

A. DUNBAR.

Improvement in Horse-Collar and Hames.

No. 119,585.

Patented Oct. 3, 1871.

Fig. 1.

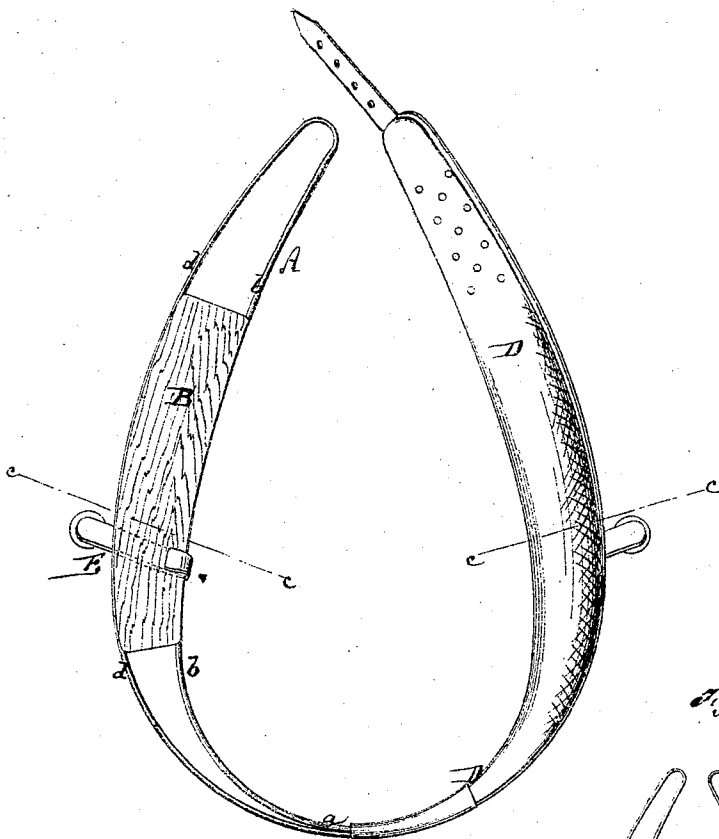


Fig. 3.

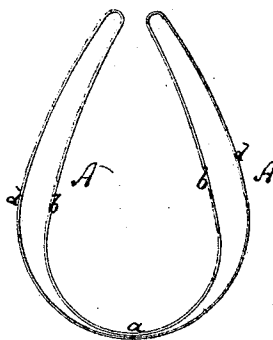
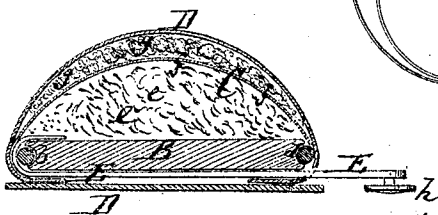


Fig. 2.



Witnesses:

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# UNITED STATES PATENT OFFICE.

ALEXANDER DUNBAR, OF WOODSTOCK, CANADA.

## IMPROVEMENT IN HORSE-COLLARS AND HAMES.

Specification forming part of Letters Patent No. 119,585, dated October 3, 1871.

*To all whom it may concern:*

Be it known that I, ALEXANDER DUNBAR, of Woodstock, in the Province of Ontario and Dominion of Canada, have invented a new and Improved Combined Horse-Collar and Hames; and I do hereby declare that the following is a full, clear, and exact description thereof, which will enable others skilled in the art to make and use the same, reference being had to the accompanying drawing forming part of this specification.

Figure 1 represents a back view of my improved horse-collar and hames. Fig. 2 is a transverse section on an enlarged scale, the line *c c*, Fig. 1, indicating the plane of section. Fig. 3 is a face view of the skeleton-frame used thereon.

Similar letters of reference indicate corresponding parts.

This invention relates to a new construction of horse-collar and hames, and has for its object to make the same lighter and less expensive. It consists principally in the use of a wire frame, which sustains the covering and padding and constitutes an elastic, durable, and reliable support for all the parts of a collar. The invention consists, also, in a new manner of applying the draft-hook to the front of the collar.

A in the drawing represents the frame of the collar. It is made of one continuous wire, bent so as to form a skeleton for the support of the padding and cover and connect the sides of the collar beneath, at *a*. At the sides of the collar the wire is bent to form the edges and laid over the top. At the connection *a*, however, the two thicknesses of wire are brought close together,

as is clearly shown in Fig. 3, and form a strong spring connection for the parts of the collar. Wooden plates B, grooved at the edges, are fitted into the sides of the skeleton-frames, between the upright wires *b* and *d* of the same, and held in place by the wires entering the grooved edges, as in Fig. 2. These boards extend up and down only far enough to back the padding C, which is put against them, and then covered by leather D or other material. I prefer to make the padding, as shown in Fig. 2, of an inner layer of hay or straw, *e*, covered by canvas *f*, and an outer layer of hair, *g*, between *f* and D. E E are the draft-hooks. They are, before the covering is applied, laid over the outer faces of or through the boards B and hooked over the wires in front at *b*. Suitable buttons *h*, or other trace fasteners, are formed at the outer ends of these draft-hooks. By hooking them over the front of the collar a powerful leverage is obtained, and a full support to the boards B, to which these hooks may be fastened in any suitable manner.

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

1. The skeleton horse-collar frame, formed of a continuous wire and covered and padded, substantially as herein shown and described.

2. The draft-hooks E, fitted over the front wire of the collar and applied against the boards C, substantially as herein shown and described.

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Witnesses:

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