S. B. SEGUR.

Hoisting Device.

No. 224,483. Patented Feb. 10, 1880.

Fig. 1

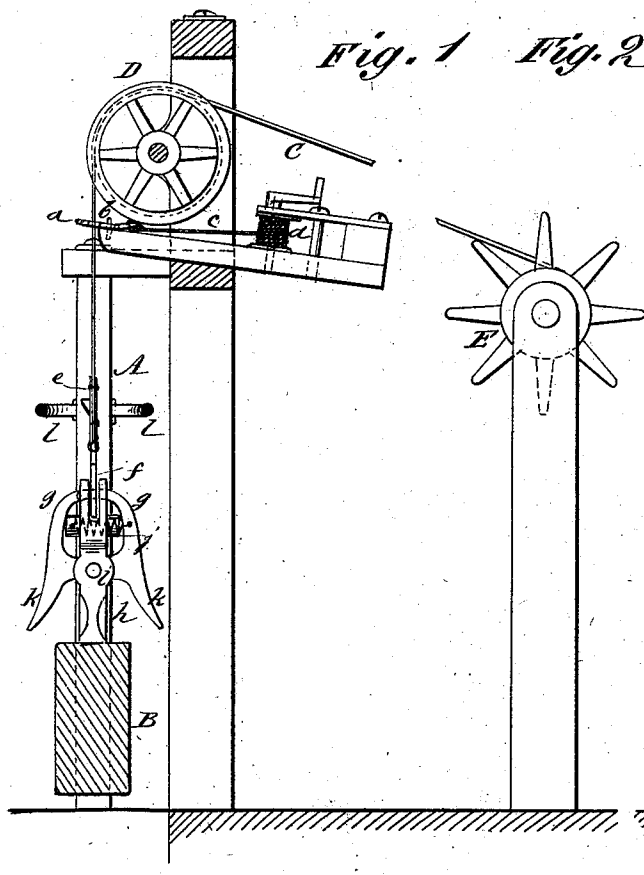


Fig. 2

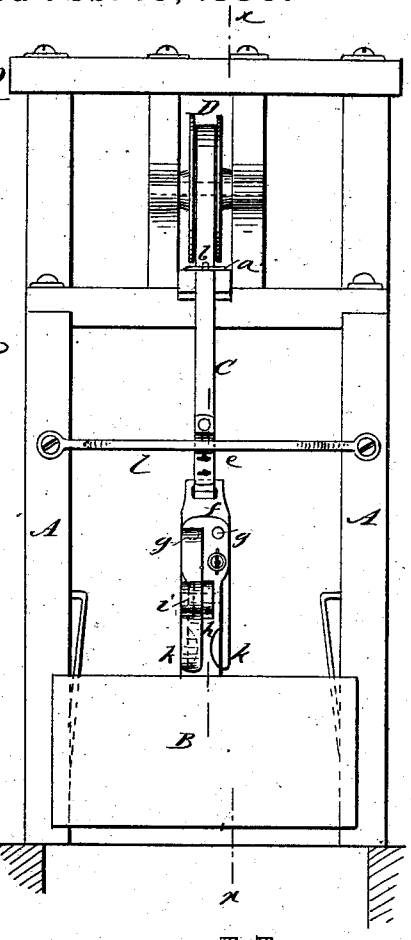


Fig. 3

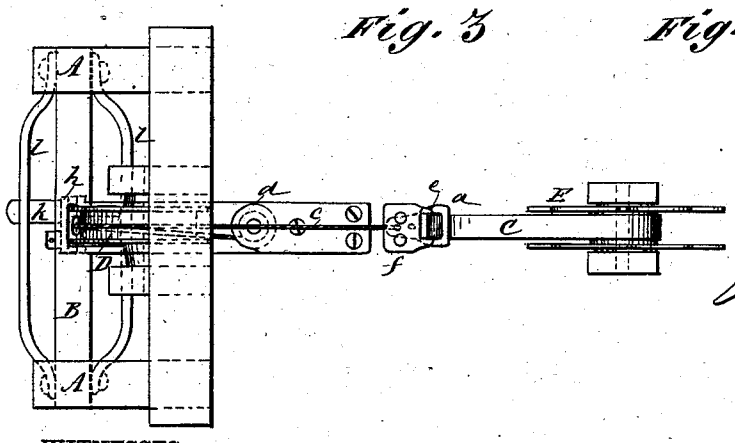
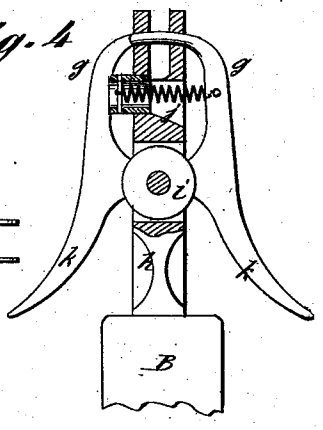


Fig. 4



WITNESSES:

C. Neveux

C. Sedgwick

INVENTOR:

S. B. Segur

BY Munn & Co.

ATTORNEYS.

N. PETERS, PHOTO-LITHOGRAPHER, WASHINGTON, D. C.

UNITED STATES PATENT OFFICE.

STEPHEN B. SEGUR, OF GOLD HILL, NEVADA.

HOISTING DEVICE.

SPECIFICATION forming part of Letters Patent No. 224,483, dated February 10, 1880.

Application filed April 18, 1878.

To all whom it may concern:

Be it known that I, STEPHEN B. SEGUR, of Gold Hill, in the county of Storey and State of Nevada, have invented a new and Improved Safety Apparatus for Hoisting Machinery, of which the following is a specification.

Figure 1 is a vertical section of my improved apparatus, taken on line *x x* in Fig. 2. Fig. 2 is a front elevation. Fig. 3 is a plan view. Fig. 4 is a detail view of the safety-hook.

Similar letters of reference indicate corresponding parts.

The object of my invention is to prevent hoisting-cages in mines or elevators of any description from being raised so high as to endanger the lives of miners or others working in connection with hoisting apparatus or being carried up by elevators.

The invention consists in a safety-hook of novel construction, and in means for detaching the same from the elevator-car.

It also consists in a device for returning the hoisting-rope to the engine-reel, to prevent it from falling to the ground and doing damage to the machinery or injuring people on the floor of the works. It can be returned afterward to the safety-hook by the same reel.

Referring to the drawings, A A are guides, upon which the elevator B moves. C is the hoisting-rope, which runs over the wheel D, and is wound upon the drum E by means of a suitable motor. The hoisting-rope C passes through an apertured plate, *a*, which rests upon one of the timbers of the frame that supports the wheel D, and is kept in place by short studs *b*. This plate is attached to the end of a rope, *c*, which is wound upon the reel *d* placed behind and below the wheel D.

A stop, *e*, is attached to the hoisting-rope C, and when the said rope is disengaged from the elevator-car the stop *e* engages the plate *a* and lifts it from the studs *b*. The rope *c* then follows the hoisting-rope C over the wheel D toward the reel E, and may be used in returning the hoisting-rope to the proper position for attachment to the elevator-car.

To the extreme end of the hoisting-rope is secured a plate, *f*, having three apertures, one for receiving the end of the rope and two for receiving the safety-hooks *g*, which are pivoted in the standard *h*, that projects from the top of the elevator-car. This standard is slotted to receive the plate *f*, and is apertured transversely to receive the ends of the hooks *g*. The hooks *g*, which are oppositely arranged in respect to each other, are pivoted at *i*, and are drawn into the apertures in the standard *h* by springs *j*, which are secured in chambers formed in the standard. The hooks are each provided with an arm, *k*, which is curved downward and outward. These arms are engaged by rods *l* secured to the guides A when the elevator-car has reached the highest point, and disengages the hooks *g* from the plate *f*. Simultaneously two spring-catches secured to the guides A spring out under the car and prevent it from falling as the hoisting-rope is unfastened.

This device is useful in mining-shafts and in other similar places where accidents are liable to occur from raising the elevator-car too high.

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

1. The plate *a* and returning-rope *c*, in combination with the hoisting-rope C, having the stop *e*, substantially as and for the purpose shown and described.

2. The slotted standard *h*, one or more hooks, *g*, having springs *j* and arms *k*, one or more disengaging-rods, *l*, and the aperture-plate *f*, in combination, substantially as shown and described.

STEPHEN BAKER SEGUR.

Witnesses:

W. HALSEY,

P. S. CORBITT.