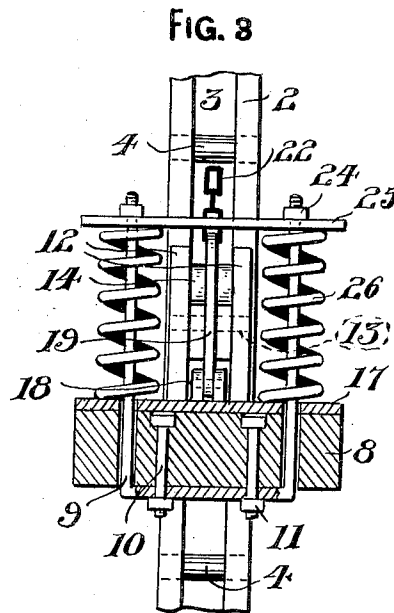
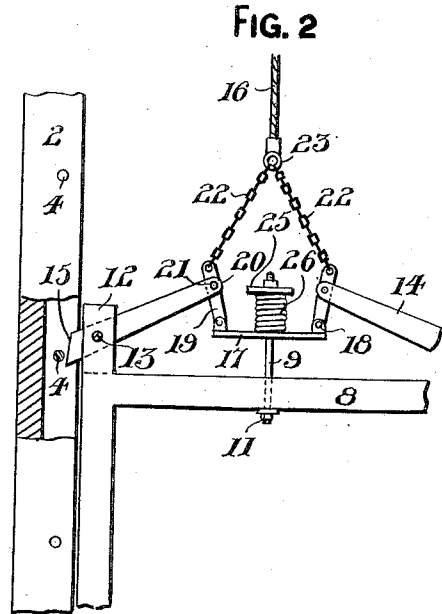
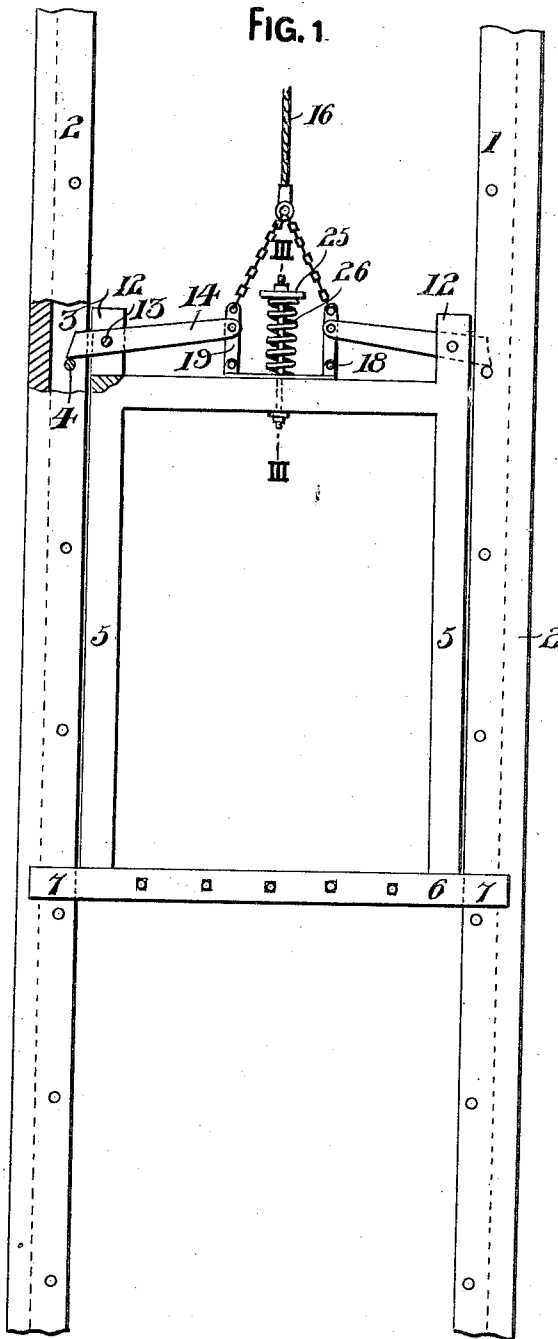


S. TREPA.
ELEVATOR.

APPLICATION FILED AUG. 12, 1912.

1,057,303.

Patented Mar. 25, 1913.



WITNESSES

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STANISLAW TREPA, OF SYRACUSE, NEW YORK.

ELEVATOR.

1,057,303.

Specification of Letters Patent.

Patented Mar. 25, 1913.

Application filed August 12, 1912. Serial No. 714,603.

To all whom it may concern:

Be it known that I, STANISLAW TREPA, a subject of the Emperor of Austria-Hungary, residing at Syracuse, in the county of Onondaga and State of New York, have invented certain new and useful Improvements in Elevators, of which the following is a specification, reference being had therein to the accompanying drawing.

10 This invention relates to elevators, and
has for its object to provide means asso-
ciated with the elevator cage and in a man-
ner as hereinafter set forth for arresting
the descent of the cage if the elevating cable
15 becomes slack or broken.

A further object of the invention is to provide a safety elevator device that is comparatively simple in its construction and arrangement, strong, durable, efficient in its use, readily set up in operative relation with respect to an elevator cage and to the guide rails for the cage, and comparatively inexpensive to manufacture.

25 With the foregoing and other objects in
view the invention consists of the novel
construction, combination and arrangement
of parts as hereinafter more specifically de-
scribed and illustrated in the accompany-
ing drawing, wherein is shown an embodi-
30 ment of the invention, but it is to be under-
stood that changes, variations and modifica-
tions can be resorted to which come within
the scope of the claim hereunto appended.

In the drawing:—Figure 1 is an elevation, partly in section, of an elevator cage and guide rails therefor, and further shows the adaptation with the cage of a safety device in accordance with this invention and further shows the safety device in an operative position, Fig. 2 is a view illustrating the safety device in an inoperative position, and Fig. 3 is an enlarged view illustrating the safety device in section.

Referring to the drawing by reference
45 characters, 1, 2 denote a pair of guide rails
which are mounted in the elevator shaft and
each provided with a longitudinally extend-
ing groove 3 and further having trans-
versely extending stop pins 4 which project
50 across the grooves 3.

The reference character 5 denotes the elevator cage having the lower bars 6 thereof straddling the guide rails, as at 7.

The reference character 9 denotes a yoke
55 which has its base positioned against the
lower face of the top bar 8 of the cage 5.

The arms of the yoke 9 extend upwardly through said bar 8. Bolts 10 extend down through the bar 8 and also through the base of the yoke 9 and they have their heads countersunk in the top of said bar 8. Nuts 11 are mounted upon the lower ends of the bolts 10 and which engage the base of the yoke 9 for securing said base against the lower face of said bar 8. Projecting upwardly from each end of the bar 8 is a pair of uprights 12 and between each pair of said uprights 12 is pivoted, as at 13 a locking lever 14 having a beveled outer end 15. The outer portions of the levers 14, when the elevating cable 16 becomes slack or is broken are adapted to be moved in the path of the pins 4 whereby the descent of the cage 5 is arrested.

Loosely mounted upon the arms of the yoke 9 is a vertically movable spring controlled plate 17 provided with a pair of vertical lugs 18 to which are pivoted links 19. The plate 17 normally engages the top bar 8. To each of the links 19, intermediate its ends, is pivotally connected, as at 20, the inner end 21 of a lever 14. To each of the links 19 is attached the lower end of a chain 22. The upper ends of the chains 22 are connected by the eye 23 to the lower end of the cable 16. Mounted upon the upper ends of the arms of the yoke 9 are nuts 24 against which is positioned a rectangular strip 25, the arms of the yoke 9 extending through said strip 25 and interposed between the latter and the plate 17 and surrounding the arms of the yoke 9 are coiled springs 26, the function of which is to lower the plate 17 so as to shift the levers 14 on their pivots to move the outer portions of the levers 14 in the path of the pins 4, such action being had when the cable 16 becomes broken or is slack. When the cable 16 is taut the weight of the cage will compress the springs 26 whereby the levers 14 will be shifted to a position as shown in Fig. 2, so as the cage rises or lowers the beveled ends 15 of the levers 14 will clear the pins 4, but should the cable 16 become slack the elements will assume the position as shown in Fig. 1 whereby the levers 14 will be shifted into the path of the pins 4 and the descent of the cage arrested.

What I claim is:—

An elevator safety device comprising the combination with an elevator cage and a pair of guide rails provided with channels

having stop pins arranged therein, of a yoke
having its base positioned against the lower
face of the top bar of the elevator cage and
having its arms projecting upwardly
5 through said top bar, bolts extending
through said top bar and the base of the
yoke and having their heads countersunk in
the top of said bar, nuts mounted upon said
bolts and engaging the base of the yoke for
10 fixedly maintaining the yoke in position, a
plate loosely mounted upon the arms of the
yoke and normally engaging said top bar,
a strip mounted upon the arms of the yoke,
means carried by the arms of the yoke for
15 limiting the upward movement of said strip,
coiled springs interposed between said strip

and plate and surrounding the arms of the
yoke, links pivotally connected to said plate,
locking levers having their inner ends pivot- 20
ally connected to said links intermediate the
ends of the latter and having their outer
portions pivotally connected to said cage
and adapted to engage the stop pins to ar-
rest descent of the cage, an elevating cable,
and means for connecting the upper ends of 25
the links to the lower end of said cable.

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

STANISLAW TREPA.

Witnesses:

JOHN FUYTEK,
TRENK GUGUTA.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents,
Washington, D. C."