

UNITED STATES PATENT OFFICE.

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KEY LOCKING DEVICE FOR CASH REGISTERS.

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To all whom it may concern:

Be it known that I, EDUARD OSTMEYER, residing at Essen-Margarethenhohe, Germany, a citizen of the German Republic, have invented a certain new and useful Improvement in Key Locking Devices for Cash Registers, of which the following is a specification.

The present invention relates to a key locking device for cash registers, the characteristic feature of which is that the key is positively connected to a plug of a safety lock which is locked when the key of the lock is not inserted and unlocked when this key is inserted in the lock. The new locking device differs by this feature advantageously from the known locking devices of this kind, in which the key is so connected to a safety lock that the key is only released by rotating the lock key inserted in the lock.

The invention will be described with reference to an example of the subject-matter of the invention shown in the accompanying drawing, in which:

Fig. 1 is a horizontal section through a key board above a key and the plug of the corresponding safety lock.

Fig. 2 is a view corresponding to Fig. 1 with the parts in a different position.

Furthermore, on a larger scale,

Fig. 3 is a horizontal section through the safety lock and

Fig. 4 is a section on the line 4-4 of Fig. 3.

In the key board A there is arranged alongside each key B which registers the particular operator using the cash register a safety lock (see Figures 1 and 2) the casing of which is formed by a part a^1 of the key board and whose plug is denoted by C. The plug C which is provided with a journal-shaped extension c^1 is adapted to rotate in a shouldered down boring a^2 in the casing a^1 running parallel with the longitudinal axis of the key B. The plug is held in the boring a^2 by a ring D screwed into the front wall of the casing a^1 .

The tumbler of the safety lock is constructed as in a Yale lock. The plug C has for this purpose a radial longitudinal slot c^2 in it (see Figures 3 and 4) the inner part of which serves to guide the key E of the lock and the outer part of which receives a number of tumbler pins F. Against these

pins F bear locking pieces G which are movable in a radial slot a^3 in the casing a^1 and acted upon by springs g^1 . By means of the described tumbler the plug C is prevented from rotating when the key of the lock is withdrawn, as is well known, while after the key has been inserted the plug can be rotated and when it has been rotated the key is prevented from being withdrawn.

Rigidly connected to the key B is an arm H which extends at right angles to the key B (see Figures 1 and 2) and projects through a slot a^4 in the casing a^1 and engages with its free end h^1 in a helical groove c^3 in the plug C. The arrangement is also so devised that when the key B is depressed the plug C has a rotation of 90° imparted to it by the cooperation of the arm H with the groove c^3 .

The extension c^1 of the plug C is provided with an eccentrically arranged cam c^4 . In the position of rest of the plug C this cam lies outside the path of an adjusting member J (see Fig. 1) of the till which is moved when the machine is operated but when the plug is rotated through an angle of 90° the cam c^4 is moved into the path of the member J (see Fig. 2) and then forms a stop which limits the movement of this member.

The foot b^1 of the operator key B serves when the key is depressed likewise as a stop for an adjusting member K on the till, and a shoulder b^2 on the key is provided for the purpose of cooperating with a slide M, in order to release the till and switch on the driving motor in the well known way.

The locking of the key connected to the safety lock is undone as previously explained by the introduction of the key E into the lock, and it is therefore necessary to rotate the key also by hand for the purpose of releasing the key B. On the depression of the released key B the key E is locked against being withdrawn and the cam c^4 of the plug C is set in the position in which it acts as a stop so that, in addition to the foot b^1 of the key B which acts as a stop for a gear member (K) provided say for the adjustment of the adding mechanism used by the particular operator, a second stop (the cam c^4) is simultaneously also moved into the path of a second gear member (J) which effects the adjustment of say the operator's distinctive letter.

The new arrangement consequently af-

fords the advantage that by the depression of a key the adjustment of two gear members which become operative in different periods of the operation of the till, is prepared. The turning back of the plug C of the safety lock into the original position takes place positively on the return movement of the key B, which is effected by the cancelling of the keys.

10 Claims:

1. The combination with a sliding element of a locking device comprising a key controlled locking member rotatable in unlocked position and means connecting said locking member to said sliding member whereby said locking member is rotated upon a displacement of said sliding member.

2. The combination with a sliding element of a key controlled locking member ro-

tatable in unlocked position, said locking member being formed with a helical groove and an arm connected to said sliding element and engaging said groove for rotating said locking member upon a displacement of said sliding element.

3. The combination with a sliding element of a rotary locking member releasable upon the insertion of a key, means connecting said sliding element to said rotary locking member for rotating the same upon a displacement of the sliding element and a stop carried by said locking member, said stop being moved to operative position when said locking member is rotated.

The foregoing specification signed at Essen, Germany, this 29th day of September, 1921.

EDUARD OSTMEYER.