

No. 700,299.

Patented May 20, 1902.

E. BURNS.
DRAFT EVENER.

(Application filed Oct. 30, 1901.)

(No Model.)

FIG. 1.

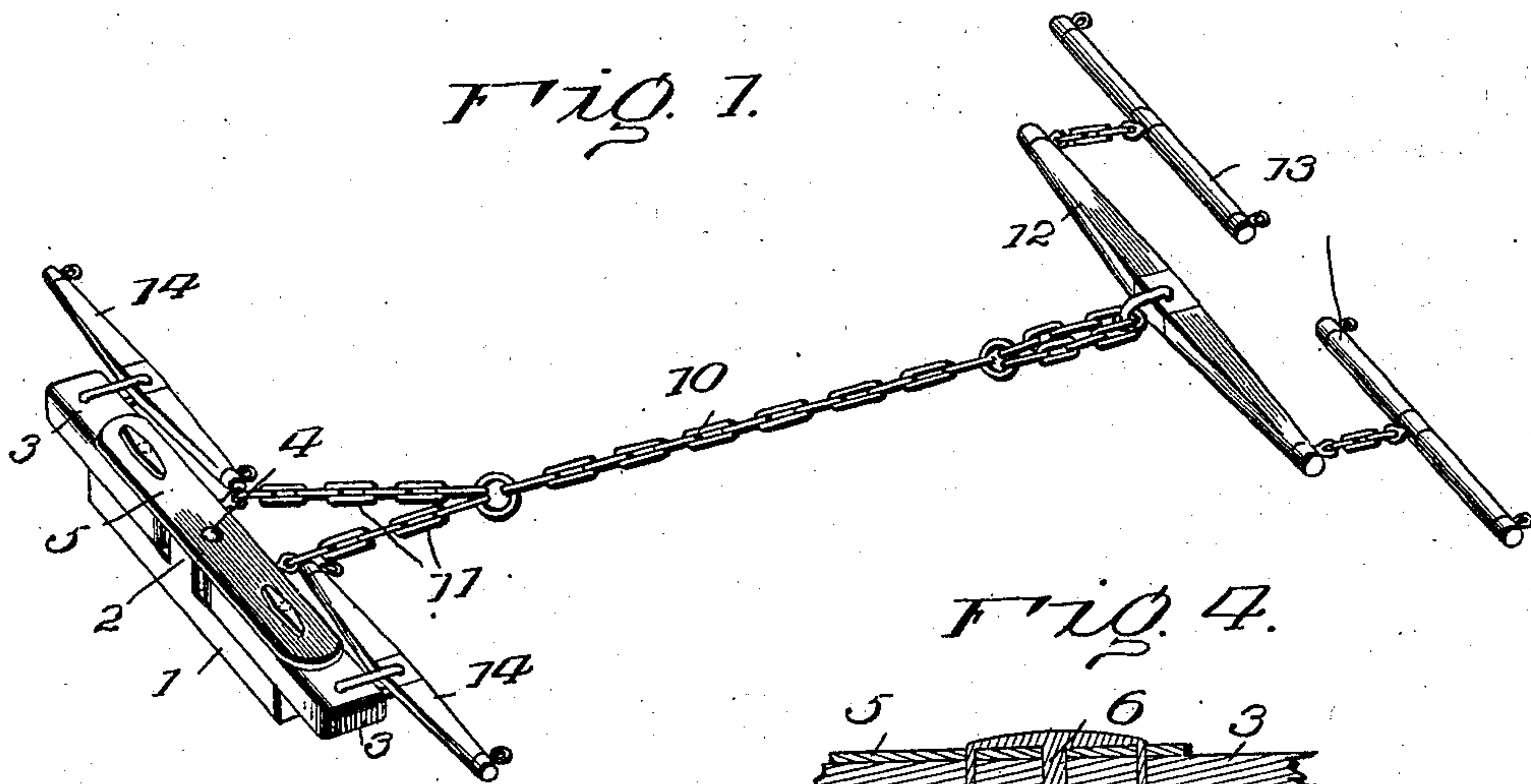


FIG. 4.

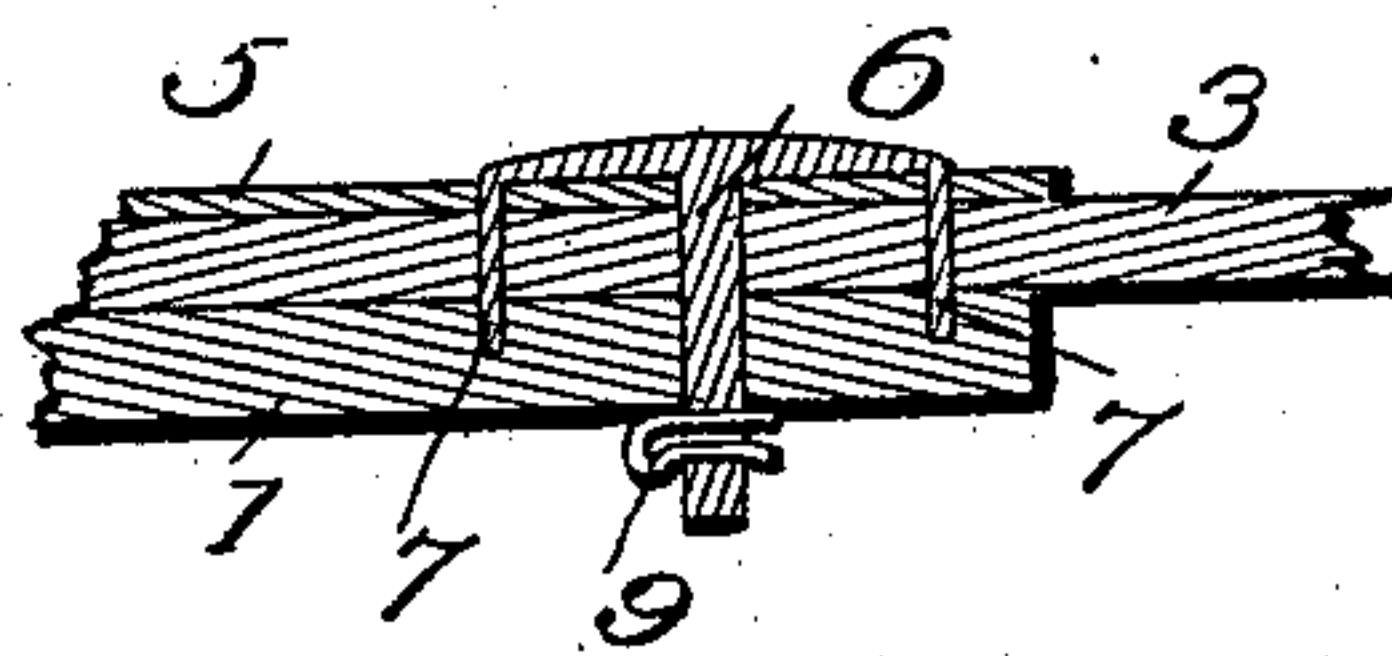


FIG. 2.

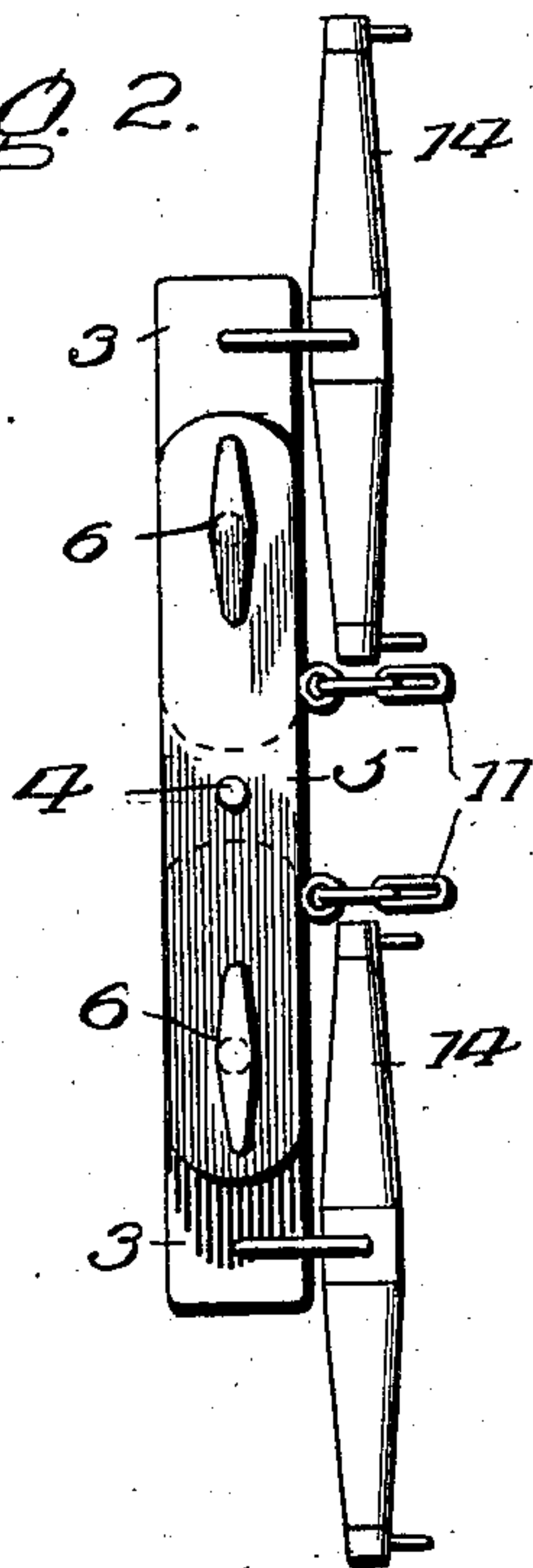


FIG. 3.

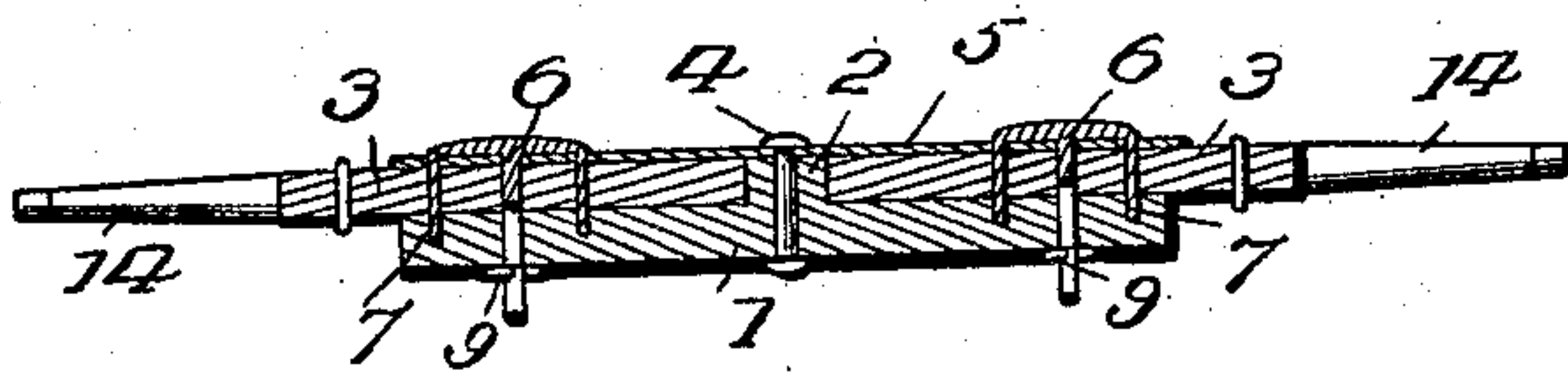
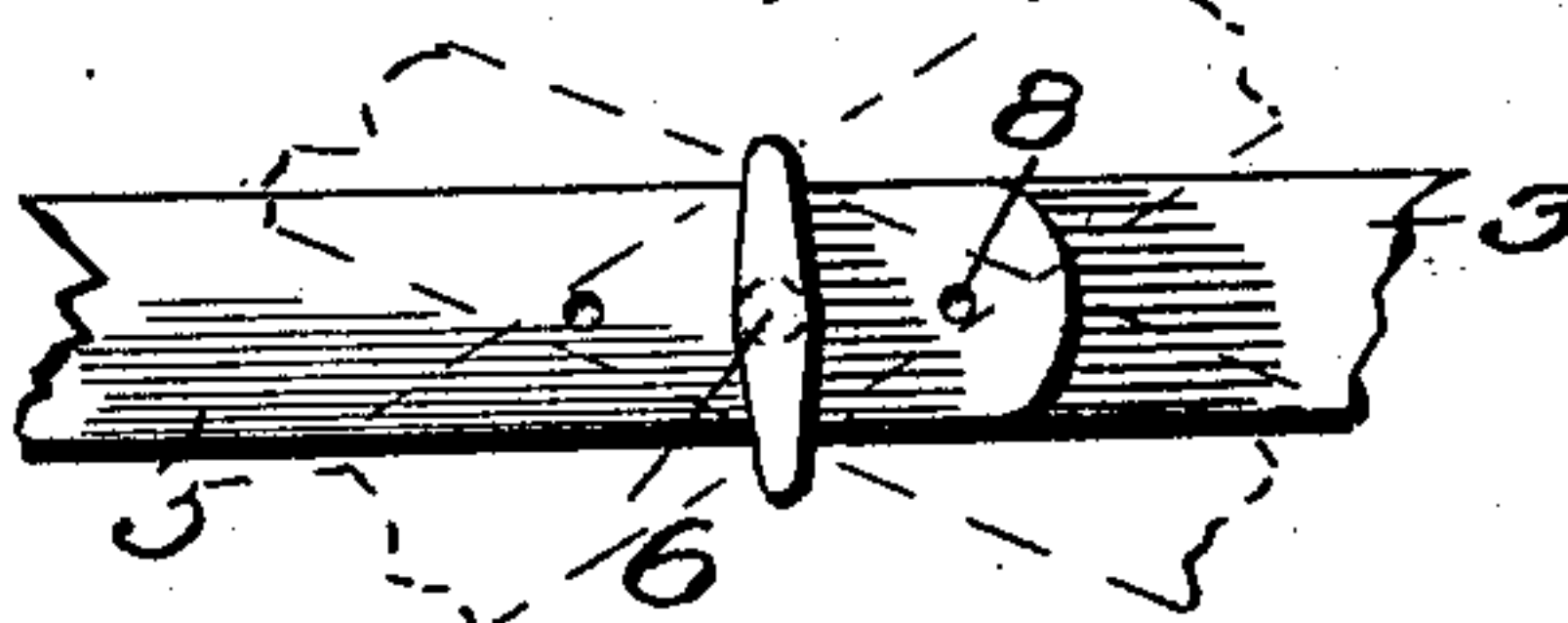


FIG. 5.



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EDWARD BURNS, OF ZEARING, IOWA.

DRAFT-EVENER.

SPECIFICATION forming part of Letters Patent No. 700,299, dated May 20, 1902.

Application filed October 30, 1901. Serial No. 80,548. (No model.)

To all whom it may concern:

Be it known that I, EDWARD BURNS, a citizen of the United States, residing at Zearing, in the county of Story and State of Iowa, have invented certain new and useful Improvements in Draft-Eveners; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as it appertains to make and use the same.

This invention relates to means for equalizing the draft of animals when arranged in pairs and the pairs set one in advance of the other in tandem fashion, whereby in starting a team the load is thrown on the several animals and a concerted action of all assured.

For a full description of the invention and the merits thereof, and also to acquire a knowledge of the details of construction of the means for effecting the result, reference is to be had to the following description and drawings hereto attached.

While the essential and characteristic features of the invention are susceptible of modification, still the preferred embodiment of the invention is illustrated in the accompanying drawings, in which—

Figure 1 is a perspective view of a draft-evenner constructed in accordance with and embodying the essential features of the invention. Fig. 2 is a top-plan view of the singletree and parts intimately associated with and connected thereto. Fig. 3 is a central longitudinal section of the singletree and equalizing-levers looking toward the front. Fig. 4 is an enlarged section of an end portion of the singletree and the middle portion of the equalizing-lever connected thereto. Fig. 5 is a top plan view of the parts shown in Fig. 4, the dotted lines indicating the extreme positions of the equalizing-lever.

Corresponding and like parts are referred to in the following description and indicated in all the views of the drawings by the same reference characters.

The singletree 1 is provided at a central point with a lug 2 to come between the inner ends of the equalizing-levers 3 and which is vertically apertured to receive the bolt 4 for connecting the singletree to the vehicle or implement to which the draft is to be applied.

A plate 5 extends parallel with the singletree and is spaced therefrom to receive the inner end portions of the equalizing-levers 3, said plate being secured to the singletree by the bolt 4.

The equalizing-levers 3 are pivotally connected to the outer ends of the singletree 1 and plate 5 by means of T-bolts 6, the cross-heads of which are provided at their ends with arms 7, extending parallel with the stems of the said bolts 6. These arms 7 perform a dual office—to secure and prevent pivotal movement of the equalizing-levers when in one position and to limit the pivotal movements of the said levers when in another position. The stems of the T-bolts 6 pass through openings in the plate 5, singletree 1, and equalizing-levers 3 in coincident relation, and the arms 7 thereof are adapted in one position of the T-bolts to embrace opposite edges of the equalizing-levers and limit their pivotal movement, as shown by the dotted lines in Fig. 5, and in another position of the T-bolts the arms 7 are adapted to pass through coincident openings 8 in the plate 5 and equalizing-levers 3 to prevent any pivotal movement of the equalizing-levers, which at times is desirable. The end portions of the arms 7 after passing through the openings 8 in the equalizing-levers and plate 5 enter the singletree, thereby firmly securing the equalizing-levers against any pivotal movement. The T-bolts may be secured in place by any means, and, as shown, cotter-pins 9 are employed. The draft-chain 10 is connected by short chains 11 with the inner ends of the equalizing-levers 3 and a doubletree 12, having singletrees 13 attached to its outer end. Singletrees 14 are connected to the outer ends of the equalizing-levers 3. The arrangement admits of a pair of draft-animals having a tandem arrangement and located so that an animal of each pair is upon opposite sides of the draft-chain 10. Upon adjusting the T-bolts 6 so that the arms 7 may embrace the edges of the equalizing-levers, as indicated in Fig. 5, the said equalizing-levers are free to oscillate, thereby admitting of an equalization of the load between the front and rear pairs of animals. Upon adjusting the T-bolts so that the arms 7 will pass through the openings 8 of the plate 5 and equalizing-le-

vers 3 with their end portions entering the singletree the equalizing-levers are made fast and prevented from movement. Hence the singletree may be used in the capacity of
5 a doubletree and with a single pair of draft-animals, as will be readily comprehended.

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

1. In a draft-evenner, and in combination
10 with a singletree and equalizing-levers cooperating therewith, bolts of approximately T form having arms at the ends of their cross-heads either to enter the equalizing-levers and prevent pivotal movement thereof or to
15 embrace the edges thereof and limit their pivotal movement, substantially as set forth.

2. In a draft-evenner, and in combination with a singletree, a plate paralleling the singletree and connected thereto, and equalizing-levers arranged between the singletree and the said plate, T-shaped bolts pivotally connecting the equalizing-levers with the plate and singletree and having arms
25 at the ends of their cross-heads either to embrace opposite edges of the said plate and

equalizing-levers or to enter corresponding openings formed in the said plate and equalizing-levers, substantially as set forth.

3. A draft-evenner comprising a singletree having a centrally-disposed lug, a plate paralleling the singletree and spaced therefrom
30 by the said lug, equalizing-levers located between the said plate and singletree, singletrees applied to the outer ends of the equalizing-levers, a draft-chain having connection
35 with the inner ends of the said equalizing-levers, and T-shaped bolts connecting the equalizing-levers to the said plate and singletree and provided with arms at the ends of their cross-heads to embrace the edges of
40 the equalizing-levers or to enter corresponding openings in the said plate and equalizing-levers, as and for the purpose set forth.

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

EDWARD BURNS. [L. S.]

Witnesses:

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ELLA BURNS.