

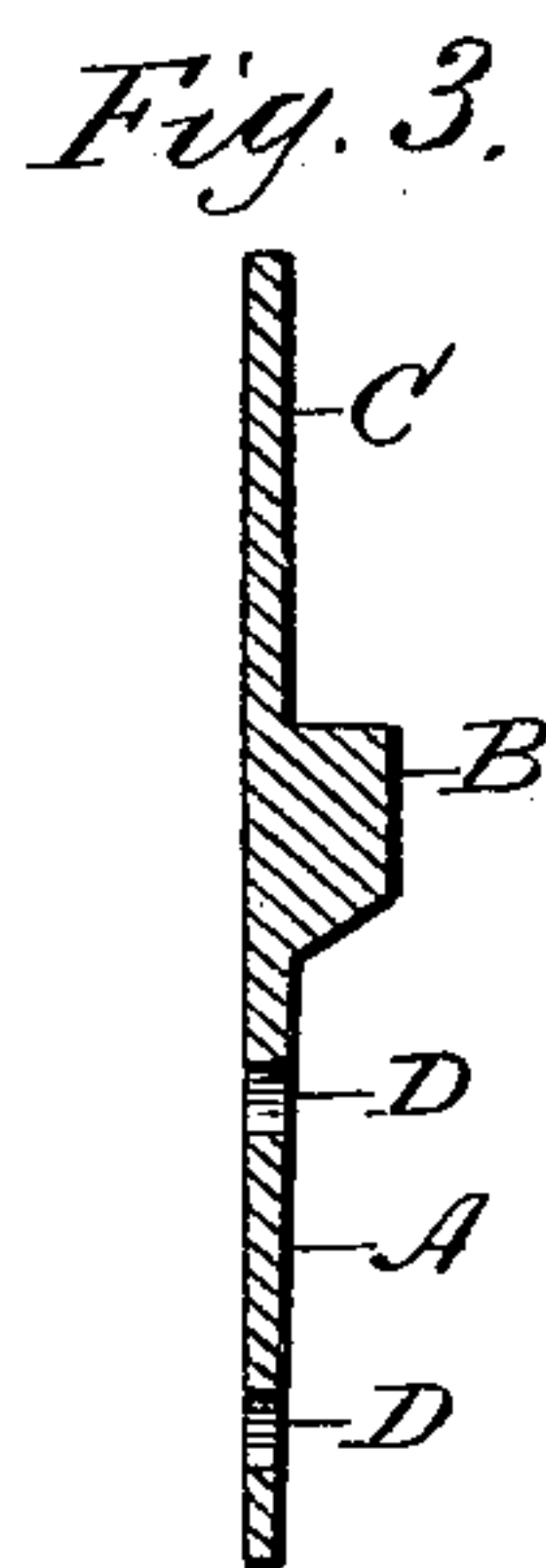
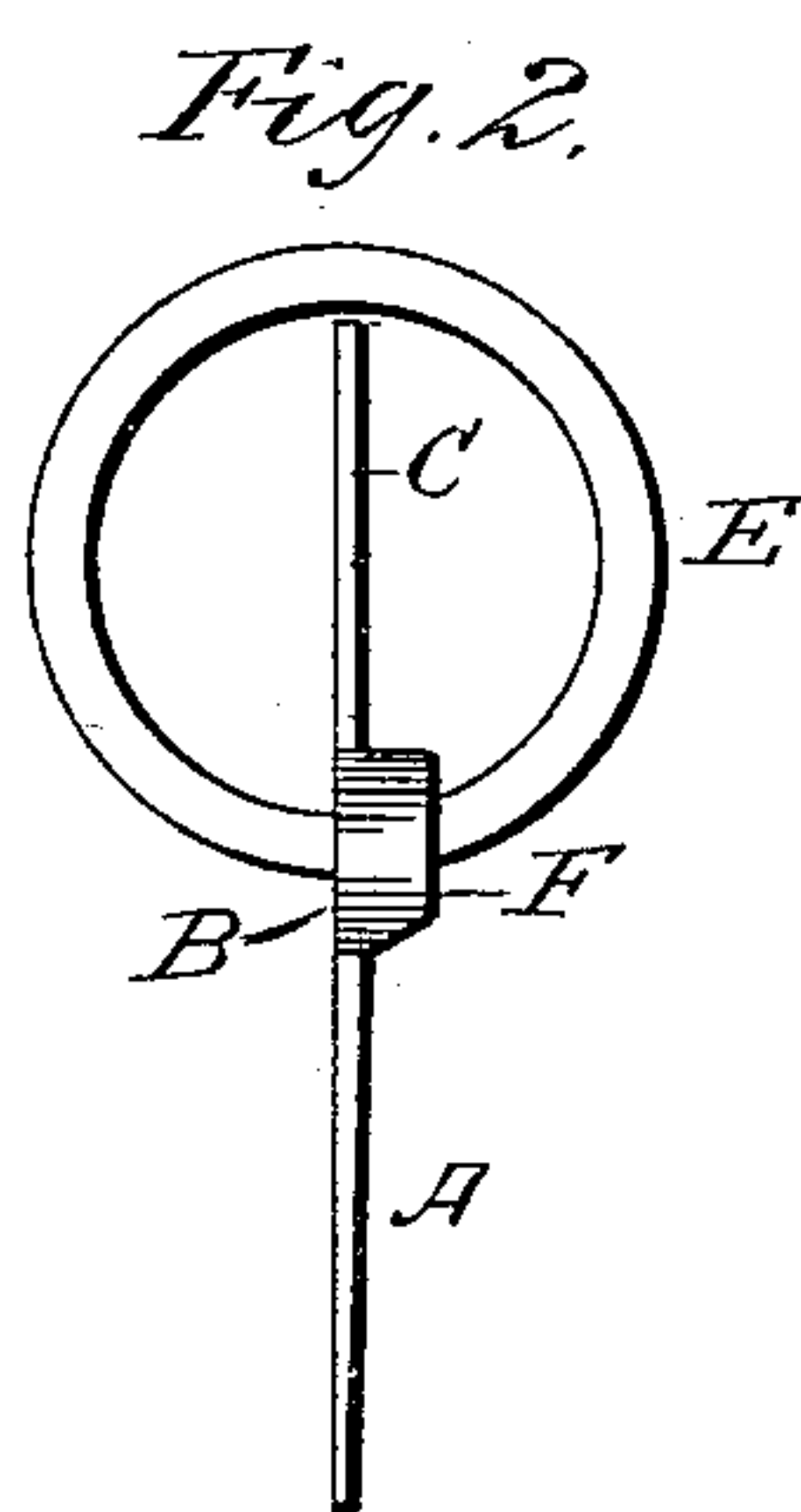
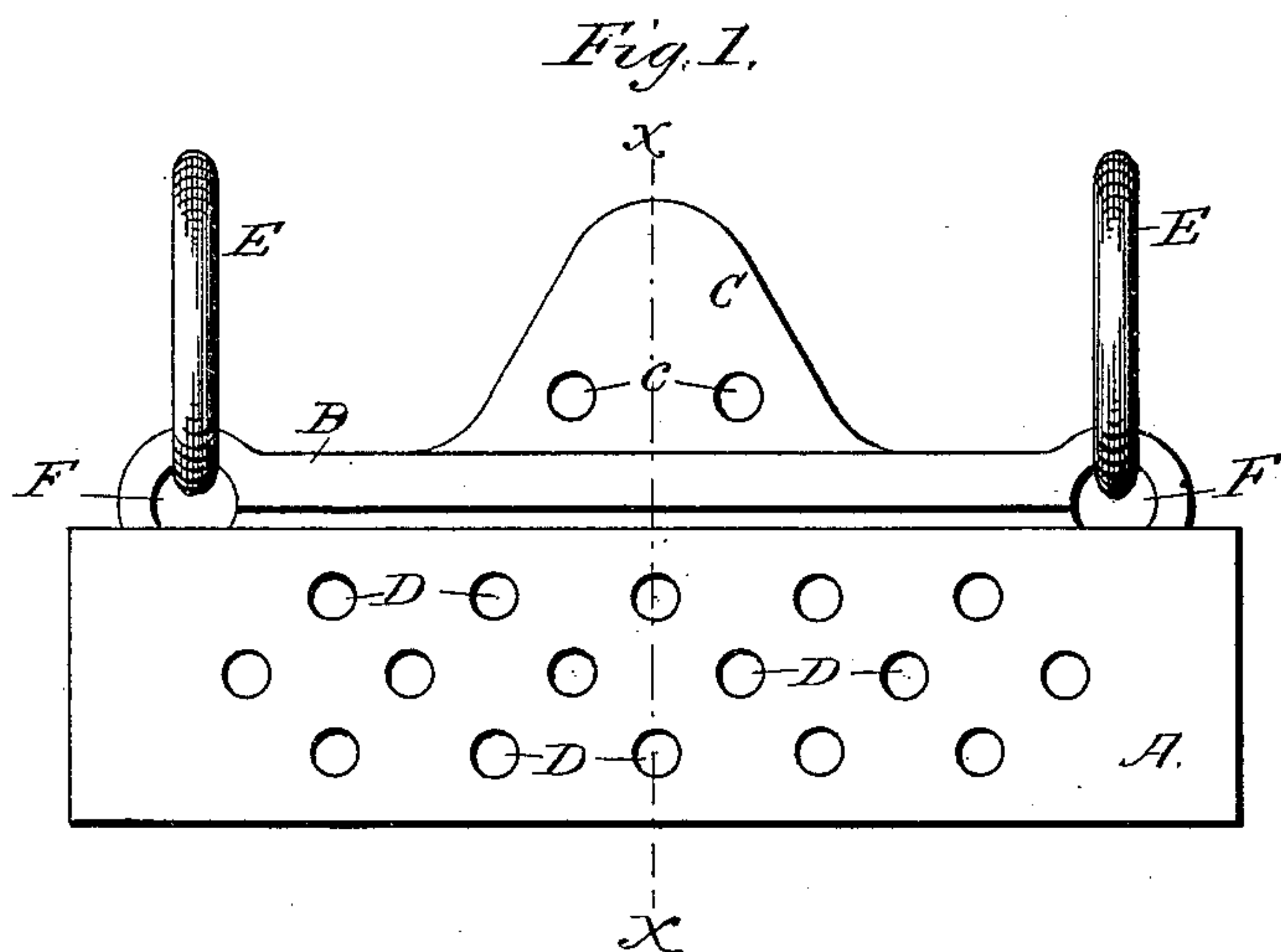
(No Model.)

C. E. HUBBARD.

CALF WEANER.

No. 354,140.

Patented Dec. 14, 1886.



Witnesses,
Tom R. Stuart,
L. Seward Bacon

Inventor,
Chas. E. Hubbard.
By *Emmatt*
Atty.

UNITED STATES PATENT OFFICE.

CHARLES E. HUBBARD, OF TOPEKA, KANSAS.

CALF-WEANER.

SPECIFICATION forming part of Letters Patent No. 354,140, dated December 14, 1886.

Application filed September 27, 1886. Serial No. 214,612. (No model.)

To all whom it may concern:

Be it known that I, CHARLES E. HUBBARD, a citizen of the United States, residing at (North) Topeka, in the county of Shawnee and State of Kansas, have invented certain new and useful Improvements in Calf-Weaners; 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 to make and use the same.

My invention relates to calf-weaners; and it consists in the construction and arrangement of the parts, which will be more fully hereinafter described, and pointed out in the claims.

The object of my invention is to provide a calf-weaner which prevents a vacuum being formed in the mouth of the calf, and which is simple and effective in its construction and operation, strong and durable, easily handled, and readily understood and applied, and cheaply manufactured. I attain these objects by means of the device illustrated in the accompanying drawings, wherein like letters of reference indicate similar parts in the several views, and in which—

Figure 1 is a front elevation of my improved calf-weaner. Fig. 2 is an end elevation of the same, and Fig. 3 a transverse vertical section on the line *xx* of Fig. 1.

The weaner comprises a metallic rectangular part having suitable rows of holes or apertures, *D D*, formed therein and at predetermined intervals, a cross-rib, *B*, having eyes *F* at one side of the part *A*, rings *E E* being inserted in each of the eyes *F* of the said rib, and a part, *C*, having holes *c* on the other side of the cross-rib *B*, and of smaller dimensions than the part *A*, and of suitable curvature, being formed with the said rib *B* at its central portion. The part *A*, rib *B*, and part *C* are all cast integral and at one operation, and formed of suitable metal, the rings *E E* being inserted through the eyes *F* and welded together afterward. The holes or apertures *D* and *c* in the parts *A* and *C* may be formed by drilling, or when the casting is formed, by well-known means, as may be desired and most expeditious.

My improved weaner is attached to a suitable bridle or halter by means of the rings *E E*, which is placed over the head of the calf. The weaning device is then placed in the calf's mouth, the part *A* resting against the

tongue and lower jaw, so as to have the lower edge come to the gums just above the teeth, and the part *C* between and below the grinders. The cross-rib *B* is fitted in the corners of the mouth in such a manner as not to draw the same, and when such arrangement has been accomplished the weaner is properly adjusted. The part *A* holds the upper lip up and entirely free from the lower lip, and the cross-bar *B*, being raised above the part *A*, leaves an air-passage between the roof of the mouth and the said part *A*.

The calf, when taking the teat into its mouth from the end of the nose, finds no support from the upper lip in forming a vacuum with the tongue, which is necessary to draw the milk. The air-passage on top of the part *A* is brought into action when the calf attempts to suck by air passing through the perforations *D* therein, air therefore being the result of the calf's efforts, and not milk. When the teat is taken into the corner of the mouth, the upper portion of the part *C*, above the cross-rib *B*, prevents the calf from pressing the teat against the roof of the mouth and forming a vacuum at this part thereof, and when it again attempts to suck receives air through the perforations *c* in the said part *C*, being re-enforced or aided through the medium of air also passing through the perforations *D* in the part *A*, as heretofore described.

By means of my improved weaner calves are prevented from obtaining milk from the cows without injuring them either in their health, growth, or general thrift.

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

1. A calf-weaner consisting of a single plate having a rectangular part, *A*, a cross-rib, and a smaller perforated part on the opposite side of said rib, substantially as described.

2. A calf-weaner consisting of a single plate having a rectangular part, *A*, provided with suitable perforations, a cross-rib having suitable end eyes engaged by rings, and a smaller perforated part on the opposite side of said cross-rib, substantially as described.

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

C. E. HUBBARD.

Witnesses:

N. M. ALLEN,

C. L. HEYWOOD.