July 3, 1928.

1,676,014

J. FECHER

SAFETY LOCKING DEVICE

Filed June 16, 1927

Fig.1.

Fig.1a

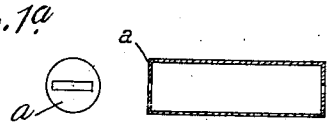


Fig.2.

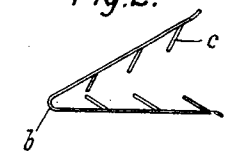


Fig.2a

Fig.3.

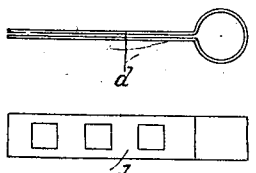
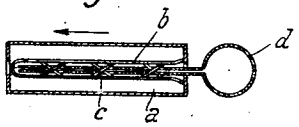


Fig.3a

Fig.4.



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UNITED STATES PATENT OFFICE.

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SAFETY LOCKING DEVICE.

Application filed June 16, 1927, Serial No. 199,372, and in Germany November 27, 1925.

The invention refers generally to improvements in safety locking devices and more particularly to a locking seal provided with a spring having ratchet teeth, the spring being insertible into a casing while the teeth thereof are adapted to engage the holes of the sealing ribbon and lock the latter within the casing upon the insertion of the ribbon into the casing.

Locking seals are known in which pieces of porcelain or glass are employed as parts thereof and it is a matter of course that such glass or porcelain parts must be demolished in order to release the lock. The use of these porcelain or glass objects makes this kind of a lock expensive. It is also a fact that in destroying the porcelain and glass objects, persons are often hurt.

According to the present invention, all of these inconveniences are avoided by providing the bottom of the lock casing with an opening for introduction of the ratchet spring. After the sealing ribbon has been cut beneath the limit of the introduction, the spring as well as the notches can be removed from the casing. The ratchet spring and the casing therefore, always remain intact and can be used again. The price of the destroyed sealing ribbon is of no importance and, moreover, persons can not be hurt or cut by the ribbons.

The invention is clearly illustrated in the accompanying drawings in which:

Figure 1 is a longitudinal sectional view of the lock casing.

Fig. 1^a is an end elevational view thereof.

Fig. 2 is a side elevational detail of the spring.

Fig. 2^a is a top plan view thereof.

Fig. 3 is a side elevational detail of the sealing ribbon.

Fig. 3^a is a top plan view thereof, and,

Fig. 4 is a longitudinal sectional view of the complete sealing lock.

Similar characters of reference are employed in all of the above described views to indicate corresponding parts.

Referring now, more particularly, to the accompanying drawings, there is provided a casing *a*, which can be fastened by means of rivets (not shown) to the apparatus to be protected. The same can also be employed without being rigidly connected with the apparatus. The respective ends of the casing, although closed, are provided with central openings preferably oblong in shape. A spring *b* is now employed and is made from a piece of ribbon-like spring steel, the opposing side portions having hook-like tongues *c* struck out therefrom, the tongues extending inwardly towards the medial portion. The tongues, in effect, provide rigid teeth. When the spring is folded so that the side portions lie in close relation to each other it can be inserted through one of the openings in the ends of the casing *a*. A sealing ribbon or locking strip *d* is now provided and consists of a single piece of metal bent upon itself to provide a loop-like handle portion and parallel arranged side portions, the latter being provided with openings so that when the ribbon or strip is inserted through the opening in the opposite end of the pocket, it passes between the hook-like tongues so that the latter in turn engage the openings in the strip *d*. It is now impossible to withdraw the strip. The only way in which this can be done is by cutting the strip *d* adjacent the loop portion and pushing the remaining portions as well as the spring in the direction of the arrow in Fig. 4 outwardly through the opening in the adjacent end of the casing. To again use the lock it is only necessary to replace the spring and employ a new locking strip.

It is believed in view of the foregoing description that a further detailed description of the operation of the invention is entirely unnecessary. Likewise it is believed that the advantages of the invention will be readily apparent.

What I claim as new and desire to be secured by Letters Patent is:

A locking seal including a casing having openings in the respective ends thereof, a locking spring inserted through one of the openings into the casing, a locking strip inserted through the opposite opening in the casing and having an interlocked engagement with the spring and adapted to have the projecting end cut off so that the portion engaged by the spring may be removed from the casing with the spring through the opening in which the spring is inserted.

In testimony whereof I have signed my name to this specification.

JACOB FECHER.