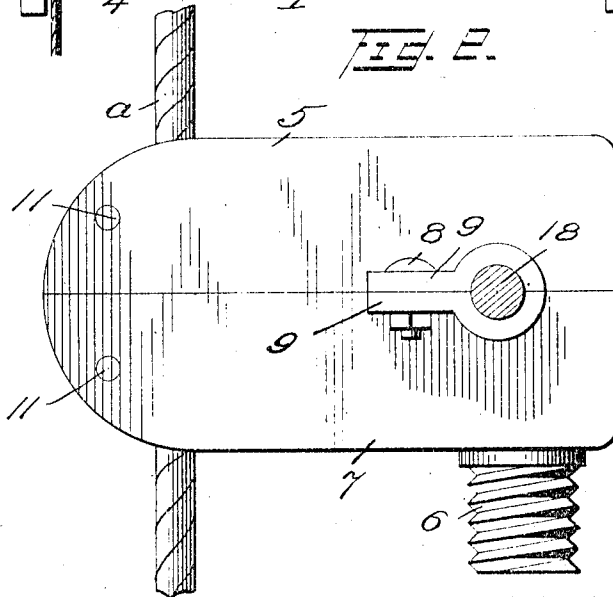
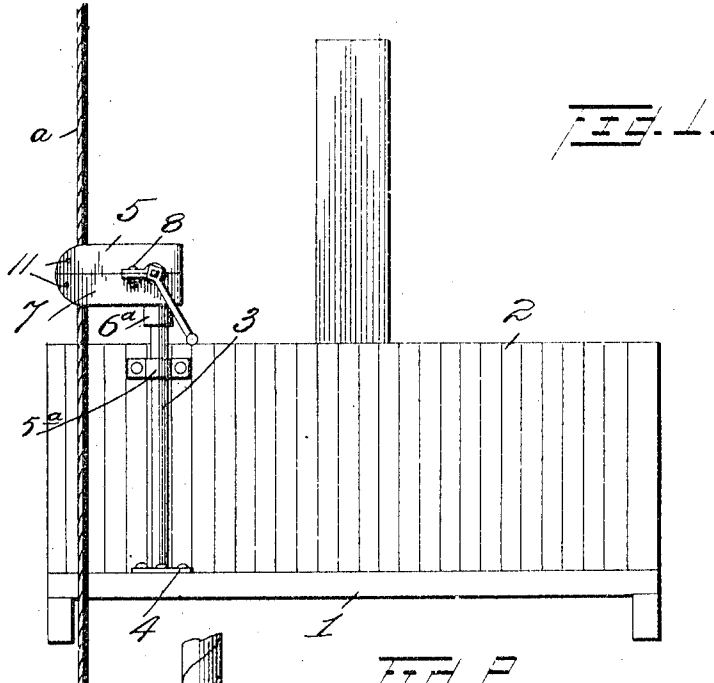


C. H. A. BAHDE.
ELEVATOR LOCK.
APPLICATION FILED AUG. 14, 1911.

1,035,130.

Patented Aug. 6, 1912.
2 SHEETS-SHEET 1.



Inventor

Carl H. A. Bahde

Witnesses

E. C. Duffy
A. C. E. Keap

By

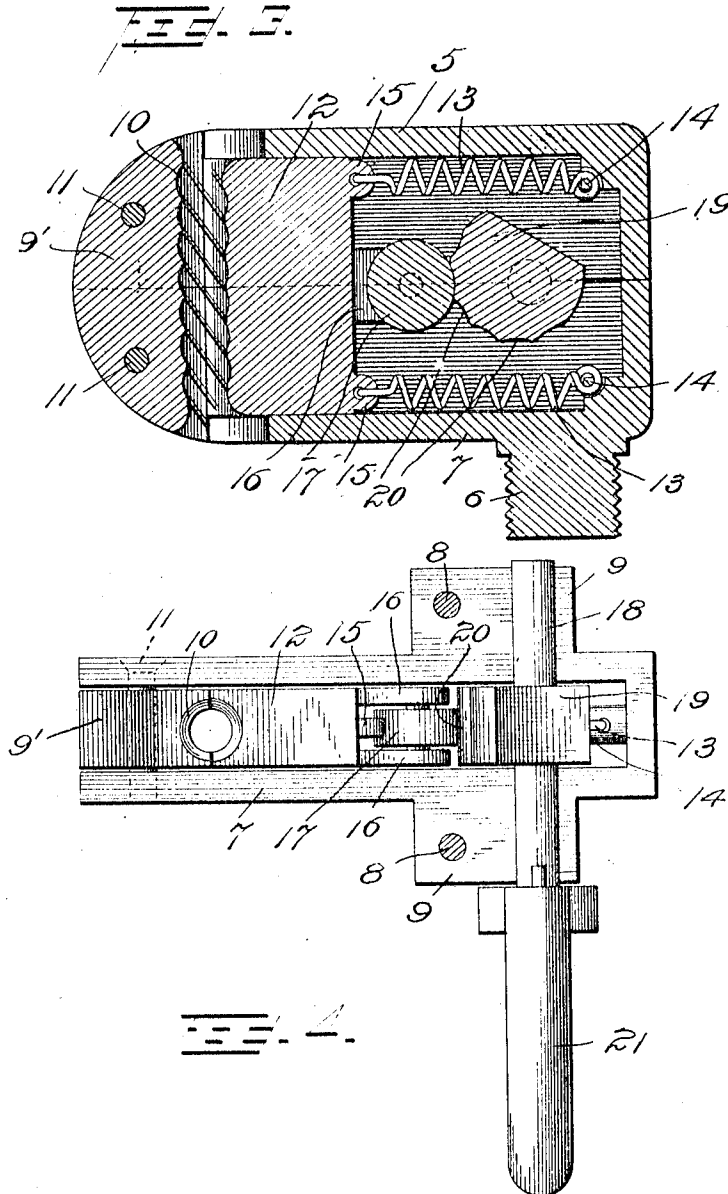
C. T. Bungea
Attorney

C. H. A. BAHDE.
ELEVATOR LOCK.
APPLICATION FILED AUG. 14, 1911.

1,035,130.

Patented Aug. 6, 1912.

2 SHEETS-SHEET 2.



Inventor

Carl H. A. Bahde

Witnesses

E. C. Duffy
A. C. & Heap

By

E. C. Duffy
His Attorney

UNITED STATES PATENT OFFICE.

CARL H. A. BAHDE, OF MILWAUKEE, WISCONSIN.

ELEVATOR-LOCK.

1,035,130.

Specification of Letters Patent.

Patented Aug. 6, 1912.

Application filed August 14, 1911. Serial No. 643,917.

To all whom it may concern:

Be it known that I, CARL H. A. BAHDE, a citizen of the United States of America, residing at Milwaukee, in the county of Milwaukee and State of Wisconsin, have invented certain new and useful Improvements in Elevator-Locks, of which the following is a specification:

This invention relates to elevator locks, designed more particularly for use in connection with freight elevators, and one of the principal objects of the invention is to provide a simple lock for clamping the operating cable of the elevator in order that the elevator may be held stationary and in an inoperative condition when desired and placed entirely within the control of one person.

In freight elevators as at present constructed, the operating cable may be used for starting the elevator from any of the floors of a building and many accidents have happened owing to the fact that a person upon one floor has started the elevator when the freight was in the process of being removed from the elevator platform on an upper floor. Many accidents resulting in the loss of life and property have been caused by raising or lowering the elevator car without knowledge of the condition of the elevator above or below.

Another object of the invention is to provide a lock for elevators in which the passage-way through the lock is formed of spiral corrugations which conform to the spiral surface contour of the cable in order that the cable may not be injured by the lock when the latter is clamped upon the cable.

Still another object of the invention is to provide a lock which will firmly and reliably clamp cables of different sizes without injury to the cable.

These and other objects may be attained by means of the construction illustrated in the accompanying drawings, in which:—

Figure 1 is a side elevation of a freight elevator having my lock secured thereon; Fig. 2 is a side elevation of the lock on an enlarged scale, said lock being removed from the post or bar upon which it is shown mounted in Fig. 1 of the drawing; Fig. 3 is a vertical section taken through the lock; and Fig. 4 is a top plan view of the lock with the upper section of the casing removed.

Referring to Fig. 1 of the drawing, the numeral 1 designates the platform of the elevator car and 2 is the side of the elevator car. Secured to the platform of the elevator car near one side thereof is a rod or bar 3, said bar being secured to the platform 1 by means of suitable bolts 4, said rod or bar being secured to the side 2 by means of a suitable keeper 5^a. On the upper end of the rod or bar 3 is a threaded sleeve or collar 6^a. It will be understood, of course, that my elevator lock may be applied to any suitable form of elevator.

The lock comprises a casing made in two sections, the lower section 7, provided with a screw threaded stud 6 designed to be connected to the threaded sleeve or collar 6^a at the top of the rod or bar 3, and an upper section 5, said sections being secured together by means of bolts 8 which extend through outwardly projecting lugs 9. The sections 5 and 7 are hollow and secured between the front ends of the casing is the stationary member 9' of the lock, said member being provided with suitable spiral corrugations 10 on the inner face thereof, said corrugations designed to conform to the corrugations of the operating cable for the elevator, said member 9' being secured to the casing members 5 and 7 by means of bolts or screws 11. Mounted to move within the casing is the sliding locking member 12 said member being connected by means of spiral springs 13 to studs 14 on the members 5 and 7 at one end, while the opposite ends of said springs are connected to lugs 15 on the sliding lock member 12. The sliding member 12 is provided with spiral corrugations upon its outer face which conform to the corrugations 10 on the member 9'.

Journalled between the integral lugs 16 projecting from the locking member 12 is a wheel or roller 17. A crank shaft 18 is mounted in bearings in the casing, said crank shaft carrying an eccentric cam 19, said cam having corrugations 20 on a portion of its periphery, said corrugations being of substantially the same curvature as the periphery of the roller 17 and said corrugations being adapted to bear upon the periphery of said roller by the action of the springs 13. A crank 21 is secured to the shaft 18.

The operation of my invention may be briefly described as follows: The operating

cable *a* is passed between the stationary member 9' and the sliding locking member 12 of the lock and when the operator desires to lock the cable so as to prevent the movement of the elevator, the crank 21 is operated to throw the corrugations of the member 12 against the cable and force it against the stationary member 9'. In this condition, the elevator cannot be moved until after the crank 21 has been turned to release the cable. Owing to the form of the cam 19 having corrugations 20, it will be obvious that the rotation of the cam will move the sliding member 12 to clamp a large or small cable and to firmly hold the same without injury to the cable.

From the foregoing, it will be obvious that my invention is of simple construction, can be readily connected to any operating cable of an elevator and will firmly hold the cable against operation by an unauthorized person on any of the other floors of the building.

What I claim is:—

25 1. An elevator lock comprising a casing,

a stationary lock member connected to the casing, a sliding lock member within the casing, a roller journaled on the sliding member, a crank shaft, and a corrugated eccentric cam connected to the crank shaft. 30

2. An elevator lock comprising a casing, a stationary lock member connected to the casing, said member spirally corrugated on the inner surface to more readily hold the operating cable of the elevator, a sliding lock member within the casing, one surface of said sliding lock member being spirally corrugated to more readily hold the operating cable, springs connected to said sliding member and to said casing, a roller connected to said sliding member, a crank shaft, a corrugated eccentric cam mounted on said shaft for moving the sliding member against a cable and for locking the same, and means for attaching said lock to the elevator frame. 45

CARL H. A. BAHDE.

Witnesses:

LOUIS VON STERNWALDT,
GEO. C. WIDULE.