Sept. 22, 1925. 1,554,309

C. C. TIPPETT

PIT BUCKET LATCH

Filed May 21, 1925

Fig. 1.

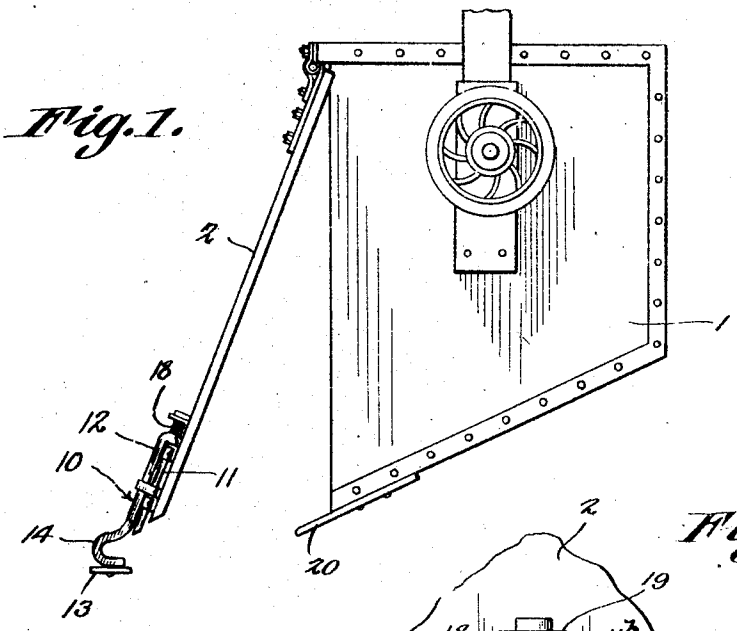
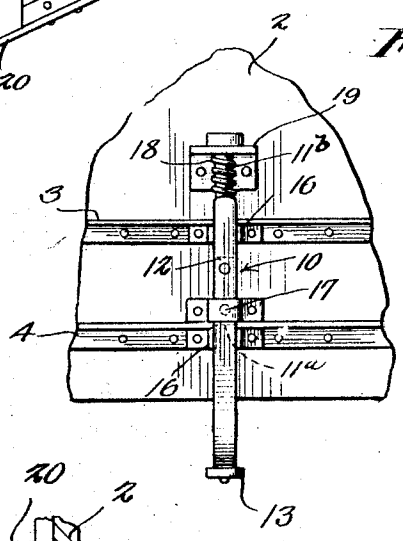


Fig. 2.



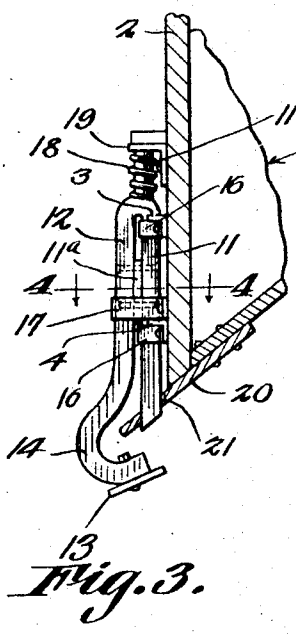


Fig. 3.

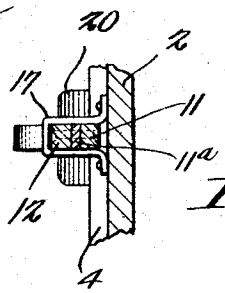


Fig. 4.

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UNITED STATES PATENT OFFICE.

CHARLES C. TIPPETT, OF LUCKEY, OHIO.

PIT-BUCKET LATCH.

Application filed May 21, 1925. Serial No. 31,894.

To all whom it may concern:

Be it known that I, CHARLES C. TIPPETT, a citizen of the United States, residing at Luckey, in the county of Wood and State of Ohio, have invented a new and useful Pit-Bucket Latch, of which the following is a specification.

This invention relates to pit buckets and more particularly to latches therefor.

The object of the invention is to provide a latch of this character for securing the swinging door of buckets of this kind whereby the lowering of the bucket into dumping position will operate to unlatch the door and the raising of the bucket will close it.

Another object of the invention is to provide a simple and efficient latch which projects beyond the bucket and is designed to be engaged by any object when the bucket is lowered so that the door will open to discharge the contents immediately such projecting member engages an object and when the door swings into closed position on the raising of the bucket the latch will automatically secure it.

With the foregoing and other objects in view which will appear as the description proceeds, the invention resides in the combination and arrangement of parts and in the details of construction hereinafter described and claimed, it being understood that changes in the precise embodiment of the invention herein disclosed may be made within the scope of what is claimed without departing from the spirit of the invention.

In the accompanying drawings:—

Figure 1 represents a side elevation of a pit bucket equipped with this improved latch with the door shown in open position;

Figure 2 is a front elevation of a portion of the door with this improved latch shown applied;

Figure 3 is a vertical section through the door showing the latch in side elevation; and

Figure 4 is a transverse section taken on the line 4—4 of Fig. 3.

In the embodiment illustrated, a container in the form of a pit bucket 1 of ordinary construction is shown which is closed at its bottom and open at its top and has one side hinged to form the closure or door 2, said door being hinged at its upper end so that the lower end thereof swings outwardly for discharging the contents of the bucket when desired.

The latch 10 which constitutes this invention and the purpose of which is to retain the door 2 closed while the bucket is being filled and to open the door when the contents are to be discharged, is designed to cooperate with a latch plate 20 attached to the bottom of the bucket 1 and projecting beyond the side thereof to which the door 2 is hinged. This plate 20 is apertured as shown at 21 to receive the locking bolt of the latch.

The latch 10 which is constructed of tool steel is made preferably from one piece of steel folded or bent intermediate its end with the members 11 and 12 thereof spaced slightly apart, with a spacing member 11^a of tool steel inserted between said members and fastened with countersunk rivets to prevent the latch members from spreading apart to permit free action of the latch. The member 11 constitutes the locking bolt for engagement with the aperture 21 in the plate 20 while the member 12 projects at its lower end beyond the lower end of the bolt 11 and carries a foot plate 13 at its terminal. This member 12 is bowed outwardly at its lower end as shown at 14 to form a hook-shaped member with a recess or housing on its inner face for the plate 20 when the latch is in closed position as is shown clearly in Fig. 3.

The door 2 is shown provided on its outer face with vertically spaced transversely extending angle irons 3 and 4, to which are bolted yokes or keepers 16 in which the bolt 11 is mounted to slide.

Another keeper 17 is secured to the door to form a guide and retainer for the bolt member 12.

A coiled spring 18 is mounted on an extension 11^b of bolt 11 and bears at one end against the shoulder of said bolt and at its other against the bracket 19 carried by the door 2. This spring 18 exerts its tension to normally project the bolt into locking position.

This improved door latch prevents all possibility of accidental unlatching of the door 2 thus avoiding spilling of the contents of the bucket when loading or unloading which frequently occurs with buckets in ordinary use.

I claim:—

1. The combination with two members in the form of a container having a closure; of locking means for said closure comprising a spring projected bolt carried by one of said members and a bolt receiving plate by

the other, and a projection carried by said bolt and extending longitudinally beyond its plate engaging end whereby contact on said extension with a resisting object will retract the bolt against the tension of its spring and disengage it from said plate.

2. The combination with a container having a closure; of locking means for said closure comprising a spring projected bolt including parallel laterally spaced members, one of said members being longer than the other, an apertured plate carried by the container to receive the shorter member of said bolt to secure the closure in closed position, the longer member being equipped with a contact foot to engage resisting objects whereby the bolt will be retracted against the tension of its spring to disengage its shorter member from said plate.

3. The combination with a container having a closure; of locking means for said closure comprising a spring projected bolt including parallel members spaced laterally apart, one of said members being longer than the other with its long end bowed outwardly at its terminal, an apertured bolt receiving plate carried by the container and located in the path of the shorter member of the bolt whereby the closing of the closure will force said bolt end to engage said plate.

4. The combination with a container having a hinged closure; a spring projected bolt carried by the free end of said closure, an apertured bolt receiving plate carried by the container in the path of said bolt and extending beyond the open space in the container, and a hook-shaped projection carried by said bolt and extending beyond the plate engaging end thereof, said projection being designed to fit around the plate when the bolt is engaged with it, and a foot plate carried by said projecting bolt end for contact with a resisting object whereby the bolt is retracted to release it from said plate.

In testimony that I claim the foregoing as my own, I have hereto affixed my signature.

CHARLES C. TIPPETT.