

No. 801,699.

PATENTED OCT. 10, 1905.

J. F. WELLS.
SHOE FOR CONVEYER CHAINS.
APPLICATION FILED JULY 12, 1904.

Fig 1.

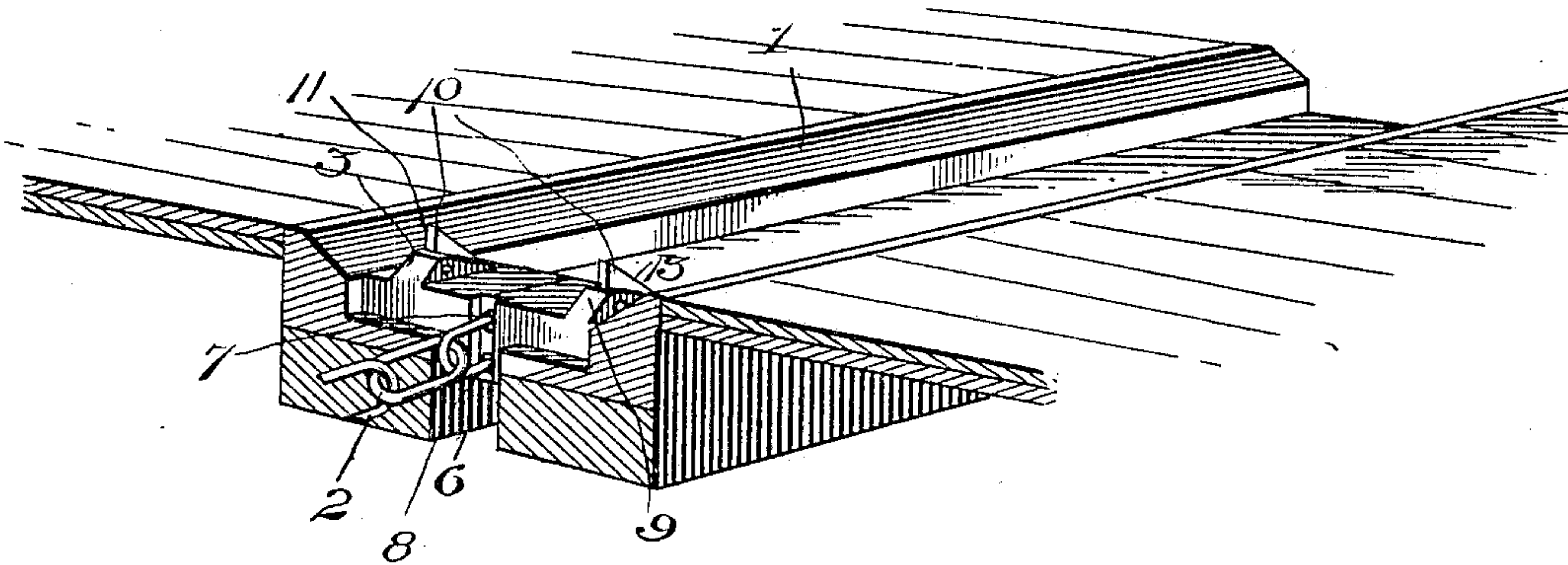


Fig 2.

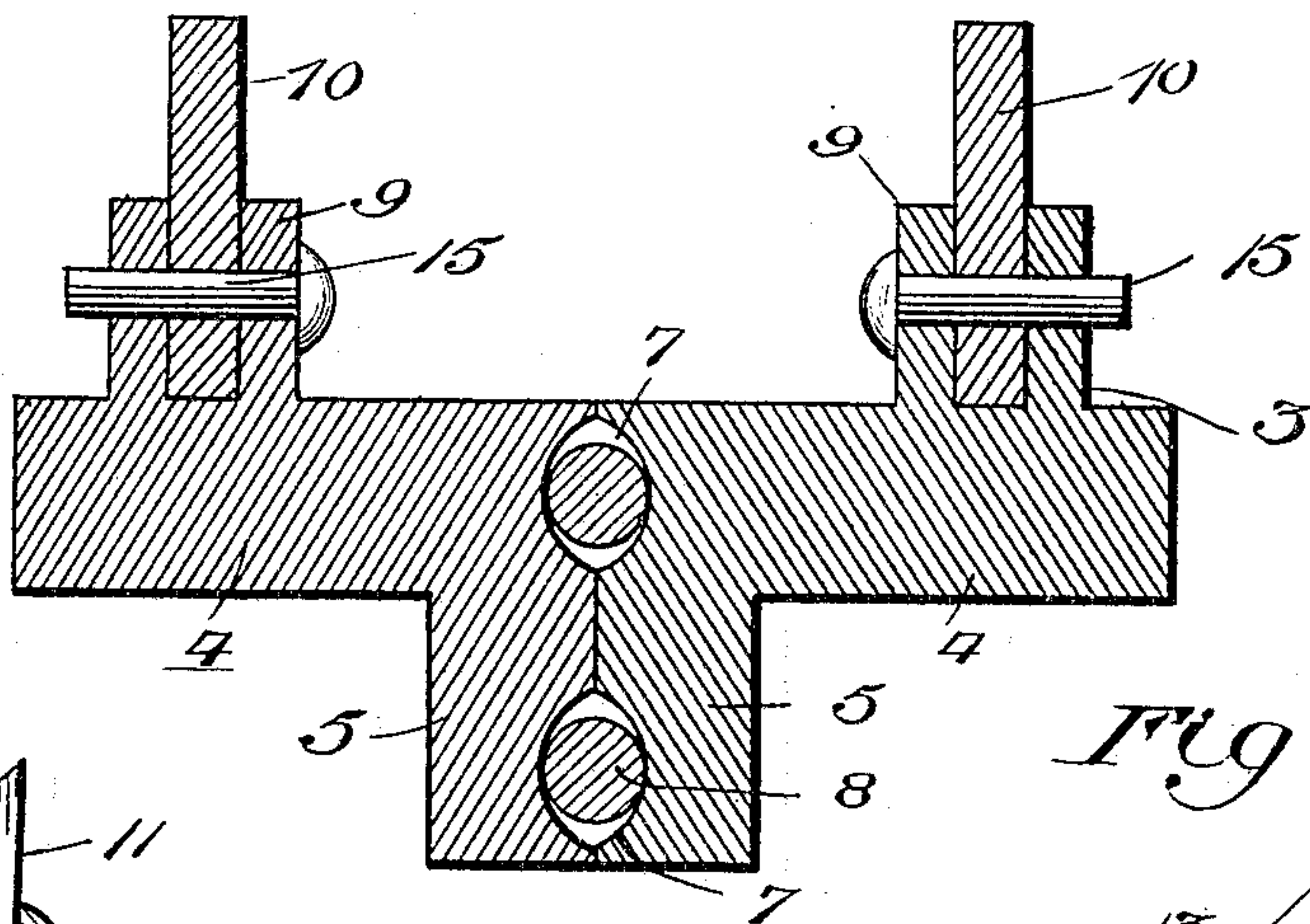


Fig 4.

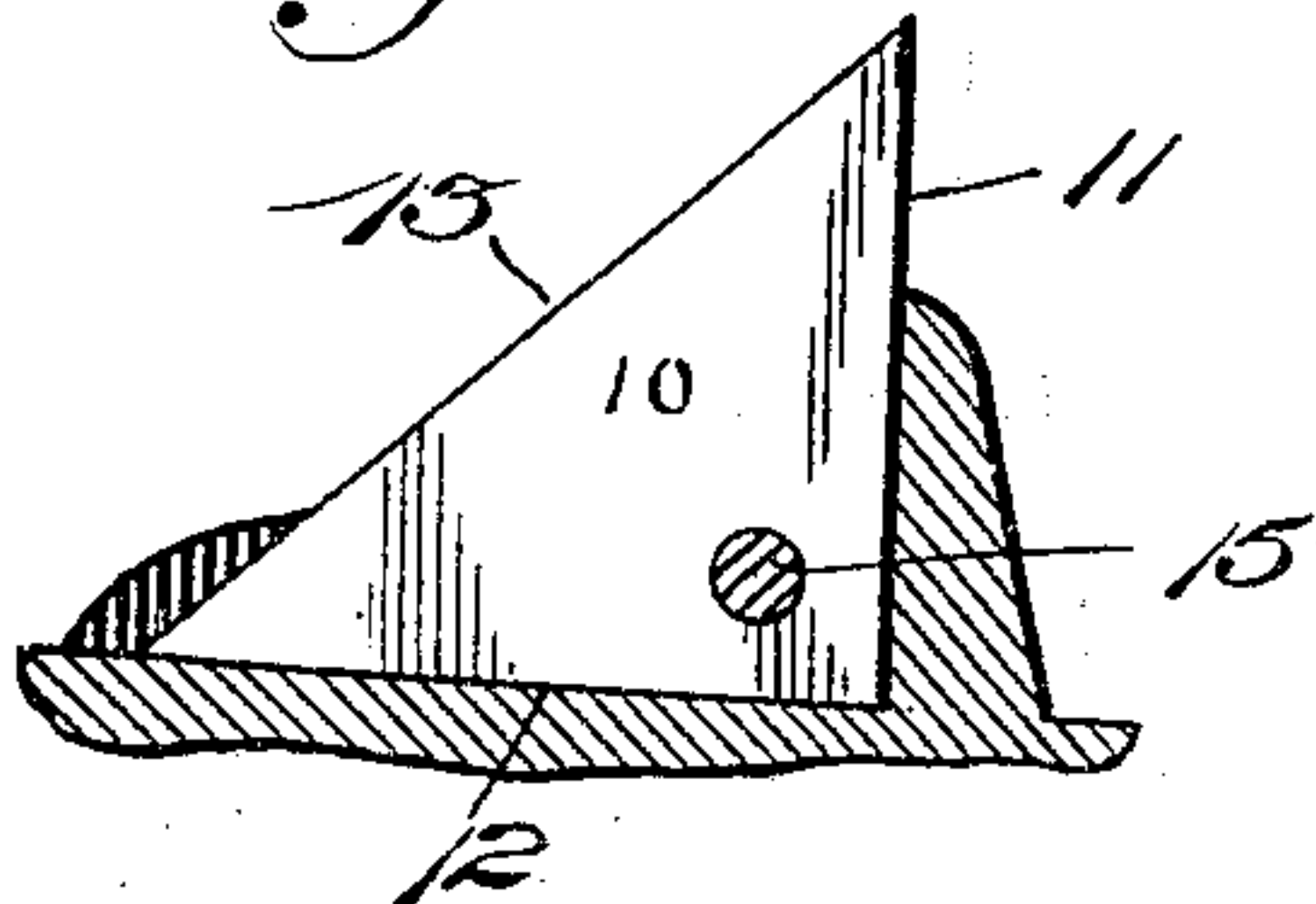


Fig 5.

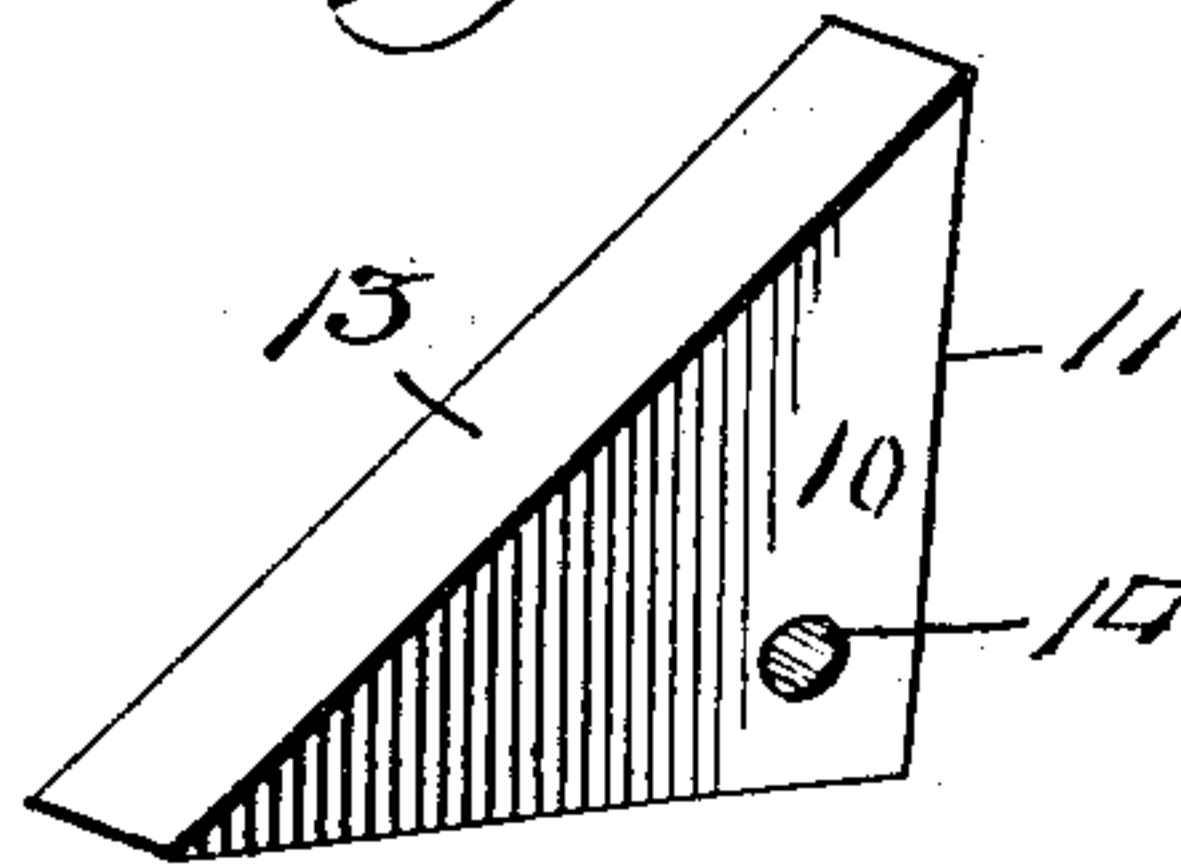
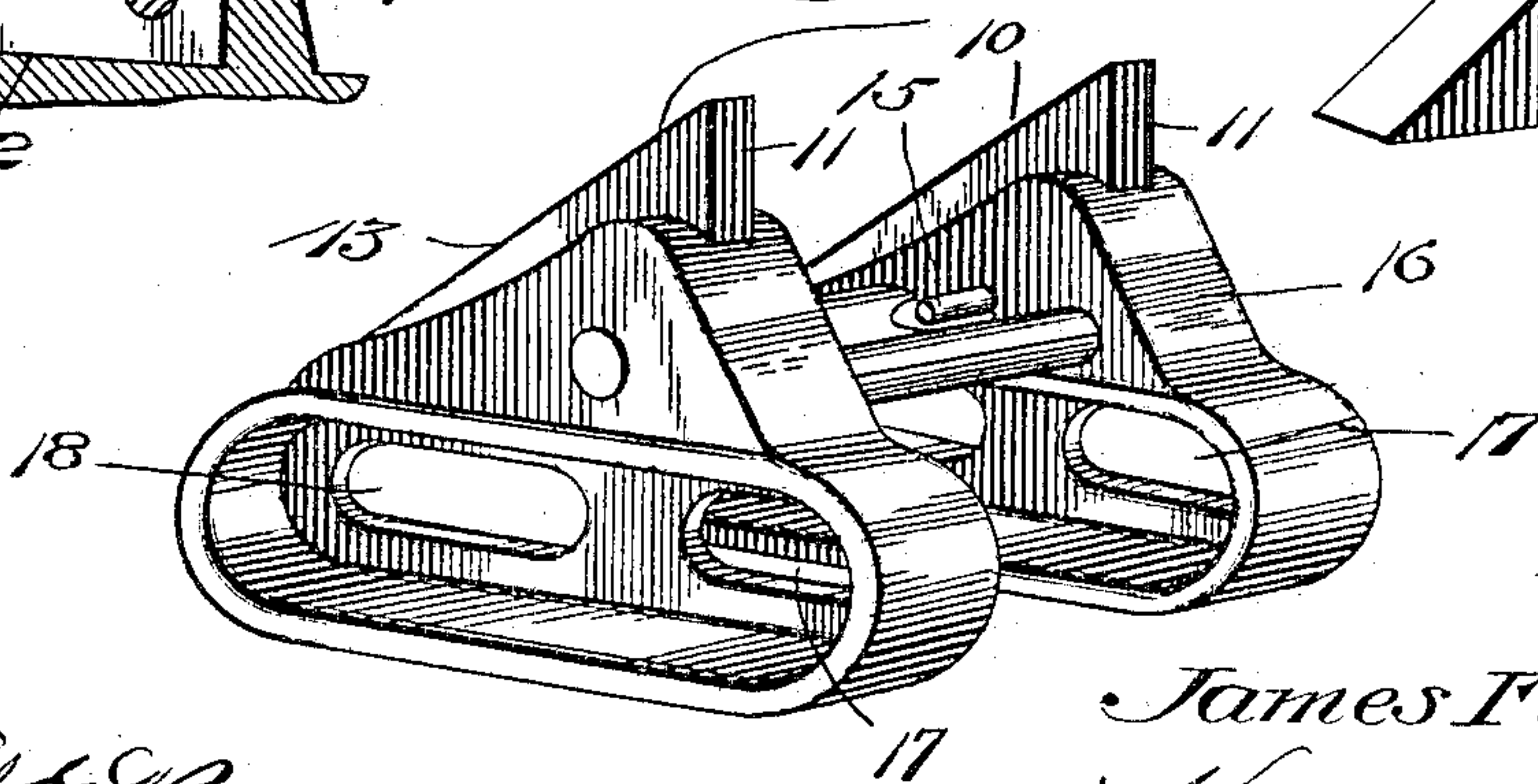


Fig 3.



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JAMES F. WELLS, OF CROSSFORK, PENNSYLVANIA.

SHOE FOR CONVEYER-CHAINS.

No. 801,699.

Specification of Letters Patent.

Patented Oct. 10, 1905.

Application filed July 12, 1904. Serial No. 216,257.

To all whom it may concern:

Be it known that I, JAMES F. WELLS, a citizen of the United States, residing at Crossfork, in the county of Potter and State of Pennsylvania, have invented new and useful Improvements in Chairs or Shoes for Endless Conveyer-Chains, of which the following is a specification.

This invention relates to chairs or shoes for endless conveyer-chains.

A grave fault with conveyer chairs or shoes as heretofore constructed is that the dogs carried by the chairs for engaging logs or the like which are to be raised by the conveyer soon become so worn and misshapen as to be unfit for further use. By reason of the fact that such dogs are usually formed as integral parts of the chair the entire device becomes useless when the dogs are worn out. It is necessary, then, to remove the chair or shoe from the endless conveyer-chain and replace it with an entirely new chair or shoe having serviceable dogs for engaging the logs. As the old forms of chairs or shoes are comparatively expensive, the necessity of supplying an entirely new chair each time the dogs of an old one become worn is a burden upon lumbermen.

The principal object of the present invention is to improve the construction of the chairs or shoes in such manner that the log-engaging dogs may have a plurality of engaging portions whereby when one engaging portion becomes worn the dog may be reversed readily to bring a new or unworn engaging portion into operation.

Furthermore, the invention aims to improve the construction of the chairs or shoes and the dogs in such manner that when a dog becomes entirely worn out it may be removed without difficulty from the chair or shoe and replaced at small expense with a similar dog, the necessity of supplying an entirely new chair or shoe being thereby avoided.

Further objects of the invention are generally to simplify the construction and to decrease the expense attending the manufacture of such chairs and dogs.

With the foregoing and other minor objects in view, which will appear as the description proceeds, the invention resides, primarily, in a chair or shoe having suitable means for attachment to either a single or a double link conveyer-chain and provided on its upper surface with lugs each having therein a substantially right-angular slot adapted to receive a

dog having a plurality of substantially right-angular faces and reversibly and removably held within the lug by means of a bolt extending through the opposite walls of the lug and through the reversible dog.

The invention also resides in the particular combination and arrangement of parts and in the precise details of construction hereinafter described and claimed as a practical embodiment of the invention.

In the accompanying drawings, forming part of this specification, Figure 1 is a perspective view of a trough, showing one of the improved chairs of the endless chain thereof. Fig. 2 is a transverse vertical section through one of the chairs. Fig. 3 is a perspective view of a modified form of chair suitable for use in connection with a double-link conveyer-chain. Fig. 4 is a section at right angles to Fig. 2, part of the chair being broken away and the reversible dog being shown in elevation. Fig. 5 is a perspective view of the reversible dog.

Like reference-numerals indicate corresponding parts in the different views.

The reference-numeral 1 designates the trough of a log-conveyer, through which extends the endless conveyer-chain 2, having thereon at proper intervals a plurality of chairs or shoes, such as 3. Each of the chairs 3 is preferably made in two sections or halves 4, each half having a downwardly-extending lug 5, adapted to fit into the central groove 6 of the trough 1. The adjoining faces of the halves 4 of the chair or shoe are formed with registering grooves 7, designed to embrace a link, such as 8, of the endless conveyer-chain.

Upon the upper surface of each half 4 of the chair or conveyer is formed a lug 9, having therein a substantially right-angular slot—that is to say, the slot in each lug 9 is formed with a horizontal bottom and a vertical front wall, which, as indicated, form a substantially right-angular slot. Seated in the right-angular slot in each of the lugs 9 is a dog 10, which is formed with a plurality of substantially right-angular faces—that is to say, the faces 11 and 12 of the dogs 10 are at right angles with respect to each other, and the face 13 of the dog, which may be straight, as shown, or curved, if desired, gives the dog a triangular appearance. A perforation, such as 14, is formed in each dog 10 adjacent to the point of intersection of the right-angular faces 11 and 12 thereof. Each dog 10 is reversibly held within its right-angular slot in the lug 9 by means of a removable bolt 15.

It will be understood that each of the dogs 10 is adapted to be placed within the right-angular slot of the lug in such manner that either the face 11 or the face 12 of said dog rests against the horizontal bottom of said right-angular slot. In the event that the face 12 of the dog rests against the horizontal bottom of the slot the face 11 of course will be in vertical position, whereby it will serve to engage the logs or the like which are being moved along the trough 1 by means of the conveyer. When the face 11 of the dog becomes worn or useless, the bolt 15 is removed from the lug 9, and the dog is reversed in such manner that the face 11 rests against the horizontal bottom of the right-angular slot and the unworn face 12 of the dog is in vertical position, whereby the life of the dog is materially lengthened. When both faces of the dog become worn, said dog may be removed from the lug and replaced with a new dog of the same construction.

It will be evident that the dogs 10 may be manufactured at small expense, as they are adapted to be cast readily or to be cut from a strip of metal. In this manner the necessity and expense of supplying an entirely new shoe or chair each time that one of the dogs becomes worn are effectually avoided.

If desired, the bottom of the right-angular slot in each lug 9 may be upwardly inclined to a slight extent, as shown in Fig. 4, and the vertical wall of said slot may be inclined slightly from a vertical plane, as shown, the two walls of the slot, however, being always right angular with respect to each other. This construction permits the engaging edge 11 or 12 of the reversible dog to project forward slightly, so as to take a firmer hold upon the end of a log being carried by the conveyer.

Referring again to Fig. 2 of the drawings, it will be understood that any suitable means, such as a screw or bolt, may be employed to hold the two halves of the chair in assembled position.

In Fig. 3 of the drawings is illustrated a modified construction of chair adapted for use in connection with a double-link chain or in connection with two conveyer-chains. Ac-

ording to this construction the double links are fitted around the connecting portion 16, extending between the two halves of the chair. If two chains be used, the links of the chains may be fitted through the perforations 17 and 18 in the two halves of the chair.

Having thus fully described the invention, what is claimed as new is—

1. A conveyer chair or shoe having a lug thereon formed with a slot, and a dog reversibly and removably mounted in the slot of the lug.

2. A conveyer chair or shoe having a lug thereon formed with a substantially right-angular slot, and a dog reversibly and removably mounted in the slot and having a plurality of substantially right-angular faces.

3. A conveyer chair or shoe having a plurality of lugs thereon, each lug having a substantially right-angular slot, a dog removably and reversibly mounted in the slot of each lug and having a plurality of substantially right-angular faces and a perforation adjacent to the intersection of said right-angular faces, and a removable bolt extending through each lug and through the perforation in the removable and reversible dog thereof.

4. The combination with a conveyer-dog having a plurality of engaging teeth, of supporting means for said dog, whereby said teeth may be successively brought into operative position, substantially as described.

5. In a conveyer, the combination with a dog having a plurality of engaging teeth, of supporting means for said dog, said dog and means being so constructed and arranged that any of said teeth may be held in operative position, substantially as described.

6. In a conveyer, the combination with a dog having a plurality of teeth, of a support for said dog having a recess for the reception of said teeth, substantially as described.

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

JAMES F. WELLS.

Witnesses:

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