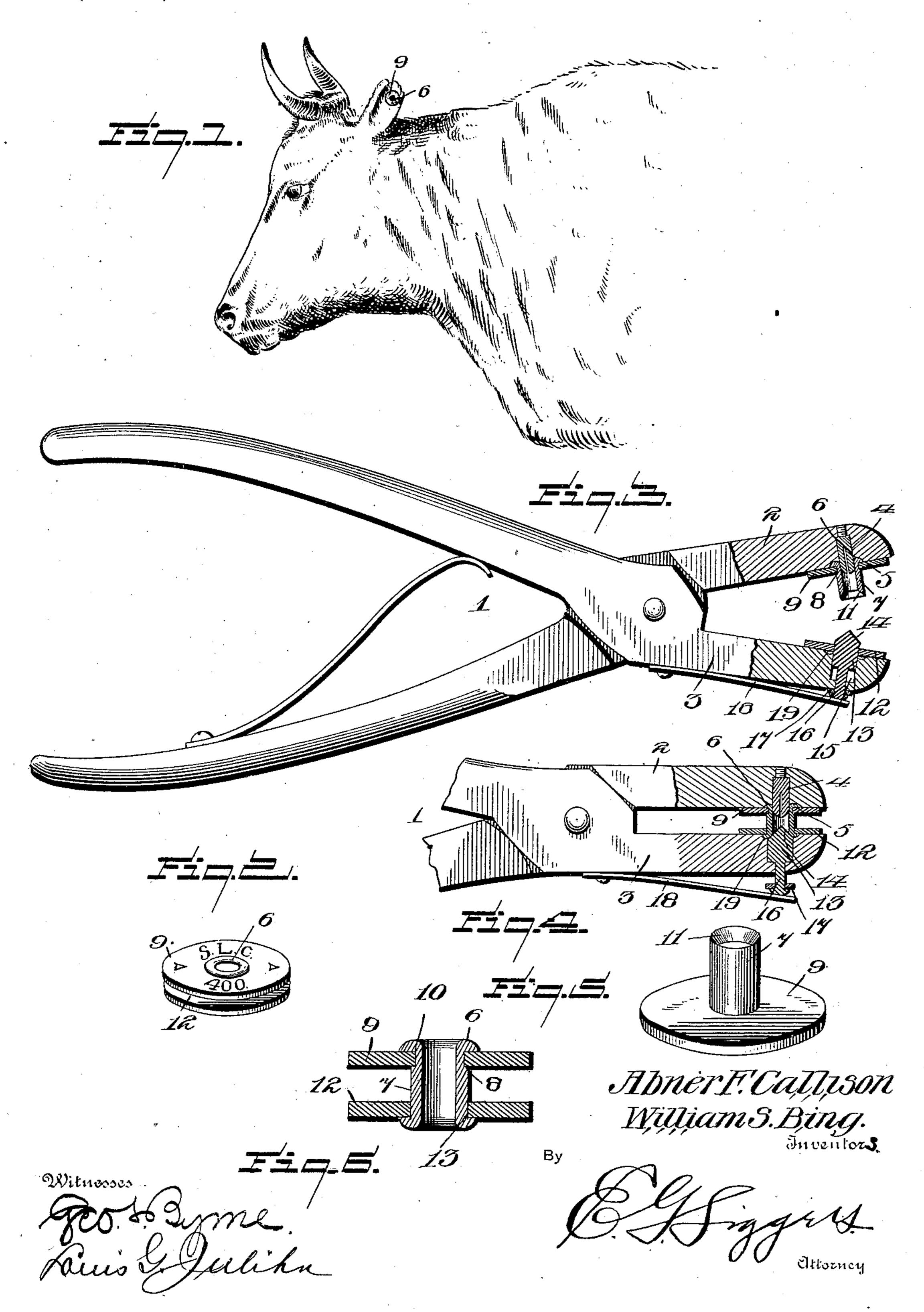
## A. F. CALLISON & W. S. BING.

CATTLE MARKER.

. (No Model.)

(Application filed May 12, 1900.)



## United States Patent Office.

ABNER F. CALLISON AND WILLIAM S. BING, OF SALT LAKE CITY, UTAH.

## CATTLE-MARKER.

SPECIFICATION forming part of Letters Patent No. 673,314, dated April 30, 1901.

Application filed May 12, 1900. Serial No. 16,473. (No model.)

To all whom it may concern:

Be it known that we, ABNER F. CALLISON and WILLIAM S. BING, citizens of the United States, residing at Salt Lake City, in the county of Salt Lake and State of Utah, have invented a new and useful Cattle-Marker, of which the following is a specification.

Our invention relates to cattle-markers; and the object in view is to provide an identifying-button which may be permanently attached to the ears of cattle with facility and in a practically painless manner. Our identifying button or marker is of that type which comprehends a pair of heads or disks which bear the identifying characters and which are retained upon opposite sides of the animal's ear by an intermediate eyelet, tube, or shank passed through an opening in the ear and connected at its opposite ends to the disks.

Heretofore the attachment of marking devices to the ears of animals has necessitated the perforation of the ear and the affixing of the marking device by a subsequent operation, which is highly objectionable, first, because of the time consumed, and, second, because the operation is prolonged to the great inconvenience of the operator, particularly when the device is being attached to the ear of a fractious animal.

one object of our invention, in a somewhat more specific aspect, is to provide an identifying marker or button so constructed and arranged that the perforation of the ear and the affixing of the marker may be accomplished simultaneously, the act of associating the elements of the button serving to perforate the ear for the reception of the button-shank.

A still further object of the invention is to provide for the practically painless perforation of the animal's ear by an element of the button and to provide for the removal from the button of the small disk of flesh cut from the ear and for the free circulation of air through the button to assist in keeping down inflammation by forming the button-shank of tubular form throughout—that is to say, entirely open from end to end, so that the severed portion of the ear may be punched out of the shank to permit of the free circulation of air through the button.

To the accomplishment of these objects!

and others subordinate thereto the invention consists in the construction and arrangement of our device hereinafter fully described, 55 illustrated in the accompanying drawings, and defined in the appended claim.

In said drawings, Figure 1 is a general view illustrating the application of our marker. Fig. 2 is a detail view of the marker or but- 60 ton detached. Figs. 3 and 4 are two sectional views, partly in elevation, of the tool or set employed to effect the attachment of the button, Fig. 3 showing the elements of the button assembled for attachment, and 65 Fig. 4 showing the elements assembled upon the ear. Fig. 5 is a detail perspective view, on an enlarged scale, of the headed eyelet, tube, or shank detached; and Fig. 6 is a sectional view through the button complete. 70

Referring to the numerals of reference employed to designate corresponding parts in the several views, 1 indicates the tool or set employed for the purpose of affixing the marker and comprising a pair of pivoted 75 members having upper and lower jaws 2 and 3. The jaw 2 is provided with an expansible holder 4, projecting beyond the face of the jaw 2 and surrounded by an annular recess 5. This recess is designed for the accommoda- 80 tion of the upset end 6 of a hollow tubular perforating-shank 7, recessed at one end to form an annular shoulder 8, between which shoulder and the upset end 6 is retained the inner edge of a permanent head or disk 9, the 85 opening 10 through which is of somewhat less diameter than the exterior diameter of the tube 7. The outer end of the perforatingshank 7—that is to say, the end opposite the upset end 6—is beveled from the periphery 90 of the shank to its interior face. The purpose of this beveled end is twofold—first, the bevel is provided in order to produce a sharp annular cutting edge 11, and, second, to reduce the thickness of the metal to provide for 95 the upsetting of this end of the shank after it shall have been passed through the attachable head or disk 12, which preferably corresponds in general dimensions to the head or disk 9, but the axial opening 13° through which 100° is designed to snugly receive the shank 7.

The disk 9, with its attached shank, is retained upon one edge by the holder 4, and the other disk 12 is supported upon the lower jaw

and is pierced by a spring-retained mandrel having a conical end 14 projecting through the disk. The mandrel 13 is movable in the mandrel-socket 15 in the jaw 3 and is provided 5 with a reduced stem 16, extended beyond the lower wall of the jaw 3 and having a washer 17 clenched thereon to form a head, against which a leaf-spring 18 bears for the purpose of retaining the mandrel in a normally-proro jected position, as shown in Fig. 3 of the drawings. The movement of the mandrel 13 is just sufficient to permit the base of its conical end to be retracted into alinement with the inner edge of an annular upsetting socket

15 or recess 19 in the face of the jaw 3. It being understood that the tool 1 constitutes no part of our present invention, inasmuch as it forms the subject-matter of our concurrent application for Letters Patent, Se-20 rial No. 21,539, filed June 25, 1900, and that it is simply illustrated for the purpose of rendering comprehensive the description of the construction and method of manipulation of the button, let us proceed to discover in what 25 manner the button is attached to the ear of the animal and by reason of what peculiarities of the button the attachment is facilitated and rendered comparatively painless. With the elements of the button retained upon the jaws 30 of the tool, as shown in Fig. 3 of the drawings, the ear of the animal is introduced between the jaws, which are urged into the position shown in Fig. 4 by the compression of the handles of the pivoted members. The approach of the 35 jaws 2 and 3 will cause the ear of the animal to be caught first between the conical end 14 of the mandrel and the beveled end 11 of the button - shank 7. Continued pressure will cause the depression of the mandrel and will 40 present the ear against the face of the head 12, the square inner edge or corner of which will coöperate with the sharpened annular edge of the shank to effect the perforation of the ear for the purpose of permitting said 45 shank to pass therethrough. The perforation having been formed in the ear by the passage of the shank therethrough, the conical end 14 of the mandrel will be in alinement with the adjacent edge of the trans-50 versely-curved annular upsetting-socket 19, 1

which will now upset or turn back the reduced upsetting end of the shank 7 and will effect the secure riveting or clenching of the attachable head 12 in permanent relation with the shank and the other head or disk 9, this 55 relation of the elements of the button being clearly shown in Fig. 4 of the drawings. The small disk of flesh which is cut from the animal's ear may now be punched from the shank of the button, as the latter is of tubular form 60 throughout, and after the disk has been thus removed the free circulation of air will be set up through the button to aid in the prevention of such inflammation as may be induced by the attachment of the marker.

From the foregoing it will be seen that we have produced a simple and effective identifying marker or button capable of being attached to the ears of cattle by a single operation; but while the present embodiment of 70 our invention appears at this time to be preferable we do not wish to limit ourselves to the structural details defined, as we reserve the right to effect such changes in construction and design as may be suggested by ex- 75 perience or may be necessitated by the use of the markers by various individuals each desiring to employ his own characteristic de-

sign of marker.

What we claim is—

An identifying-marker comprising a hollow shank having one end interiorly beveled to form an annular cutting edge located at the periphery of the shank and of a diameter equal to the greatest diameter of the shank, 85 a permanent head at the opposite end of the shank, and an attachable head adapted to be fitted on the beveled end of the shank and retained by the upsetting of said end, said shank being of tubular form throughout for 90 the purposes substantially as described.

In testimony that we claim the foregoing as our own we have hereto affixed our signatures

in the presence of two witnesses.

ABNER F. CALLISON. WILLIAM S. BING.

Witnesses:

C. T. CALLISON, J. MERR HISKEY.