

No. 682,663.

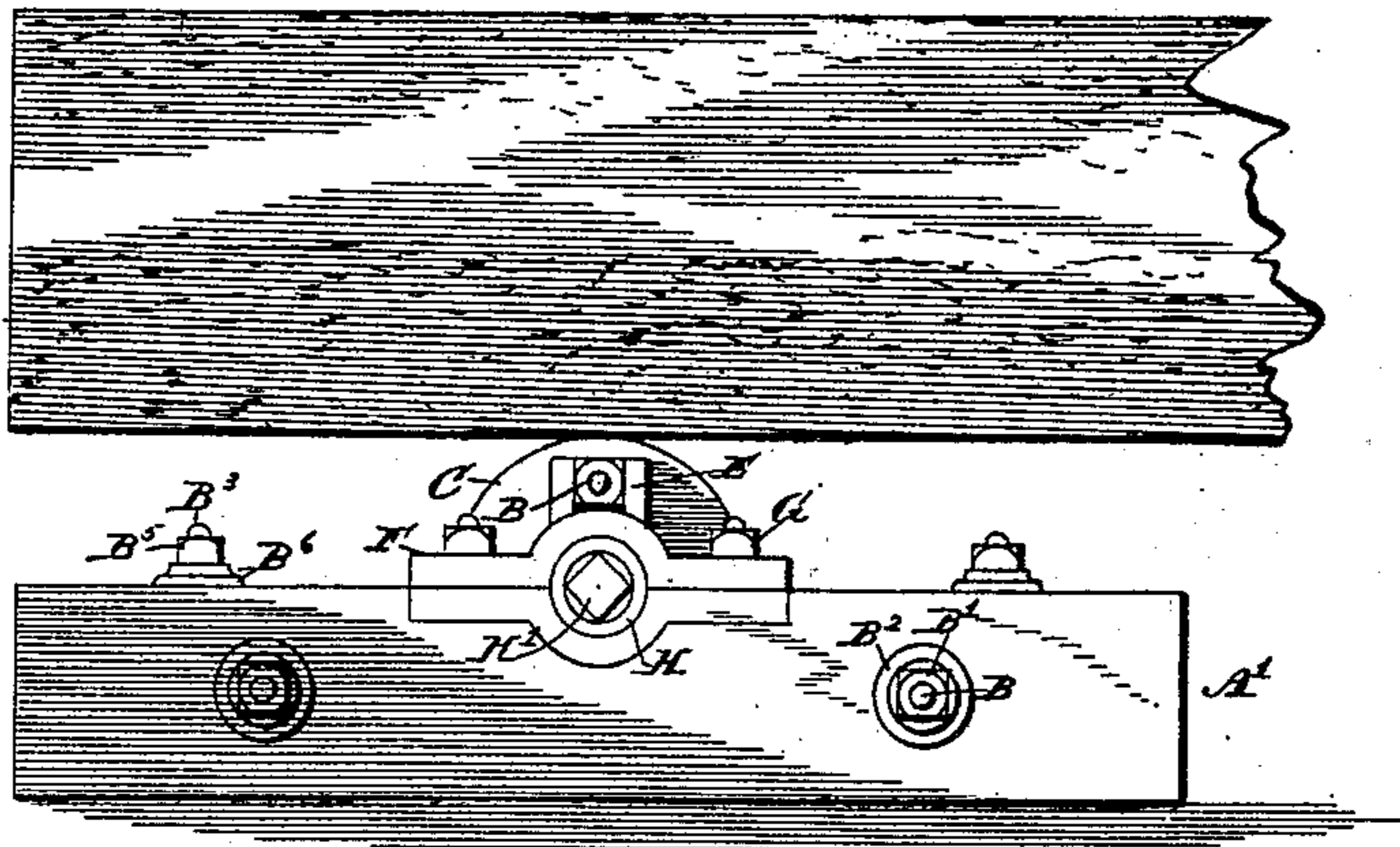
Patented Sept. 17, 1901.

J. L. BAYLEY.  
TIMBER DOLLY.

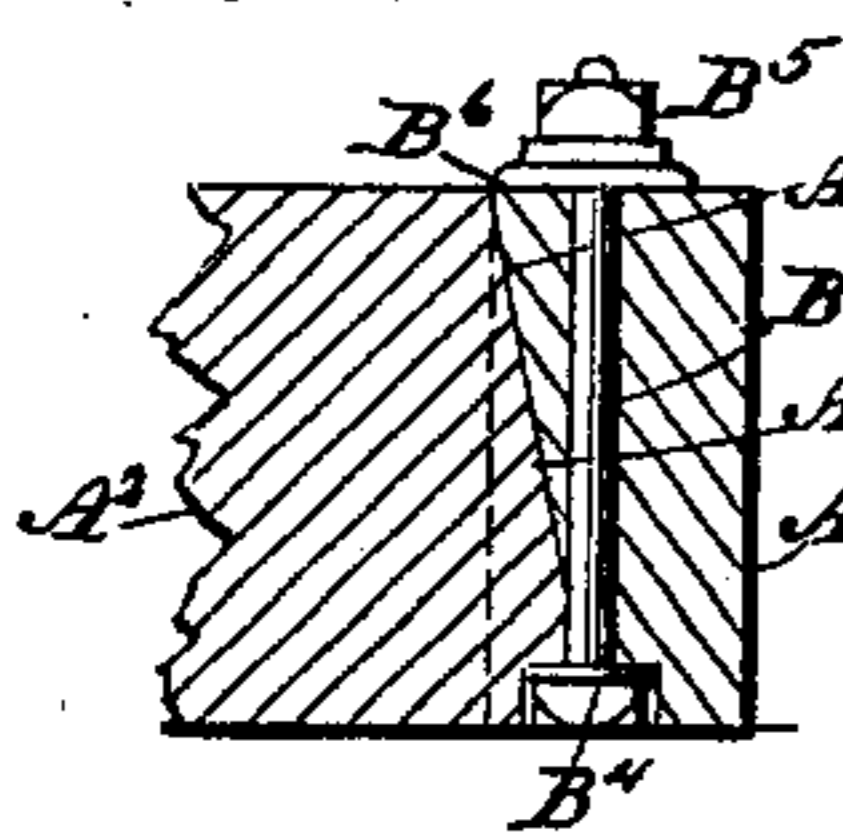
(Application filed Feb. 28, 1901.)

(No Model.)

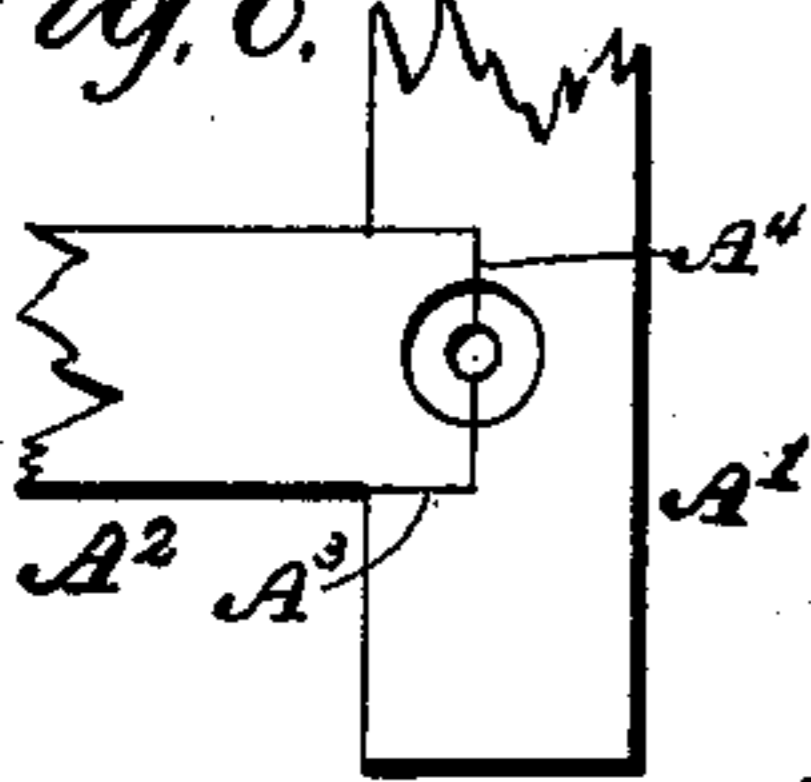
*Fig. 1.*



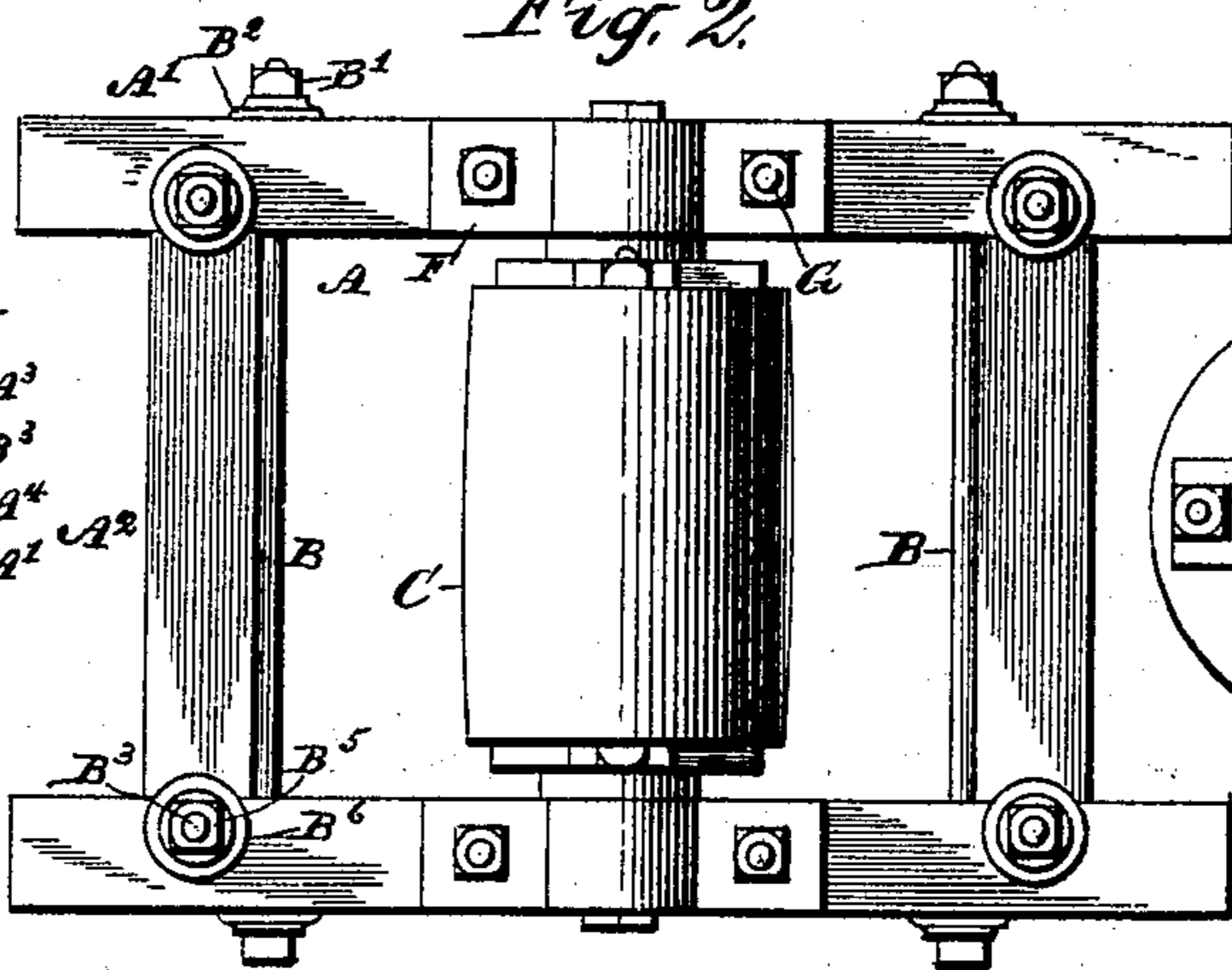
*Fig. 5.*



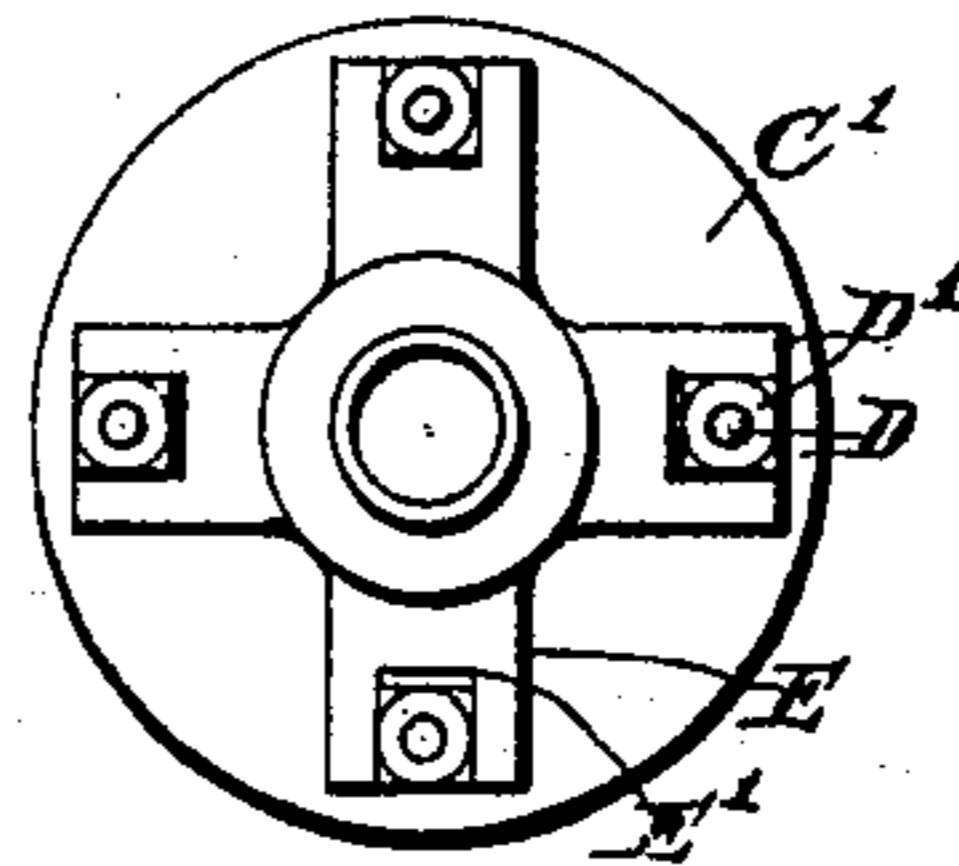
*Fig. 6.*



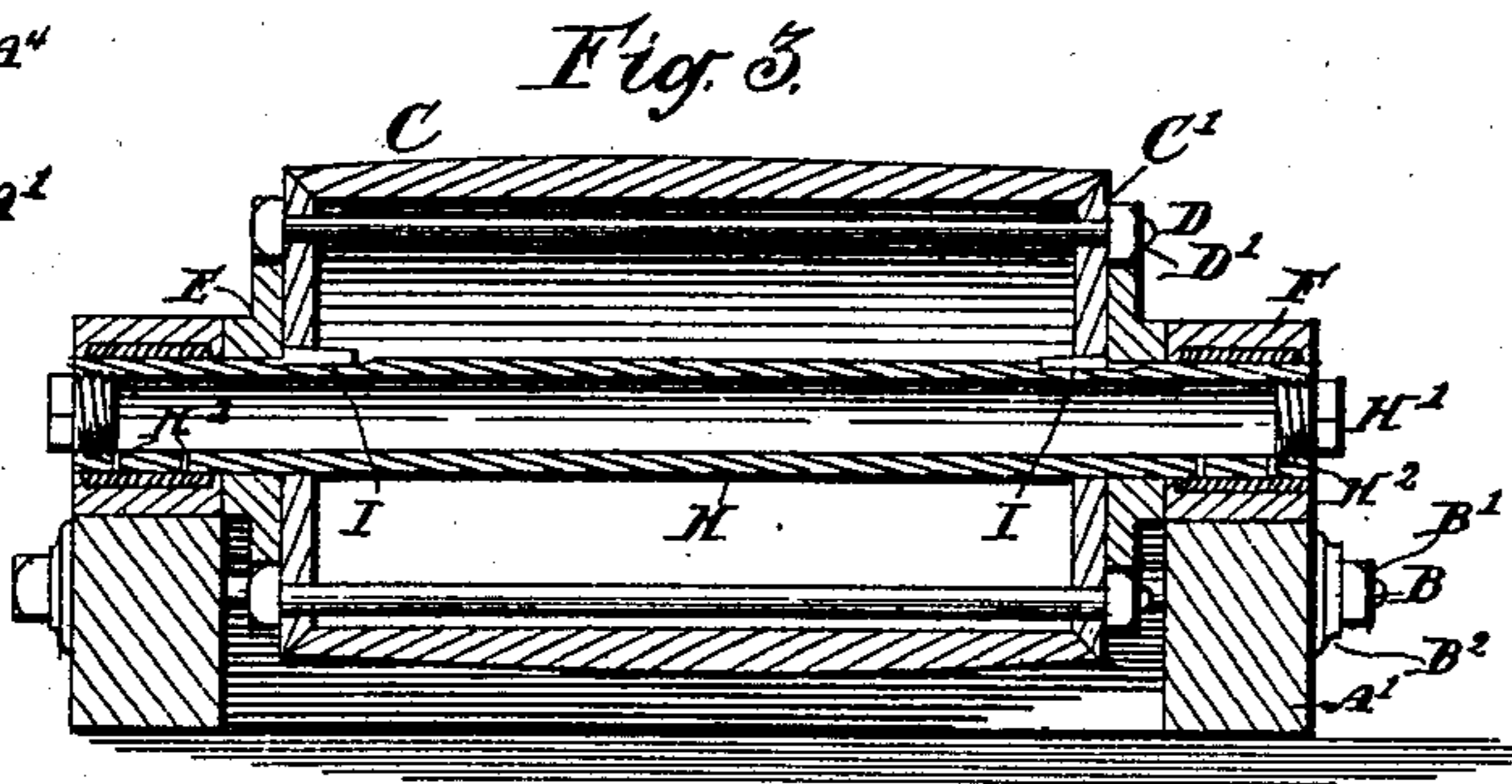
*Fig. 2.*



*Fig. 4.*



*Fig. 3.*



Witnesses.

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# UNITED STATES PATENT OFFICE.

JAMES L. BAYLEY, OF SPOKANE, WASHINGTON.

## TIMBER-DOLLY.

SPECIFICATION forming part of Letters Patent No. 682,663, dated September 17, 1901.

Application filed February 28, 1901. Serial No. 49,188. (No model.)

*To all whom it may concern:*

Be it known that I, JAMES L. BAYLEY, a citizen of the United States, residing at Spokane, in the county of Spokane and State of Washington, have invented certain new and useful Improvements in Timber-Dollies; 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.

This invention relates to a sort of truck used in and about lumber-mills and all heavy timber construction for the easy and rapid handling of timbers; and the object of the invention is to improve the construction of such trucks, commonly known as "dollies," so as to reduce their weight, while retaining the same relative strength, and provide better means for lubricating them.

The nature of the invention will fully appear from the description and claims following, reference being had to the accompanying drawings, in which—

Figure 1 is a side elevation of my improved dolly as in use. Fig. 2 is a top view of the same. Fig. 3 is a central transverse section of the same. Fig. 4 is an end view of the roll and its attached spider. Fig. 5 is a fragment of the main frame, taken on the line *a* *b*. Fig. 6 is a view of the same part as seen from the under side.

For convenience in description the dolly may be considered as in the position shown in Fig. 1, though in practice it is used either side up and about equally in either position.

Referring now to the drawings, A is a rectangular frame of stout timbers A' and cross-beams A<sup>2</sup>. The usual practice is to connect these timbers by mortise and tenon, and the effect of this is so to weaken the parts that the timbers must for that reason be made much heavier than would otherwise be necessary. As the dolly must itself be handled more or less, it is desirable to make it as light as practicable, while at the same time retaining ample strength for durability and the hard service to which it is subjected. Instead, therefore, of joining the timbers by mortise and tenon I provide the improved joint illustrated in Figs. 2, 5, and 6.

On the inner sides of the longitudinal timber A' are made diagonal gains A<sup>3</sup>, and the

ends of the timbers A<sup>2</sup> are correspondingly beveled at A<sup>4</sup>, so as to abut on the inclined faces of said gains. The side timbers are held in close contact with the cross-beams by a pair of tie-rods B, provided with suitable nuts B' and washers B<sup>2</sup>, and the parts are held securely against vertical dislocation by bolts B<sup>3</sup>, passing vertically through the side beams A' and partially through the inclined ends of the cross-beams, as shown in Fig. 5. The holes through which these bolts pass are counterbored at the bottom of the frame, so that the same may rest flat on the floor or present a smooth surface for the log to roll over when the other side is up. Under the heads of the bolts should be placed washers B<sup>4</sup>, and the upper ends are provided with suitable nuts B<sup>5</sup> and washers B<sup>6</sup>. Across the middle of this frame is placed a roll C. To secure the requisite lightness with great strength, the roll is made tubular and is provided with suitable heads C', fitted to its ends, as by the miter-joints shown. The heads are held securely in place by tie-rods D, provided with nuts D', four of such tie-rods being preferred in practice. Outside the heads are placed spiders E, having sockets E' in their arms to take the nuts D' and prevent their working loose. The outer sides of the spider-hubs E<sup>2</sup> are faced, so as to run nicely against the inner sides of the boxes F, bolted to the side beams by suitable bolts G. The roll is secured to its axle H by keys I, and these are held from working out by the spiders abutting on their outer ends, as shown in Fig. 3. The axle is made tubular for the sake of strength and lightness and also to serve as a receptacle for oil. Its ends are threaded, and in them are fitted screw-plugs H'. The oil escapes in suitable small quantities to the bearings through small holes H<sup>2</sup>.

In practice the lubrication of the dolly is an important feature and is generally neglected, so that the roll usually runs hard and dry. This is largely due to the fact that the dolly is used only occasionally and does not therefore have the care that is given to a machine in daily and constant use. By my improvement the dolly is made self-oiling while in use, and when at rest the oil is retained in the tubular axle. The roll is preferably made a little crowning in the middle, so as to be

easily turned or "cut," as it is commonly expressed, to move the timber at any desired angle.

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

1. In a timber-dolly, the combination with  
a suitable roll and bearings therefor, of a  
frame comprising two side beams and a pair  
10 of cross-beams, the side beams being diagonally  
gained on the inner side to take the ends of the  
cross-beams, said cross-beams being beveled to  
correspond therewith, tie-rods adjacent to said  
cross-beams, and bolts  
15 passing vertically through the side beams and  
partially through the ends of the cross-beams,  
whereby the whole frame is securely bound and  
locked together.

2. In a timber-dolly, the combination with  
20 a frame substantially as described, of a tubular  
roll therefor, having heads fitted in its ends,  
tie-rods to draw them securely in position, and  
spiders having sockets in their arms

to engage and hold the nuts and heads of said  
tie-rods.

3. In a timber-dolly, the combination with  
a suitable frame, of a roll, comprising a tubular  
body, heads fitted in its ends, tie-rods connecting  
said heads, an axle and keys to retain the heads  
thereon, and spiders external to the heads having  
nut-sockets in their arms to engage the nuts and  
heads of the tie-rods, and adapted to hold said  
keys in place when in position.

4. In a timber-dolly, the combination with  
35 a suitable frame, bearings and roll, substantially  
as described, of a tubular axle for the roll,  
provided with oil-holes at the bearings, and plugs  
screwed in the ends to retain said oil.

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

JAMES L. BAYLEY.

Witnesses:

JOHN J. SMITH,

R. A. HUTCHINSON.