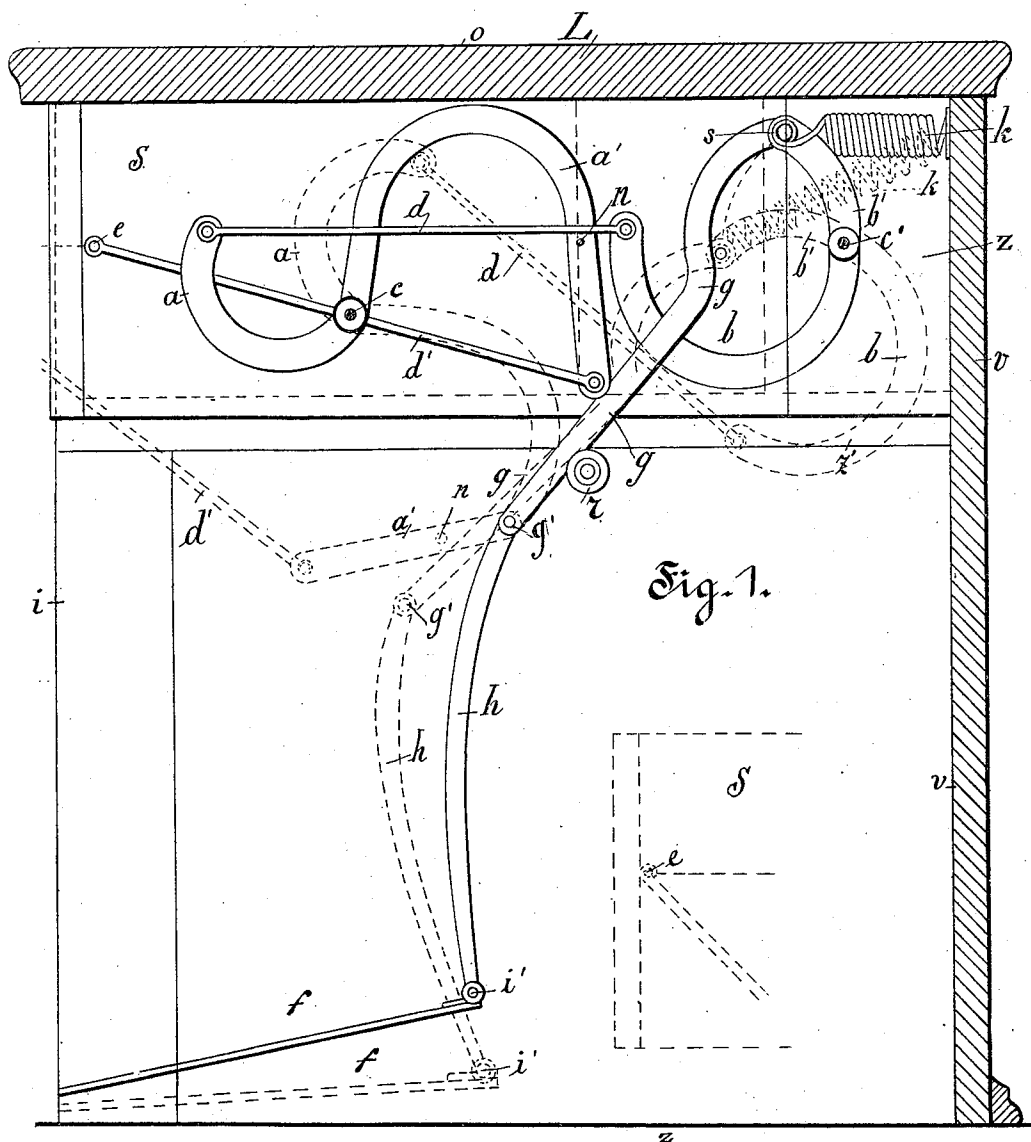
(No Model.)

2 Sheets—Sheet 1.

H. BRAV.
TILL LOCK.

No. 478,392.

Patented July 5, 1892.



Witnesses:

C. Sedgwick

E. M. Clark

Inventor

H. Brav

by *Munn & Co*

Attorneys.

(No Model.)

2 Sheets—Sheet 2.

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Fig. 2.

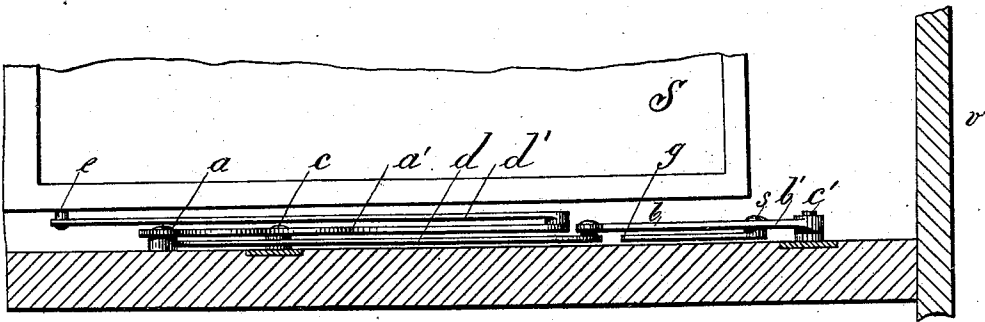
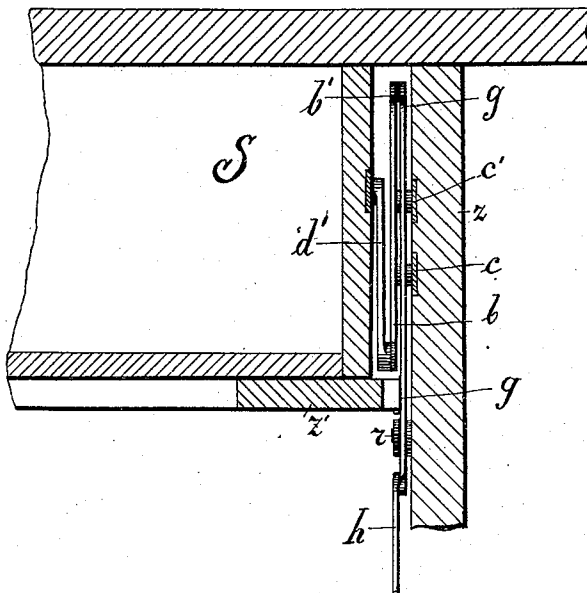


Fig. 3.



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UNITED STATES PATENT OFFICE.

HUGO BRAV, OF BERLIN, GERMANY.

TILL-LOCK.

SPECIFICATION forming part of Letters Patent No. 478,392, dated July 5, 1892.

Application filed April 1, 1892. Serial No. 427,352. (No model.)

To all whom it may concern:

Be it known that I, HUGO BRAV, manufacturer, of Berlin, in the Kingdom of Prussia and German Empire, have invented new and useful
5 Improvements in Attachments for Drawers and Tills, of which the following is a specification, reference being had therein to the accompanying drawings.

This invention has for its object to prevent
10 unauthorized opening of counter tills or drawers, as it is a well-known disadvantage of till-drawers as at present constructed that access can be readily had to the till not only by the shop-keeper from the inside of the shop-counter, but also from the side of the customer by
15 bending over with the upper part of the body. In this new arrangement the drawer cannot be opened by pulling with the hand the front or a knob or handle, but is opened by pressing with the foot on a foot-lever, the movement of which is transmitted by a combination of levers upward to the drawer. By this
20 means unauthorized opening of the drawer from the side of the customer is entirely prevented, because the said foot-lever cannot be operated either from the front through the solid longitudinal wall of the counter, nor can it be operated by bending over with the upper
25 part of the body over the counter. On unauthorized insertion of the hand of any person into the open till the hand of such person will be caught or jammed therein.

Reference is to be had to the accompanying drawings, forming a part of this specification, in which similar letters of reference indicate
35 corresponding parts in all the figures.

Figure 1 is a longitudinal elevation, the counter being in section. Fig. 2 is a plan view showing the drawer broken away and the
40 counter in section. Fig. 3 is a front elevation, the drawer and counter being in section.

The counter is indicated by the letter *L*, *v* being its front or outer wall, *i* a side wall, and *o* the top. *z* is an intermediate vertical partition, and *z'* a horizontal partition, on which
45 slides the drawer *S*, which may in addition be guided in a horizontal direction by means of fillets or grooves.

The mechanism for moving the drawer is
50 arranged at one side of the same on the fixed partition *z*, and consists, essentially, of a peculiar combination of levers, which is main-

tained in the normal position by a coiled spring and is connected to the drawer at *e* and is operated in such a manner by depressing the foot-lever that the drawer is brought into the open position. (Shown dotted in Fig. 1.)

The two two-armed levers *a a'* and *b b'* are arranged behind each other and are pivoted or fulcrumed intermediate their ends to the partition *z* at *c* and *c'*, respectively. All the arms *a a'* and *b b'* are suitably curved or bent and engage at their ends with pull or push rods, which transmit the movement. The front
65 arm *a* of the lever *a a'* is jointed by means of the rod *d* to the front arm *b* of the second lever *b b'*, and the rear arm *a'* is jointed by means of the rod *d'* to the pin *e*, which is fixed to the drawer. The rear arm *b'* of the lever
70 *b b'* extends upward and is attached at its end *s* to a rod *g*, which extends in a downward and inclined direction and slides over a pulley or roller *r*, which is pivoted to the partition *z*. The rod *g* is attached at its end *g'* to
75 a pull-rod *h*, which is connected at *i'* to the foot-lever *f*. This combination of levers is maintained under strain by a tension-spring *k*, which is fixed at one end to the longitudinal wall *v* of the shop-counter and is attached
80 at its other end to the end *s* of the lever.

Fig. 1 shows the drawer *S*, with the pushing device in the two end positions. The position when closed is shown in full lines. The open position is shown dotted.

It will be readily seen that the opening can be effected in a very simple manner by depressing the foot-lever, and the open position is maintained so long as pressure is exerted by the foot. According to the extent of oscillation of the foot-lever the drawer can be opened to a greater or less extent. In this operation the rod *h* draws the rod *g*, which slides on the pulley or roller *r*, downward, placing the spring *k* under strain thereby.
95 The lever *b b'* oscillates about *c'*, and the rod *d* pulls back the lever *a a'*, so that its arm *a'* oscillates in a forward direction and transmits this movement through rod *d'* to the drawer. On releasing the foot-lever all the parts are returned into their closing position by the pull of the spring *k*. The lever-arm *a'* may also be provided with a pin *n* for the rod *d* for the purpose of more securely actuating the lever
100

a a'. The axis of the rod *d'* must of course lie in the closing position above the lever fulcrum or pivot *c*, or may even coincide with the same, so that an intentional direct pulling or pulling out of the drawer in a forward direction merely serves to force it more firmly into its recess.

What I claim, and desire to secure by Letters Patent of the United States, is—

10 1. The combination, with a drawer, of spring-actuated levers connected therewith and normally tending to maintain the drawer closed and means for throwing the levers against the tension of the spring for opening said drawer, 15 substantially as described.

2. The combination, with a drawer, of two connected levers, one of which is connected with the drawer and the other of which is connected with a spring and provided with means 20 for throwing it to open the drawer through the

medium of the first-named lever, substantially as described.

3. The combination, with a drawer, of an oscillating lever in the shape of a compound curve, disposed vertically, a rod connecting 25 the rear downwardly-curved end of said lever with the drawer, a second oscillating lever fulcrumed intermediate its ends, and a rod connecting one end of said lever with the upwardly-curved front end of the first-named 30 lever, the opposite end of said second lever having means for throwing it and provided with a retractile spring, substantially as described.

In witness whereof I have hereunto set my hand in presence of two witnesses. 35

HUGO BRAV.

Witnesses:

PAUL FISCHER,
PAUL BRINKMANN.