D. G. MANGES.

SPAR POLE FOR LOG SKIDDING MACHINES.

APPLICATION FILED MAR. 11, 1915.

1,207,192.

Patented Dec. 5, 1916.

3 SHEETS—SHEET 1.

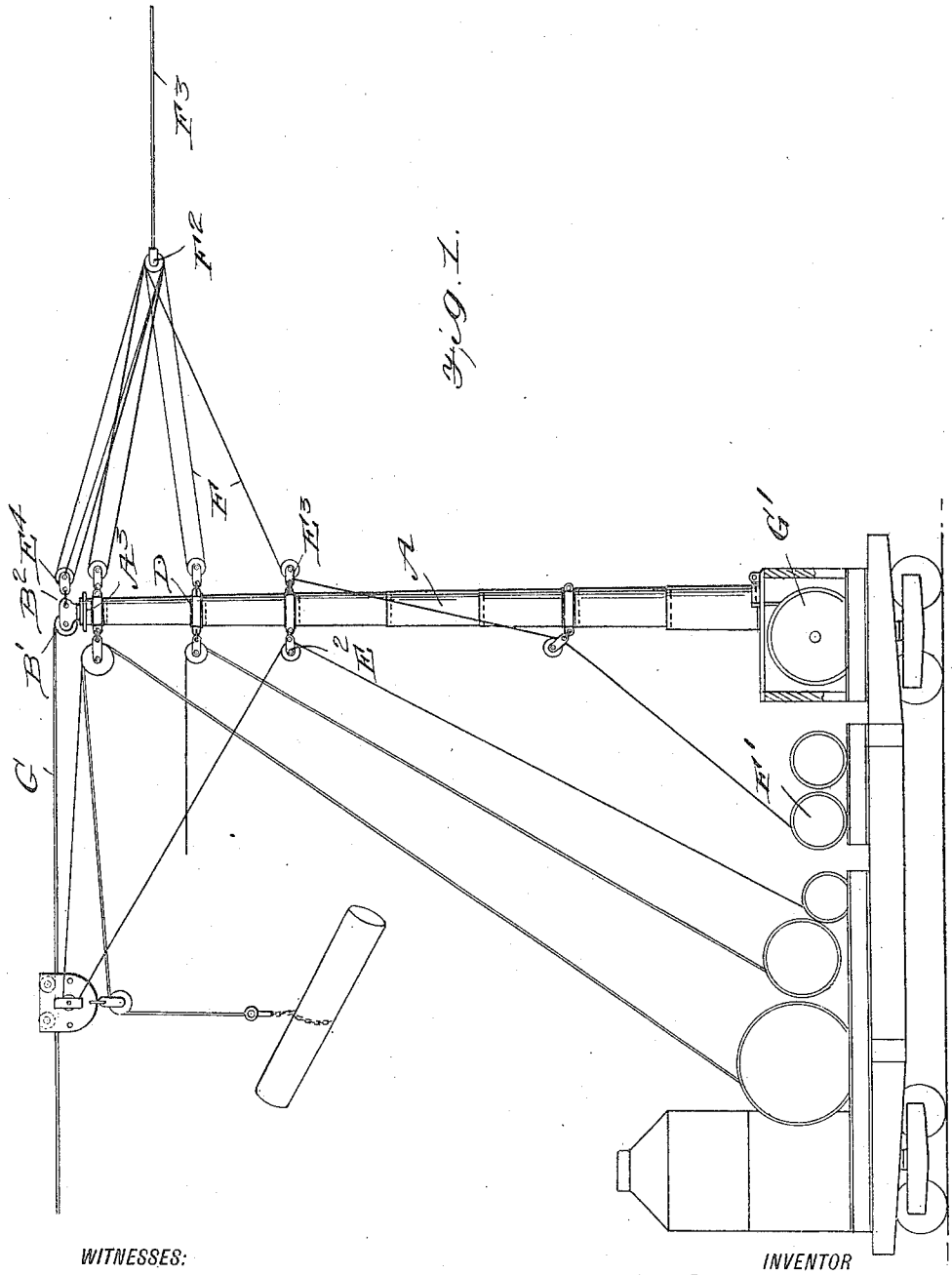


Fig. 1.

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3 SHEETS—SHEET 2.

Fig. 2.

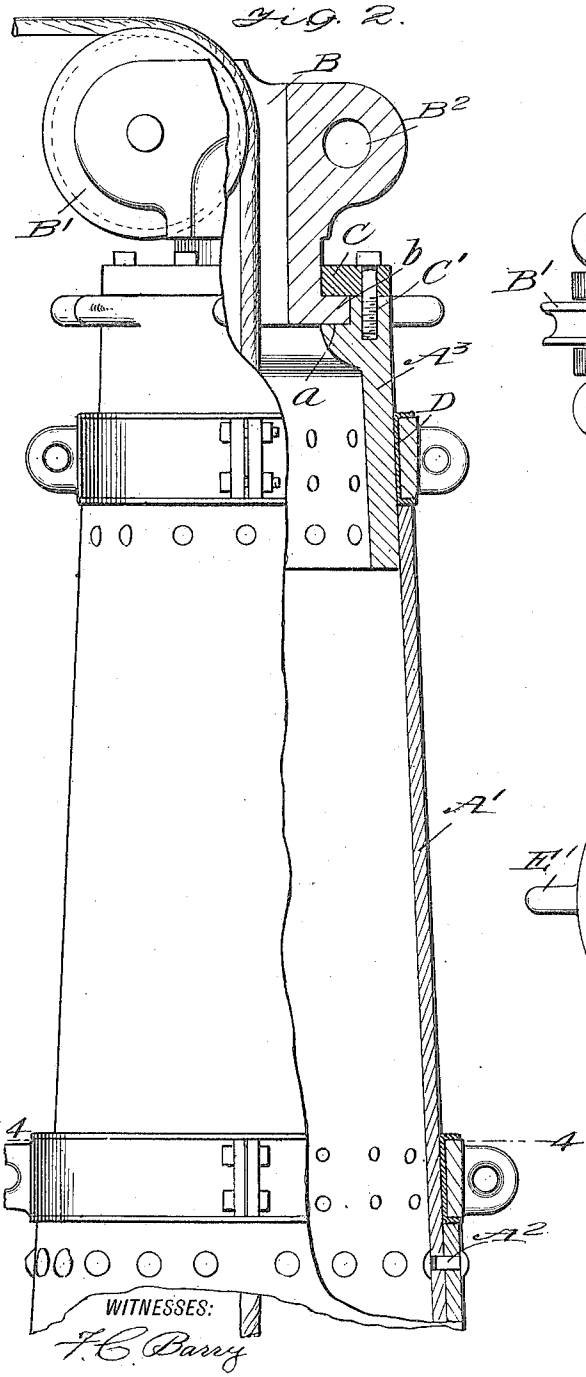


Fig. 3.

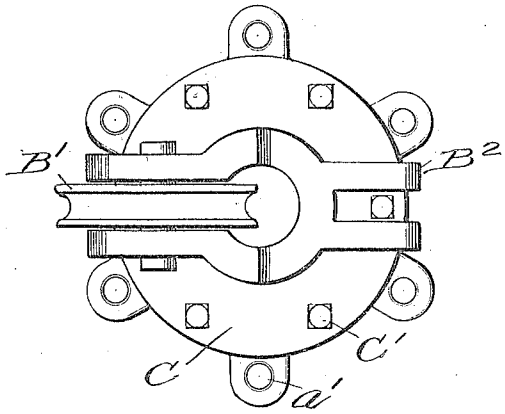
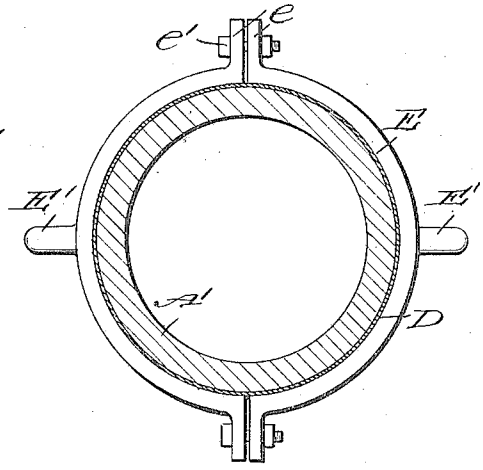


Fig. 4.



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3 SHEETS—SHEET 3.

Fig. 5.

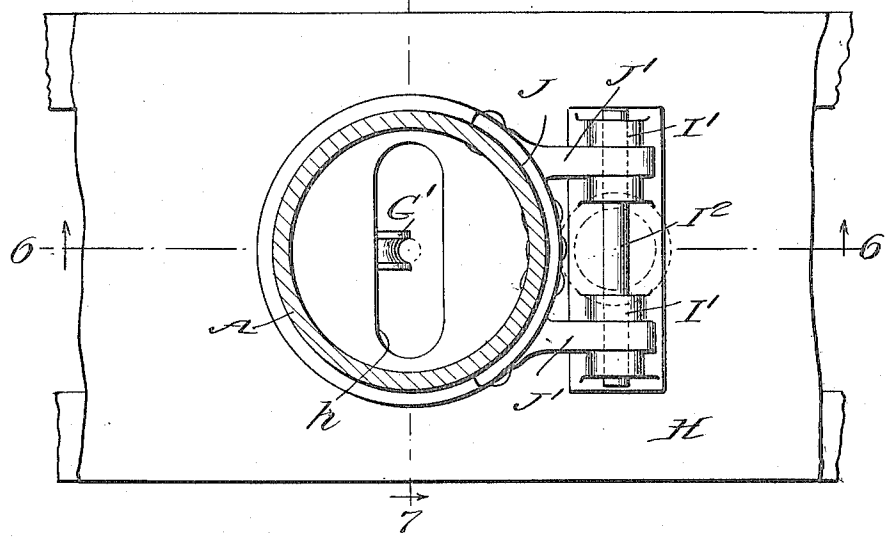


Fig. 6.

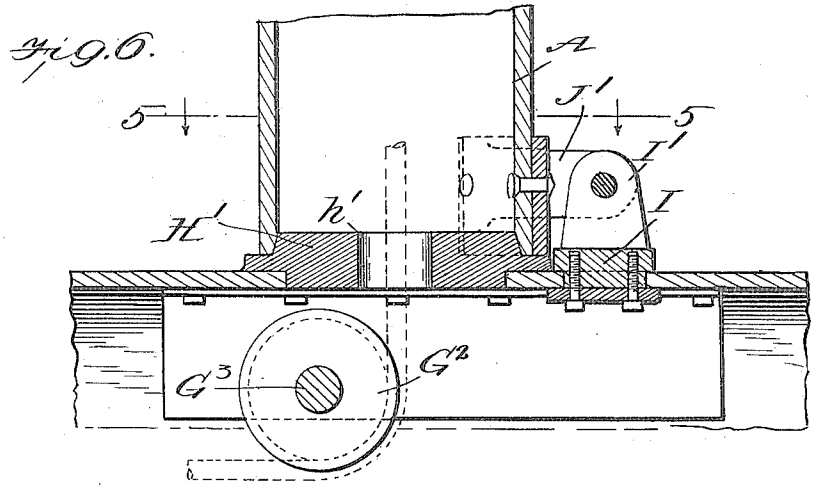
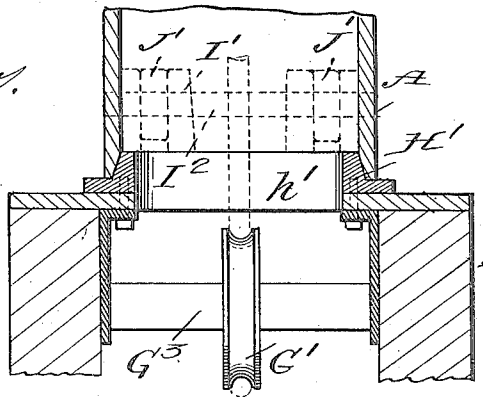


Fig. 7.



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UNITED STATES PATENT OFFICE.

DUFF GERARD MANGES, OF TELLICO PLAINS, TENNESSEE.

SPAR-POLE FOR LOG-SKIDDING MACHINES.

1,207,192. Specification of Letters Patent. Patented Dec. 5, 1916.

Application filed March 11, 1915. Serial No. 13,666.

To all whom it may concern:

Be it known that I, DUFF G. MANGES, a citizen of the United States, and a resident of Tellico Plains, in the county of Monroe and State of Tennessee, have invented a certain new and useful Improvement in Spar-Poles for Log-Skidding Machines, of which the following is a specification.

My present invention relates to spar poles, more particularly to spar poles for use in connection with log skidding machines, my object being to provide a metallic construction including freely adjustable sheaves, certain of which receive the main or trolley cable and the others of which receive the operating cables, and all of which provide for the reception of sheave blocks in order to receive a guy wire threaded through the same and the sheave block of a single guy cable.

A further object of my invention is to provide a swiveled hinge for the base support of the pole whereby to facilitate the raising and lowering thereof, and transportation upon cars without detachment.

In the accompanying drawing which illustrates my present invention, Figure 1 is a side elevation, the support of the spar pole being partly broken away and in section; Fig. 2 is an elevation, on an enlarged scale, of the upper end portion of the spar pole, partly broken away and in section, to better illustrate certain of the parts thereof; Fig. 3 is a top plan view; Fig. 4 is a transverse section taken substantially on line 4—4 of Fig. 2; Fig. 5 is a similar view taken substantially on line 5—5 of Fig. 6; Fig. 6 is a detail vertical section taken substantially on line 6—6 of Fig. 5; and Fig. 7 is a similar view taken substantially on line 7—7 of Fig. 5.

Referring now to these figures, I provide a hollow spar pole A consisting of a series of cylindrical metallic sections A′, the ends of which are securely riveted together in telescoped relation, as best seen at A^2 in Fig. 2, and the upper end of which is similarly connected to a short section A^3, having an annular internal seat *a* at its upper extremity on which the lower flanged portion *b* of a head B is disposed, this head being in the nature of a sheave, having to this end a laterally projecting pulley B′ journaled at one side, and a laterally projecting eye B^2 at a point diametrically opposite the pulley B′. The head B is rotatably held in position by means of a clamping ring C which is disposed over its flanged lower end *b* and secured by bolts C′ entering the short metallic section A^3 of the spar pole. This upper section A^3 is also provided with the usual surrounding series of eyes *a′* which come into temporary use when the pole is being raised and lowered.

At vertically spaced points, the upper portion of the spar pole is provided with surrounding channel members D, securely riveted thereto, and preferably resting upon the upper jointed extremities of certain of the sections A′ of the spar pole, these channel members serving to receive two-part rotatable rings E, the parts of which are provided with abutting flanges *e* by which they are secured together through the use of clamping bolts *e′*. Each of the rings E, thus rotatably held, is provided with diametrically opposed eyes E′, providing for the reception of series of sheave blocks at opposite sides of the spar pole, the series of which blocks indicated at E^2, are for the operating cables, the series E^3 at the opposite side of the pole, being for the reception of the several strands F of a guy wire which may be controlled from a drum F′ on the log skidding machine itself, such as shown in Fig. 1, the guy wire being threaded through the several blocks E^3, and also a block E^4 attachable to the eye B^2 of the rotatable head B, and this guy wire is also threaded through the sheave block F^2 of a single guy cable F^3 extending to a suitable anchor. In this manner the pole in its operative position may be supported by the use of a single guy cable such as F^3, connected to the pole, in the manner shown and described.

The main or trolley cable G extends downwardly through the spar pole, as seen by reference to Figs. 1, 2, 6, and 7, over the pulley B′ of the rotatable head, and leads either directly to the operating drum G′ in case the spar pole is mounted directly over the drum, as in Fig. 1, or to such drum around a pulley D^2 as in Figs. 6 and 7, which pulley is slidably and rotatably mounted upon its shaft G^3 to provide for the oscillation of the cable in its travel.

The main or trolley cable extends downwardly through either a slot *h* in the spar pole support H as shown in Fig. 5, or a slot *h′* in a block H′ disposed on said support and receiving the lower end of the spar

pole as shown in Figs. 6 and 7, and this support H in either case having a circular opening adjacent the slots *h* and *h'* in which is rotatably held a block I having apertured upright portions I' receiving the pin I^2 forming a hinge between the same and the lateral projections J' of a casting J securely fastened to the lower portion of the spar pole, and through which projections J' the pin I^2 also passes. In this manner, the lower end of the spar pole is hinged so that it may be readily raised and lowered to and from an operative position such as shown in Fig. 1, the hinge being swiveled on the support H of the spar pole in such manner that the raising and lowering of the spar pole and its transportation upon cars without detachment from its support, will be greatly facilitated. Furthermore, the head B and the several rings E, being freely adjustable and rotatable in their connection with the spar pole, the several operating cables, guy wires, and their sheave blocks, are freely adjustable around the spar pole to suit varying conditions.

I claim:—

1. The combination of a spar pole, a base support upon which the lower end of the spar pole rests, having an opening at one side of the said lower end of the spar pole, and a hinge connecting the lower end of the spar pole with the said base support, one of the members of which hinge is swivelly held in the opening of the base support, for the purpose described.

2. The combination of a spar pole, a base support having a seat block upon which the lower end of the spar pole rests, and having an opening at one side of the said seat block, and a hinge connecting the lower end of the spar pole with the said base support, one of the members of which hinge is swivelly held in the said opening of the base support whereby the mast may be turned with respect to the base support when disengaged from the said seat block.

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Witnesses:
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Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."