

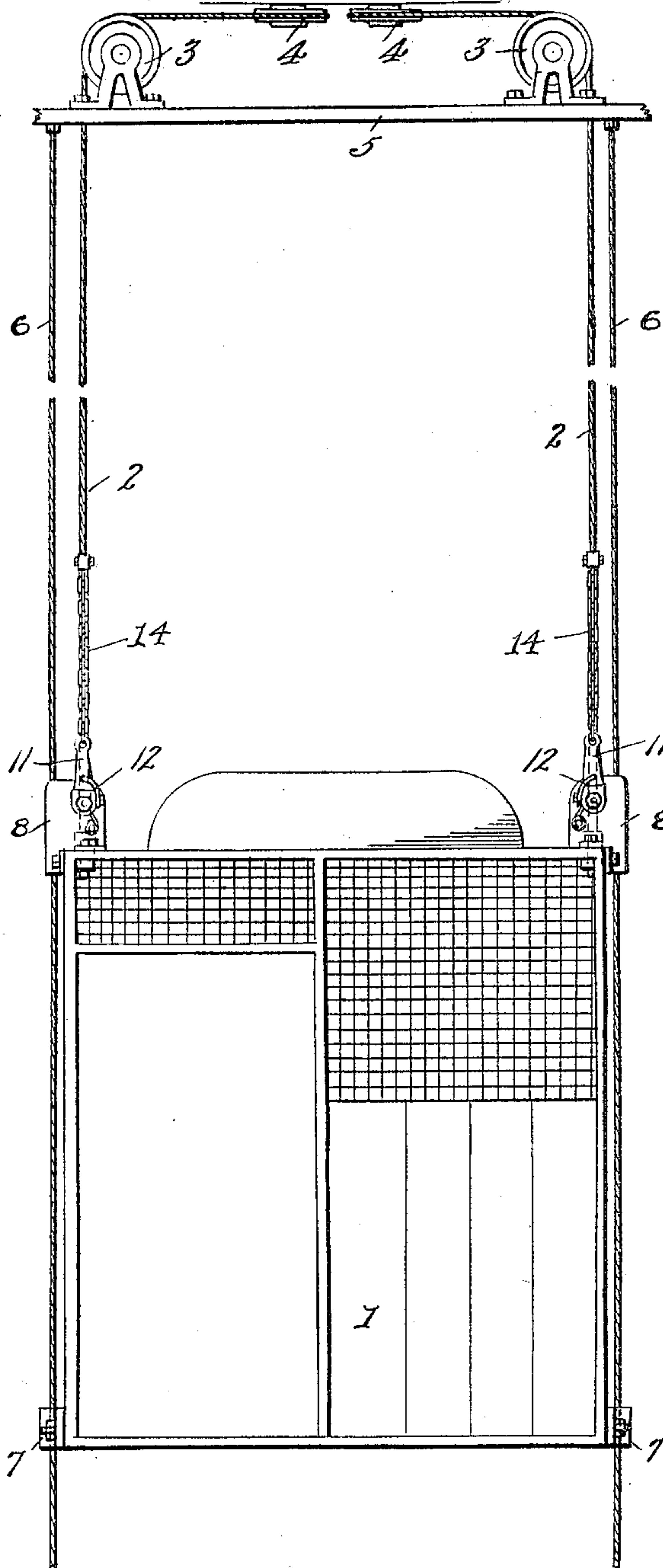
No. 822,538.

PATENTED JUNE 5, 1906.

J. MORGAN.
ELEVATOR CATCH.

APPLICATION FILED APR. 29, 1905.

FIG. 1.



Witnesses

Chas. H. Davis.

E. Hume, atty.

FIG. 2.

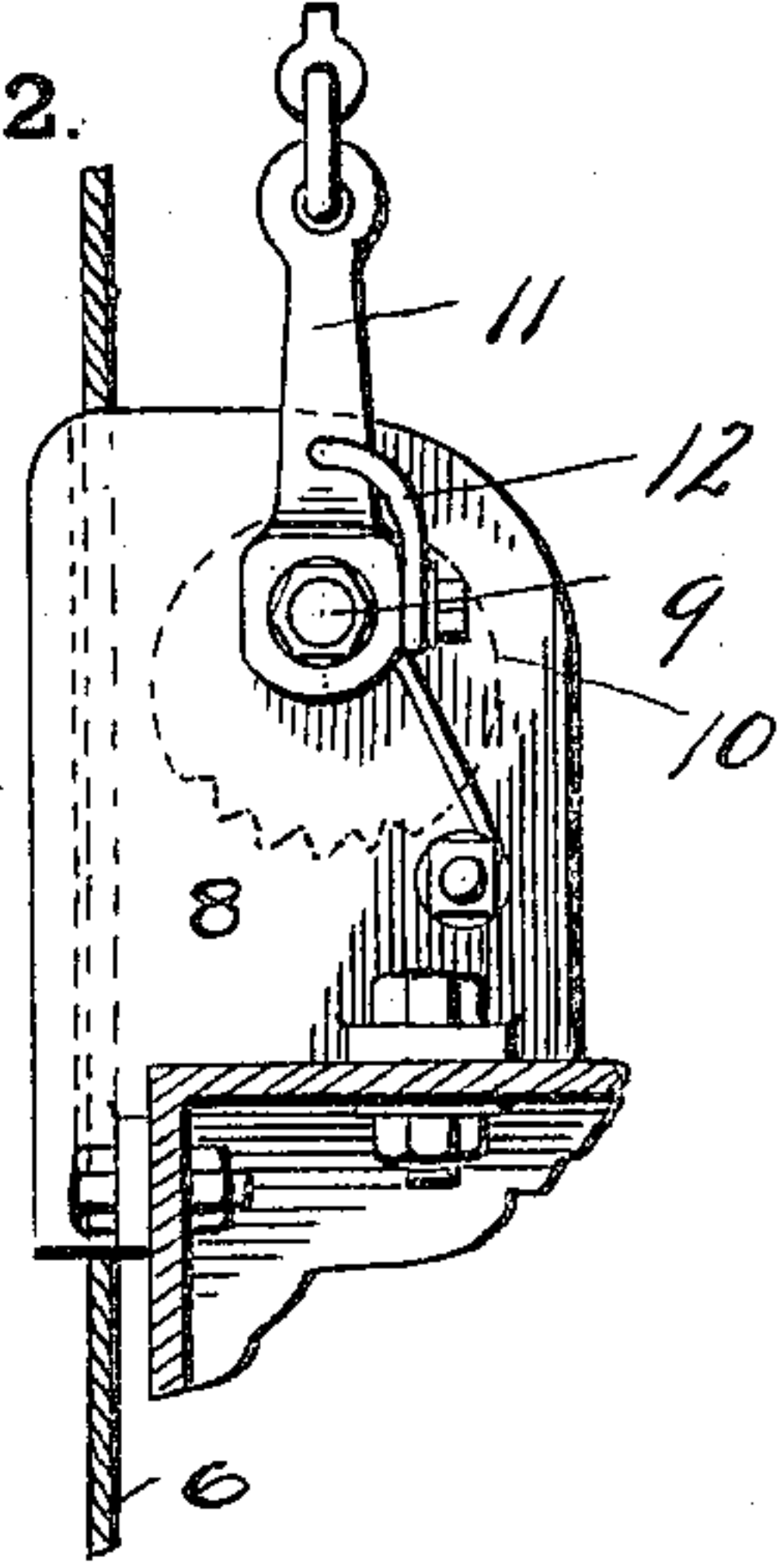


FIG. 3.

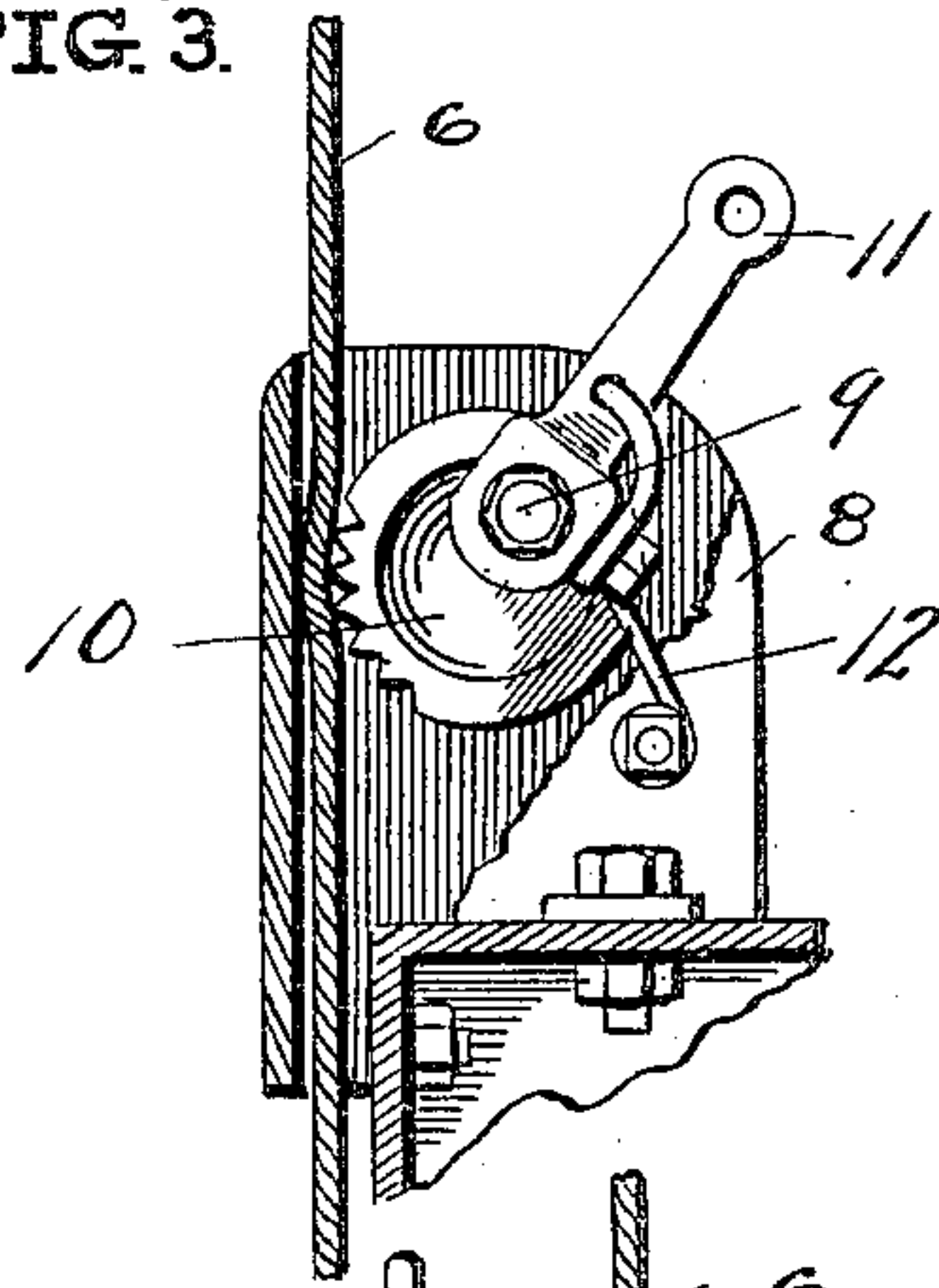
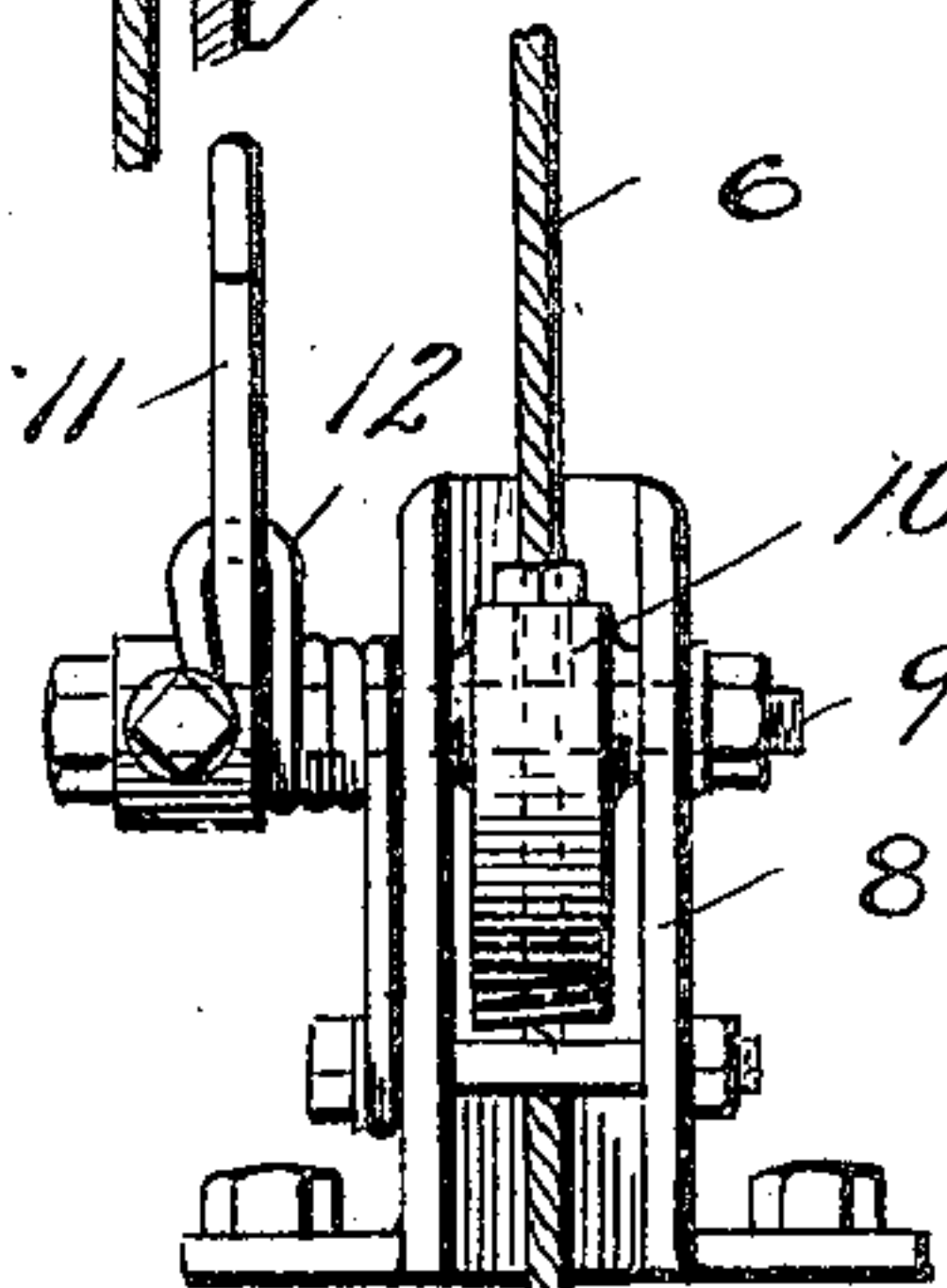


FIG. 4.



Inventor

James Morgan

By

Shepherd & Parker

Attorneys

UNITED STATES PATENT OFFICE.

JAMES MORGAN, OF NEW BEDFORD, MASSACHUSETTS.

ELEVATOR-CATCH.

No. 822,538.

Specification of Letters Patent.

Patented June 5, 1906.

Application filed April 29, 1905. Serial No. 258,108.

To all whom it may concern:

Be it known that I, JAMES MORGAN, a citizen of the United States, residing at New Bedford, in the county of Bristol and State of Massachusetts, have invented certain new and useful Improvements in Elevator-Catches, of which the following is a specification.

My invention relates to safety devices for elevators, and to that particular class in which the car is held from lateral movement by guide-ropes.

The object of my invention is to provide an inexpensive device of the class described which may be attached to elevators now in use, thereby eliminating all danger of falling due to the breaking of the hoisting-cable.

With these and other objects in view the present invention consists in the combination and arrangement of parts, as will be hereinafter more fully described, shown in the accompanying drawings, and particularly pointed out in the appended claim, it being understood that changes in the form, proportion, size, and minor details may be made within the scope of the claim without departing from the spirit or sacrificing any of the advantages of the invention.

In the drawings, Figure 1 is a passenger-elevator provided with my device. Fig. 2 is a front view of my device, showing in dotted lines the binding member in an inoperative position. Fig. 3 is a front view of the same with the casing partly broken away, showing the binding member in operative position. Fig. 4 is a side view.

Referring to the drawings, in which like numerals indicate corresponding parts throughout the several views, 1 is an elevator-car provided with a hoisting-cable 2, running over a pulley 3 to a winding-drum. Secured to beam 5 are guide-ropes 6, which are anchored at the bottom of the shaft in some suitable manner. Loops 7 and casings 8 engage the guide-ropes and serve to hold the car steady.

As shown in Fig. 1 of the drawings, I secure my safety device in such position that the guide-rope 6 passes down through casing 8. Mounted in this casing is a shaft 9, to which is eccentrically keyed a cylindrical disk 10, having the part of its periphery which is brought into contact with the guide-rope serrated. To the outer end of shaft 9 is secured an arm 11. When this arm is in an upright position, disk 10 is held out of engagement with guide-rope 6, as shown in Fig. 2. Spring 12 operates on the arm to hold the disk 10 into binding position with the guide-rope. One end of chain 14 is clamped to hoisting-cable 2. The other is secured to arm 11 and serves to hold said arm in an upright or inoperative position. Should the cable break, however, chain 14 would be slackened and the spring 12 would move arm 11 toward a horizontal position, which in turn would cause the disk 10 to bind rope 6 against the side of casing 8, thereby holding the car from further descent.

Having thus described my invention, what I claim as novel, and desire to secure by Letters Patent, is—

In an elevator, the combination with a car of a guide-rope, a casing on said car through which said guide-rope passes, a safety device with an eccentrically-mounted binding member with a lever-arm fastened thereto by the shaft 9, said shaft being operated by the spring 12, said spring having a U-shaped extension, the curved portion of which passes through said lever-arm and the main portion of which is coiled about said shaft and secured thereto at one end, said safety device being normally held out of operation by connection with the hoisting-cable.

In testimony whereof I affix my signature in presence of two witnesses.

JAMES MORGAN.

Witnesses:

THOMAS LANSDALE,
HENRY MARSH.