

No. 723,637.

PATENTED MAR. 24, 1903.

G. C. BIRMINGHAM.  
CALF WEANER.

APPLICATION FILED MAY 3, 1902.

NO MODEL.

Fig. 1.

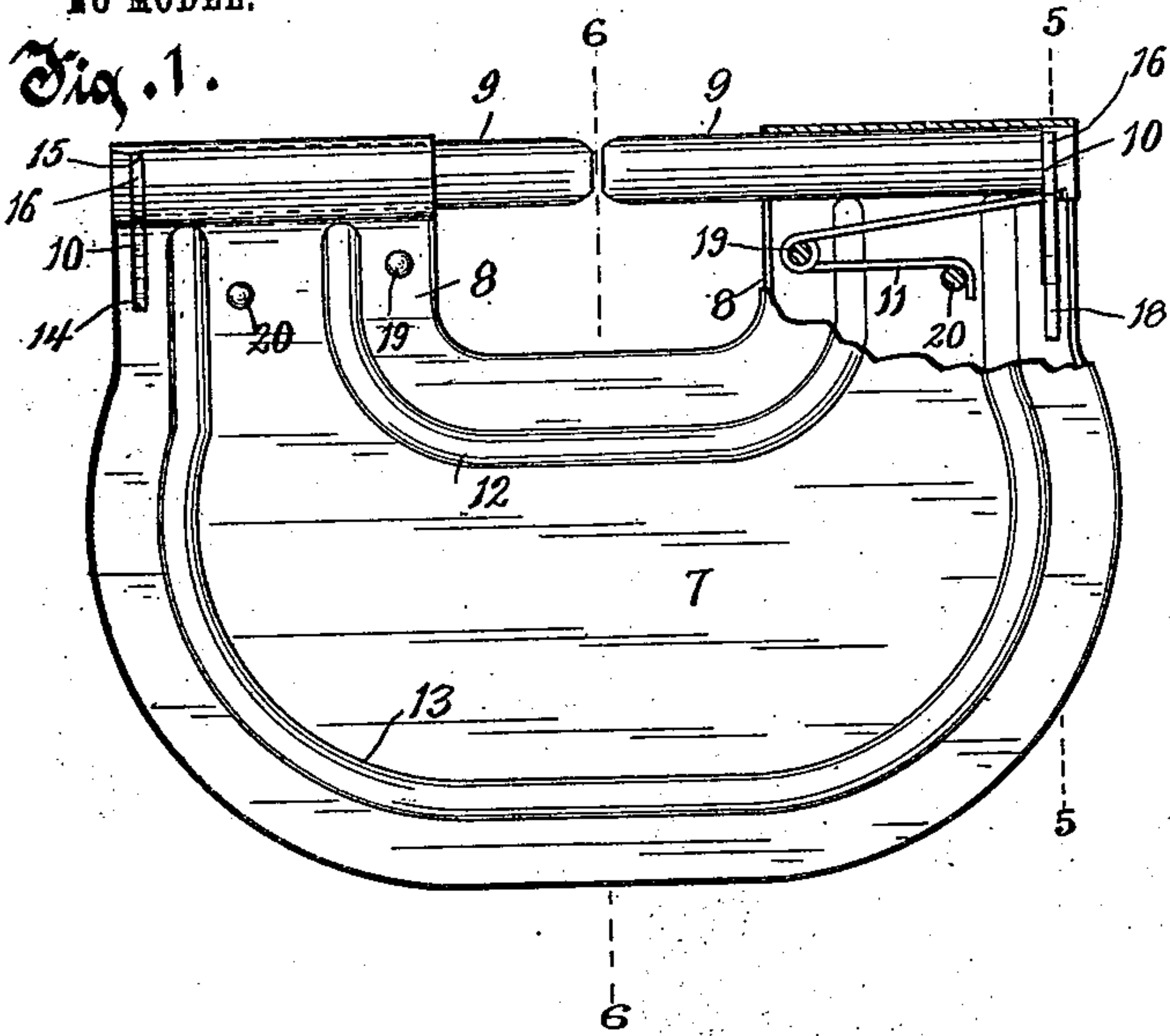


Fig. 2.

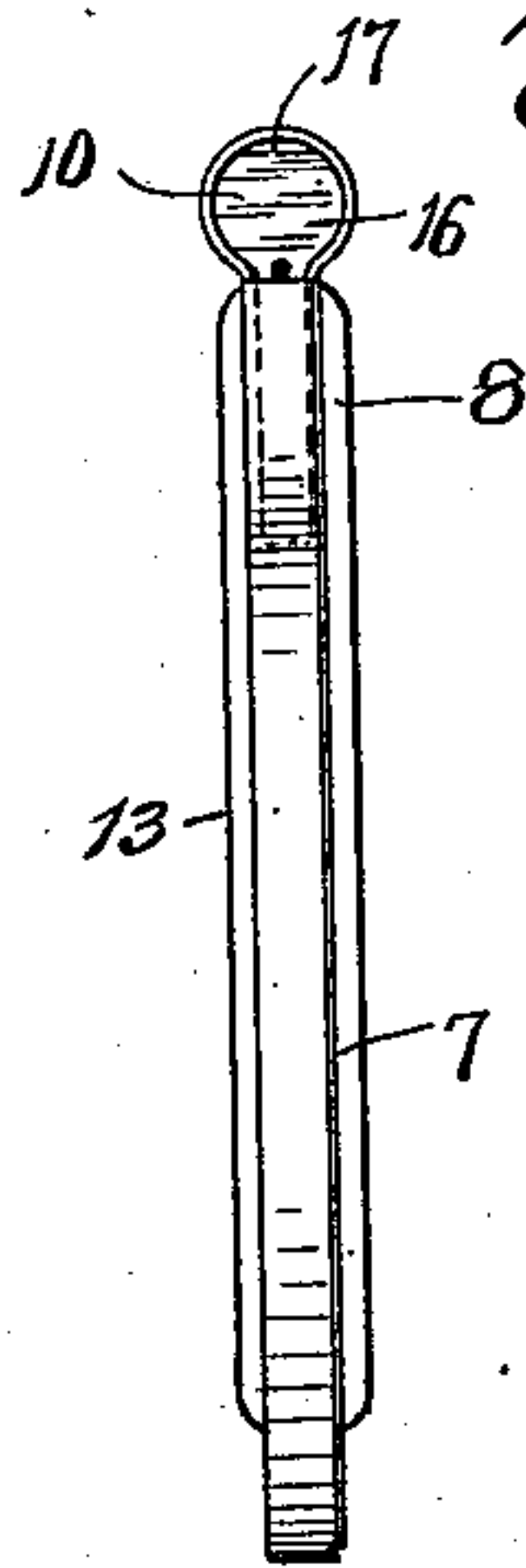


Fig. 4.

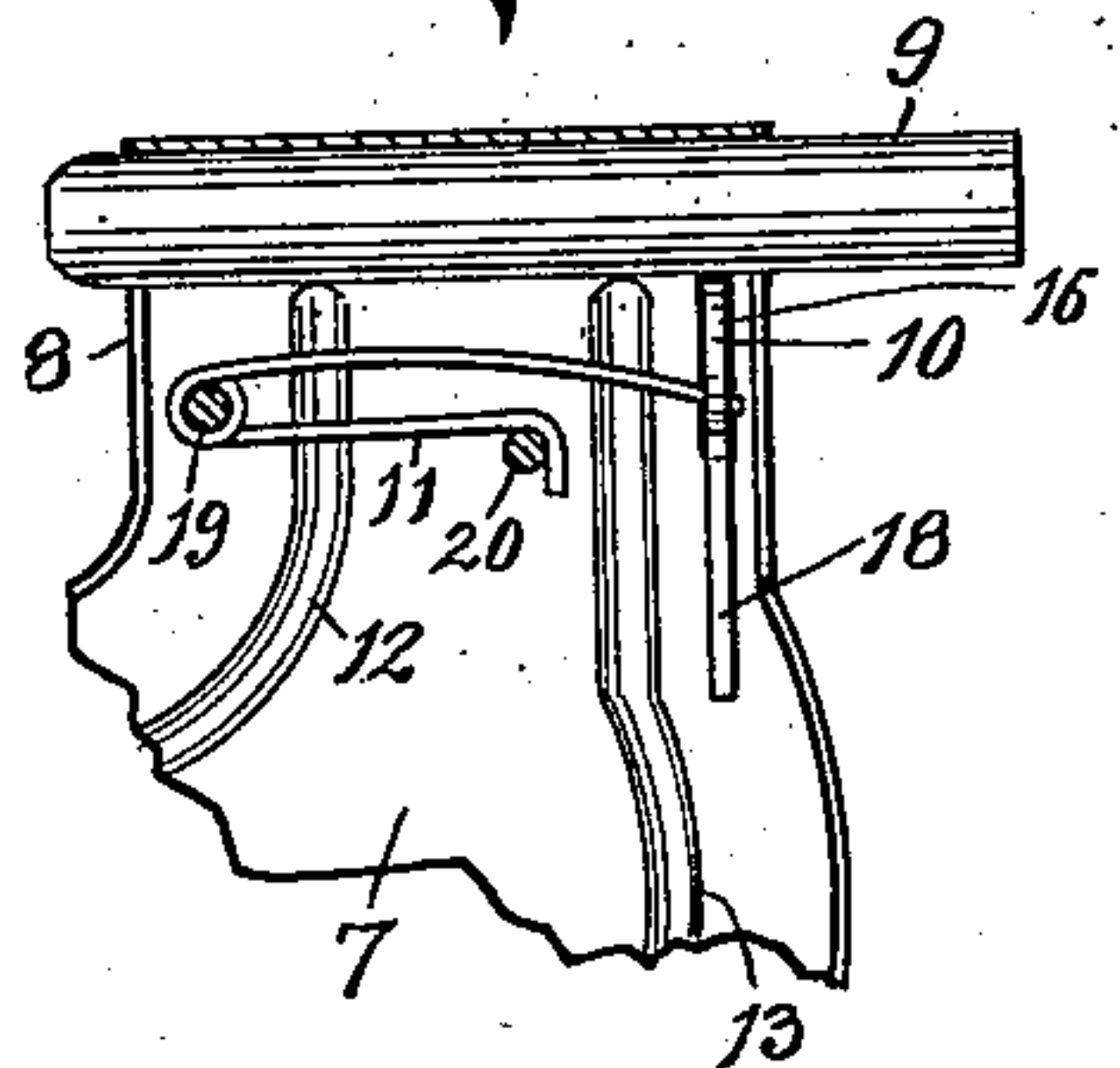


Fig. 3.

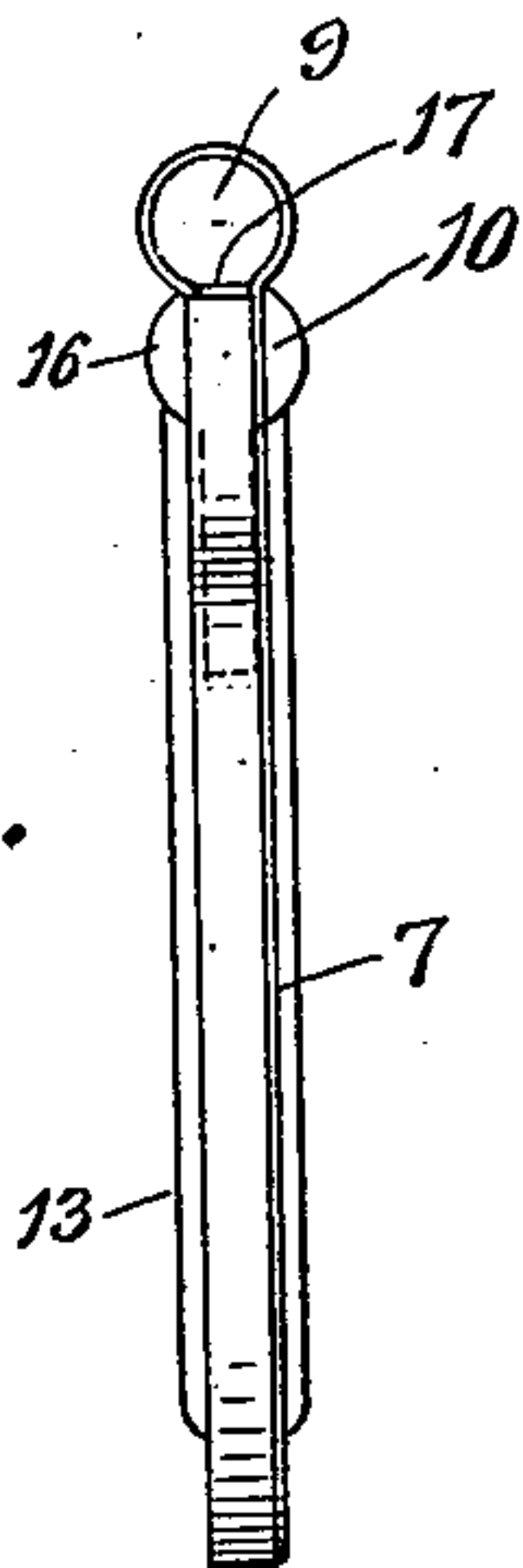


Fig. 5.

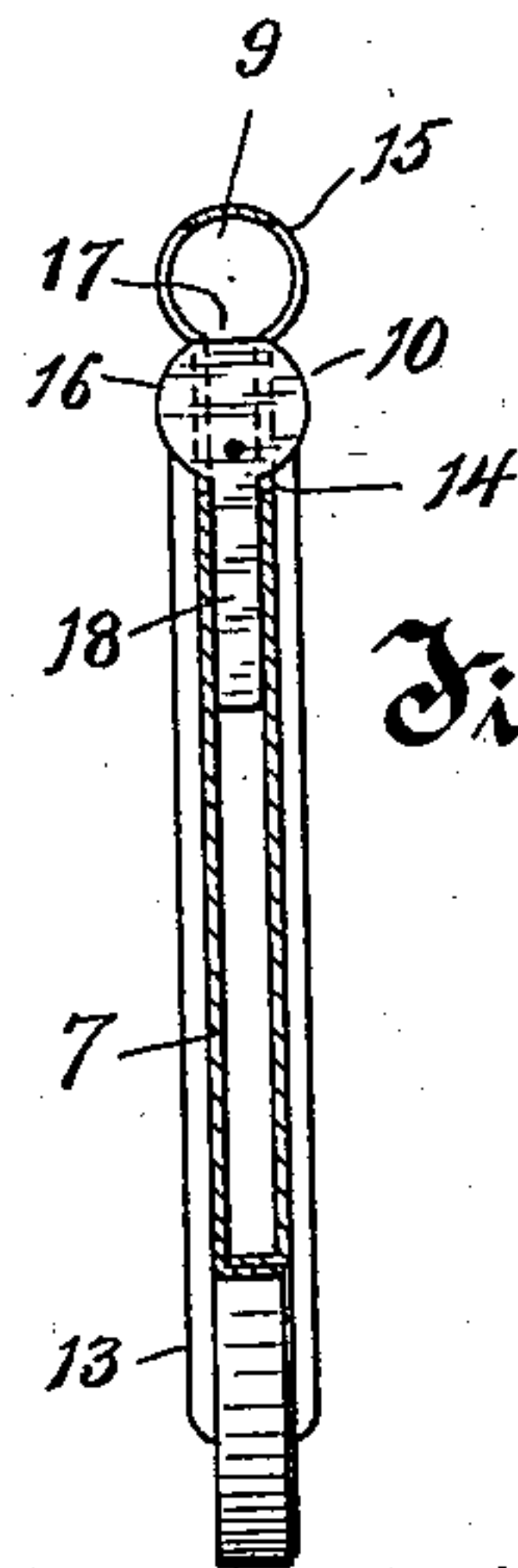
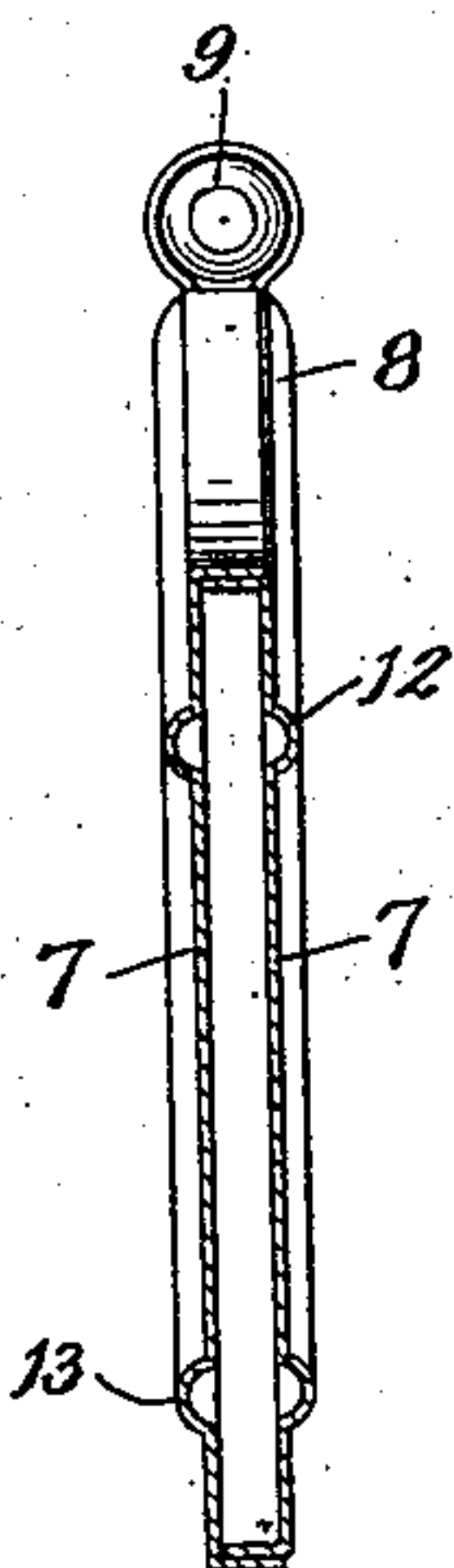


Fig. 6.



Witnesses.

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# UNITED STATES PATENT OFFICE.

GRANT C. BIRMINGHAM, OF MILWAUKEE, WISCONSIN.

## CALF-WEANER.

SPECIFICATION forming part of Letters Patent No. 723,637, dated March 24, 1903.

Application filed May 3, 1902. Serial No. 105,716. (No model.)

*To all whom it may concern:*

Be it known that I, GRANT C. BIRMINGHAM, residing at Milwaukee, in the county of Milwaukee and State of Wisconsin, have invented  
5 a new and useful Improvement in Calf-Weaners, of which the following is a description, reference being had to the accompanying drawings, which are a part of this specification.

10 This invention relates to improvements in calf-weaners.

The object of the invention is to produce a very light and strong device of simple construction and of a small number of parts.

15 A further object is to produce nose-engaging fingers for calf-weaners of such material that cushions or rubber engaging tips therefor will not be necessary.

20 A still further object is to produce a device the body of which and ways for the fingers may be struck from one piece of sheet metal.

A still further and more limited object of the invention is to produce simple inexpensive means for locking the non-engaging fingers when placed in position against the septum of the nose against outward movement.

25 These and other objects I attain in a device constructed as described in the specification and illustrated in the accompanying drawings, in which—

30 Figure 1 is a side elevation of a device embodying this invention. Portions of the device are shown in cross-section and portions broken away for the sake of clear illustration. Fig. 2 is an end elevation of the device shown in Fig. 1. Fig. 3 is an end view similar to Fig. 2; but in this view one of the locking members for the slidable nose-engaging fingers hereinafter described is shown removed from the path of the finger. Fig. 4 is  
40 a detail view of the locking means for the nose-engaging fingers and shows a finger in the act of being inserted or removed, as the case may be, from its bearing. Fig. 5 is a cross-sectional view taken on line 5 5 in Fig. 1, and Fig. 6 is a cross-sectional view taken on line 6 6 in Fig. 1.

Throughout the several views like elements are denoted by like characters.

50 The device consists of a guard or shield 7, adapted to be suspended across the mouth of the calf, and is made sufficiently long so as to

preclude the possibility of the calf working it longitudinally to get its mouth beyond either end of the same to defeat the object of the device. The shield is provided with upwardly-extending bent-over portions 8, within the upper portions of which longitudinally-slidable nose-engaging fingers 9 are carried. Each projecting part 8 is provided with a slidable locking member or gate 10, yieldingly held in the path of the finger by spring 11 and movable from said path manually for the insertion or removal of the nose-engaging fingers.

65 The guard or shield 8, together with the bearings for the nose-engaging fingers 9, is preferably stamped or pressed from a single sheet of metal, preferably aluminium, and is bent over medially to form partially-cylindrical bearings for the fingers and the projections 8 for carrying same. The edges of the device—that is, of the projecting portions and the guard or shield 7—are bent over and lapped one against the other, so as to form smooth edges, and strengthening-ribs 12 and 13 will be pressed into the metal, as shown in Fig. 1. The nose-engaging fingers will be formed of aluminium, and by using this metal it will not be necessary to pad or rubber-tip the inner ends of the fingers, as has been heretofore necessary, as the metal itself may be made very smooth and on account of its structure is of a soft greasy lubricating non-irritating nature.

85 Each projection 8 from a distance or point 14 below the bearing for the finger is slotted, or, in other words, each side wall of the projection from the point 14 to a point 15 near the top of the finger-bearing is slotted, and the slots in each side registering form a way or passage for the head 16 of the locking member 10. The head 16 of the locking member 10 is flattened on top, as shown at 17, and the remainder of the head is of the same diameter as the outside diameter of the bearing for the finger. The locking member is provided with a downwardly-projecting lug 18, adapted to lie between the walls of the projection of the guard or shield. The walls of the guard or shield at each projecting portion 8 are connected together by rivets 19 and 20, and the spring 11, having one end projecting through the locking member, as



shown at 21, is coiled about rivet 19 and has its other end bent down around rivet 20, so as to yieldingly hold the locking member 10 in its outward or locked position. It will be  
 5 seen that the locking member is held within its slot by the projecting lug 18, which when the locking member is in its highest position projects below point 14 or the bottom of the slot. By depressing the locking member  
 10 manually, which may be accomplished by inserting a pointed instrument between the flattened portion 17 of the locking member and the top of the bearing, the finger may be inserted into or removed from its bearing.

15 Having thus described my invention, I claim—

1. In a calf-weaner, a guard or shield struck from one piece of metal and medially bent to form a body portion having upwardly-extending bent-over projections with a space there-  
 20 between and nose-engaging finger ways or bearings formed in each projection at its bent-over portion, nose-engaging fingers loosely mounted in the bearings, a slot in each projection extending from a distance  
 25 below the bearing to within a short distance from the top of the bearing, a stop member or gate located and slidable in the slot and a spring arranged within the projection and  
 30 engaging the stop for yieldingly forcing the same to the top of the slot.

2. In a calf-weaner, a guard or shield struck from one piece of metal and bent over to form a body portion having upwardly-extending  
 35 bent-over projections with a space therebetween and a nose-engaging finger-bearing formed in each projection by its bent-over end, and a nose-engaging finger loosely mounted in each bearing, a slot in each projection  
 40 extending from a distance below to within a short distance from the top of the bearing, a gate or locking member slidably located within each slot, and a spring located within each projection for yieldingly forcing the locking  
 45 member to operative position.

3. In a calf-weaner, the combination of a guard or shield having upwardly-extending

bent-over projections with a space therebetween, nose-engaging fingers along the upper edges of the projections having their inner  
 50 ends adapted to extend within a space between the projections, a slot in each projection, a locking member or gate slidably located within the slot and a spring located within the projection for yieldingly forcing the  
 55 gate or locking member to operative position.

4. A sheet-metal blank for calf-weaners comprising a body and a foldable reinforce integral therewith, the body and reinforce being apertured to form a nose-opening.  
 60

5. In a calf-weaner, the combination of a guard or shield having upwardly-projecting portions within each of which is slidably and rotatably mounted a nose-engaging finger, said guard or shield and the bearings for said  
 65 fingers being struck from one piece of metal medially bent to form the bearings projections and the guard, a slot in each projection extending through the walls thereof and the walls of the bearing thereon and from a distance  
 70 below said bearing to within a short distance of the top thereof, a gate slidably located within said slot and having a head adapted when in operative position to lie in the path of the finger and a projecting lug  
 75 lying between the walls of the projection, and a spring located between the walls of the projection for yieldingly holding said gate in operative position.

6. A calf-weaner formed from a blank of  
 80 sheet metal and comprising a body and a reinforce cut away to form a nose-opening, said reinforce being folded over upon and secured to the body and looped at its points of junction with the body to provide bearings, and  
 85 nose-pieces adjustable in said bearings to engage the septum narium of the nose, substantially as set forth.

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

GRANT C. BIRMINGHAM.

Witnesses:

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