

(No Model.)

J. BLY.

SUPPORT FOR POWER TRANSMITTING RODS.

No. 553,665.

Patented Jan. 28, 1896.

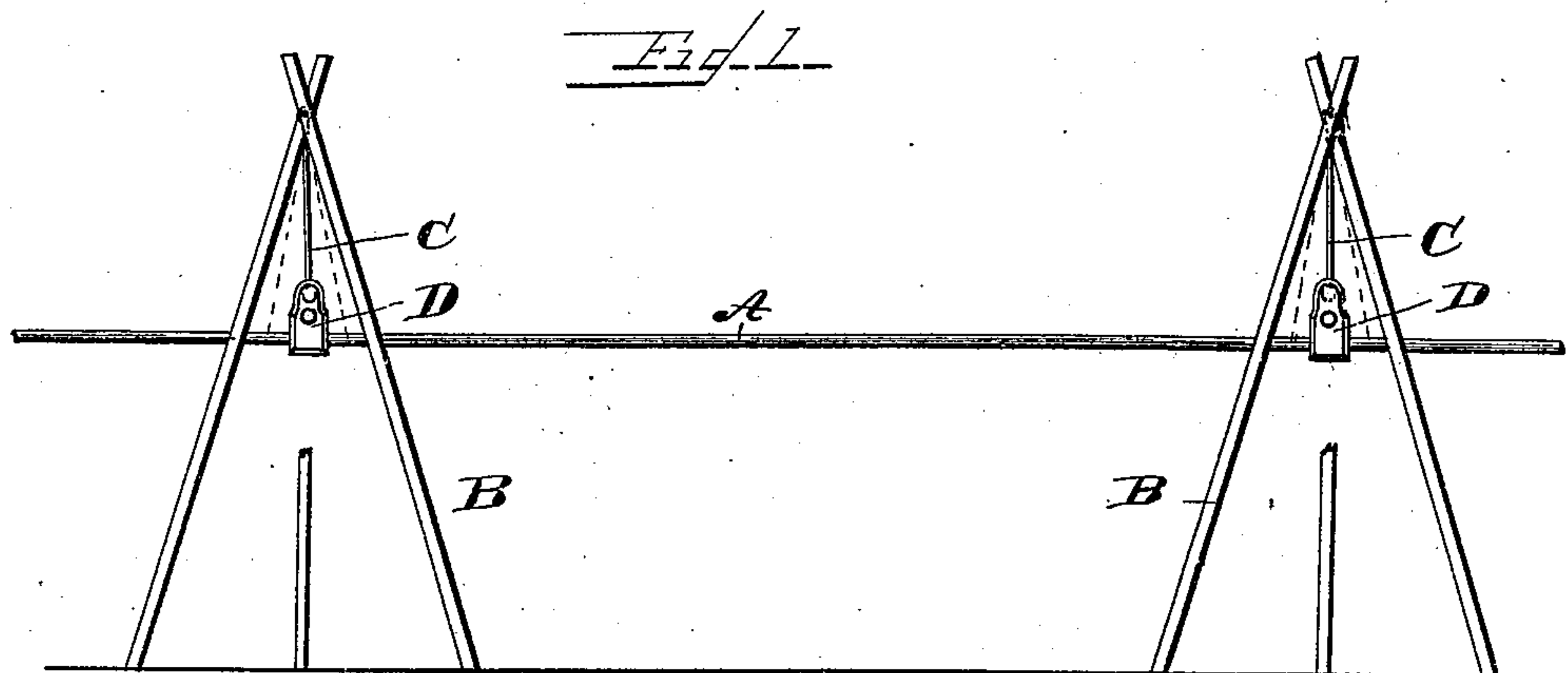


Fig. 2

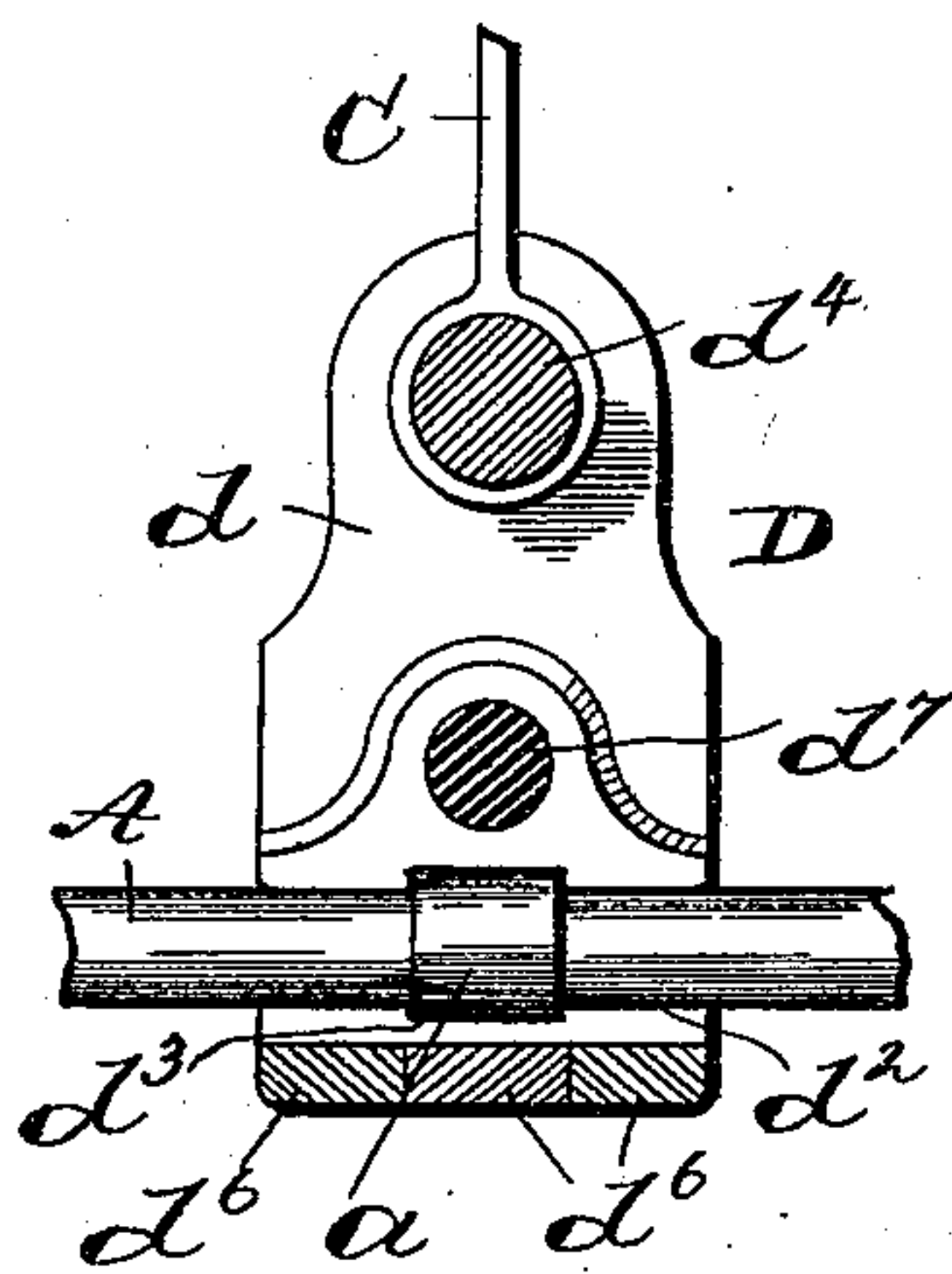


Fig. 3

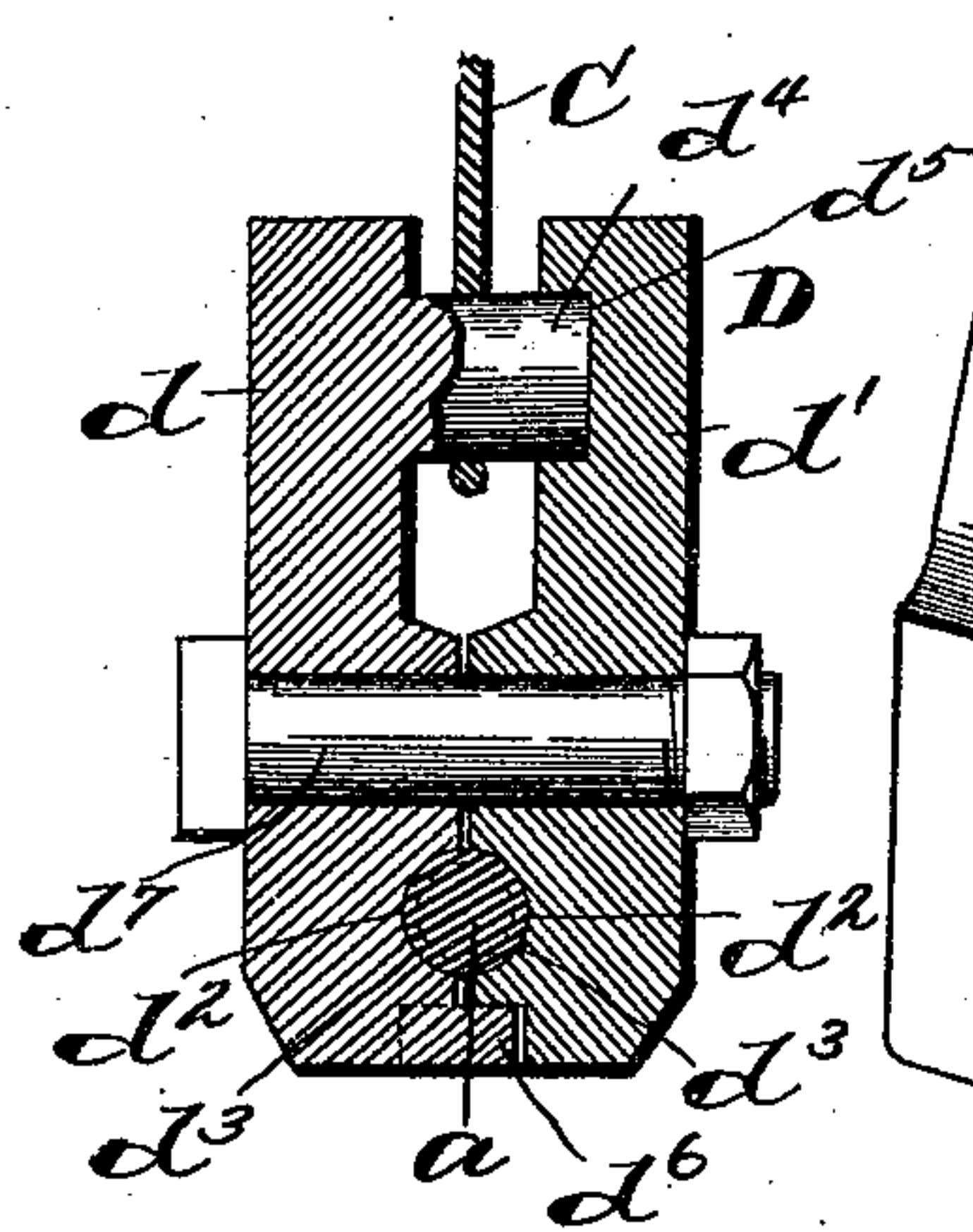


Fig. 4

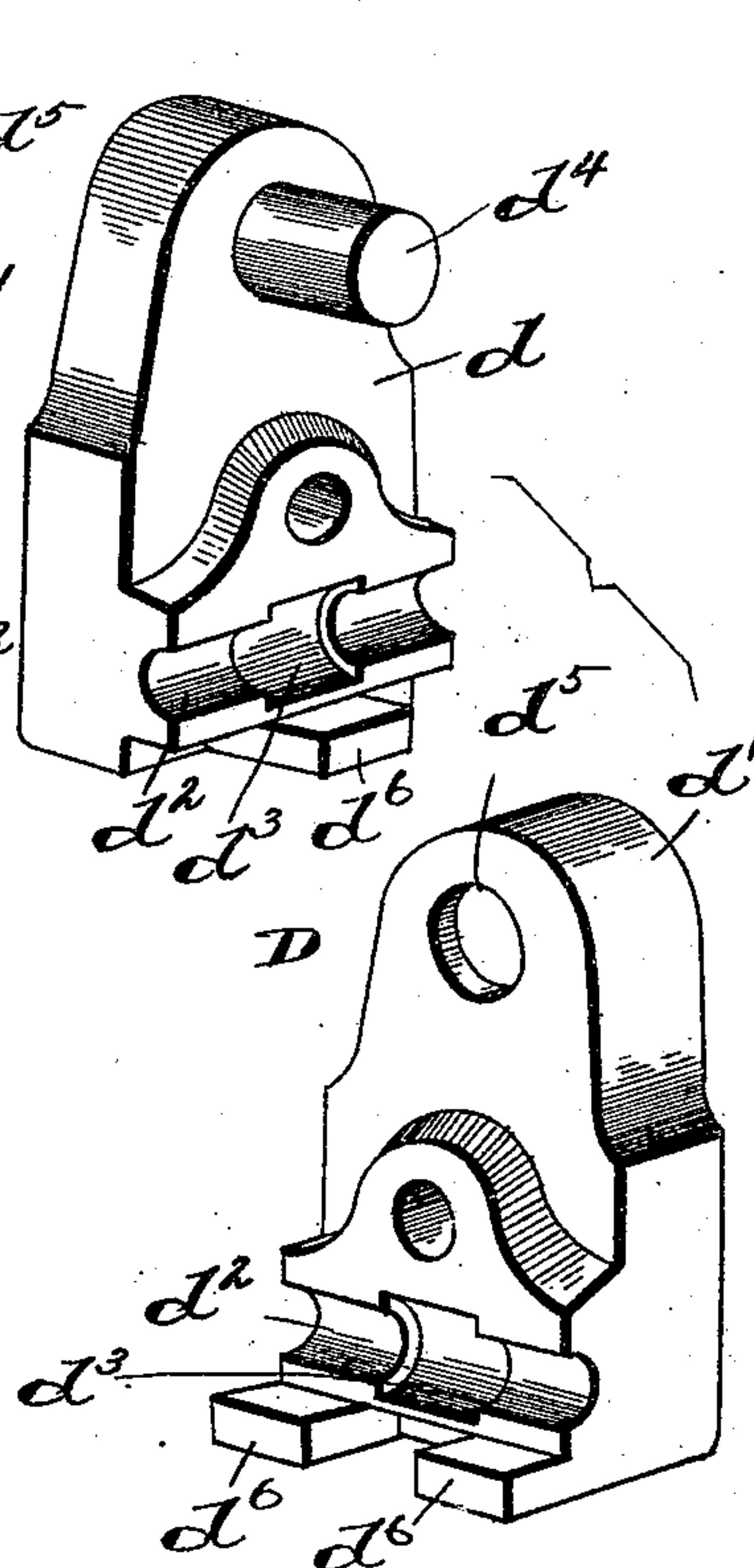
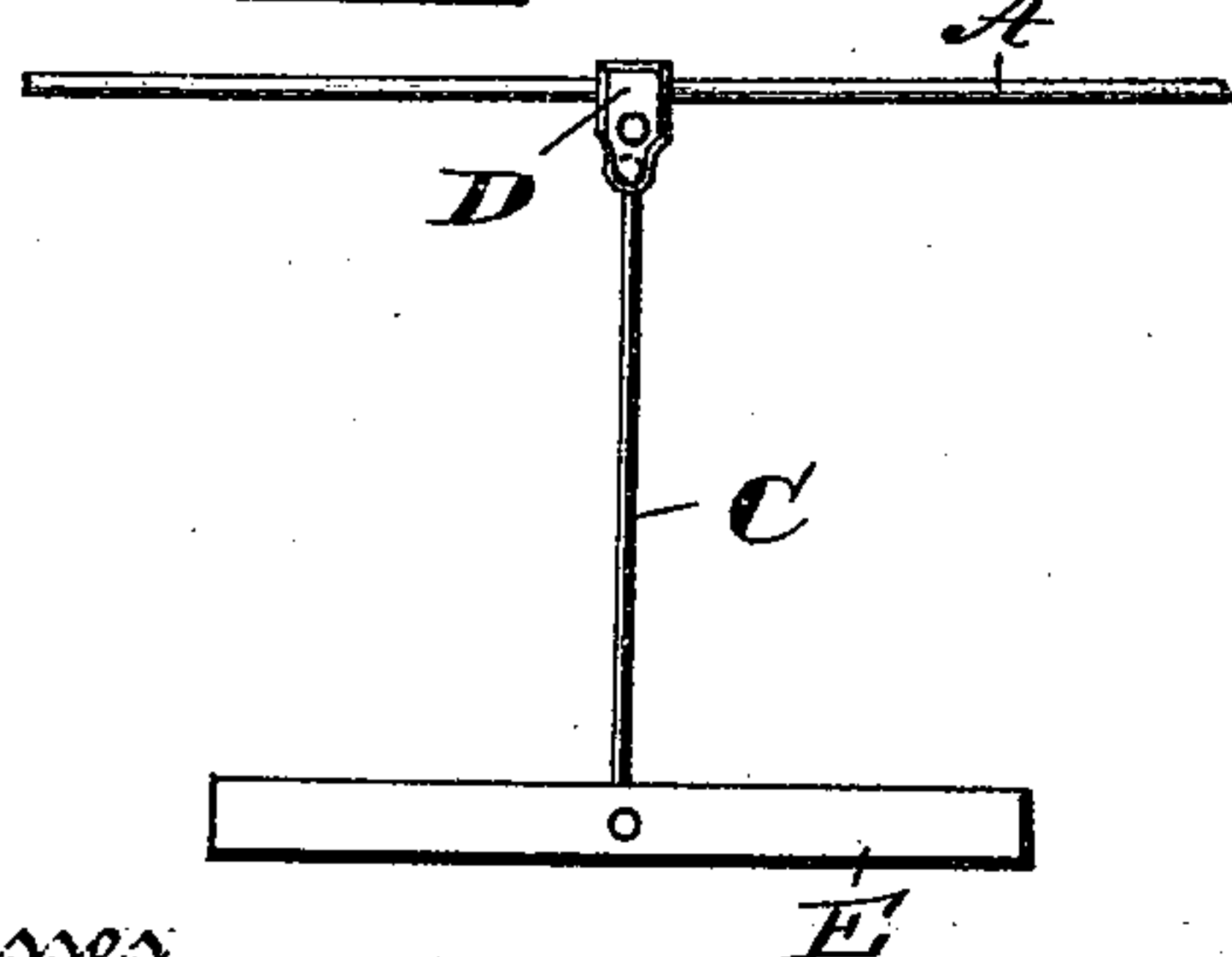


Fig. 5



Witnesses
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UNITED STATES PATENT OFFICE.

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SUPPORT FOR POWER-TRANSMITTING RODS.

SPECIFICATION forming part of Letters Patent No. 553,665, dated January 28, 1896.

Application filed May 7, 1895. Serial No. 548,397. (No model.)

To all whom it may concern:

Be it known that I, JOHN BLY, a citizen of the United States, residing at Titusville, in the county of Crawford and State of Pennsylvania, have invented certain new and useful Improvements in Supports for Power-Transmitting Rods or Cables; and I do hereby 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.

My invention is an improved device for supporting power-transmitting rods or cables used in drilling or pumping oil-wells; and it consists in the novel features of construction hereinafter fully described, reference being had to the accompanying drawings, which show one form in which I have contemplated embodying my invention, and said invention is fully disclosed in the following description and claims.

Referring to the said drawings, Figure 1 represents in elevation a portion of the operating rod or cable and the devices for supporting the same. Fig. 2 represents a central vertical section of the clamp. Fig. 3 is a similar section in a plane at right angles to the plane of section of Fig. 2. Fig. 4 represents in detail perspective the two parts of the clamp. Fig. 5 shows the arrangement for using my improved clamp in connection with an anchor.

In drilling and pumping oil-wells it is customary to employ a rod or cable of any desired length to communicate reciprocating motion from an engine-house or other source of power to some point where the power is to be applied.

In carrying out my invention I propose to support this power-transmitting rod or cable by a series of pendulous hangers or supports, so that the rod or cable will be supported and held in position, but is capable of a longitudinal reciprocation under the influence of the engine or other source of power located at one end, thereby transmitting the power to the other end of the rod or cable.

In the drawings, A represents a portion of the power-transmitting rod or cable.

B B represent a series of tripods, standards or other suitable stationary supports to

which are connected the pendulous hangers. These hangers consist preferably of a section of wire cable C secured at its upper end to the support B, although I may use a rod or link pivotally connected to said supports, as will be readily understood. To the lower end of the pendulum or hanger C is secured the clamp D. This clamp consists of two jaws d and d' , as shown in Figs. 2, 3 and 4, each of which has a semicircular clamping-groove d^2 for engaging the rod or cable A and a clamping-recess d^3 of greater depth than the groove d^2 , which receives an enlarged portion a on the power-transmitting rod A, and thus prevents the rod from moving longitudinally with respect to the clamp when the latter is closed. When a cable is employed to transmit the power the portions of the same engaged by the grooved portions d^2 of the clamp will be compressed and the portion of the cable lying in the recess d^3 will remain of greater diameter than said compressed portions, thus preventing the cable from being pulled through the clamp. The part d of the clamp has a stud d^4 at its upper end, which engages a recess d^5 of the same size on the part d' , and this stud serves as a support to which the lower end of the pendulum or hanger C is attached, and also as a fulcrum upon which the two parts d and d' of the clamp move when the two parts are drawn together upon the rod or cable A. I therefore will term the stud d^4 the "fulcrum-stud." At the end of the clamp adjacent to the grooves d^2 the parts d and d' are provided with interlocking projections d^6 d^6 , which prevent the parts from getting out of alignment or twisting on the fulcrum-stud d^4 . The parts of the clamp are drawn together by a securing-bolt d^7 and nut, which bolt passes through suitable bolt-holes in the parts between the fulcrum-stud and the clamping grooves and recesses d^2 d^3 . As the nut is tightened on the bolt d^7 it will be seen that the upper portions of the parts d and d' are held a definite distance apart by the fulcrum-bolt d^4 , and the grooved portions of the parts d d' will be drawn together tightly upon the rod or cable A, clamping it firmly, as shown in Fig. 3. The lower end of the hanger C is attached to the fulcrum-bolt, as shown in

Figs. 2 and 3. The rod or cable A being supported, as shown, by the hangers C and clamps D, if power is applied at one end to move the rod longitudinally it will transmit the power to the other end, the hangers swinging like pendulums, as indicated in dotted lines, Fig. 1.

I may also support the rod from beneath by a similar hanger and clamp, as when the rod crosses a gully or ravine, as indicated in Fig. 5, in which E represents an anchor to be secured below the rod, and the hanger and clamp are connected to this anchor in the usual manner. I may also secure the hangers C horizontally, if desired, as where the rod or cable A is carried around a bend in the rocks, or for other reasons it becomes necessary to support the rod or cable in a curved position.

What I claim, and desire to secure by Letters Patent, is—

1. The combination with a power transmitting rod or cable, of a pendulous hanger for supporting said rod or cable, provided at its free end with a clamp having opposing jaws for gripping the rod or cable and provided with recesses therein to receive enlarged portions on said rod or cable to prevent the slip-

ping of the rod or cable through said clamp, substantially as described.

2. A support for a power transmitting rod or cable including among its members a clamp composed of two opposing parts each provided with a clamping groove and a clamping recess of greater depth than said groove, one of said parts having a fulcrum stud for engaging the other part, said parts having interlocking projections adjacent to said grooves, and a clamping bolt for holding said parts together, substantially as described.

3. A support for a power transmitting rod or cable comprising among its members, a clamp composed of two parts, each having a clamping groove for engaging the said rod or cable one of said parts having a fulcrum stud engaging the other part, a clamping bolt for holding said parts together and a pendulous support secured to said fulcrum stud, substantially as described.

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

JOHN BLY.

Witnesses:

DAVID WEED,
J. J. HOLDEN.