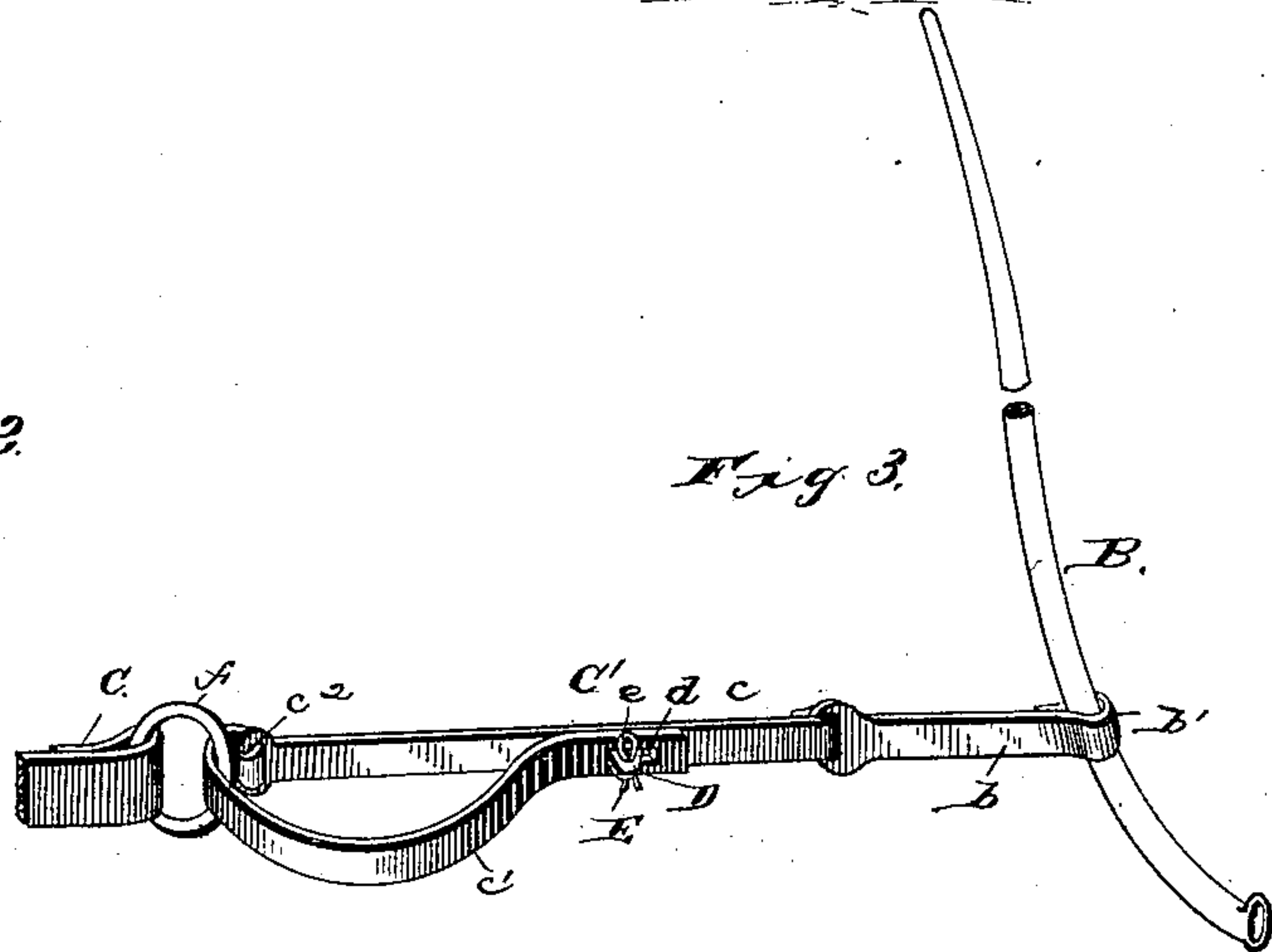
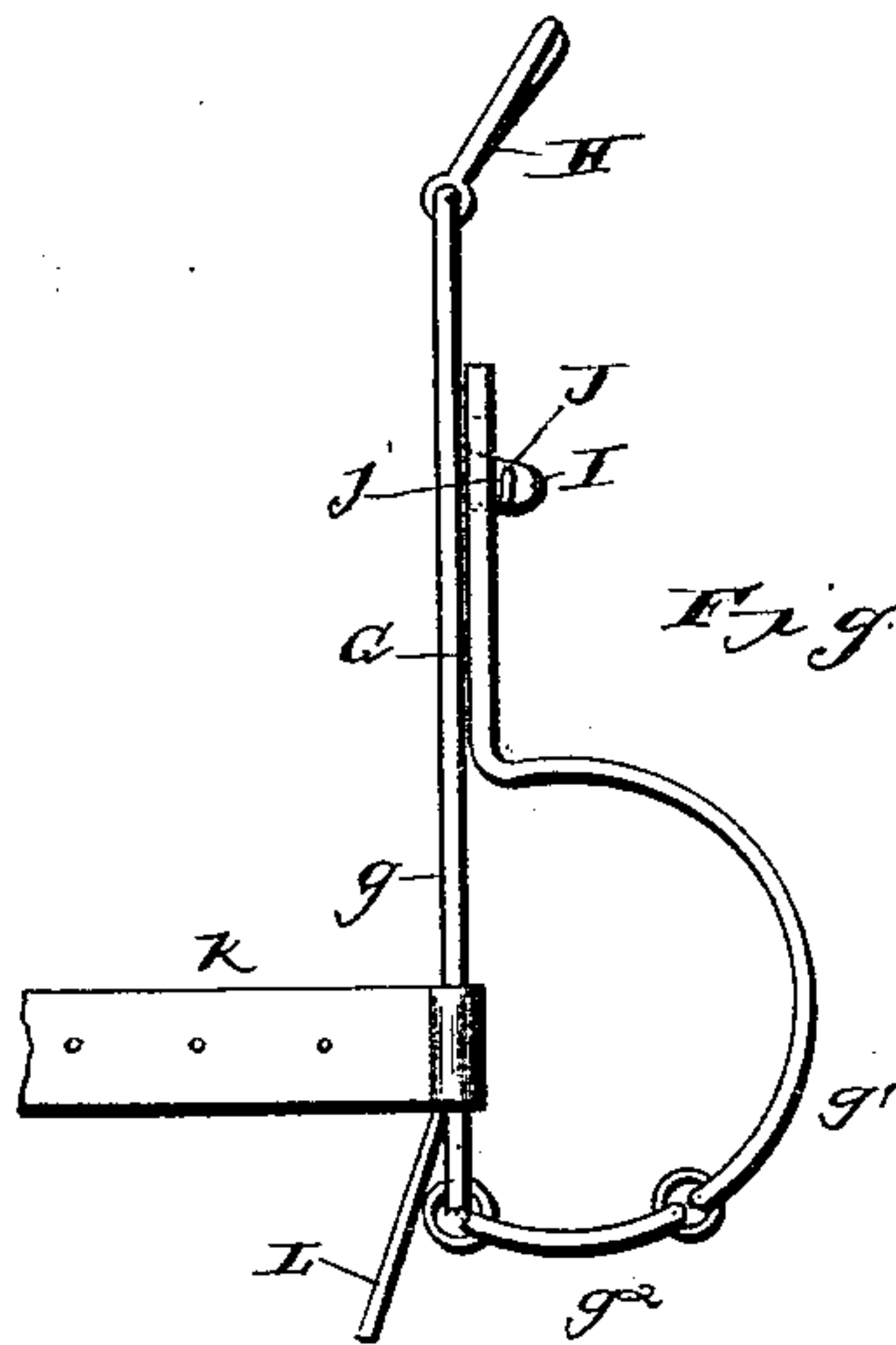
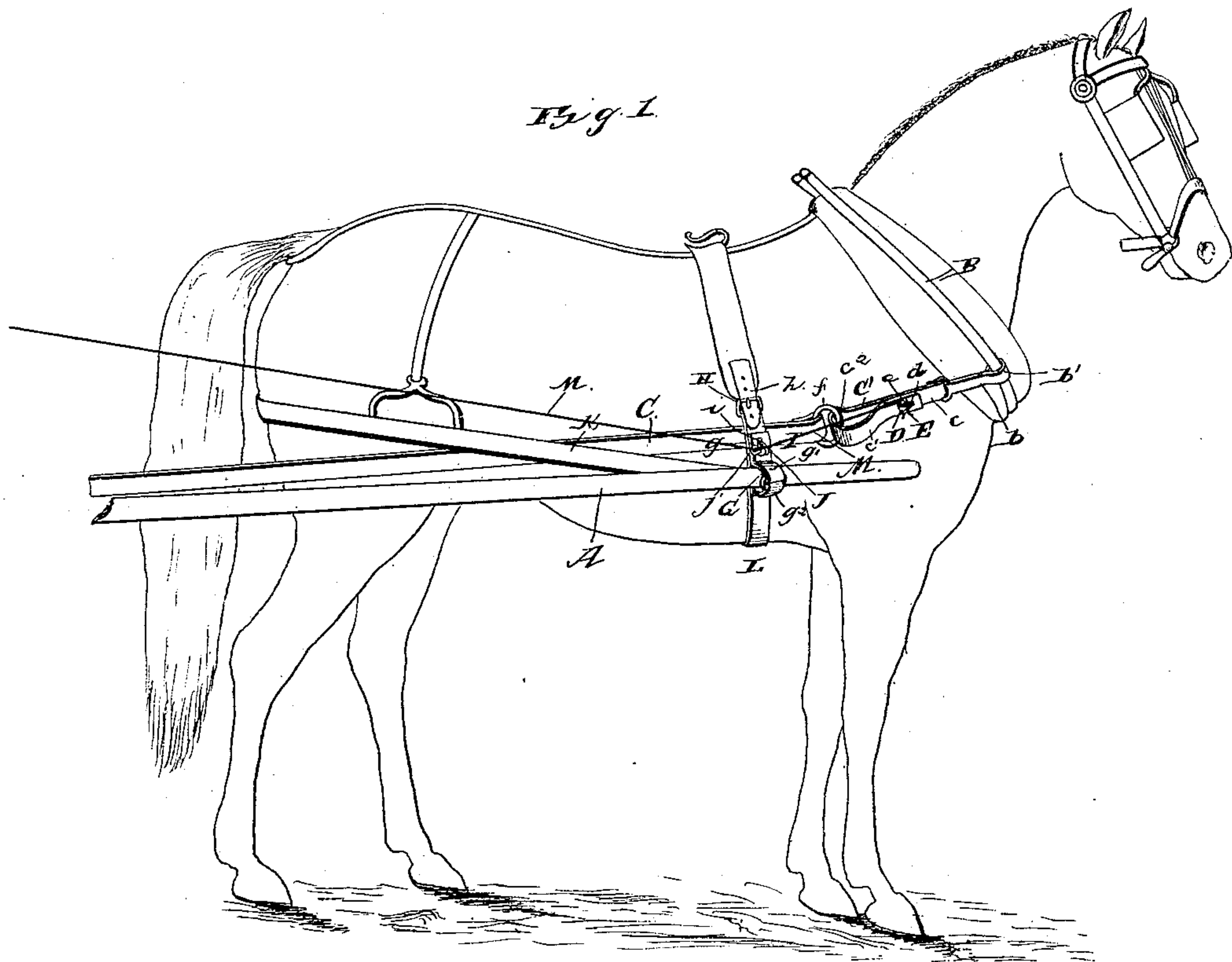


(No Model.)

J. R. McDONALD.
HARNESS ATTACHMENT.

No. 377,112.

Patented Jan. 31, 1888.



Witnesses

Gen. Thayer.
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UNITED STATES PATENT OFFICE.

JOSEPH RODGERS McDONALD, OF McKENZIE, TENNESSEE.

HARNESS ATTACHMENT.

SPECIFICATION forming part of Letters Patent No. 377,112, dated January 31, 1888.

Application filed November 22, 1887. Serial No. 355,907. (No model.)

To all whom it may concern:

Be it known that I, JOSEPH RODGERS McDONALD, a citizen of the United States, residing at McKenzie, in the county of Carroll and State of Tennessee, have invented new and useful Improvements in Harness Attachments, of which the following is a specification.

The invention relates to improvements in harness attachments, the object being to detach the traces from the hames and the horse from the thills at the same time; and it consists in the construction and novel combination of parts hereinafter described, and pointed out in the appended claims.

In the accompanying drawings, Figure 1 represents the invention applied to a horse. Fig. 2 represents a detail view of the compound shaft-loop and attachments. Fig. 3 represents a detail view of our hame-releasing loop with part of the trace attached.

Referring to the drawings by letter, A designates one of the thills of a vehicle; B, the hames, and C the traces of the harness attached thereto. Attached to each hame is a loop, *b*, the stem of the loop having, preferably, an eye, *b'*, that slips upon the hame, and C' is a compound detaching-loop composed of the straight bar *c*, having a loop at its front end to engage the loop *b*, and a curved bar, *c'*, which makes a loop-joint, *c''*, with the rear end of the bar *c*.

D is a lug standing outward from the bar *c* at a proper point and passing through a slot, *d*, in the portion of the bar *c'* that lies against the bar *c*. The said lug has its front edge inclined rearward to move easily into the slot, and when therein the two bars are locked together by the split key E, which enters a perforation in the lug, the said key having a looped head, *e*, for the attachment of a cord, hereinafter described.

The traces C have a ring, *f*, at the front end to engage the disengaging-loop on the same side.

G is a compound thill-loop composed of the straight inner bar, *g*, and the curved outer bars, *g'* *g''*, respectively. The bar *g* has jointed to its upper end a buckle, H, to engage a strap, *h*, depending from the back strap. At its lower end the bar *g* makes a looped joint with the inner end of the curved bar *g''*, the outer end of which makes a similar joint with the

lower end of the curved bar *g'*, the upper portion of which is straight and lies against the upper part of the bar *g*.

I is a lug standing outward from the bar *g* 55 and entering a slot, *i*, in the straight portion of the bar *g'*, where it is retained by the split key J, that passes through a perforation on its outside of the bar *g'* and is provided with a looped head, *j*. The said lug has its upper 60 edge beveled downwardly to more easily enter the slot.

K is the breech-strap, and L is the belly-band, both of which are secured, at suitable points, to the bars *g* of the compound thill-loops. 65

The bars *g'* and *g''* are so curved as to accommodate snugly the thills of the vehicle to which the device is attached.

M M are cords running on each side of the horse, and each having its front end secured to the loop of the key E, whence it extends rearward and is secured to the loop of the key J. The cords run thence to the driver, who, by pulling both and thereby drawing the keys 75 E and J on both sides, allows the compound loops C and G to open, releasing both traces from the hames and both thills from their loops G, so that the thills fall to the ground and the horse is free therefrom, the breech-strap and 80 belly-band remaining attached to the open thill-loops and the rear end of the traces remaining attached to the whiffletrees.

Having described my invention, I claim—

1. The thill-loops, each composed of the 85 straight inner bar, *g*, provided with the perforated lug I, the curved bar *g''*, hinged to the lower end of the bar *g*, and the curved bar *g'*, hinged to the free end of the bar *g''*, provided with the slot *i*, the curves of the bars *g'* *g''* being formed to embrace the corresponding thill, the keys J, passing through the perforations on the lugs I, and the unlocking-cords M, substantially as specified. 90

2. The combination, with the hames, of the 95 compound jointed detaching-loops connected thereto, the traces, each provided with a ring engaging the corresponding detaching-loop, the locking-keys, and the cords attached to said keys for the purpose of drawing the same 100 and unlocking said loops, substantially as specified.

3. The combination, with the hames and the loops *b*, attached thereto, of the compound jointed detaching-loops, each composed of a straight bar, *c*, forming a joint with the corresponding loop *b* at its forward end and provided with the perforated lug D, and the curved bar *c'*, jointed to the rear end of the bar *c*, provided with the slot *d*, the traces having rings on their front ends to engage the corresponding detaching-loops, the split key engaging in the perforations of the lugs D, and the cords M, for the purpose of drawing the said keys and unlocking the disengaging-loops, substantially as specified.

4. The combination, with the thills, hames, and traces provided with rings on their front ends, of the compound jointed thill-loops attached to the hames and connecting with the rings on the traces, the keys locking the said thill-loops and detaching-loops, and the cords attached to said keys, whereby the thill-loops and detaching-loops may be simultaneously unlocked, substantially as specified.

5. A harness attachment for the purpose of simultaneously detaching the horse from the thills and traces, composed of the detaching-loops C, each consisting of the bars *c*, provided

with the perforated lug D, the bar *c'*, provided with the slot *d*, and the locking-key E, the thill-loops G, each composed of the bar *g*, provided with the perforated lug I, the bar *g'*, provided with the slot *i*, the bar *g''*, and the locking-key J, and the cords M, secured to the keys E and J for the purpose of simultaneously drawing said keys and unlocking the respective loops, substantially as specified.

6. The compound jointed loops to be attached to the hames and backband, respectively, the one attached to the hames connecting with the traces and the one attached to the backband connected to the thills, said compound jointed loops consisting of a rigid part and a pivoted or jointed part, the latter having a detachable connection with the rigid part, and the releasing-cord running from the driver to this said detachable connection, as set forth.

In testimony that I claim the foregoing as my own I have hereto affixed my signature in presence of two witnesses.

JOSEPH RODGERS McDONALD.

Witnesses:

JO R. HAWKINS,
W. M. CARSON.