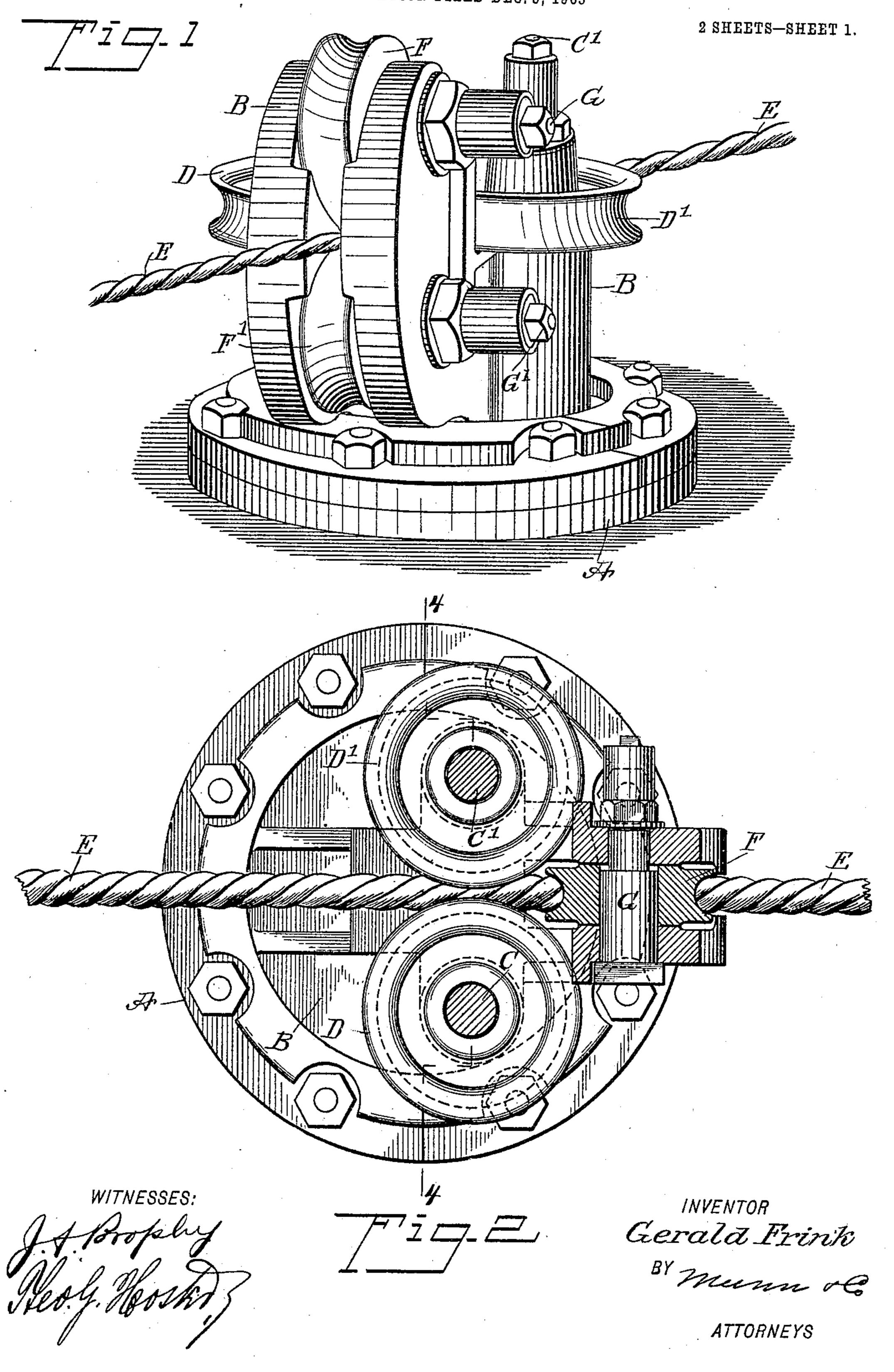
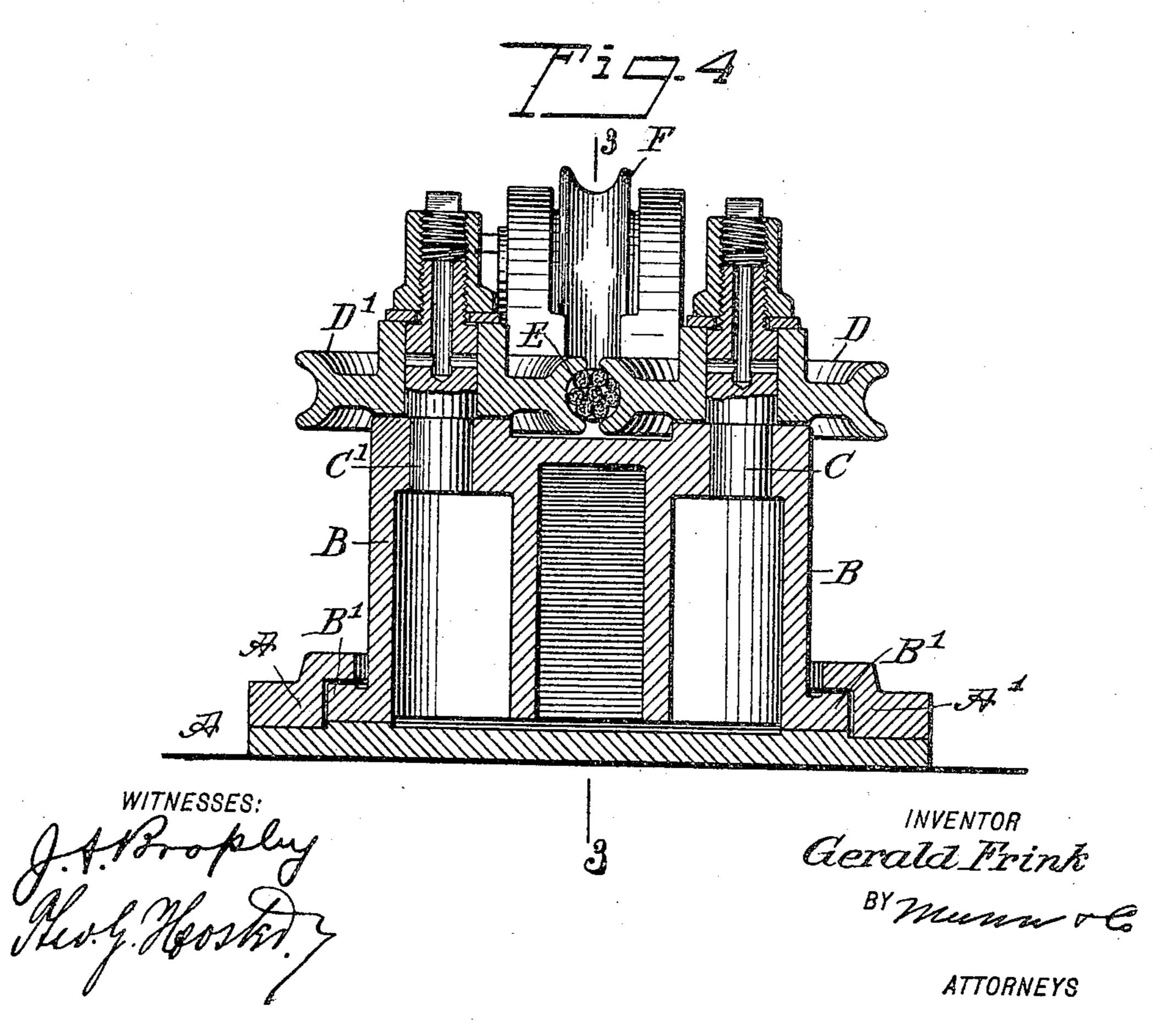
G. FRINK.

CABLE OR ROPE GUIDE.

APPLICATION FILED DEC. 5, 1905



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NITED STATES PATENT OFFICE.

GERALD FRINK, OF SEATTLE, WASHINGTON, ASSIGNOR TO WASHINGTON IRON WORKS COMPANY, OF SEATTLE, WASHINGTON.

CABLE OR ROPE GUIDE.

No. 817,553.

Specification of Letters Patent.

Patented April 10, 1906.

Application filed December 5, 1905. Serial No. 290,383.

To all whom it may concern:

Be it known that I, Gerald Frink, a citizen of the United States, and a resident of Seattle, in the county of King and State of 5 Washington, have invented a new and Improved Cable or Rope Guide, of which the following is a full, clear, and exact description.

The invention relates to logging-machines; ro and its object is to provide a new and improved cable or rope guide or fair-leader arranged to properly lead the cable or rope to the drum of the logging-engine from any direction.

The invention consists of novel features and parts and combinations of the same, which will be more fully described hereinafter and then pointed out in the claims.

A practical embodiment of the invention 2c is represented in the accompanying drawings, forming a part of this specification, in which similar characters of reference indicate corresponding parts in all the views.

Figure 1 is a perspective view of the im-25 provement. Fig. 2 is a sectional plan view of the same on the line 2 2 of Fig. 3. Fig. 3 is a sectional side elevation of the same on the line 3 3 of Fig. 4, and Fig. 4 is a transverse section of the same on the line 4 4 of Fig. 2.

The base A of the cable or rope guide is provided with an annular bearing A', in which is mounted to turn a flange B', secured or formed on the lower end of a frame or standard provided on the top with vertically-35 disposed pins or studs C and C', on which are mounted to rotate guide pulleys or sheaves D and D', between which passes the cable or rope E, employed for logging purposes and leading to the drum of the logging-engine to 40 be wound thereon. The cable or rope E, besides passing between the horizontally-disposed guide-pulleys D and D', also passes between the vertically-disposed guide-pulleys

45 G and G', secured on the frame or standard B and having their axes disposed in a vertical plane parallel to and somewhat in front of the vertical plane passing through the axes of the pulleys D and D'. The vertical plane

50 passing through the axes of the pulleys D and D' extends somewhat in front of the center of the frame B, as will be readily understood by reference to Fig. 2, so that the cable or rope E in passing from any direction to the set of 55 guide-pulleys F and F' and then to the set of I

| guide-pulleys D and D' causes a turning of the frame B in the bearing A' according to the direction in which the cable or rope passes from the guide to the drum on which the cable or rope is to be wound. Thus the 60 cable or rope guide automatically accommodates itself according to the direction in which the cable or rope E is traveling to or from the drum of the logging-engine, and consequently friction and undue strain are re- 65 duced to a minimum.

The guide is very simple and durable in construction and composed of comparatively few parts not liable to get easily out of order.

As shown in the drawings, the pins C, C', G, 70 and G' are provided with suitable lubricating channels for properly lubricating the guidepulleys D D' and F F'.

Having thus described my invention, I claim as new and desire to secure by Letters 75 Patent—

1. A cable or rope guide, comprising a frame, sets of guide-pulleys journaled upon the frame, the sets being disposed at angles one to the other, said frame being mounted 80 to turn in an axis parallel to the axis of one of the said sets of guide-pulleys.

2. A cable or rope guide, comprising a base, a frame mounted to turn in the said base, a set of guide-pulleys journaled in the 85 said frame and having their axes parallel to the axis of the said frame and on opposite sides of the frame-axis, and a second set of guide-pulleys journaled in the said frame and having their axes at right angles to the axis of 90 the said frame.

3. A cable or rope guide, comprising a base, a frame mounted to turn in the said base and having a vertical axis, a pair of horizontally-disposed guide-pulleys journaled in 95 the said frame and having their axes arranged in a vertical plane somewhat in front of the axis of the said frame, and a set of ver-F and F', mounted to rotate on pins or studs | tically-disposed guide-pulleys journaled in G and G', secured on the frame or standard | the said frame and having their axes in a 100 plane parallel to and somewhat in front of the plane passing through the axis of the first-named set of guide-pulleys.

In testimony whereof I have signed my name to this specification in the presence of 105 two subscribing witnesses.

GERALD FRINK.

Witnesses:

G. W. Upper, I. D. WARE.