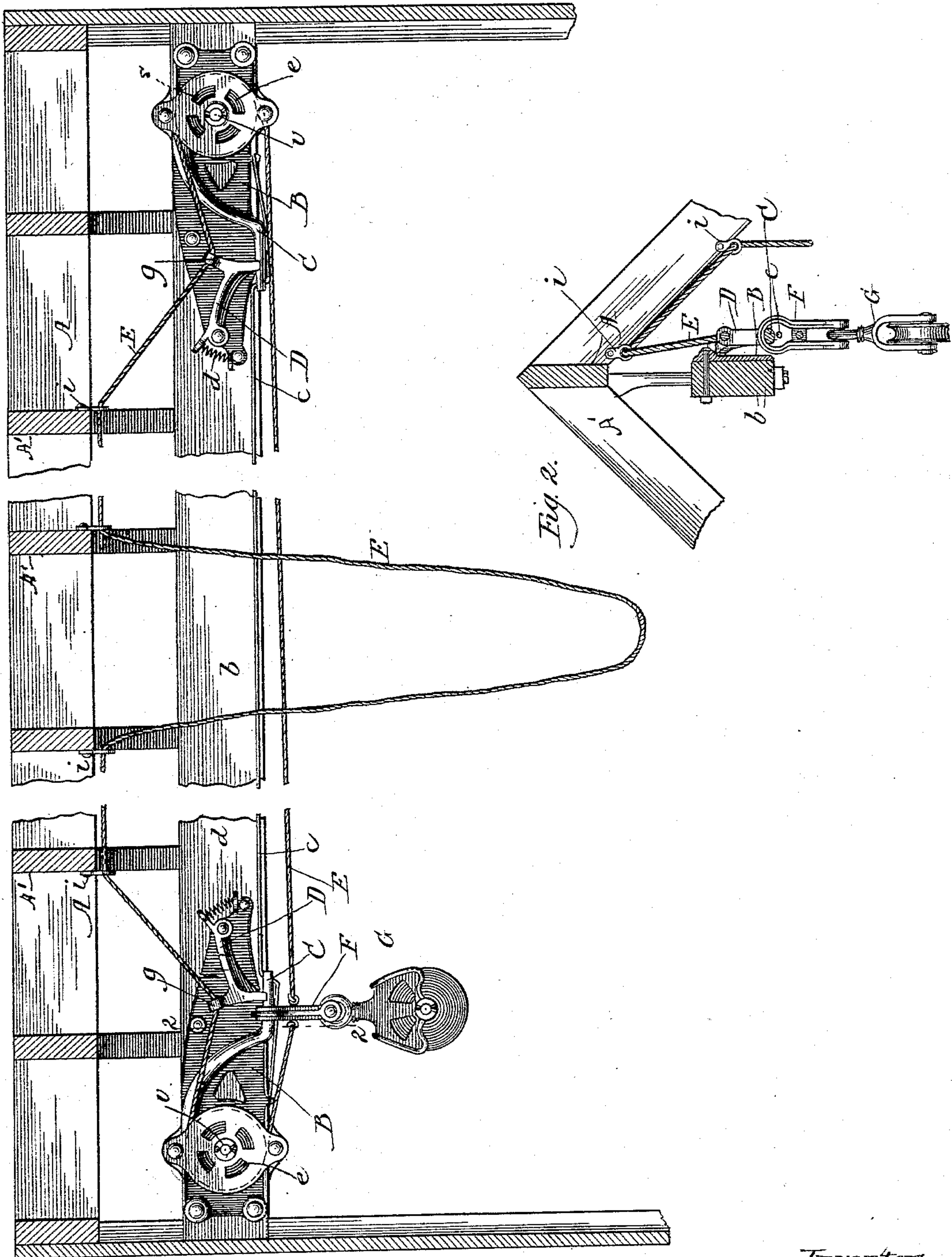


(No Model.)

A. J. BURBANK & E. L. CHURCH.  
PULLEY CHANGING DEVICE.

No. 401,328.

Patented Apr. 16, 1889.



Witnesses:

Frank S. Blanchard

Fred Gerlach.

Fig. 1

Inventor:  
Abner J. Burbank  
Eugene L. Church  
By A. W. Stout



# UNITED STATES PATENT OFFICE.

ABNER J. BURBANK AND EUGENE L. CHURCH, OF HARVARD, ILLINOIS.

## PULLEY-CHANGING DEVICE.

SPECIFICATION forming part of Letters Patent No. 401,328, dated April 16, 1889.

Application filed December 10, 1888. Serial No. 293,210. (No model.)

*To all whom it may concern:*

Be it known that we, ABNER J. BURBANK and EUGENE L. CHURCH, citizens of the United States, residing at Harvard, in the county of McHenry and State of Illinois, have invented a new and useful Improvement in Pulley-Changing Devices, of which the following is a specification.

Our said invention is a pulley-changing device to be used in connection with or independently of a hay-carrier, and it will be hereinafter fully described with reference to the accompanying drawings, in which—

Figure 1 represents a side elevation of the same in connection with sections of some of the rafters and parts of a building in which it is used, and Fig. 2 a cross-section in detail of the same made as indicated by the broken line 2 2 in Fig. 1.

In the drawings, A indicates a ridge-beam of a building-roof; A', some of its rafters; b, a sufficiently strong beam suspended from rafters A' of the building for the hay-carrier to travel upon; B, two plates which may be made of malleable iron, which are bolted to the track-beam b, one at each end, as shown; C, arms, one of which is fastened to each of the plates B, their inner ends standing in a horizontal position, but so far out from the plates as to leave room for the top ends of the clevis F to pass between them, as shown; D, spring-stops pivoted to the plates B, provided with springs d, seated upon the plates, the tension of which holds the feet of the stops down upon the arms C with a certain force, and provided with holes g through the top ends for the endless rope E to pass through, and by means of which the feet are raised against the tension of the springs d to allow the clevis, with its pulley G, to be transferred from one end of the barn to the other by operating the rope E over the track-wire c, the ends of which are secured to the plates B. The endless rope E hangs down in a loop between the end plates, B, and the rest of it passes through eyes i, attached to the rafters, or some of them, above the stops D, through the eyes g in the stops D and around the sheaves s, which turn on their

axles v, having their bearings in plates B and e, which are fastened together, and also through a hole in clevis F, and it is knotted on each side of the clevis to confine the same in position.

The sheaves s are indicated by the circular broken lines in Fig. 1.

The operation of the device is simply as follows: By pulling down on the left side of the loop of rope E the foot of the left stop is raised so that the top of the clevis can pass under it and onto the track-wire c, and then by pulling down the right portion of the loop the clevis is forced to travel on the wire track to the other end of the building, and pass under the foot of the stop at that end of the building, and upon letting go the rope the stop by the force of its spring will close down upon and confine it. Then by reversing the operation the clevis can be returned to the left side again.

What we claim as our invention, and desire to secure by Letters Patent, is—

1. In combination with a track-beam suspended from the frame of the roof, the plates B, one of which is attached to each end of such beam, each plate being provided with a sheave, s, and an arm, C, and a wire track, c, connecting said plates, spring-stops D, and the endless rope E, extending around the sheaves and held up by supports above the plates and provided with a long loop, whereby the clevis F and its pulley are adapted to be moved from one end of the building to the other, substantially as described.

2. In combination with the endless rope E, mounted upon bearings above the sheaves s, as described, the said sheaves, the plates B, and their arms C, the wire track c, connecting said arms, and the spring-stops D, pivoted to plates B, adapted to be confined or released by operating said rope as required, substantially as described.

ABNER J. BURBANK.  
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Witnesses:

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