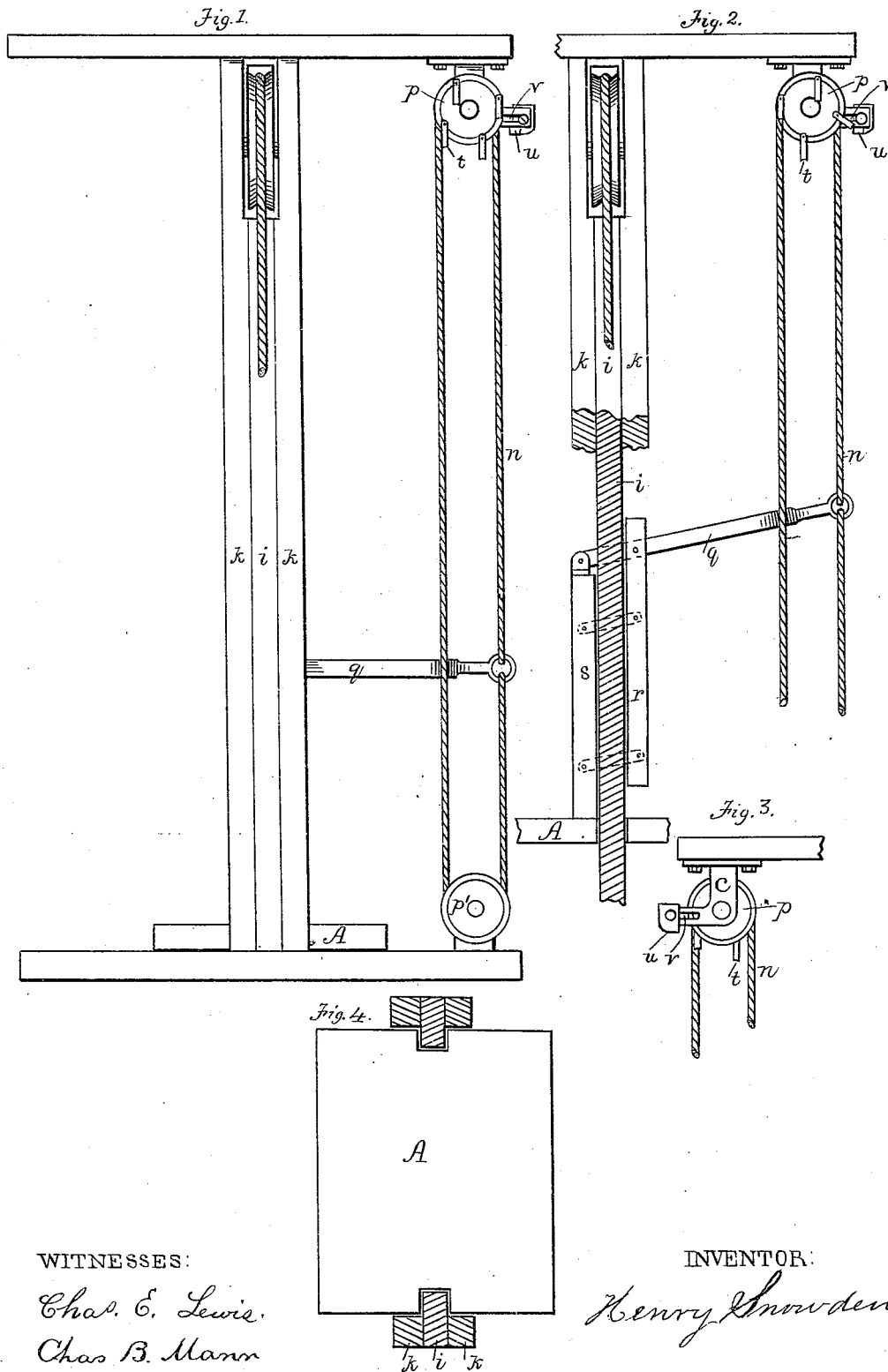


H. SNOWDEN.  
Elevator.

No. 217,825.

Patented July 22, 1879.



WITNESSES:

Chas. E. Lewis.  
Chas B. Mann

INVENTOR:

Henry Snowden.

# UNITED STATES PATENT OFFICE.

HENRY SNOWDEN, OF BALTIMORE, MARYLAND.

## IMPROVEMENT IN ELEVATORS.

Specification forming part of Letters Patent No. **217,825**, dated July 22, 1879; application filed May 10, 1879.

*To all whom it may concern:*

Be it known that I, HENRY SNOWDEN, of Baltimore, in the county of Baltimore and State of Maryland, have invented a new and useful Improvement in Safety-Brakes for Elevators, of which the following is a specification.

Figure 1 is a side elevation. Fig. 2 is also a side view, the guide-strip being in section to better illustrate the parts. Fig. 3 is a view of the reverse side of brake-pulley. Fig. 4 shows the platform or car, the uprights being shown in cross-section.

This invention relates to an improvement in the brake mechanism, and is especially applicable as an addition or auxiliary to the automatic brake for which United States Letters Patent were granted to me January 25, 1876, though my present invention is not limited to use in connection with that particular mechanism, but may be used with any modification thereof involving the same principle.

The brake-rope *n* passes over a pulley, *p*, located above, and over another pulley, *p'*, below. The rope is attached to a lever, *q*, which moves with the car *A*, and has a vertical movement. The lever is adapted to raise a vertical clamping-bar, *r*, attached to the car, and sliding on one side of guide *i*, and which is pivoted by means of links, in a manner similar to a parallel ruler, to a stationary clamping-bar, *s*, also attached to the car, and sliding on the opposite side of the guide. Substantially this principle is applied in my patent hereinbefore referred to.

My present improvement consists in providing the upper pulley with pendants *t*, pivoted at one end, the other end being free. A

projecting iron stud, *u*, is secured, by means of a bracket, *c*, or other suitable arrangement, in such position relative to the pulley that the end of the pendants may, when swung out by the velocity of the pulley, engage with the stud, and thereby instantly stop the rotation of the pulley, which causes the rope to slowly slip, with friction, over the pulley, and, acting on the lever *q*, causes it to bring the clamping-bar to bear with great pressure against the vertical guide. By the friction thus occasioned the descent of the car is soon checked.

The stud may be adjusted to or from the pulley by means of the horizontal slot *V*, so as to limit the descent to any rate of speed desired, as whenever a greater speed occurs the pendants are swung out more or less, according to the speed of revolution of the pulley, and, as seen, the pulley is stopped.

As the platform rises the brake-rope travels in an opposite direction, and, of course, the clamping-bars are removed from any pressure on the guide.

Having described my invention, I claim and desire to secure by United States Letters Patent—

1. In combination with the brake-pulley and rope, the pendants *t*, pivoted by one end to the pulley, and adapted to engage with a projection placed near the pulley, as set forth.

2. The projecting stud *u*, adapted to be adjusted to or from the pulley, in combination with the brake-pulley provided with pendants, pivoted as set forth.

HENRY SNOWDEN.

Witnesses:

CHAS. B. MANN,  
JOHN W. TAYLOR.