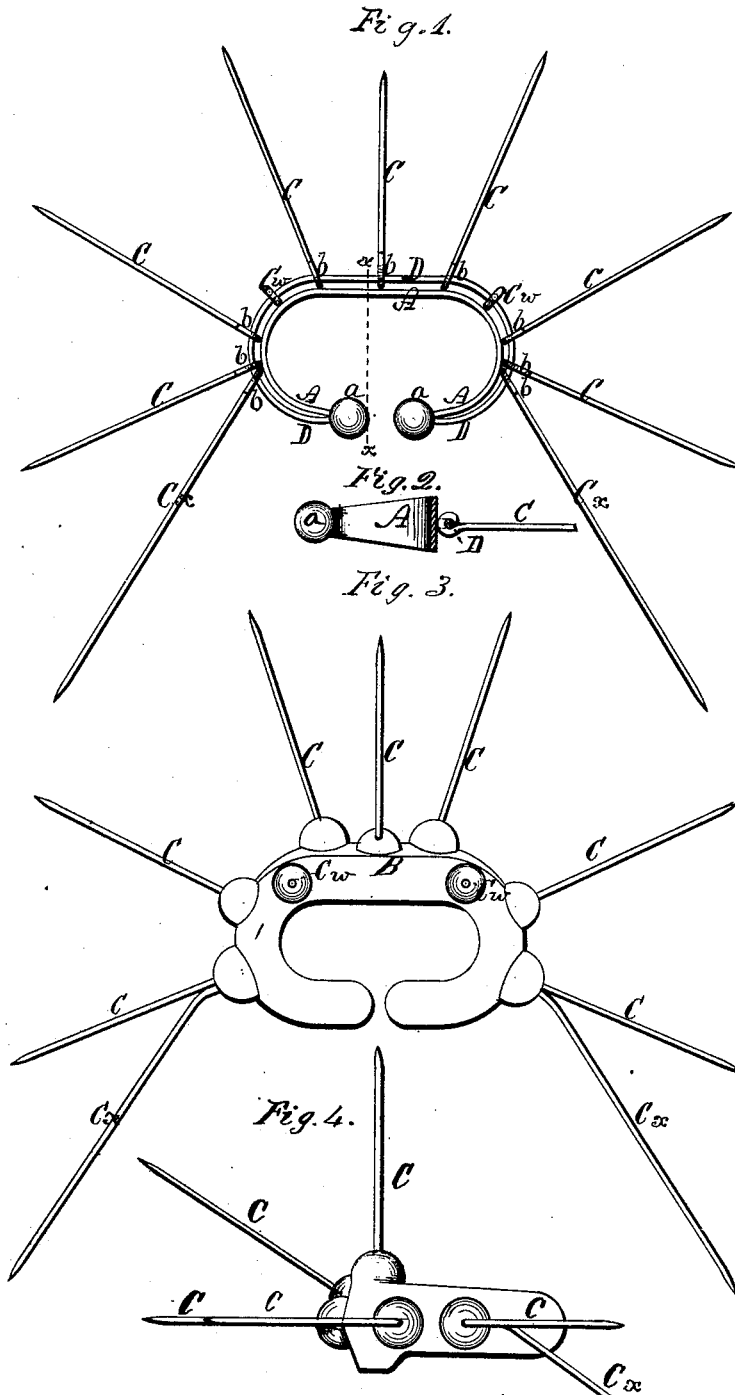


G. TILTON.
Calf-Muzzle.

No. 196,058.

Patented Oct. 9, 1877.



WITNESSES
Chas. M. Gallaher,
D. P. Lowe

INVENTOR,
George Tilton,
By J. S. Brown,
his ATTORNEY.

UNITED STATES PATENT OFFICE.

GEORGE TILTON, OF ALTON, NEW HAMPSHIRE, ASSIGNOR TO SMILIE TILTON,
OF ATLANTIC, IOWA.

IMPROVEMENT IN CALF-MUZZLES.

Specification forming part of Letters Patent No. **196,058**, dated October 9, 1877; application filed
December 21, 1876.

To all whom it may concern:

Be it known that I, GEORGE TILTON, of Alton, in the county of Belknap and State of New Hampshire, have invented an Improved Calf-Muzzle; and I do hereby declare that the following is a full and exact description thereof, reference being had to the accompanying drawings, making part of this specification.

Figure 1 is a top view of the metallic or skeleton part of the calf-muzzle, showing my peculiar mode of securing and holding the pointed pins or barbs; Fig. 2, a cross-section of the same in the line *x x*, Fig. 1; Fig. 3, a top view of the calf-muzzle complete; Fig. 4, a side view thereof.

Like letters designate corresponding parts in all of the figures.

The calf-muzzle upon which my invention is an improvement is of the kind patented by Smilie Tilton; and consisting essentially of an india-rubber bow or clasp, to embrace the bridge of the calf's nose, and provided with pointed pins embedded in the india-rubber, so as to project in different directions, the said clasp also having a metallic spring or core in its center as a stiffener.

My invention consists in an improved mode of securing and holding the pointed pins.

In the drawing, A represents the metallic spring or stiffener, around which the india-rubber B is molded to form the bow or clasp of the instrument, and in which the pins or barbs are elastically embedded.

To secure the pins or barbs C C in place and position, I employ a wire or small rod, D, bent around the stiffener A, substantially as shown in Fig. 1, and secured to the same by embedding its ends in soft-metal knobs *a a* on the clasping ends of the stiffener, or in any other convenient manner, so as to hold it in place. On this wire are strung the eyes *b b*, at the inner ends of the said pins or barbs, substantially as shown. They are then properly arranged in position in the mold for surrounding them with the india-rubber. Thus the pins or barbs are prevented from drawing

out, and are much more securely and firmly held in position, without detracting essentially from the elastic yielding property thereof.

As a modification of this construction of the skeleton of the instrument, the stiffener A itself may be the wire or rod on which the pins or barbs are strung; but this is not so good as the construction shown and above described, since the rigidity suitable for the stiffener would detract somewhat from the flexibility and elasticity given to the pins or barbs by being strung on a separate slender wire, as represented.

In the arrangement of the pins or barbs in the bow or clasp, to more effectually fulfill the purpose of the instrument, first, I arrange a number (say, two) of them, as *C w C w*, to project nearly vertically upward, as shown in Figs. 3 and 4. These not only serve to prevent the approach of the calf's nose upward toward the cow, but may also prick the calf in its attempt to approach the teats of the cow; second, I arrange a number (say, two) of the pins or barbs, as *C x C x*, one on each side, to extend backward and somewhat downward, as shown in Figs. 3 and 4. These effectually prevent the calf's turning its head into such a position as to seize the teats laterally, as it sometimes can do without this arrangement.

With the two arrangements above described, of the pins or barbs, in addition to those usually employed, I effectually guard against the calf's seizing a teat in any way whatever.

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

In a calf-muzzle, the combination, with the bow or clasp A, of the wire or rod D, extending around or beside the same, and having mounted or strung upon itself the barbs or pointed pins, which are flexibly held in position by a casing of india-rubber, substantially as and for the purpose herein specified.

GEO. TILTON.

Witnesses:

PHINEAS H. WHEELER,
JOHN W. CURRIER.