

No. 682,538.

Patented Sept. 10, 1901.

D. FOX.
TRACE CHAIN.

(Application filed Feb. 11, 1901.)

(No Model.)

Fig. 5.

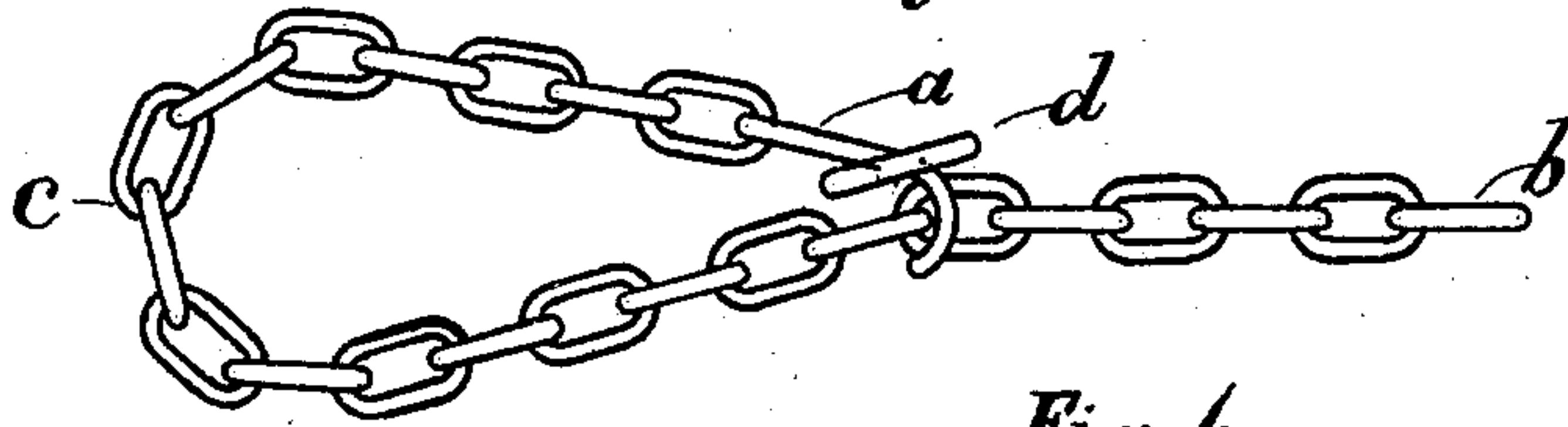


Fig. 6.



Fig. 3.

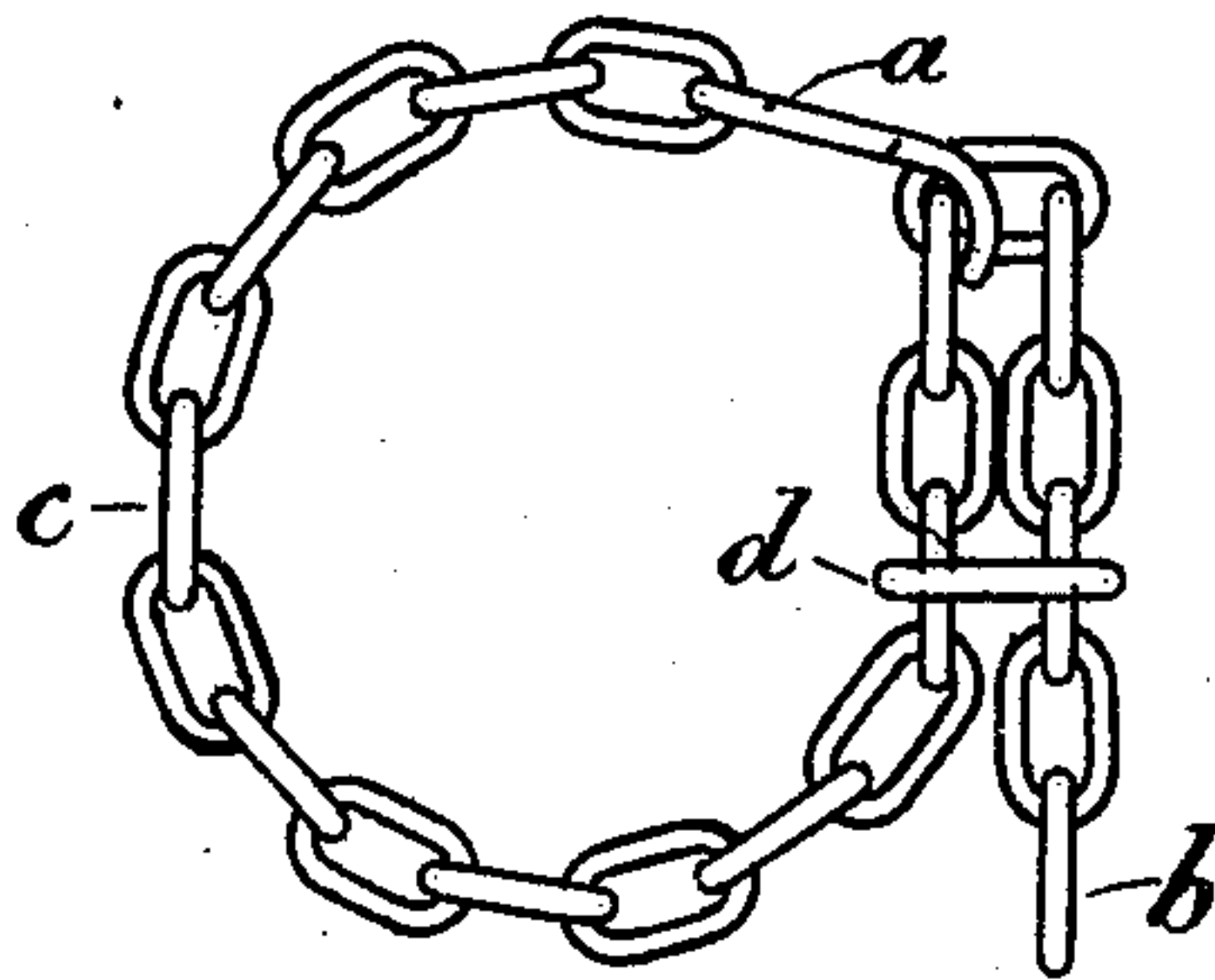


Fig. 4.



Fig. 1.

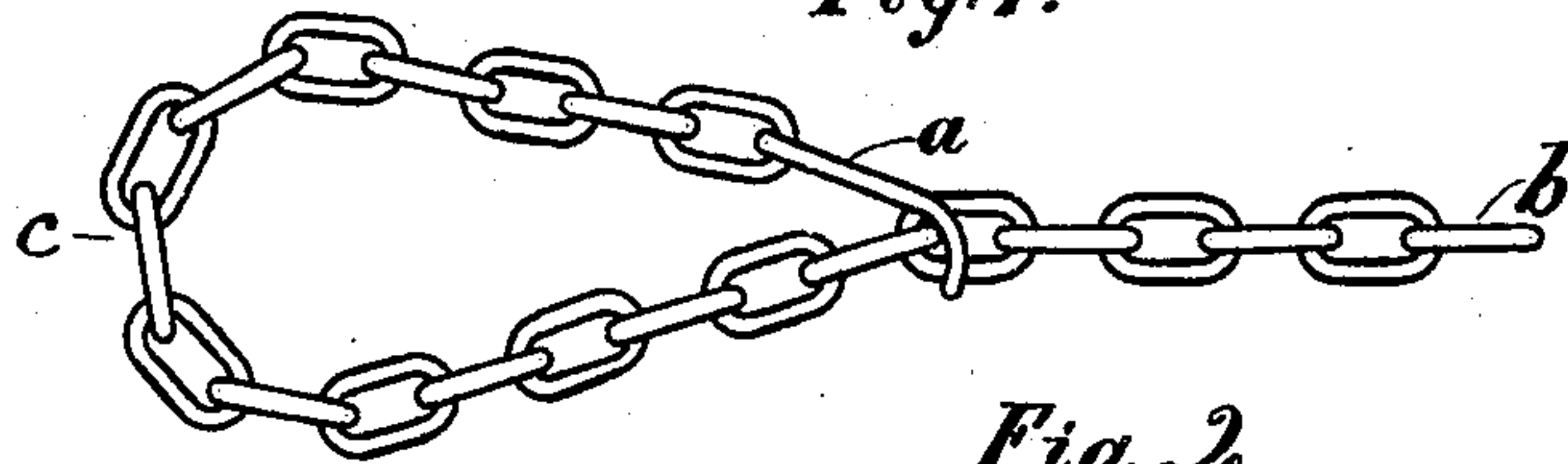


Fig. 2.



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TRACE-CHAIN.

SPECIFICATION forming part of Letters Patent No. 682,538, dated September 10, 1901.

Application filed February 11, 1901. Serial No. 46,955. (No model.)

To all whom it may concern:

Be it known that I, DAVID FOX, a British subject, residing at Valley Station, in the county of Colchester, in the Province of Nova Scotia and Dominion of Canada, have invented a new and useful Improvement in Trace-Chains, of which the following is a specification.

My invention relates to an improvement in trace-chains in which tug-chains are used to connect the leather traces to the singletree; and the object of my invention is to provide a device to prevent the grab-link on the tug-chain from becoming accidentally displaced or from changing its position on the chain when the chain becomes slack. I attain this object by the mechanism illustrated in the accompanying drawings, in which—

Figure 1 is a plan of a tug-chain with its grab-link as it is now used without my invention. Fig. 2 is an elevation of the grab-link. Fig. 3 is a plan of a tug-chain with its grab-link, showing the manner of the adjustment of my device. Fig. 4 is an elevation of a ring, which is shown in Fig. 3 encircling two parts of the chain. Fig. 5 is a plan of a tug-chain, showing the final adjustment of my device and the chain ready for use. Fig. 6 is an elevation of the grab-link encircled by the ring, as shown in plan in Fig. 5.

Similar letters refer to similar parts throughout the several views.

In the drawings, *a* is a grab-link which will fit on any link of the chain and by which the length of the trace is adjusted.

b is a link on the end of the chain, by which it is attached to the leather trace of the harness.

c is that part of the chain which is encircled by and works in the ring of the singletree.

d is a light metal ring made with an internal diameter that will allow it to be passed over two parts of the chain when folded together, but will not allow it to pass over the bow of the grab-link.

My invention, which is applicable to and can be combined with any chain on which a grab-link is used, is combined with a tug-chain in the following manner: The end of the chain *b* is passed through a ring on the singletree and then through the bow of the grab-link *a*. The chain is then adjusted to the required length, and the end *b* is again passed through the ring *d*, as shown in Fig. 3. The ring now encircling two parts of the chain is moved until it rests on the neck or contracted part of the grab-link *a*, as shown in Figs. 5 and 6, effectually securing the link from accidental displacement.

Having illustrated and described my invention and the method of its application, what I claim, and desire to secure by Letters Patent, is—

1. In a trace-chain the combination of the tug-chain with the grab-link *a*, and the ring *d*; substantially as and for the purpose herein described and set forth.

2. A chain having attached to one end an endless hook with a contracted and curved neck adapted to clasp and hold on any part of the chain, in combination with a ring adapted to encircle and to be moved over two parts of said chain onto the neck of the endless hook; substantially as, and for the purposes herein specified and set forth.

DAVID FOX.

Witnesses:

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