

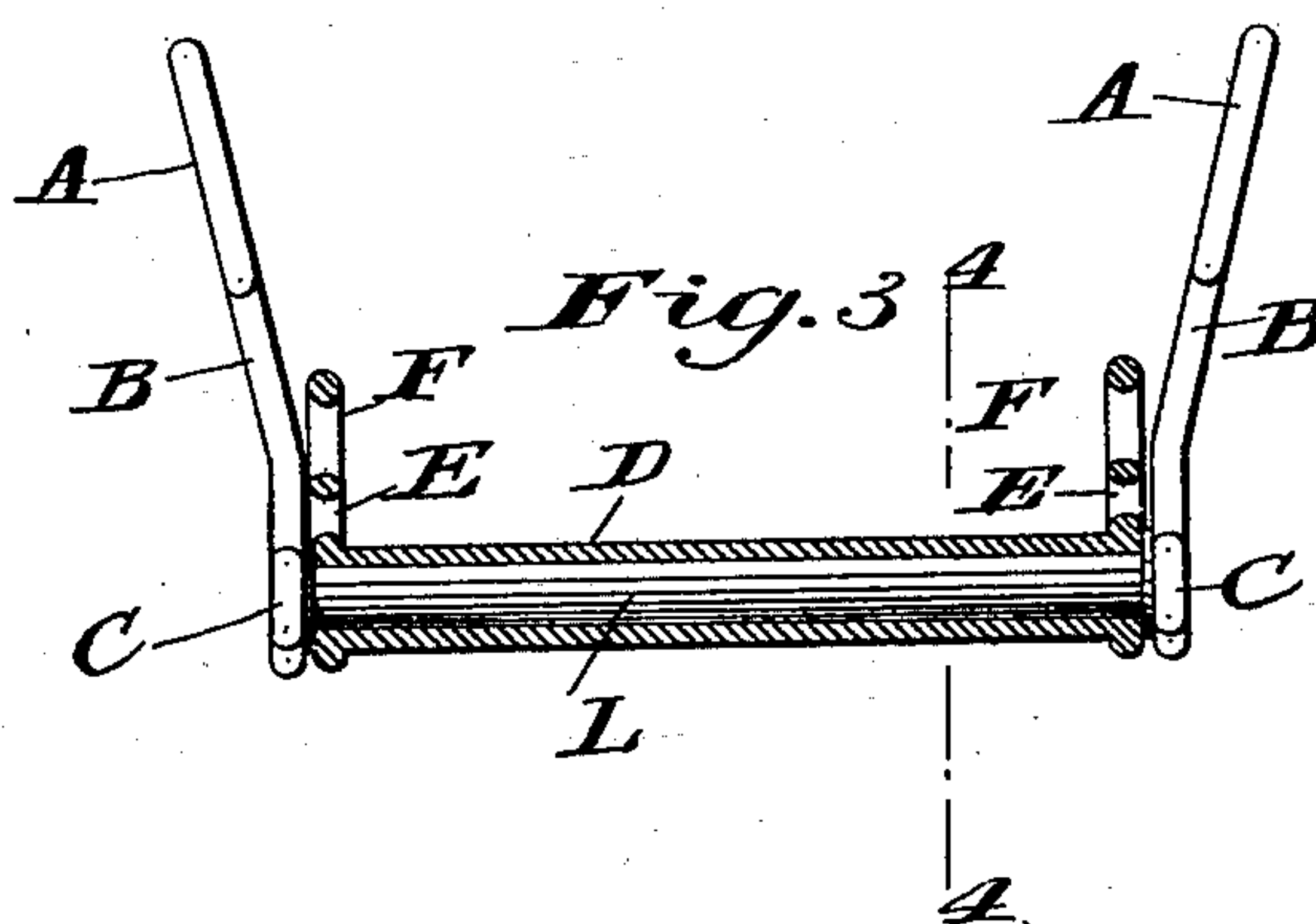
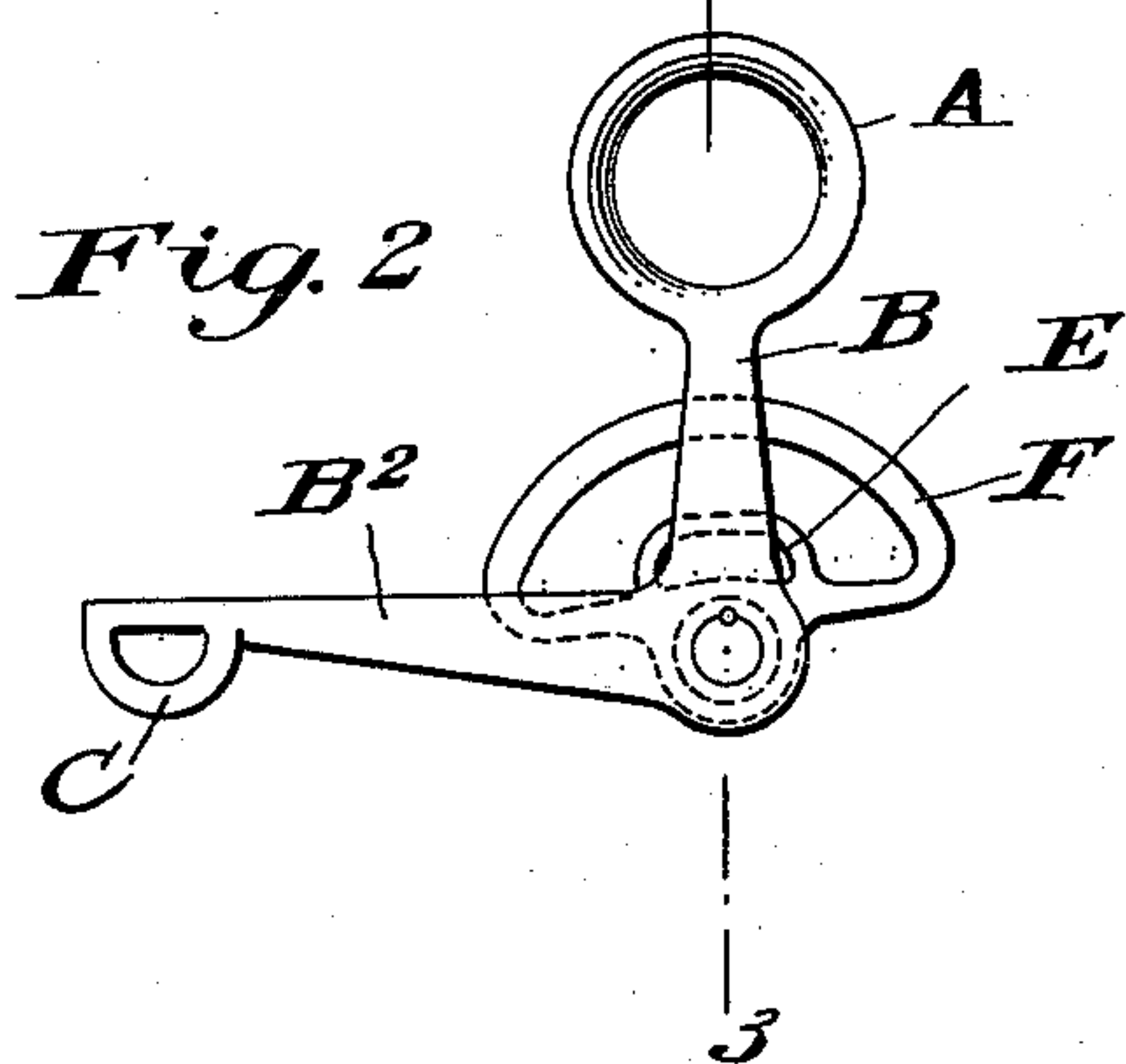
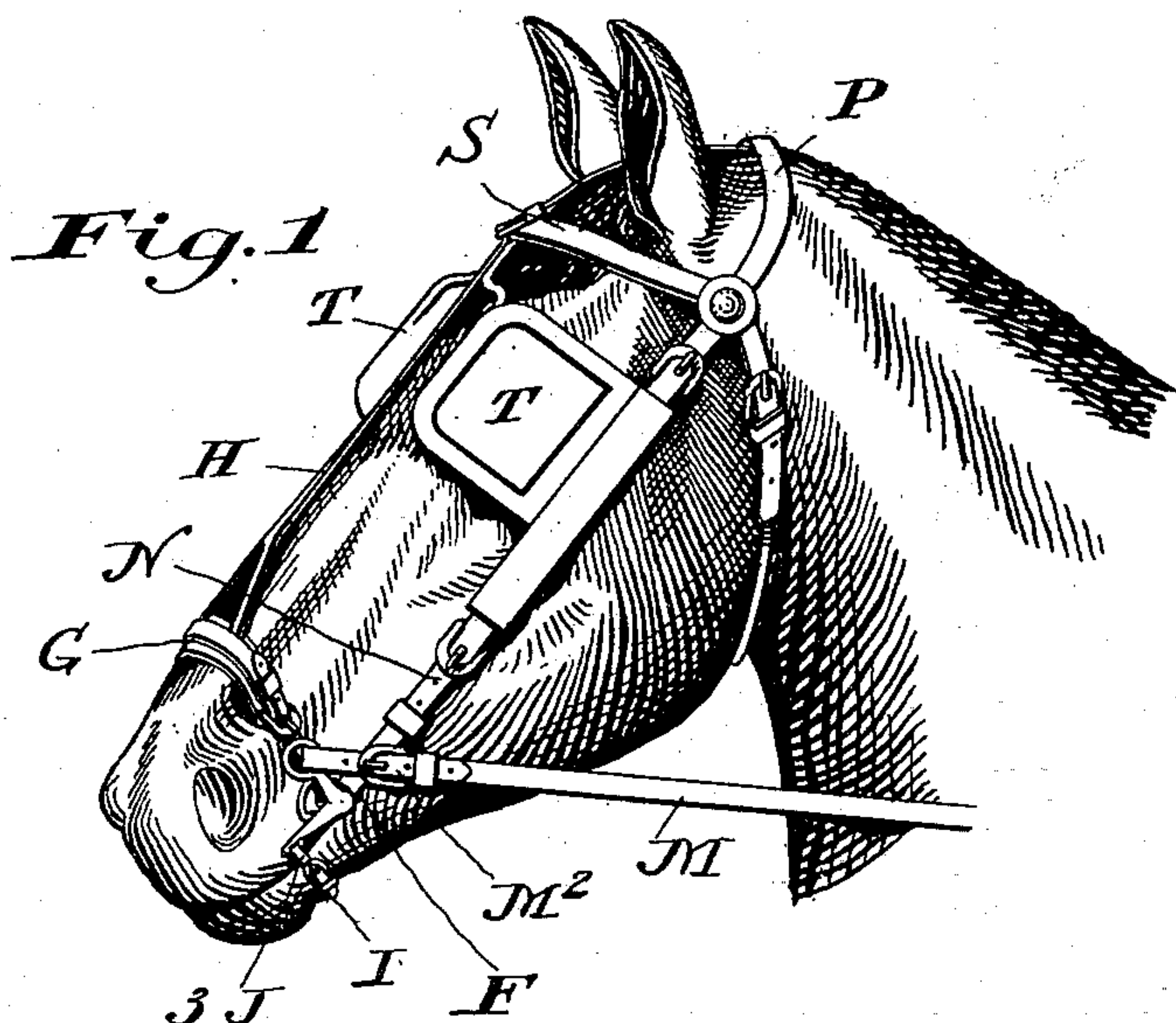
No. 637,802.

Patented Nov. 28, 1899.

F. KLEIN.  
BRIDLE BIT.

(Application filed Feb. 25, 1899.)

(No Model.)



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# UNITED STATES PATENT OFFICE.

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## BRIDLE-BIT.

SPECIFICATION forming part of Letters Patent No. 637,802, dated November 28, 1899.

Application filed February 25, 1899. Serial No. 706,805. (No model.)

*To all whom it may concern:*

Be it known that I, FRANK KLEIN, a citizen of the United States, and a resident of the city of Covington, in the county of Kenton and State of Kentucky, have invented certain new and useful Improvements in Bridle-Bits, of which the following is a specification.

My improvements relate to a novel construction of the bit and its immediate connections and to their combination.

One of the objects of my invention is to provide a governor and bit combined for use in driving trotters, pacers, and runners.

The several features of my invention and the various advantages resulting from their use conjointly or otherwise will be apparent from the following description and claims.

In the accompanying drawings, making part of this application, and in which similar letters of reference indicate corresponding parts, Figure 1 is a view in perspective showing the head of a horse and my invention applied thereto. Fig. 2 is a side elevation of mechanism illustrating my invention. Fig. 3 is a front view, partly in elevation and partly in section, of the mechanism shown in Fig. 2. In this view the section is taken in the plane of the dotted line 3 3 of Fig. 2. Those parts sectioned are the outer sleeve of the bit and those parts which are connected rigidly thereto and which are practically integral therewith. Fig. 4 is a view, partly in elevation and partly in section, taken in the plane of the dotted line 4 4 of Fig. 3, the spectator looking toward that end of the device which is at the right hand in Fig. 3, the parts A, B, B<sup>2</sup>, and C having been removed.

I will first particularly describe my invention and its application and will then describe its advantages.

A represents the ring to which the line is attached. In Fig. 1 the line is indicated by the letter M. This line is of suitable strength, shape, and thickness. It is secured to the ring by a suitable connection. Among the various kinds of such connections may be mentioned the spring-snap, also the buckle. The buckle is preferred. One of these rings A is rigidly connected to one end of a bar B.

The other end of this bar B is rigidly connected to one end of a rod L, cylindrical in form. The other of these rings A is rigidly connected to one end of another bar B, similar to the bar B already named, and to the other end of this second bar B is attached rigidly the other end of the rod L. In each case the ring A and its bar B are preferably formed in one piece. The bars B may be integral with the rod L; but I prefer to make rod L separate and afterward suitably secure it rigidly to these bars B. At each side (or end) of the bit is a bar B<sup>2</sup>, connecting rigidly that end portion of the bar B which is nearest the rod L with an eye C. The bar B<sup>2</sup> and eye C are preferably integral with the bar B, to which it is connected. To one of these eyes C is connected one end of the chin-strap I and to the other of these eyes C is connected the other end of the chin-strap I. The ends of the chin-strap may be directly connected to their adjacent eyes C, but the immediate connection at each end of the chin-strap, whereby the latter is connected to the eyes, is preferably what is known as a "billet," (indicated in the drawings by the letter J.)

A tube or cylinder D closely embraces the rod L and covers all, or nearly all, of the entire length of this rod between the arms B and B. To each end portion of this tube D is rigidly attached a small eye E, to which the nose-band G is connected for the purpose of holding the tube D to the roof of the horse's mouth. A suitable face-piece is present to hold the nose-band in position. One kind of such face-piece is shown and indicated by the letter H. Two large eyes F are likewise rigidly attached to the tube D. One of these eyes F is present at each end of this tube D. To each of these eyes F is connected the lower end of the adjacent cheek-strap N of the bridle. P indicates the usual crown-piece. There are also preferably present the brow-strap S and the blinders T, suitably connected, preferably, as shown.

The object of this invention is to produce one of the most humane of combined bits and governors.



I will now proceed to describe the mode in which my invention operates.

By pulling on the line M the ring A is drawn backward and pressure will be exerted on the nose-band G. The latter is nicely padded underneath. Any pressure in the mouth when pulling on the line or lines M will be obviated. At the same time when the line M is pulled upon the bar or rod L turns within tube D, the latter lying stationary against the upper molar teeth. At the same time when pulling on the line or lines M the chin-strap will tighten under the horse's chin. By pulling on the lines M one can raise the horse's head any height which the driver may see fit to elevate it. During all this time all pressure counter to that on the chin will be on the nose-band instead of in the mouth. To this combination bit and governor no overdraw is required, because the driver himself can judge what amount of strain he may put on the lines or at what height he desires the head of the horse to be elevated. It will be understood that tube D is stationary at all times and that it is the bar L, running through the tube D and attached to the bars B B, that turns in the tube D when the lines are pulled by the person driving.

In addition to the advantages already mentioned my invention enables the driver to stop the horse from tongue-lolling, pulling on one line, fighting on the bit. As heretofore indicated, this bit places pressure on the nose-band instead of in the mouth of the horse and does away with what is known among horsemen as the "overdraw." The bit is therefore one of the most humane of bits.

By this bit the driver is enabled to pick up

a horse from a "break" within the length of a bicycle.

This invention is primarily for use on trotting, pacing, or running horses where the habits and actions of the horse require the driver to rein the horse's head up to any desired height without the aid of an overdraw.

What I claim as new and of my invention, and desire to secure by Letters Patent, is—

1. The combination of the tube D and the eyes F thereof rigidly connected thereto, and the nose-band attached to these end eyes, and the rod L extending through the tube D and rotatable therein, and the end arms B, B, having eyes A, and the lines connected to these eyes, and the end arms B<sup>2</sup>, B<sup>2</sup>, at an angle to the arms B, B, substantially as shown and extending forward, and provided with the eyes C, and the chin-strap I, connected to these eyes, substantially as and for the purposes specified.

2. As a new article of manufacture, a bit and governor, consisting of the following combination of parts, viz: the rod L and the end bars B, B, each provided with an eye A, and the end arms B<sup>2</sup>, at an angle to the bars B, B, and each provided with an eye C, all of these parts being rigidly connected substantially as set forth, and the tube D, embracing the rod L and the end eyes F rigidly connected to the said tube D, the rod L rotatable within said tube, substantially as and for the purposes specified.

FRANK KLEIN.

Attest:

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