

(No Model.)

F. S. & E. B. BELANGER.

PULLEY.

No. 321,179.

Patented June 30, 1885.

Fig. 1.

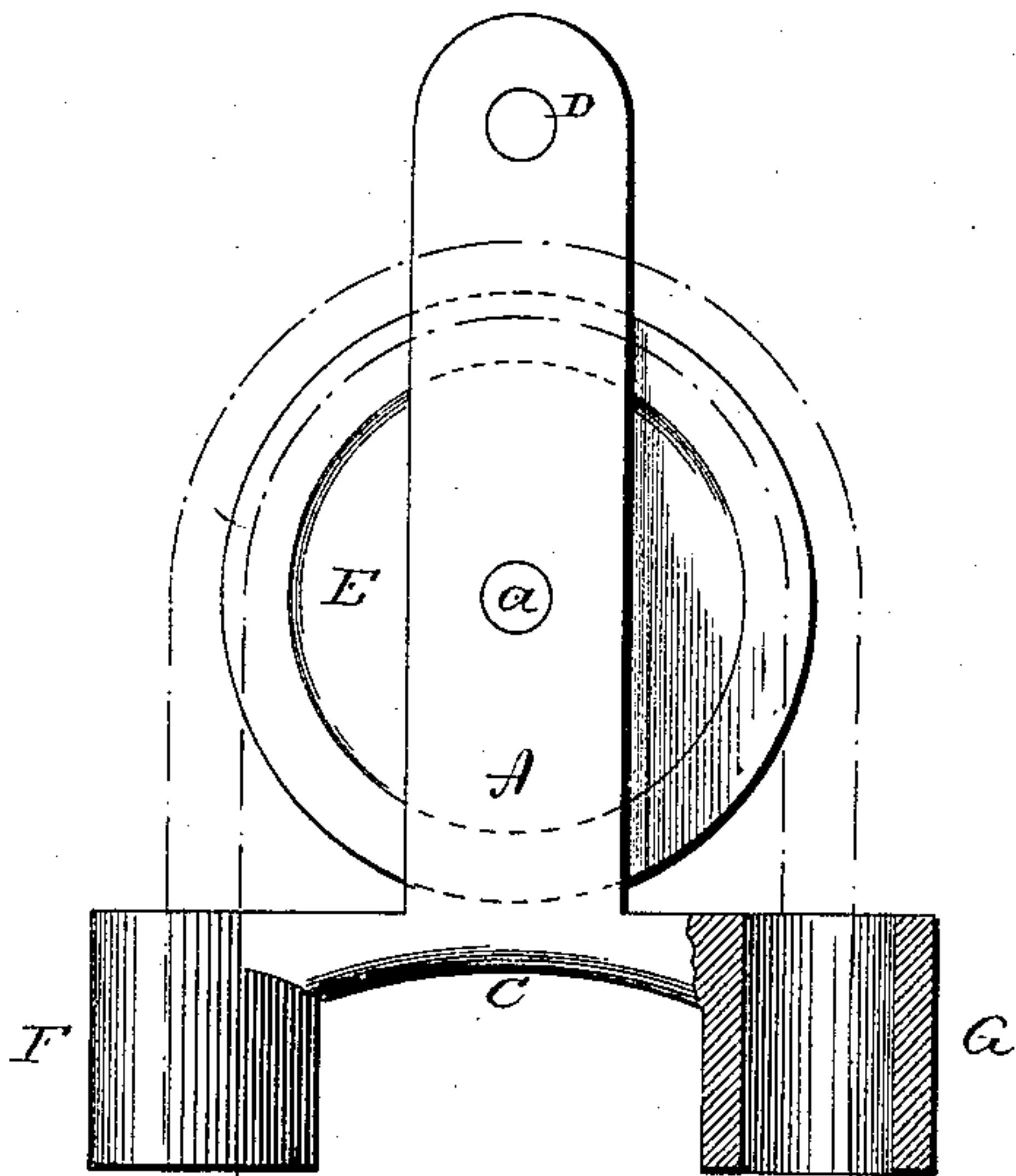


Fig. 2.

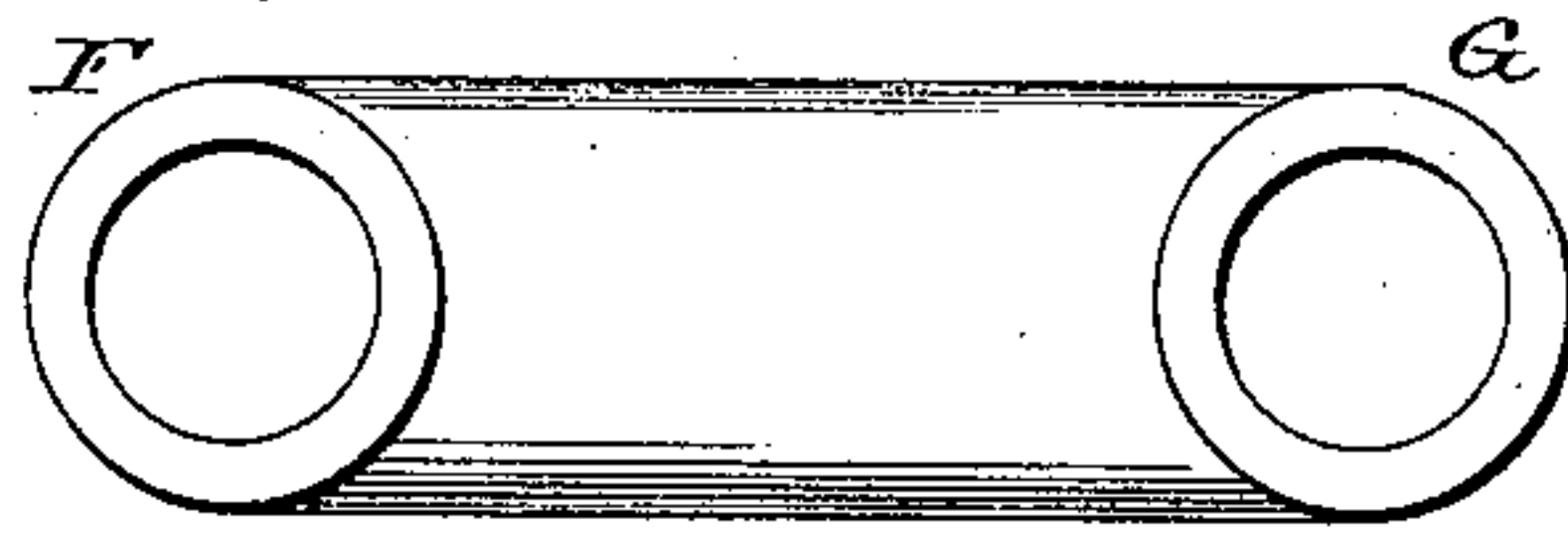


Fig. 3.

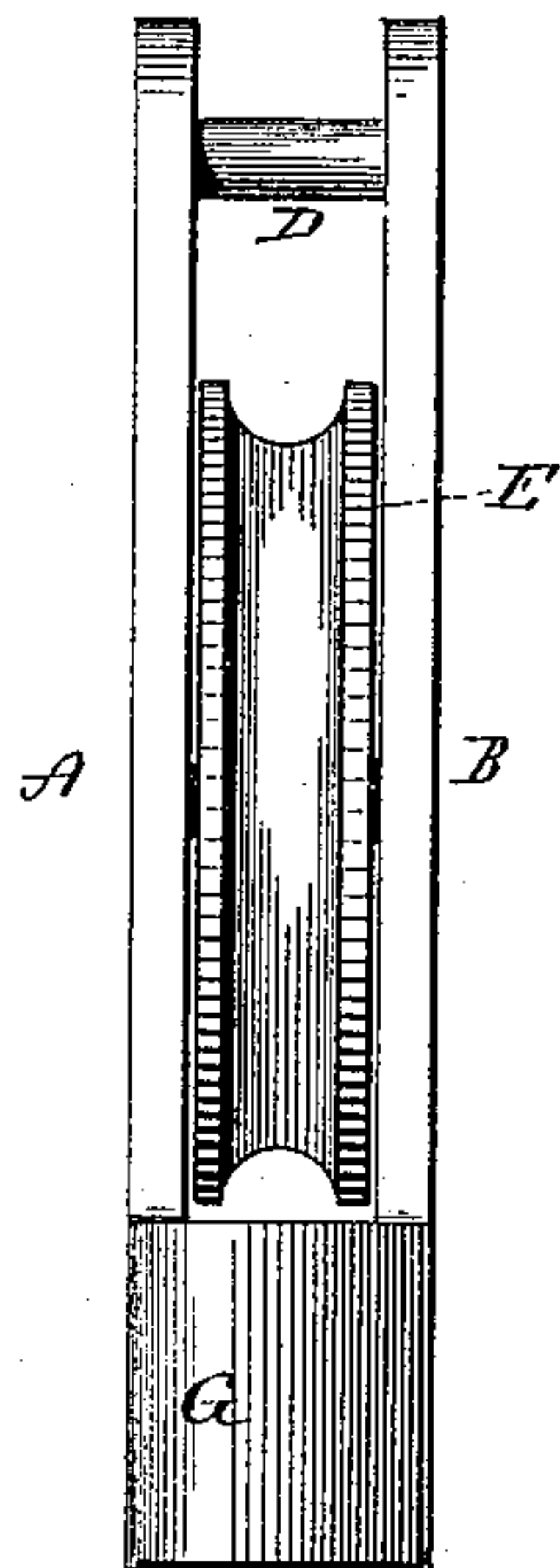
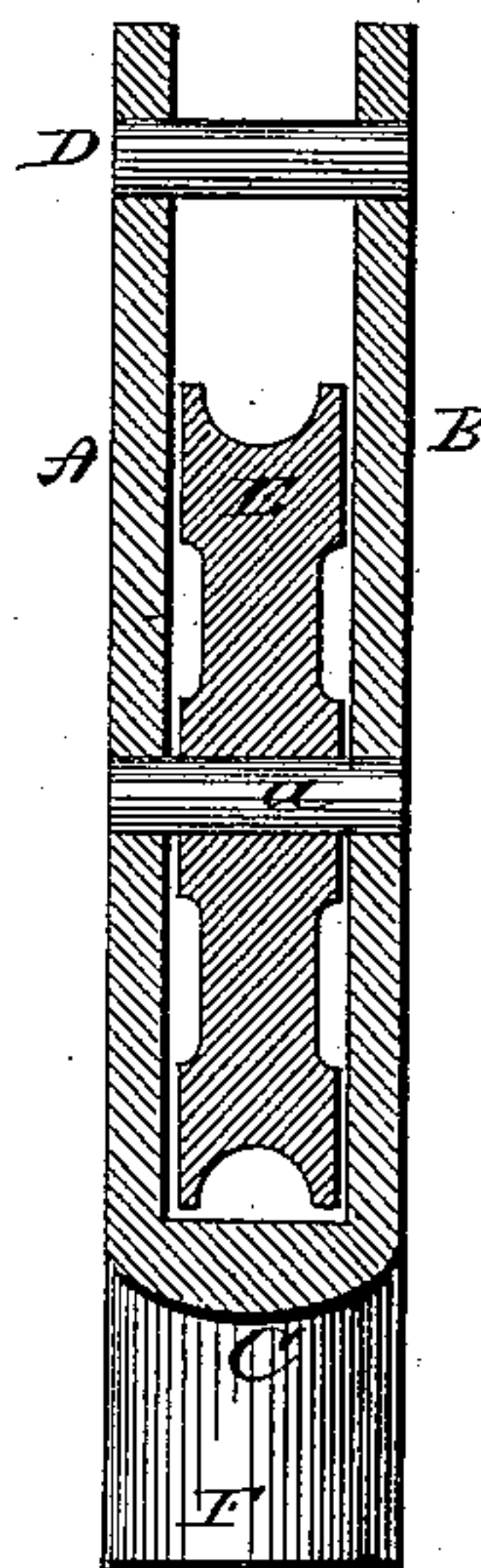


Fig. 4.



Witnesses.  
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# UNITED STATES PATENT OFFICE.

FRANK S. BELANGER AND EUSEBE B. BELANGER, OF WATERBURY, CONN.

## PULLEY.

SPECIFICATION forming part of Letters Patent No. 321,179, dated June 30, 1885.

Application filed May 4, 1885. (No model.)

*To all whom it may concern:*

Be it known that we, FRANK S. BELANGER and EUSEBE B. BELANGER, of Waterbury, in the county of New Haven and State of Connecticut, have invented a new Improvement in Pulleys; and we do hereby declare the following, when taken in connection with accompanying drawings, and the letters of reference marked thereon, to be a full, clear, and exact description of the same, and which said drawings constitute part of this specification, and represent, in—

Figure 1, a face view showing one of the tubular extensions in section; Fig. 2, an end view looking toward the tubular extensions; Fig. 3, a side view; Fig. 4, a central section through the pulley.

This invention relates to an improvement in that class of pulleys which are designed to guide or support a cord or rope. A common construction of this class of pulleys provides a hood surrounding the upper portion of the pulley, and so as to inclose that portion of its periphery, the inner surface of the hood being concave, corresponding to the concave groove in the pulley, and so that the rope runs on the pulley within the hood, the object of such a hood being to prevent the rope from running off the pulley; but where these pulleys hang free, as in clothes-lines, (to which purpose our invention is particularly adapted,) the pulley will hang in a plane at right angles to the run of the rope, so that in introducing the rope and running it over the pulley to another position the rope will drag between the pulley and the edge of the hood and frequently clog that point, so as to interfere with the free running of the rope. Again, it is frequently difficult to pass the rope around the pulley within the hood, the end of the rope clogging or interfering with such introduction.

The object of our invention is to provide the pulley with a guide for the rope, which will prevent any possible clogging between the rope and pulley, so that the pulley, irrespective of the direction of the rope, will, throughout its periphery, always stand in the plane of

the rope passing around it, and also leave the groove in the pulley entirely exposed for the application of the rope thereto; and it consists in constructing the block which supports the pulley with a tubular extension below the pulley, and so as to leave the entire groove of the pulley exposed, as more fully hereinafter described.

In the best construction of the block it consists of two arms, A B, distant from each other the thickness of the pulley, or little more. These arms are connected at their lower ends, as at C, Fig. 4, and are also connected at their upper ends, may be by a rivet, D, or otherwise, so as to afford convenient means for attaching or suspending the block. E, the pulley, is arranged upon a pintle, *a*, extending through the two arms A B and through the pulley, as seen in Fig. 4, so that the pulley may freely revolve thereon. Below the pulley, and as a part of the block, two tubular extensions, F G, are formed, distant from each other corresponding to the diameter of the pulley, and so that the passage through them is a tangent from the pulley. These tubular extensions F G are so far below the pulley as to leave the periphery of the pulley exposed above. The block may be made of cast metal complete with the extensions in a single piece. Thus constructed the end of the rope is passed through one of the tubular extensions—say F—thence around the pulley, and off through the other tubular extension, G, as indicated in broken lines, Fig. 1. In this application of the rope the groove of the pulley is free for the passage of the end of the rope around it, and the obstruction usually met in the hood is avoided. The rope in running around the pulley always approaches the pulley in a plane parallel with it, so that the rope cannot work over the edges of the pulley, and by no possibility can the rope be clogged in its working.

The construction is simple and cheap, and while specially adapted for clothes line pulleys may be used to advantage wherever it is desired to run a rope around a pulley.

I claim—



The herein-described improvement in pulleys, consisting of the block composed of the two arms A B, connected at their two ends, combined with the pulley E, arranged upon a pin-  
5 tle between the arms for free revolution, the said block constructed with tubular extensions F G below the pulley and at each side, the passage through the tubular portions be-

ing in a line tangential to the periphery of the pulley, substantially as described.

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Witnesses:

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