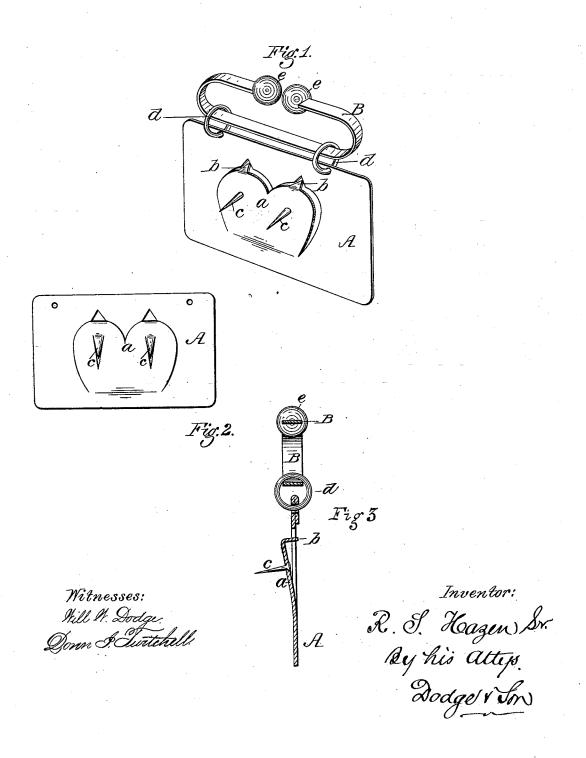
R. S. HAZEN, Sr. Calf-Muzzles.

No. 199,156.

Patented Jan. 15, 1878.



UNITED STATES PATENT OFFICE.

ROBERT S. HAZEN, SR., OF CALMUS, IOWA.

IMPROVEMENT IN CALF-MUZZLES.

Specification forming part of Letters Patent No. 199,156, dated January 15, 1878; application filed April 14, 1877.

To all whom it may concern:

Be it known that I, ROBERT S. HAZEN, Sr., of Calmus, in the county of Clinton and State of Iowa, have invented certain Improvements in Calf-Muzzles, of which the following is a specification:

My invention consists in a muzzle provided with inside and outside barbs, so arranged and connected that a pressure upon the outside barbs causes those on the inside to enter the nose of the calf, and in other details hereinafter described.

Figure 1 represents a perspective view of my muzzle; Fig. 2, a vertical cross-section of the same; Fig. 3, a face view of a modified

form of the muzzle. A represents a flat metal plate, in the center of which a tongue, a, is punched loose on three of its sides, and bent outward out of line with the plate. On the outside of the tongue a there are two barbs or spurs, c, extending outward, as shown, and at the upper free edge of the tongue there are two spurs or barbs, b, extending inward on the side which is applied next to the calf's muzzle when the deviceisinuse. Under ordinary circumstances the tongue a stands outward in the manner shown, with the points of the barbs or spurs b flush with or outside of the face of the plate A, which latter serves as a guard to prevent them from entering the nose of the calf.

B represents a bent spring, attached to the upper edge of the plate A by rings d, and provided at its ends with rubber balls e to enter the nostrils of the calf and sustain the plate in front of the nose.

So long as the calf makes no effort to milk the mother cow the muzzle is painless in its action, and causes no inconvenience; but the moment that the calf thrusts its nose against the cow the tongue a is pushed inward, and the spurs or barbs b caused to act upon the nose of the calf, while at the same time the outside barbs c, pricking the cow, cause her to repel the advances of the calf.

The muzzle constructed as above, so that it punishes both the cow and the calf at the same time, I find very efficient; and as it quickly teaches the calf that every attempt to milk the cow is followed by pain, the calf soon learns to keep away, and consequently the cow is spared the torture consequent upon the use of the ordinary muzzles, which cause the calf no pain, and with which the calf constantly and violently assails the cow.

Having described my invention, what I

• 1. The calf-muzzle consisting of the plate A, provided with the suspending device B and with the spring-tongue a, having the inner barbs b and outer barbs c.

2. In a calf-muzzle, inwardly-projecting barbs or spurs, in combination with a spring to hold them out of contact with the nose of the animal unless outward pressure is applied, substantially as shown and set forth.

ROBERT S. HAZEN, SR.

Witnesses:

D. C. CURTIS, I. H. PARSONS.