

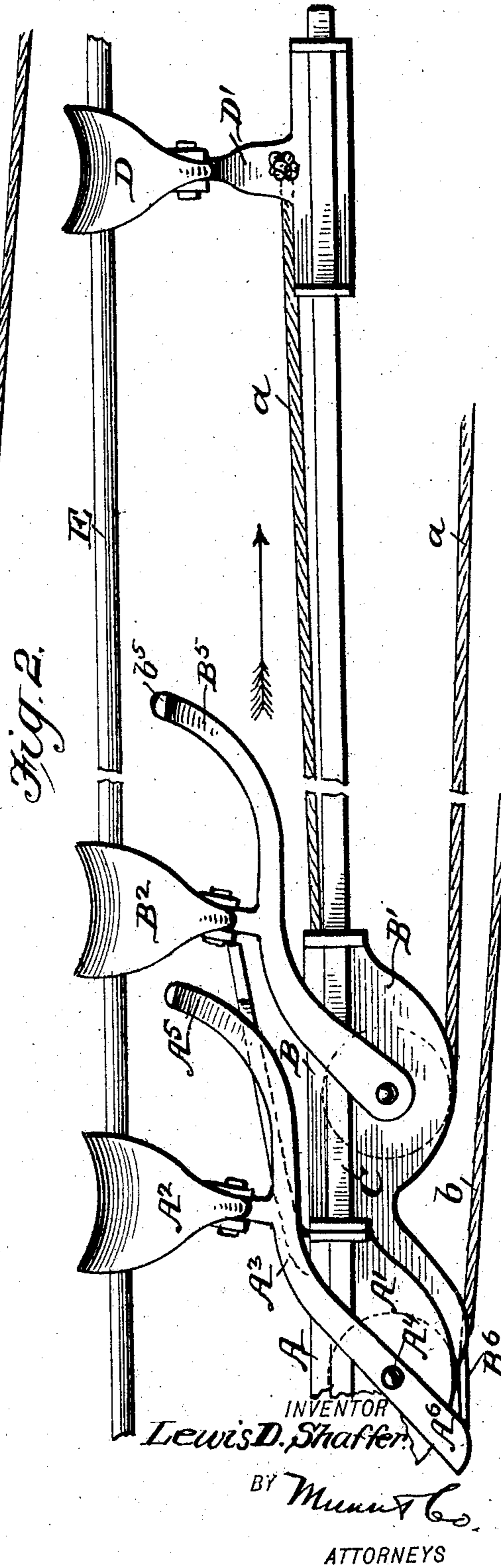
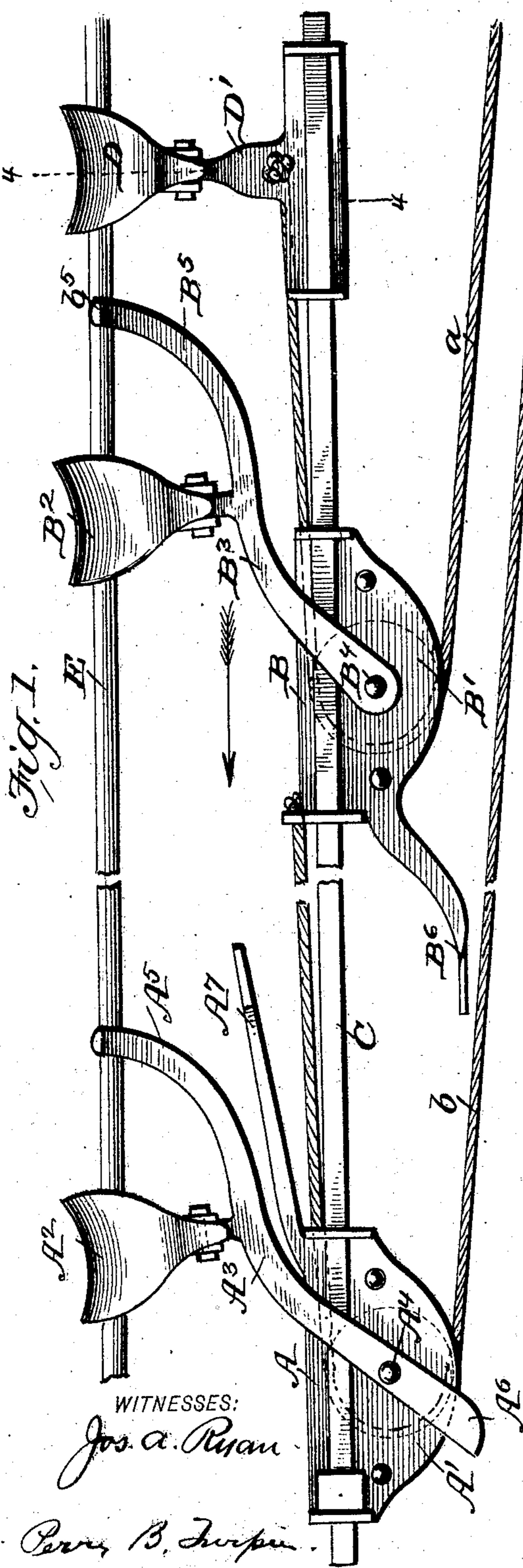
No. 850,798.

PATENTED APR. 16, 1907.

L. D. SHAFFER.
LINE CARRIER.

APPLICATION FILED NOV. 25, 1905.

2 SHEETS—SHEET 1.



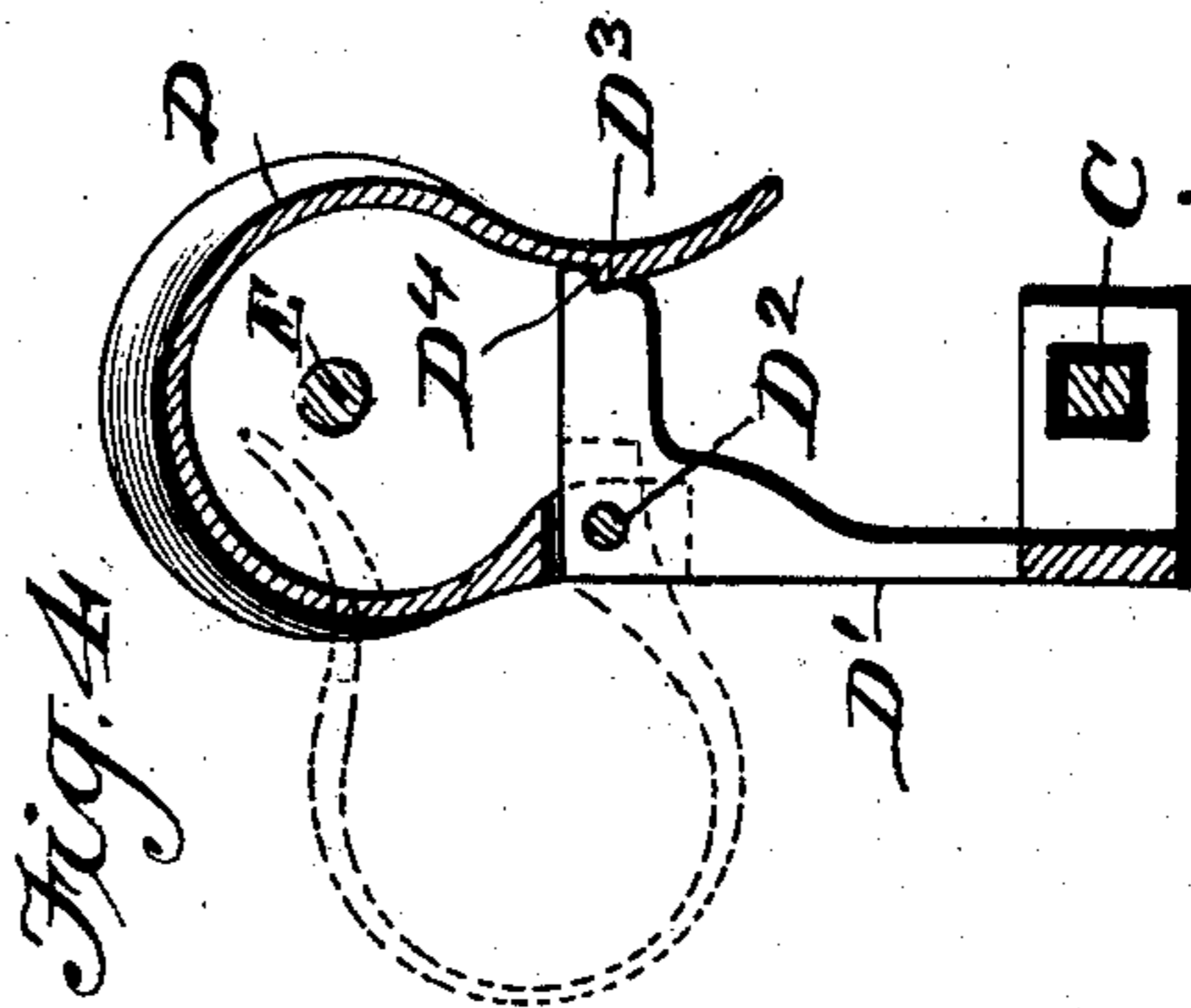
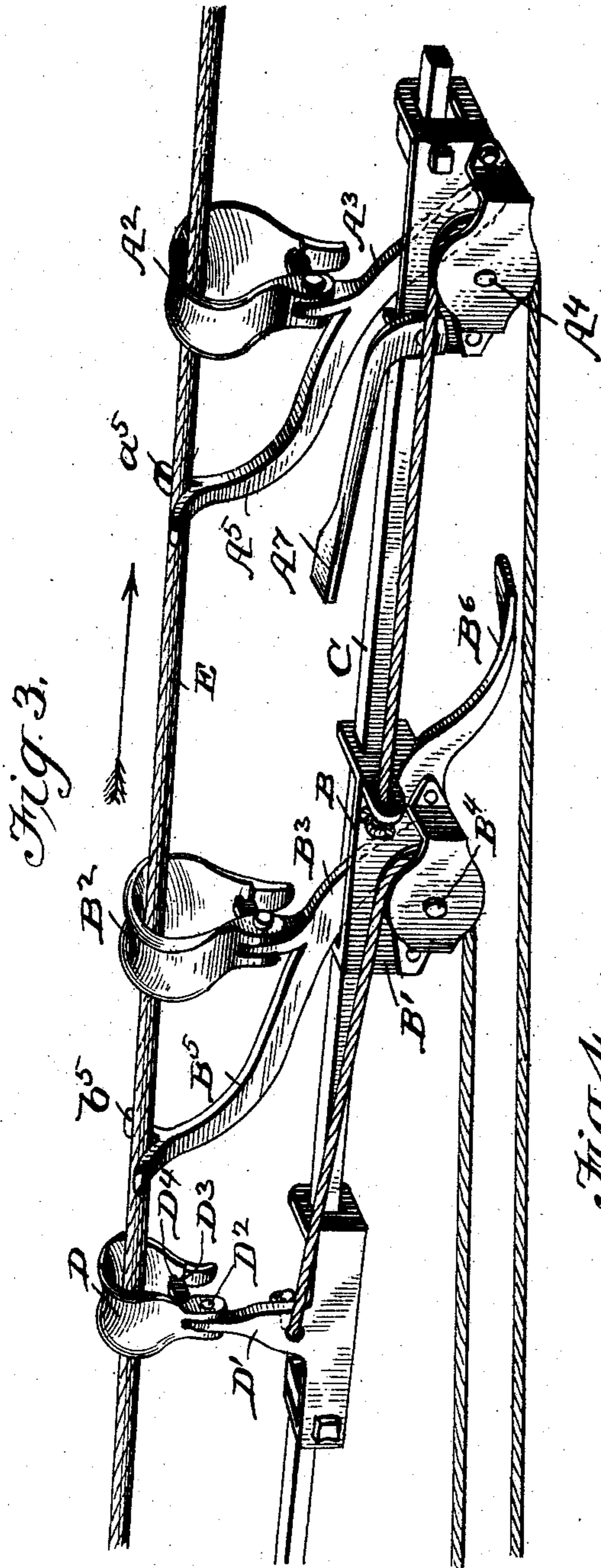
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2 SHEETS—SHEET 2.



WITNESSES:

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LEWIS D. SHAFFER, OF PAINT BOROUGH, PENNSYLVANIA.

LINE-CARRIER.

No. 850,798.

Specification of Letters Patent.

Patented April 16, 1907.

Application filed November 25, 1905. Serial No. 289,025.

To all whom it may concern:

Be it known that I, LEWIS D. SHAFFER, a citizen of the United States, and a resident of Paint Borough, in the county of Somerset and State of Pennsylvania, have invented certain new and useful Improvements in Line-Carriers, of which the following is a specification.

My invention is an improvement in line-carriers, especially designed for use in stringing wires after the first wire has been strung, as well as for carrying wires, lines, and the like across an intervening space having a wire for supporting the device; and the invention consists in certain novel constructions and combinations of parts, as will be hereinafter described and claimed.

In the drawings, Figure 1 is a side view, partly broken away, of a carrier embodying my invention, the detents of the two travelers being shown in engagement with the supporting-line. Fig. 2 is a similar view with the travelers adjusted to position to throw the detents clear of the supporting-line so the carrier may be retracted. Fig. 3 is a detail perspective view of the carrier with the parts in substantially the position shown in Fig. 1, and Fig. 4 is a cross-section on about line 4 4 of Fig. 1.

As shown, the carrier includes a front traveler A and a rear traveler B. The front traveler A is secured to a connecting-bar C, which extends rearwardly therefrom through the traveler B, which is slidable along the bar C and to the rear of the traveler B and is preferably provided in rear of the traveler B with a guide D to run upon the supporting-line E, and so maintain the carrier steadily in its desired position approximately parallel with the supporting-line. The front traveler A, which is secured to and practically forms a part of the bar C, is provided with a guide-pulley A', around which extends the cord a for advancing the rear traveler B. The traveler B is provided with a pulley B', around which extends a cord b for advancing the front traveler A through the medium of the bar C. This cord b extends over the pulley B' and thence back and is connected with the bar C in rear of the traveler B, and preferably to the bracket D', supporting the guide D, as shown in Figs. 1, 2, and 3. The travelers A and B are provided with guides A² and B², which are connected with their respective travelers by bars A³ and B³, which are preferably pivoted at A⁴ and B⁴ to their respective

travelers, so the bars A³ and B³ may be rocked to bring their detent portions A⁵ and B⁵ into and out of engagement with the line E, the said detent portions A⁵ and B⁵ being extensions of the bars A³ and B³ in rear of their respective guides A² and B² and being preferably forked at their upper ends at a⁴ and b⁵, so they will engage with the line when in the position shown in Figs. 1 and 3 to prevent any backward movement of their respective travelers, and yet may be adjusted clear of the line, as shown in Fig. 2, when it is desired to retract the entire carrier in the use of the invention, as will be presently described.

When the bars A³ and B³ are in approximately the position shown in Fig. 1, with their forked ends about in alinement with their respective guides A² and B², when applied to the line E, it will be noticed the detents will not interfere with the movement of the guides along the line E in the direction of the arrow in Fig. 1, but will by engagement with the line prevent reverse movement of the travelers. When, however, the detents are arranged as shown in Fig. 2, they will stand clear of the line E, and the carrier may be readily moved backwardly in the direction of the arrow in said Fig. 2. The guides A², B², and D are constructed alike and are arranged to be opened, as indicated in dotted lines, Fig. 4, and closed, as shown in full lines in the same figure. The guides being in the form of hooks pivoted at one end, as shown in Fig. 4, at D² and having their free ends at D³ springing into and out of engagement with a seat D⁴, the point or free end of the hooked guide thus forms a spring-catch for holding the guide in position shown in Fig. 4, and yet permits the opening of the guide under pressure to enable its application to and removal from the line E whenever desired.

In operation, when the parts are in the position shown in Fig. 1, if the line b be drawn upon it will move the traveler B to the left toward the traveler A. Then if the line a be drawn upon it will move the bar C and the traveler A to the left away from the traveler B, this step-by-step movement effecting an advance of the entire carrier, as will be understood from the drawings. It is sometimes desirable to retract the carrier, and to this end I provide means on each of the travelers for releasing the detent of the other traveler. To this end the bar A³, supporting the detent of the front traveler, extends at A⁶ below the pivot A⁴, and the rear traveler B is

provided at its front end with a projecting portion B⁶, arranged for engagement with the lower extension A⁶ of the bar A³ when the parts are adjusted to the position shown in Fig. 2, and so operates to tilt the bar A³ from the position shown in Fig. 1 to that shown in Fig. 2, and so releases the detent A⁵ from engagement with the supporting-line E. The front traveler A is provided with a rearwardly-projecting bar or portion A⁷, which in the adjustment of parts shown in Fig. 2 engages with the detent-supporting bar B³ and throws the rear detent B⁵ clear of the line E, as shown in Fig. 2. This setting of the front and rear travelers into engagement with each other may be effected by pulling the rope or cord b to such an extent as to force the rear traveler to its extreme forward position, thus moving the parts into the relation shown in Fig. 2, when the entire carrier may be drawn back to any desired extent and then released for a new forward operation by giving a slight jerk to the cord a to pull the traveler B back clear of the front traveler and to the position shown in Figs. 1 and 3 of the drawings.

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

1. The line-carrier herein described, comprising the front traveler having a rearwardly-projecting bar and a line-guide on the said bar, a rear carrier slidable along the bar between the front carrier and its line-guide, guide-pulleys on the front and rear carriers, bars pivoted to their respective carriers and projecting upwardly therefrom and provided with line-guides and in rear thereof with detent portions, the pivoted bar of the front carrier being provided with a downward extension below its pivot and said carrier being also provided with a rearwardly-projecting portion to engage the pivoted bar of the rear carrier when the carriers are moved into engagement with each other and the rear carrier being provided with a forwardly-projecting portion to engage with the downward extension of the pivoted bar of the front carrier when the carriers are moved into engagement, whereby the detents of the front and rear carriers may be released in such position of the parts, and cords for advancing the front and rear travelers alternately, substantially as set forth.

2. In a line-carrier, a traveler provided with a line-guide and in rear thereof with a detent portion for engaging a supporting-

line to prevent any backward movement of the carrier.

3. A line-carrier having a line-guide which may be opened for the application of the guide to and its removal from a line and may be closed when on the line, substantially as set forth.

4. A carrier having a line-guide consisting of a hook pivoted at one end and having its free end or point springing into and out of engagement with a suitable abutment whereby the guide may be opened or closed, substantially as set forth.

5. In a line-carrier, a traveler having a body portion, a bar pivoted thereto, a line-guide and a detent in rear thereof and carried by the said bar substantially as set forth.

6. The combination in a traveler for line-carriers of a body portion, a bar pivoted thereto and having a detent at its upper rear end and a line-guide on the bar in advance of said detent.

7. The combination in a line-carrier of a front traveler having a line-guide and a detent operating in connection therewith, a rear traveler having a line-guide and a detent operating in connection therewith, means on the front carrier for releasing the detent of the rear carrier and means on the rear carrier for releasing the detent of the front carrier, substantially as set forth.

8. A line-carrier comprising a front traveler having guide and detent devices, a bar projecting rearwardly from said front carrier, a line-guide on the said bar, a rear traveler on the bar between its line-guide and the front carrier and provided with a line-guide and a detent, and means for alternately advancing the said travelers, substantially as set forth.

9. A line-carrier comprising a front traveler having a rearwardly-projecting bar, a rear traveler slidable on said bar, said travelers being provided with line-guides and detent devices operating in connection therewith, a forwardly-extending portion on the rear traveler for releasing the detent of the front traveler, and a rearwardly-projecting portion on the front traveler for releasing the detent of the rear traveler, substantially as set forth.

LEWIS D. SHAFFER.

Witnesses:

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W. B. SYDLER.