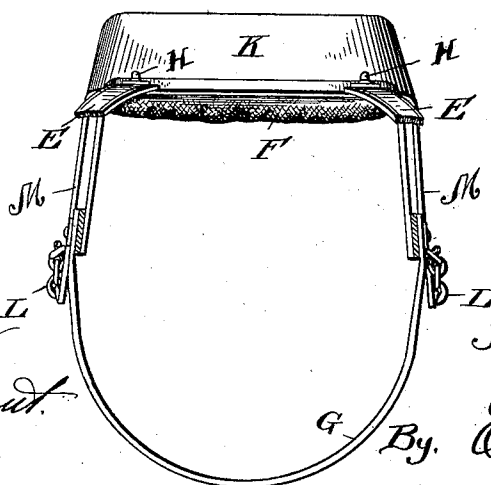
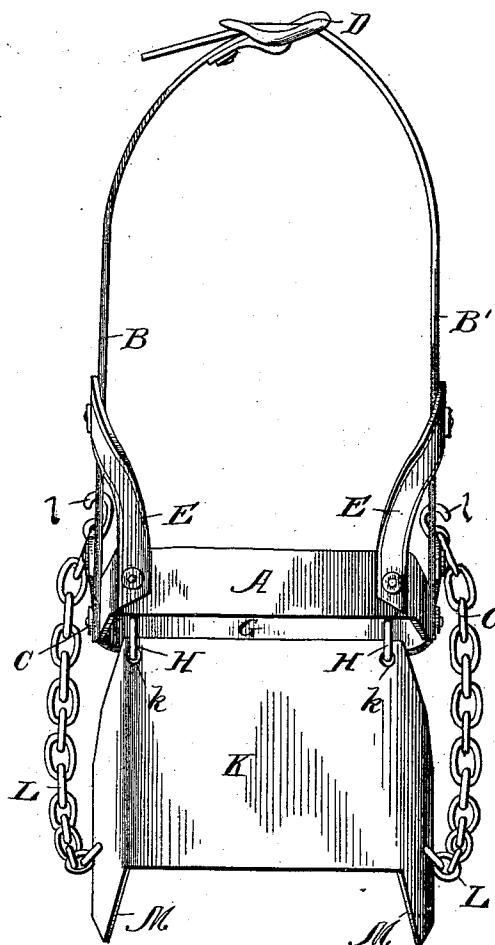
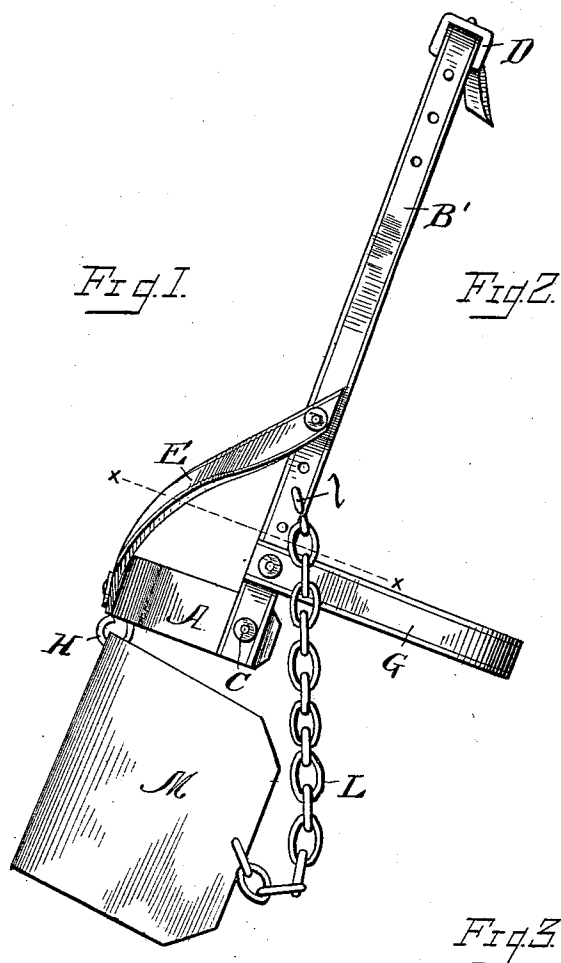


(No Model.)

J. J. SMITH.
CALF MUZZLE.

No. 488,719.

Patented Dec. 27, 1892.



WITNESSES.

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UNITED STATES PATENT OFFICE.

JOHN J. SMITH, OF WINFIELD, IOWA.

CALF-MUZZLE.

SPECIFICATION forming part of Letters Patent No. 488,719, dated December 27, 1892.

Application filed August 25, 1892. Serial No. 444,068. (No model.)

To all whom it may concern:

Be it known that I, JOHN J. SMITH, a citizen of the United States, residing at Winfield, in the county of Henry and State of Iowa, have
5 invented certain new and useful Improvements in Calf-Muzzles; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains
10 to make and use the same.

My invention relates to improvements in muzzles particularly designed for weaning calves; and the object in view is to provide an effective device for preventing a calf from
15 obtaining milk from the udder of a cow and at the same time not interfere with the calf grazing or eating food from a receptacle.

With these ends in view, my invention consists in the peculiar construction and arrangement of parts as will be hereinafter fully
20 pointed out and claimed.

In the accompanying drawings—Figure 1 is a side elevation of my improved calf muzzle; Fig. 2 is a front view of the same; and
25 Fig. 3 is a sectional view on the line $x-x$ of Fig. 1.

Like letters of reference denote corresponding parts in the several figures of the drawings, referring to which—

30 A designates a narrow metallic band of approximately U-shape and arranged to extend across the front and sides of an animal's nose or muzzle. The metallic band A is united, near its ends, to the lower ends of supporting
35 straps B, B', by means of rivets C. To the upper end of the strap B is secured a suitable buckle D and the strap B' is provided with a series of openings or apertures designed to receive the tongue of the buckle D
40 and thus permit the said straps B, B', to be connected together above the head of the animal on which the muzzle is placed. The supporting straps are connected with the front portion of the strap or band A by means of
45 short straps E which are rigidly attached to the side supporting straps and extend downwardly and inwardly toward each other as shown in Fig. 2.

On the inner or under face of the front part
50 of cross bar of the metallic band A is arranged a soft or elastic cushion or pad F to prevent

the band A from rubbing or injuring the face of the animal. The side supporting straps B, B', are connected near their lower ends by a throat band or latch G.

To the metallic band A, near the ends thereof, are rigidly attached short wires H, the lower free ends of which are inserted through
55 suitable apertures k in a muzzle plate, forming the shield or guard K, and said wires are looped upon themselves to loosely connect the
60 shield K with the supporting band A. The plate K is bent into substantially the same cross sectional form as the band A, but the sides M of said plate are slightly flared out-
65 ward from their front to their rear ends. To the sides M of the plate K are attached the lower ends of limit chains L, the upper ends of said chains being provided with suitable
70 hooks l adapted to enter suitable apertures formed in the lower portion of the side supporting straps B, B'. The chains L can be
adjusted to increase or decrease the amount of outward movement of the plate K.

The advantages of my invention will be
75 readily understood and appreciated.

Among the advantages may be mentioned the ease and quickness with which the muzzle can be secured on an animal's head and the fact that the shield K does not interfere
80 with the animal grazing or eating from a suitable receptacle; but on any upward movement of the head said shield falls into position across the mouth of the animal.

I am aware that changes in the form and
85 proportion of parts and details of construction of the devices herein shown and described as an embodiment of my invention may be made without departing from the spirit or sacrificing the advantages thereof,
90 and I therefore reserve the right to make such changes as fairly fall within the scope of the same. For example, any suitable and desirable form of hinge may be substituted for the means herein shown and described for
95 connecting the band A and the plate K.

Having thus fully described my invention, what I claim as new and desire to secure by Letters Patent, is:—

1. A muzzle consisting of an angular band, 100 the supporting straps rigidly secured to the sides of said band, and a shield loosely hung

from said band and connected with the supporting straps, substantially as described.

2. As an article of manufacture, a muzzle consisting of a U-shaped band, the supporting straps rigidly connected to said band and
5 adjustably connected together, a pad or cushion secured on the inner face of said band, a shield loosely connected to the band, and connections between said shield and the support-

ing straps, to limit the movement or play of said shield, as and for the purpose described. 10

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

JOHN J. SMITH.

Witnesses:

CHAS. W. REED,
J. M. LINDLY.