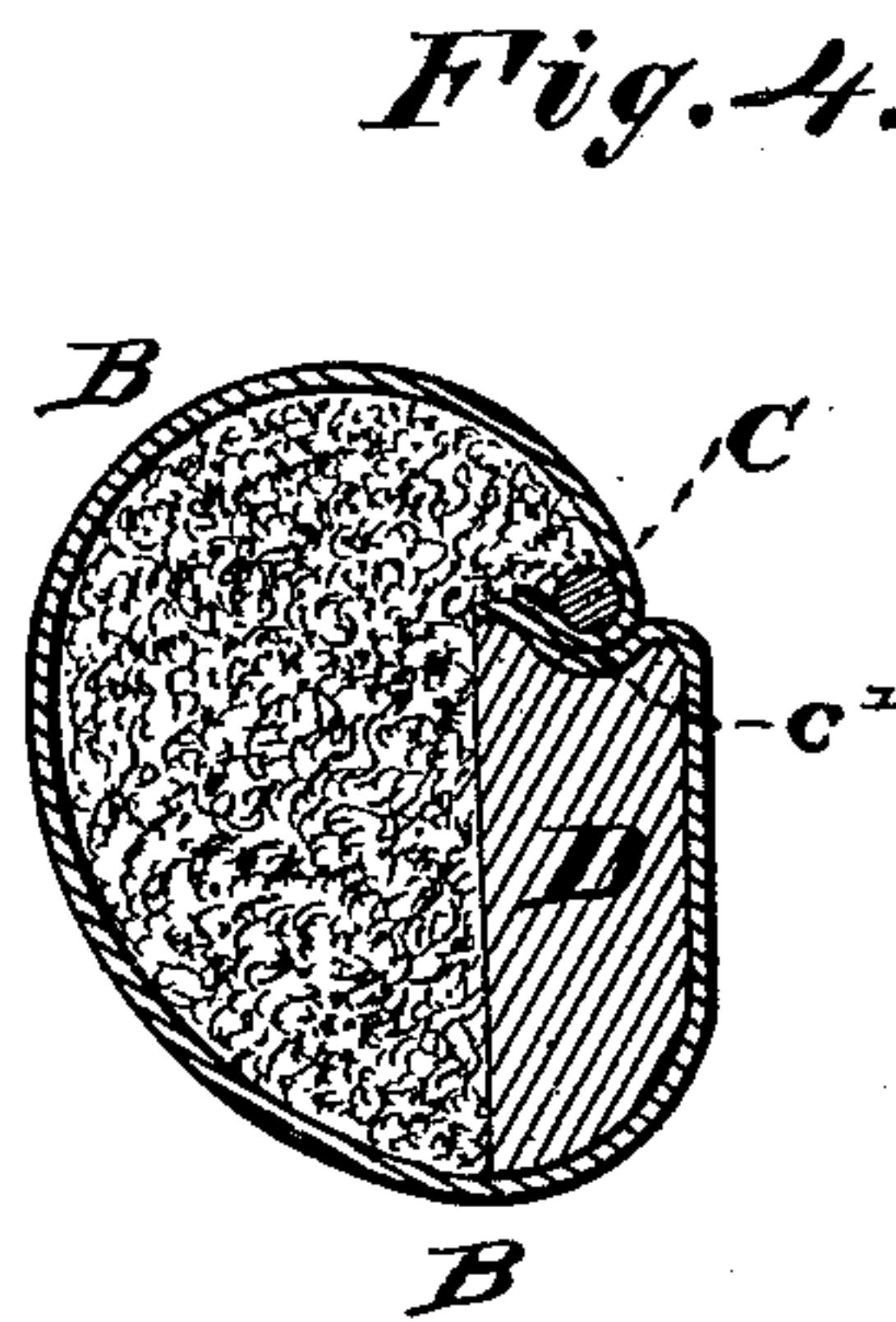
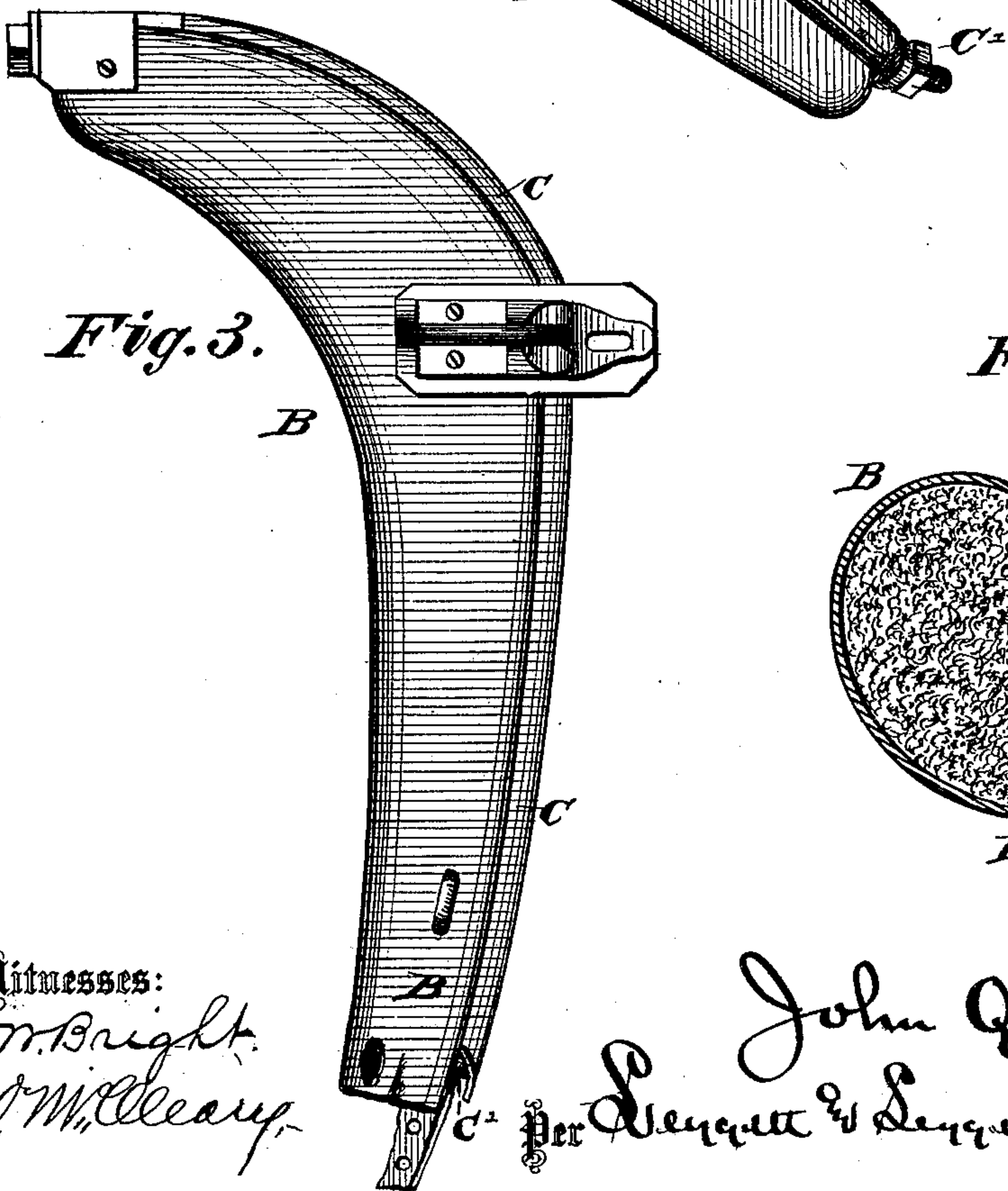
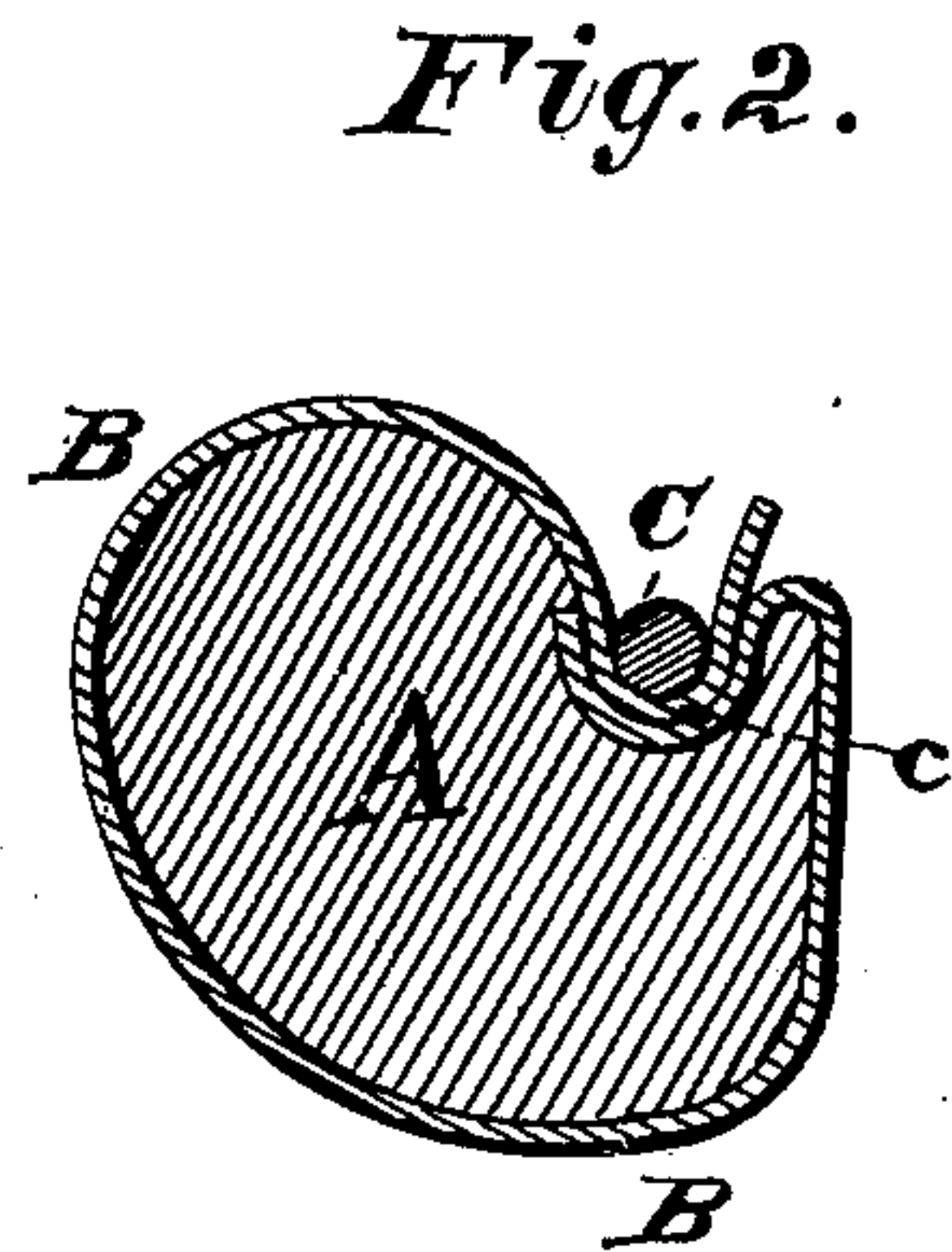
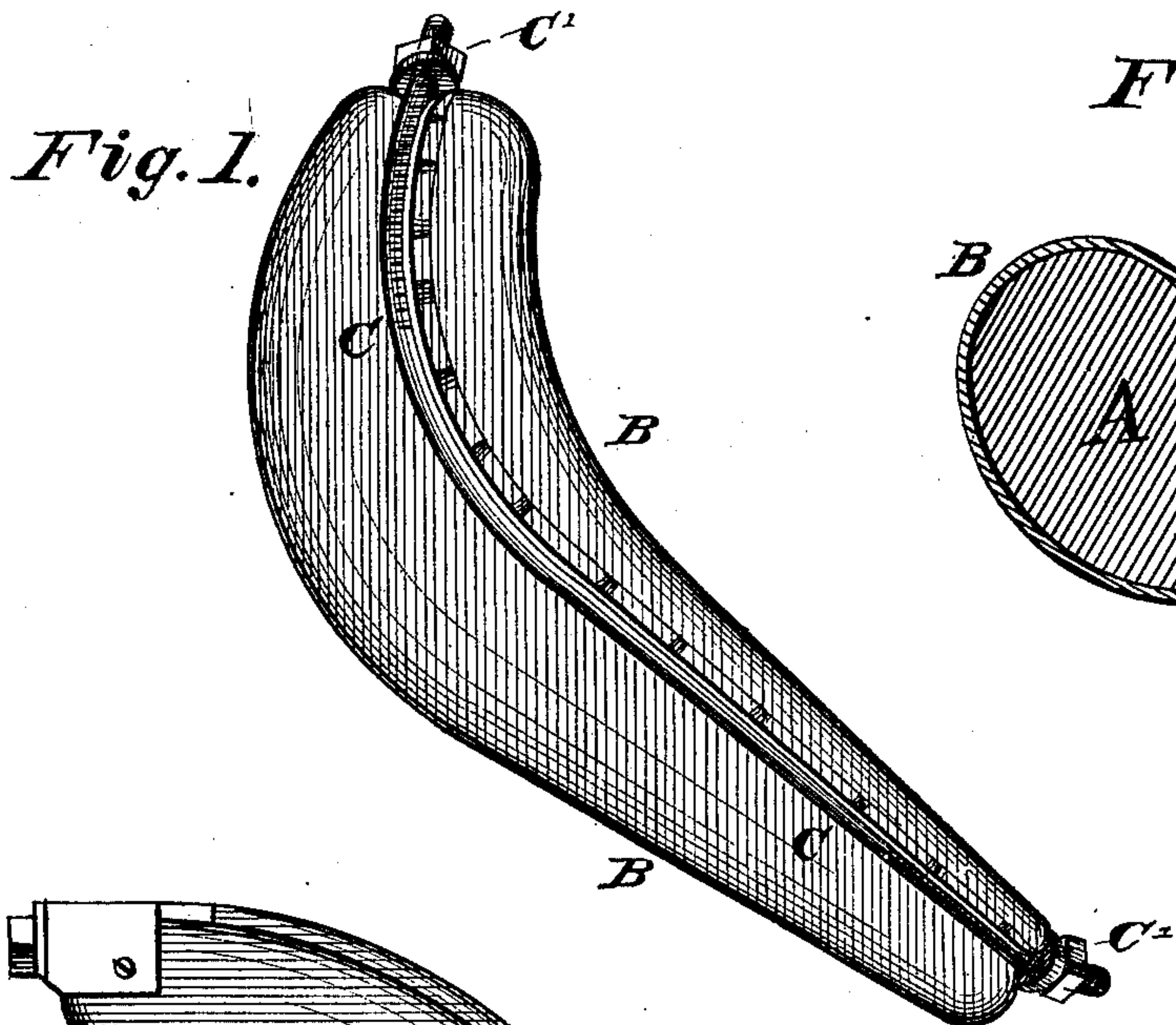


J. Q. BLACK.  
Horse-Collar.

No. 220,013.

Patented Sept. 30, 1879.



Witnesses:  
A. M. Bright.  
A. O. McLean.

Inventor  
John Q. Black.

Per Sargent & Sargent, Attorneys.

# UNITED STATES PATENT OFFICE.

JOHN Q. BLACK, OF LONE ROCK, WISCONSIN.

## IMPROVEMENT IN HORSE-COLLARS.

Specification forming part of Letters Patent No. **220,013**, dated September 30, 1879; application filed July 24, 1879.

*To all whom it may concern:*

Be it known that I, JOHN Q. BLACK, of Lone Rock, in the county of Richland and State of Wisconsin, have invented certain new and useful Improvements in Manufacture of Horse-Collars; 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 pertains to make and use it, reference being had to the accompanying drawings, which form a part of this specification.

My invention consists of the parts and combination of parts hereinafter described and claimed.

In the drawings, Figure 1 represents, in elevation, a collar-cover secured upon a form upon which it is crimped. Fig. 2 is a cross-section of same. Fig. 3 represents a collar complete, with the straining-rod on the inside. Fig. 4 is a cross-section of the same.

A is a form of suitable shape for a collar-cover, upon which a cover, B, may be crimped, in the usual way, by wetting the leather, then stretching it upon the form and securing its edges. When the leather has dried it will be found to retain its shape when removed from the form.

C is a straining-rod, which grasps the edges of the cover and binds them in the groove *c*.

C' are nuts, which may be employed to draw the rod tight into the groove upon its curved seat, and thus secure the edges of the leather very tight.

D is a hame, which is provided with a groove, *c'*, similar to the groove *c* in the form.

In carrying out my invention I first dampen and shrink a piece of leather over the form, thus crimping it so that it shall set closely to the form, and I catch the edges and hold them firmly by the rod C and its nuts. When it is

dry I loosen the nuts and release the leather from the form. I then insert in the place of the form a hame, D, which occupies, of course, only the front portion of the interior space. The front portion of the form is made of this same shape, so that the hame fits the cavity exactly, leaving a rear portion, which may be stuffed, as shown, in the usual manner. After the hame is inserted, the rod C is inserted and the edges drawn over and under it, so as to cover it in, and it binds the edges firmly in the groove *c'*.

A collar made in this way can be made without sewing. Separate hames are not required. The whole structure is neat, strong, and durable.

In order to insure that the edges of the leather may not work out from under the rod, the edges may be tacked at intervals to the hame.

The seat or groove *c'*, being curved, admits of the rod C being drawn tightly into the groove *c'* by the nuts.

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

1. The combination, with a hame fitted within the collar-cover, of a rod which secures the latter within a groove formed in said hame, substantially as set forth.

2. The combination, with a collar-cover, of a grooved hame and rod, C, with its nuts, whereby the collar-cover is firmly attached to the hame, substantially as and for the purposes described.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

JOHN Q. BLACK.

Witnesses:

JOHN E. BENNETT,  
R. S. ELDRED.