No. 824,269. PATENTED JUNE 26, 1906.

F. N. WILSON.

MINE CAGE.

APPLICATION FILED FEB. 19, 1906.

Fig. 1.

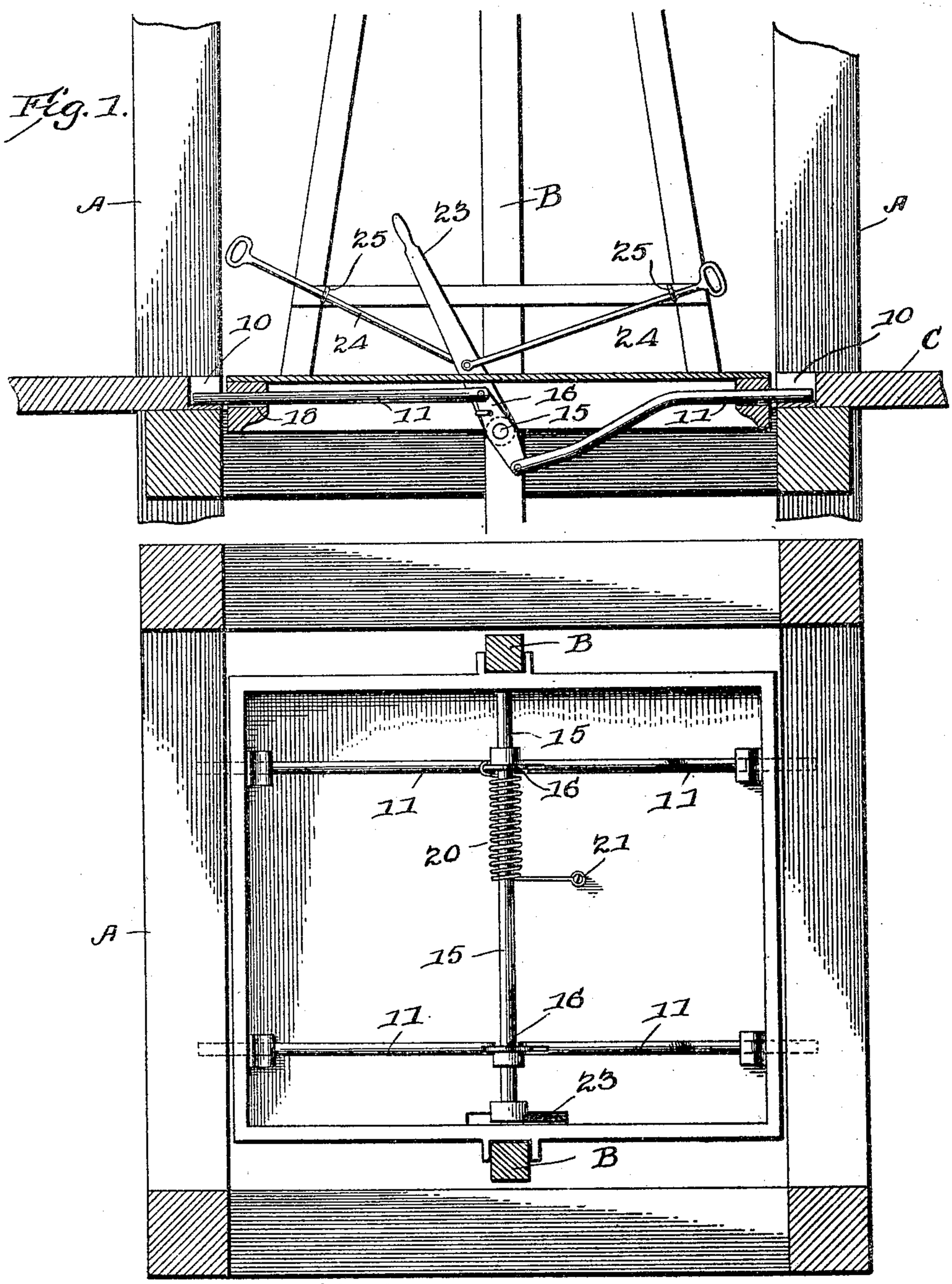

Fig. 2.

WITNESSES:

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FRANK NELSON WILSON, OF CRIPPLE CREEK, COLORADO, ASSIGNOR OF ONE-HALF TO GEORGE D. KILBORN, OF CRIPPLE CREEK, COLORADO.

MINE-CAGE.

No. 824,269. Specification of Letters Patent. Patented June 26, 1906.

Application filed February 19, 1906. Serial No. 301,877.

To all whom it may concern:

Be it known that I, FRANK NELSON WILSON, a citizen of the United States, residing at Cripple Creek, in the county of Teller and State of Colorado, have invented a new and useful Mine-Cage, of which the following is a specification.

This invention relates to mine-cages of that class in which locking chairs or dogs are employed for the purpose of holding the cage stationary at a landing during loading and unloading.

The principal object of the invention is to provide locking chairs or dogs that are so mounted as to permit ready adjustment to operative position by the cager standing on the floor of the cage or by any attendant stationed at the landing and in which the chairs or dogs will be moved automatically to inoperative position as soon as relieved from the weight of the cage, so that the latter is then free to ascend or descend.

With these and other objects in view, as will more fully hereinafter appear, the invention consists in certain novel features of construction and arrangement of parts hereinafter fully described, illustrated in the accompanying drawings, and particularly pointed out in the appended claim, it being understood that various changes in the form, proportions, size, and minor details of the structure may be made without departing from the spirit or sacrificing any of the advantages of the invention.

In the accompanying drawings, Figure 1 is a vertical section of the lower portion of the mine-cage provided with chairs and locking-dogs constructed in accordance with the invention. Fig. 2 is an inverted plan view of the cage, showing the shaft-timbers and guides in section.

Similar characters of reference are employed to indicate corresponding parts throughout both figures of the drawings.

The timbering A and guides B are of any ordinary construction, and at each of the landings C are arranged recesses 10 for the reception of the locking chairs or dogs 11, the recesses being of such depth that when the cage is locked in place its floor will be level with the surface of the landing, and thus permit ready loading and unloading.

At a point under the cage are bearings for the reception of a transversely-disposed rock-shaft 15, that is provided with two sets of levers 16, each having arms projecting in opposite directions from the shaft, and to each arm of each lever is connected one of the dogs or chairs 11, said dogs or chairs being arranged to slide in guiding-openings 18, that are formed in the side members of the cage-platform.

Surrounding the shaft 15 is a torsion-spring 20, that has one end rigidly secured to a pin 21 on the bottom of the cage, while the opposite end of said spring is secured to or bears on one of the levers 16, so that the stress of the spring will be exerted on the shaft in such direction as to tend to withdraw all of the chairs or dogs to a position within the lines of cage—that is to say, to remove them from the recesses 10 and permit the ascent and descent of the cage.

Secured to one end of the rock-shaft is an operating-lever 23, that extends up through a slot in the floor of the cage and is conveniently arranged for manipulation by the cager, who, standing on the platform, can readily move the lever for the purpose of throwing out the chairs or dogs to locking position. Connected to the lever 23 is a pair of handled rods 24, the outer ends of which are arranged within convenient reach of a person standing at the landing. These rods are guided through suitable eyes 25, secured to the frame of the cage, and by pulling on one or pushing on the other the dogs or chairs 11 may be readily projected to locking position, so that the dogs may be manipulated on either the cage or the landing and danger of accident minimized.

After the loading or unloading of the cage it is moved upward, and as soon as the chairs or dogs are free from the weight of the cage or its load spring 20 will act to withdraw all of the chairs or dogs, so that the cage may readily ascend or descend the shaft.

I claim—

In combination, a cage-platform having side or edge members provided with guiding-openings, a rock-shaft journaled below the platform, a pair of levers secured to the rock-shaft, and each having arms projecting in opposite directions from the shaft, longitudinally-movable chair members having their inner ends pivotally connected to said arms, and the outer ends extending through the guiding-openings, a lever secured to the shaft

and extending up through an opening in the platform, a torsion-spring arranged on the rock-shaft and tending to turn the same to effect withdrawal of the chair members, and a pair of handled rods guided by the cage and extending from the lever to points adjacent the opposite sides of said cage, substantially as specified.

In testimony that I claim the foregoing as my own I have hereto affixed my signature in the presence of two witnesses.

FRANK NELSON WILSON.

Witnesses:
F. P. ADDLEMAN,
N. S. WILSON.