T. S. MILLER & J. H. DICKINSON.

HOISTING AND CONVEYING APPARATUS.

APPLICATION FILED FEB. 1, 1908.

947,447. Patented Jan. 25, 1910.

Fig. 1.

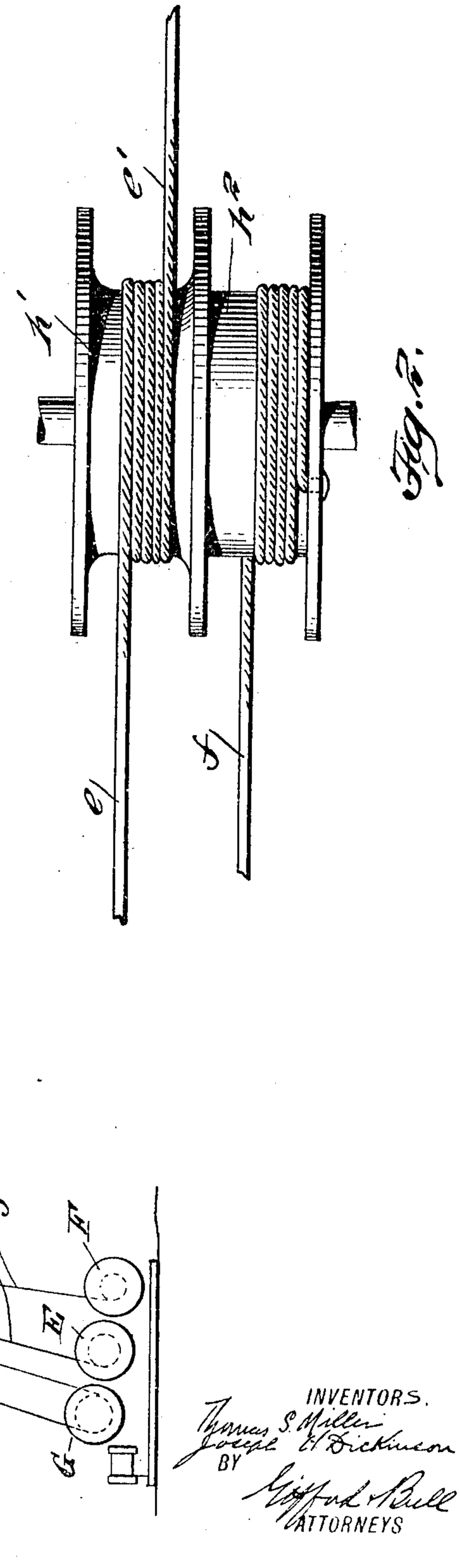

Fig. 2.

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HOISTING AND CONVEYING APPARATUS.

947,447. Specification of Letters Patent. **Patented Jan. 25, 1910.**

Original application filed October 18, 1902, Serial No. 127,788. Divided and this application filed February 1, 1908. Serial No. 413,750.

To all whom it may concern:

Be it known that we, THOMAS SPENCER MILLER, a citizen of the United States, and a resident of South Orange, in the county of Essex and State of New Jersey, and JOSEPH H. DICKINSON, a citizen of the United States, formerly a resident of Atlanta, in the county of Fulton and State of Georgia, and now a resident of Montclair, in the county of Essex and State of New Jersey, have invented a new and useful Improvement in Hoisting and Conveying Apparatus, of which the following is a specification.

This invention relates to certain novel and useful improvements in hoisting and conveying apparatus and is a division of our earlier application for hoisting and conveying apparatus filed October 18, 1902, Serial No. 127,788. In application Serial No. 127,788, in Figures 3 and 4 thereof, and in the description of said figures in the specification we have shown and described a construction of cableway wherein a traveling carriage is provided with two traveling drum parts and an outhaul rope for the carriage. Further, such construction shows an engine including two stationary drums, a rope connecting each of said stationary drums with one of said traveling drum parts to operate inversely, one of the ropes being extended beyond its traveling drum parts for connection with an object to be hauled, and we have also shown a stationary drum connected to the outhaul rope of the carriage for pulling a log outward. The present application, which as aforesaid, is a division of our prior application No. 127,788, is intended to apply to the construction shown in Figs. 3 and 4 of said application.

In the accompanying drawings Fig. 1 is a side view of a form of cableway embodying our improvements; Fig. 2 is a detail of the load-carriage drum or sheave for the same.

In the drawings the head support is at A and the tail support at B.

C is the cable or trackway.

D is the load-carriage.

E is the friction operated drum for the hoisting rope. *e* is the hoisting rope operated thereby and *e'* is the fall-rope integral therewith, or continuous therewith, and designed to carry the tongs or other gripping means for engaging the log.

F is the friction slack-pulling rope-drum of the engine.

f is the slack-pulling rope.

G is the friction traction rope drum of the engine and *g* is the traction rope operated thereby.

1, 2, 3, and 4 are guide sheaves on the head support.

5 and 6 are guide sheaves on the tail support.

7 and 8 are the load-carriage wheels running on the cable or trackway.

H is the load-carriage drum or sheave consisting of two parts, the drum part *h'* about which the fall-rope is wrapped, the end of such rope extending beyond the drum for connection with an object to be hauled, and the drum part h^2 to which the slack-pulling rope *f* is secured.

In operating the construction shown herein, as the traction rope G moves the carriage toward the tail support, the ropes *e* and *f* are paid out in unison and as it is moved toward the head support the ropes *e* and *f* are hauled in in unison. The fall may be lowered by holding the traction rope stationary and hauling in on the slack pulling rope *f*, and paying out the corresponding hoisting rope *e*. The load may be hoisted by holding the traction rope stationary, hauling in on the hoisting rope *e* and paying out on the slack-pulling rope *f*.

Having thus described our invention, what we claim is:

In combination, a traveling carriage, two traveling drum parts on said carriage, an outhaul rope connected to said carriage, two stationary drums, a rope connecting each of said stationary drums with one of said traveling drum parts to operate inversely, one of said ropes being extended beyond its traveling drum part for connection with an object to be hauled, and a stationary drum connected to said outhaul rope.

In testimony whereof we have signed our names to this specification in the presence of two subscribing witnesses.

THOMAS SPENCER MILLER.
JOSEPH H. DICKINSON.

Witnesses:
H. G. BARRINGTON,
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