

W. O'NEILL.
 CONVEYER FOR TRANSPORTATION OF LOGS, &c.
 APPLICATION FILED APR. 13, 1911.

1,011,837.

Patented Dec. 12, 1911.

2 SHEETS—SHEET 1.

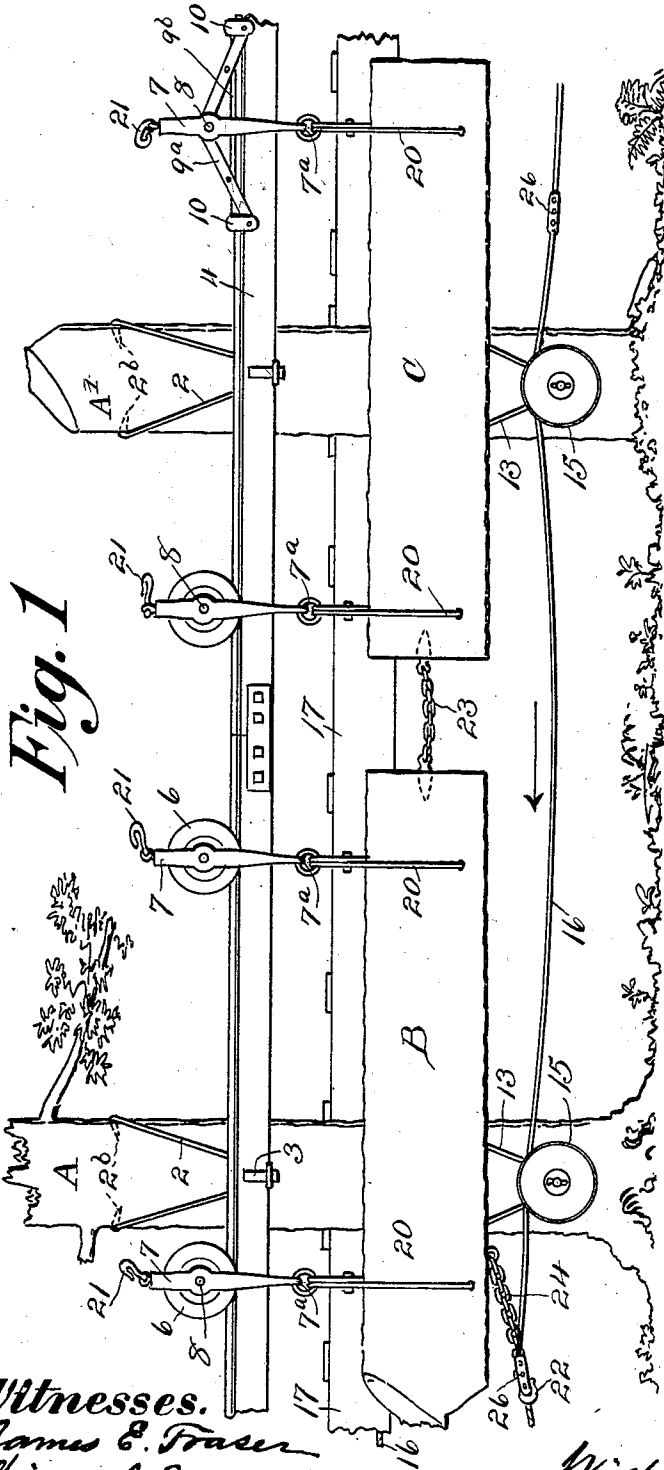


Fig. 1

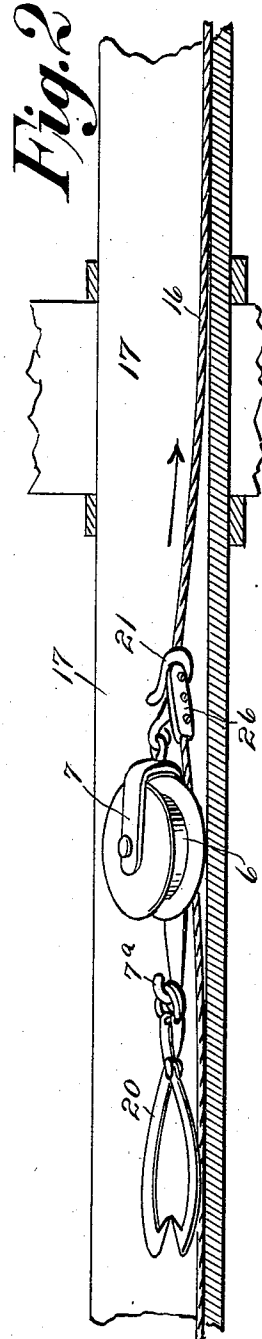


Fig. 2

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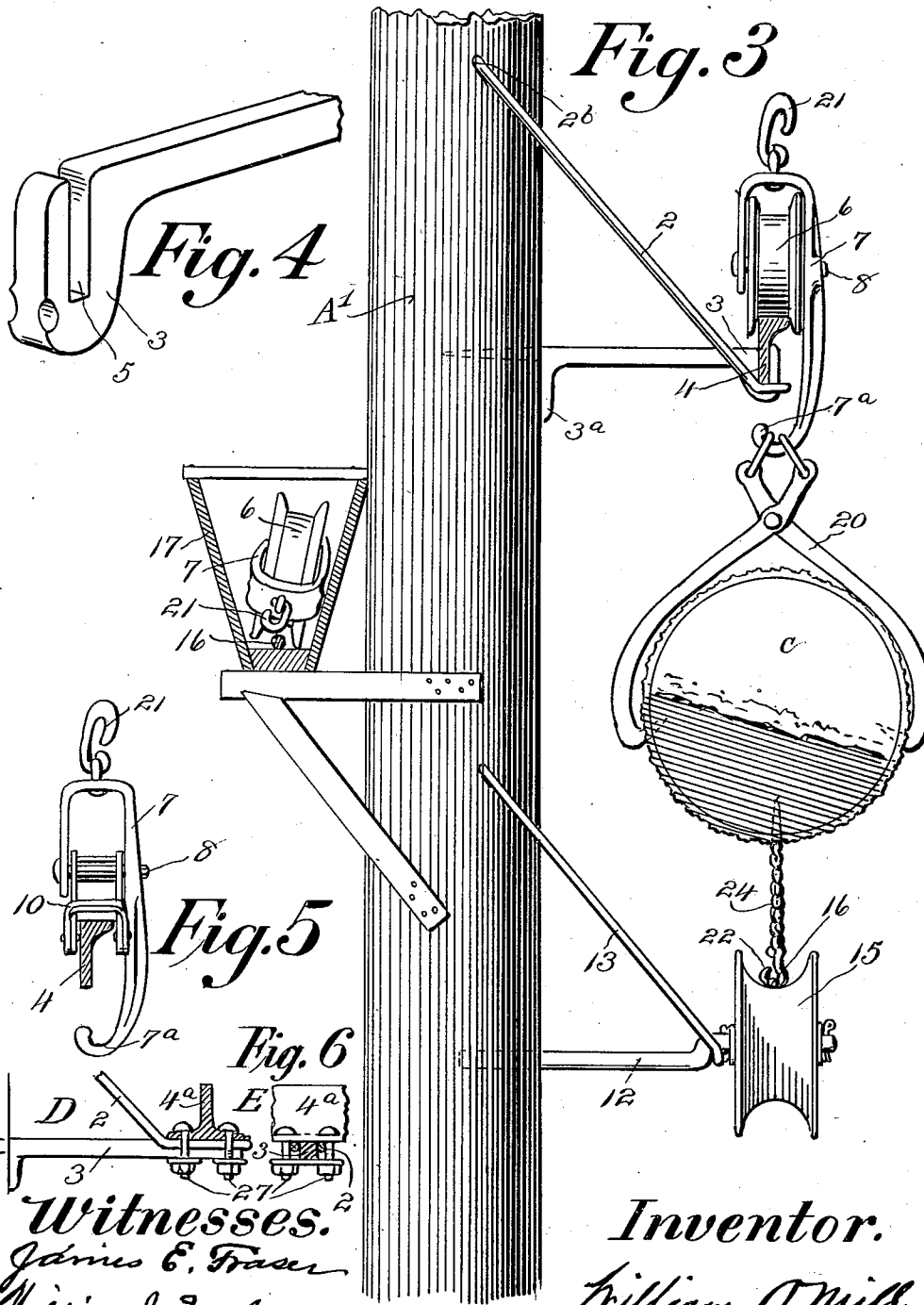
Inventor.
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UNITED STATES PATENT OFFICE.

WILLIAM O'NEILL, OF ST. JOHN, NEW BRUNSWICK, CANADA.

CONVEYER FOR TRANSPORTATION OF LOGS, &c.

1,011,837.

Specification of Letters Patent.

Patented Dec. 12, 1911.

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To all whom it may concern:

Be it known that I, WILLIAM O'NEILL, a citizen of the Dominion of Canada, residing at St. John, in the county of St. John and Province of New Brunswick, Canada, have invented certain new and useful Improvements in Conveyers for Transportation of Logs, &c.; and I do declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to the letters and figures of reference marked thereon, which form a part of this specification.

This invention relates to a conveyer for transporting logs, timber, coal, stone, ice and the like, and has for its object to provide a simple inexpensive, efficient and portable conveyer, primarily designed for the removal of timber logs from a forest to places assigned for sawing or rafting the said logs.

With this object in view the invention consists in the novel construction of the conveyer, and also in certain combinations of parts, all of which will be first fully described and afterward specifically pointed out in the appended claims.

Referring to the accompanying drawings: Figure 1 is a side elevation of a conveyer constructed in accordance with my invention. Fig. 2 is an enlarged fragmentary view of a portion of the conveyer. Fig. 3 is an end elevation partly in section. Fig. 4 is a perspective view of the outer portion of steel bracket adapted to hold the conveyer rail in proper position. Fig. 5 is an elevation of a brake shoe adapted to displace one or more of the flange wheels that carry the logs, and Fig. 6 illustrates a modification in the shape of the rail and the manner in which it is fastened to the brackets.

By this arrangement of conveyer strong uprights are required to support the moving logs and hold the same out of contact with the earth. For this purpose growing trunks of trees sunk vertically in the soil are available.

Like numerals of reference indicate the same parts throughout the several figures in which—

3 indicates a steel bracket having a tang and a stop 3^a, which tang is driven into a vertical post or tree trunk A or vertical post A¹ in substantially a horizontal position,

the stop 3^a limiting the entrance of the bracket into the post or trunk. The outer end of said bracket 3 is turned to form a hook, the bight 5 of the hook being made with the inner surfaces of its sides parallel to receive and accommodate the conveyer rail 4, as clearly shown in Fig. 3.

2 indicates the bail-shaped hangers which are provided with a tang 2^b on each leg of the hanger in such manner that the said tangs can be readily driven into the tree trunk or posts from opposite sides thereof, as clearly shown in Fig. 1.

The central and lower part of the hanger 2 converges and passes around the base of the bracket 3 in a manner as illustrated in Figs. 1 and 3, so that the hangers 2 form both a strong tension support for the rail 4 and an angular tie and brace as well. The rail 4 is of a depth commensurate with the strength required and for the particular purpose for which the conveyer is to be employed in such manner as to safely carry its load between the supporting posts or trunks A and A¹; and as will appear from Fig. 4 the track of the rail 4 may be flanged in order to strengthen the same and to present a wide tread, although of course this flange and widened tread may be dispensed with without departing from the spirit of this invention, while a T rail 4^a may be employed as shown in Fig. 6. In this figure the reference letters D and E represent respectively end and side views of the rail 4^a, the supports 2 and 3 being illustrated as connected to the rail 4^a by means of bolts 27.

Referring now to the rolling stock, the same comprises a flanged roller 6 mounted on a pin or axle 8 which is held in place by perforations in the inverted U-shaped piece 7. The outer section of the said piece 7 extends in a downward direction a distance sufficient to clear all obstructions and is turned inward at the end to form a hook 7^a, upon which hook the load may be hung by any simple and efficient expedient, such as by tongs 20, as shown in Figs. 1 and 3, said tongs entering the logs B and C as shown.

When conveying the logs the same may be coupled together by connections 23 as shown in Fig. 1, said connections being in effect a short piece of chain linked to an iron wedge at each end, said connections being commonly termed "dogs", which are securely driven into the adjacent ends of the logs to securely connect the same together, driven

into the first and last log of the series of logs. The line 16 is arranged to run beneath the rail 4 and under the logs B and C, and for its accommodation pulleys 15 are provided having grooved perforations to receive the cable 16. At intervals on the driving cable are firmly secured, preferably by clamping, a series of iron stops 26 having for their purpose the engagement of a hook 22 for towing purposes, the said stops 26 being of a size sufficient to prevent them from passing through the bight of the hook. By this means the hauling power is communicated to the connecting chain 24 which is suitably connected to the logs B and C at appropriate distances.

When the load has been disposed of the rolling stock 6 is attached to the returning side of the cable circuit which is illustrated in Fig. 3 as lying within the housing 17, hooks 21 being provided on the shell 7 for connection with the cable 16. The grooved rollers 15 rotate on axles 12 which project from the posts or trunks in a manner similar to the bracket 3 which carries the rail 4, but the construction differs inasmuch as the load carried by the grooved pulleys 15 is relatively very small as compared to that carried by the brackets 3, the hangers 13 being similar to the hangers 2 for the rail 4 and are sufficient to sustain the strain on the rollers 15 and to brace the axles 12 in such manner as to readily maintain them in proper position.

In instances where the route of the conveyer leads down hillsides enabling gravity to exert too powerful a strain on the cable 16 and where the load might even break loose and become unmanageable a friction brake 9^a (Fig. 1) is substituted for one or more of the wheels 6, a simple and efficient construction for the said brake being shown in the drawing, which comprises a flat shoe 9^b acting in frictional contact with the rail 4, a pair of A-shaped irons or steel braces having near the apex thereof a perforation to correspond with the position of the actual pin 8 in the shell 7, inverted U-shaped pieces 10 binding the braces 9^a and shoe 9^b together and combining to form guiding flanges to keep the brake on the rail. As this construction illustrated and described may be altered or varied I do not wish to be understood as limiting the invention to the specific construction of the brake mechanism as any

simple efficient brake could be employed with satisfactory results.

Having thus described the several parts of this invention its operation is as follows: The conveyer being set up in the manner as illustrated in Fig. 1 the logs are conveyed by connecting the same together to form a chain, the pulleys being applied to the cable 16 which relieves the chain of logs from any strain which would tend to break the rail. As the logs are carried to their destination it is necessary to return the rolling stock and the driving cable to the starting point again, and for this purpose the housing 17 is provided within which the rolling stock and the cable are placed, the said rolling stock being connected to the cable by means of a hook 21 to lie within the housing 16 in the manner shown in Fig. 2. When, therefore, the driving cable and rolling stock have been returned to their starting point the rolling stock is again applied to the rail 4 and ready to receive another load to be conveyed, the driving cable 16 being applied to the load in the manner as above described and as illustrated in Fig. 1.

Having thus fully described the invention what I claim as new and desire to secure by Letters Patent of the United States, is:—

1. A conveyer comprising a track and means for securing the same to a series of posts or tree trunks, suitable rolling stock arranged on the said rail for supporting the load to be conveyed, a frictional sliding member arranged on the rail and adapted to support the load in order to brake the same, a driving cable and means for supporting the same under the said rail, said driving cable being provided with means for connecting the same to the load.

2. A conveyer comprising a rail and means for supporting a load therefrom, a driving cable and means for supporting the same under the said rail, means on said driving cable for connecting the same with the said load and a housing to receive the said load suspending means in the said driving cable for the purpose of returning the same after the load has been conveyed.

In testimony whereof, I affix my signature, in presence of two witnesses.

WILLIAM O'NEILL.

Witnesses:

S. J. DOWNING,
ALBERT G. EBERT.