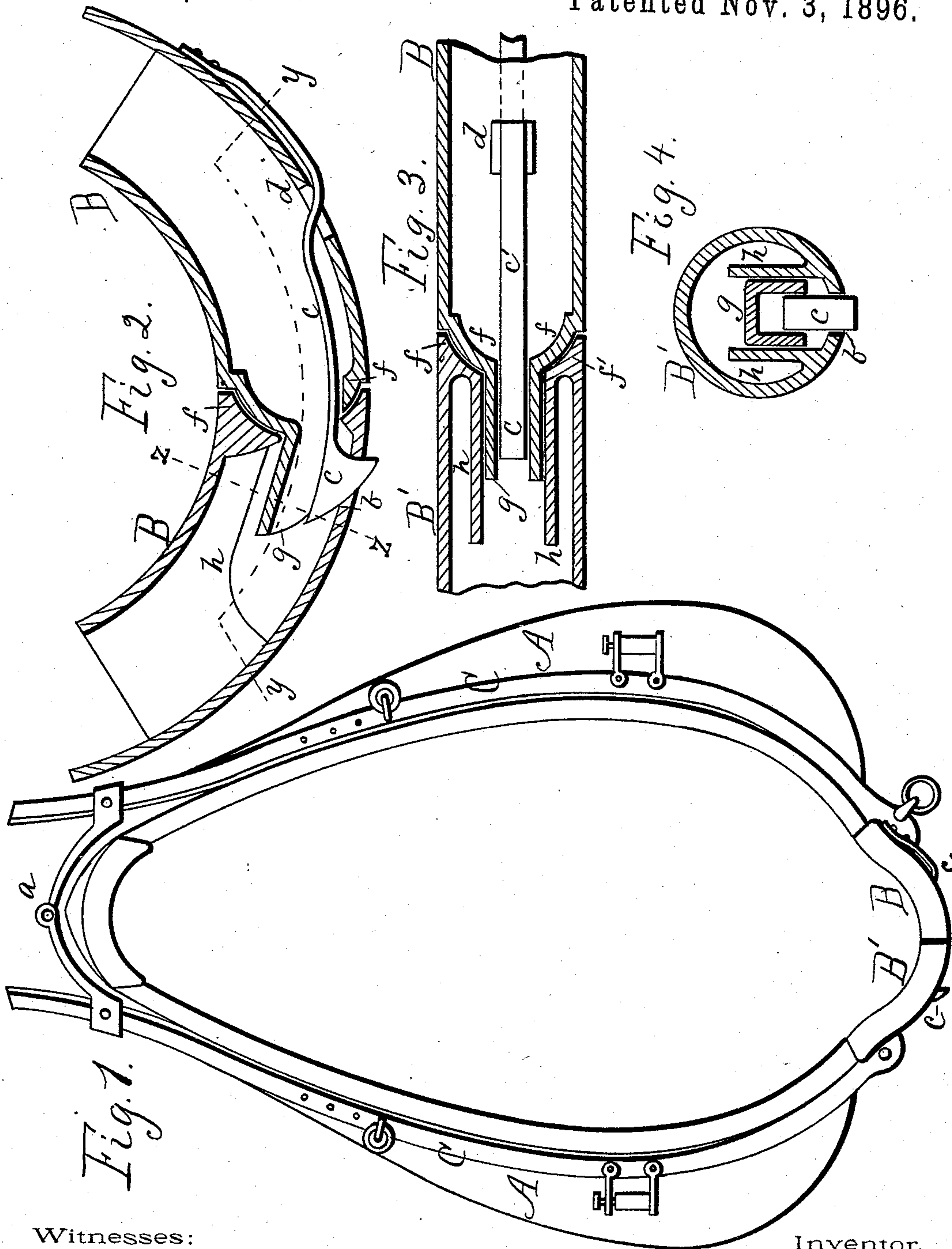


(No Model.)

J. A. WEIDER.  
HORSE COLLAR.

No. 570,887.

Patented Nov. 3, 1896.



Witnesses:

C. R. Osgood  
C. J. Osgood

Inventor.

John A. Weider by  
R. F. Osgood  
Attorney.



# UNITED STATES PATENT OFFICE.

JOHN A. WEIDER, OF ROCHESTER, NEW YORK, ASSIGNOR TO S. WALLACE HAGAMAN, OF SAME PLACE.

## HORSE-COLLAR.

SPECIFICATION forming part of Letters Patent No. 570,887, dated November 3, 1896.

Application filed June 10, 1896. Serial No. 594,959. (No model.)

*To all whom it may concern:*

Be it known that I, JOHN A. WEIDER, of Rochester, in the county of Monroe and State of New York, have invented a certain new and useful Improvement in Horse-Collars; and I do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the drawings accompanying this application.

My improvement relates to a horse-collar which is separable at the bottom to enable it to be easily applied and removed.

The invention consists in the particular construction and arrangement of the coupling, as hereinafter described, and embodied in the claims.

In the drawings, Figure 1 is a front elevation of a horse-collar, showing my invention. Fig. 2 is a longitudinal vertical section of the pipe-coupling. Fig. 3 is a horizontal section of the same in line *y y* of Fig. 2. Fig. 4 is a cross-section in line *z z* of Fig. 2.

A A indicate the two halves of the collar hinged at the top at *a*, so as to open and close, and provided with a pipe-coupling at the bottom made in two sections B B', which are connected together in the manner hereinafter described.

C C are the hames, permanently attached to the parts of the collar.

The coupling-sections B B' consist of curved pieces of pipe or tube which are attached to the lower ends of the side pieces of the collar and are made bent downward, as shown, so as not to impede the breathing of the horse. In the bottom of the section B' is made an opening *b*, forming a catch, and to the section B is attached a hook *e*, that passes through said opening and thus locks the parts together. The hook is attached to or forms a part of a spring-shank *c'*, extending along the inside of the pipe-section, then passing through a hole *d* in the section, and is riveted outside. The tendency of the spring is to force the hook down into engagement with its catch.

The meeting ends of the two sections of the coupling are provided one with a ball or cup bearing *f*, of convex form, and the other with a corresponding concave socket *f'*, in which

the bearing rests, the two articulating together so as to form a universal joint which gives ease to the connection at all points to which the coupling may be turned as well as serves to guide and center the parts when they engage together. This curved joint prevents any undue binding or friction under the working of the parts in different positions. To the cup or bearing *f* is attached a projecting shield or horn *g*, which covers and embraces the hook *c*, always keeping it in position, but allowing it free movement up and down. The shield is closed at the top and two sides, but is open at the bottom, and is inclined at the end so as to strike the concave socket of the opposite section and center the parts properly. On each side of the interior of the opposite section B is a vertical flange *h*, the two being located a distance apart sufficient to allow the shield or horn to pass freely between them as it enters. These flanges serve as guides to center and hold the shield or horn so that the hook within the shield will always coincide with its catch.

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

1. In a horse-collar, the combination of the two coupling-sections B B', the hook *c c'* attached to one section engaging with the catch *b* of the other, the projecting shield *g* of one section inclosing the hook, and the flanges *h h* of the opposite section serving to guide and hold the shield as herein shown and described.

2. In a horse-collar, the combination of the two coupling-sections B B', one provided with a convex bearing *f*, the other with a concave bearing *f'*, the hook *c c'* attached to one section engaging with a catch *b* of the other, the projecting shield *g* inclosing the hook, and the flanges *h h* for centering and holding the shield, as herein shown and described.

In witness whereof I have hereunto signed my name in the presence of two subscribing witnesses.

JOHN A. WEIDER.

Witnesses:

R. F. OSGOOD,  
GEO. A. GILLETTE.