

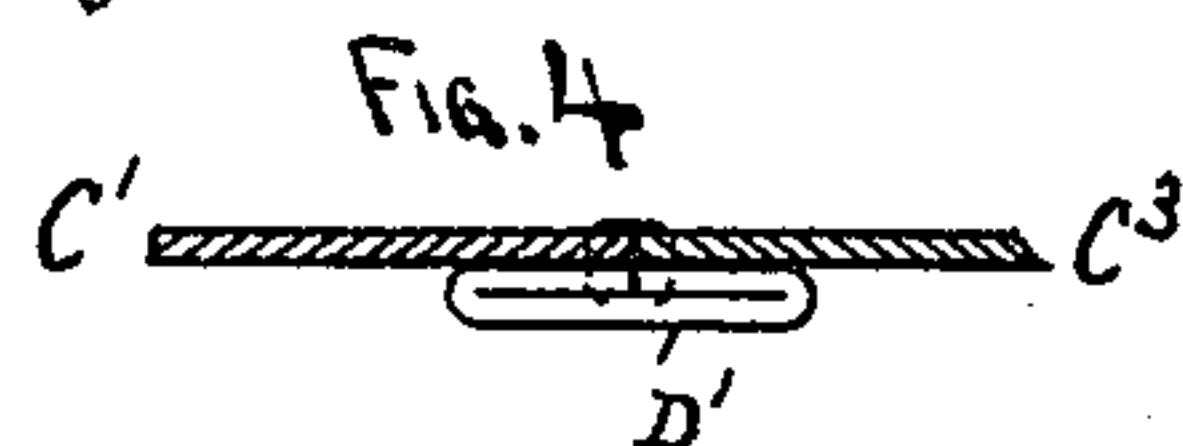
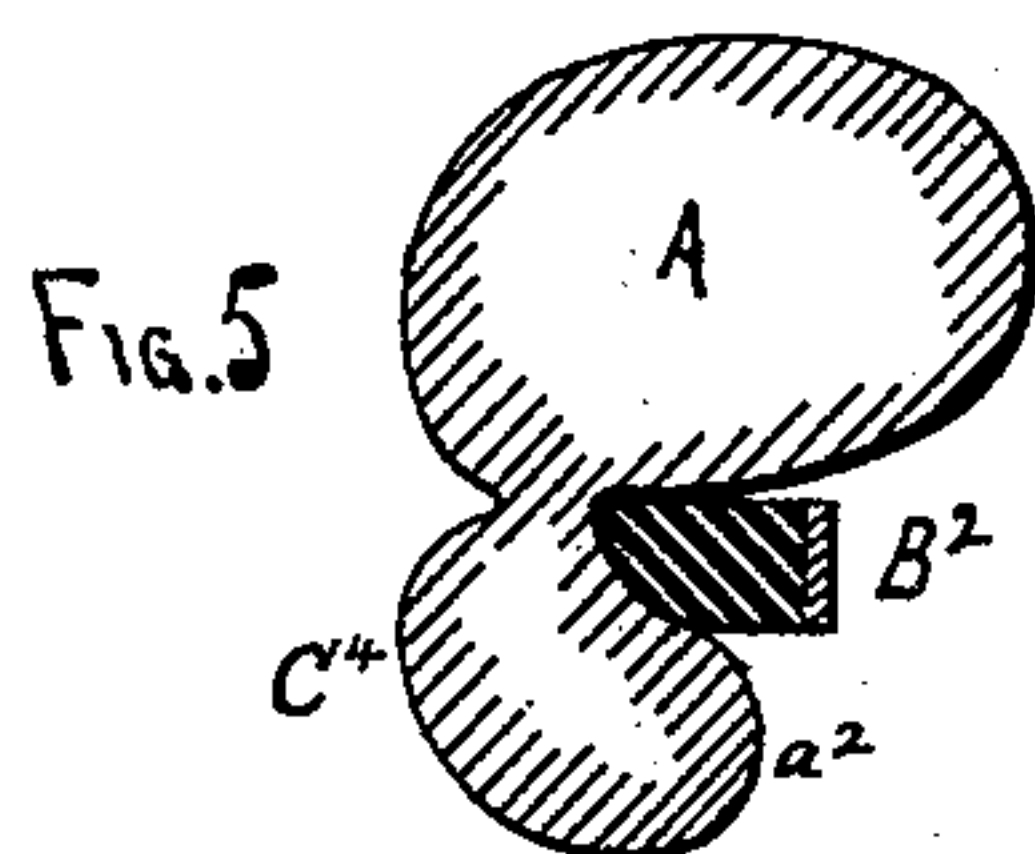
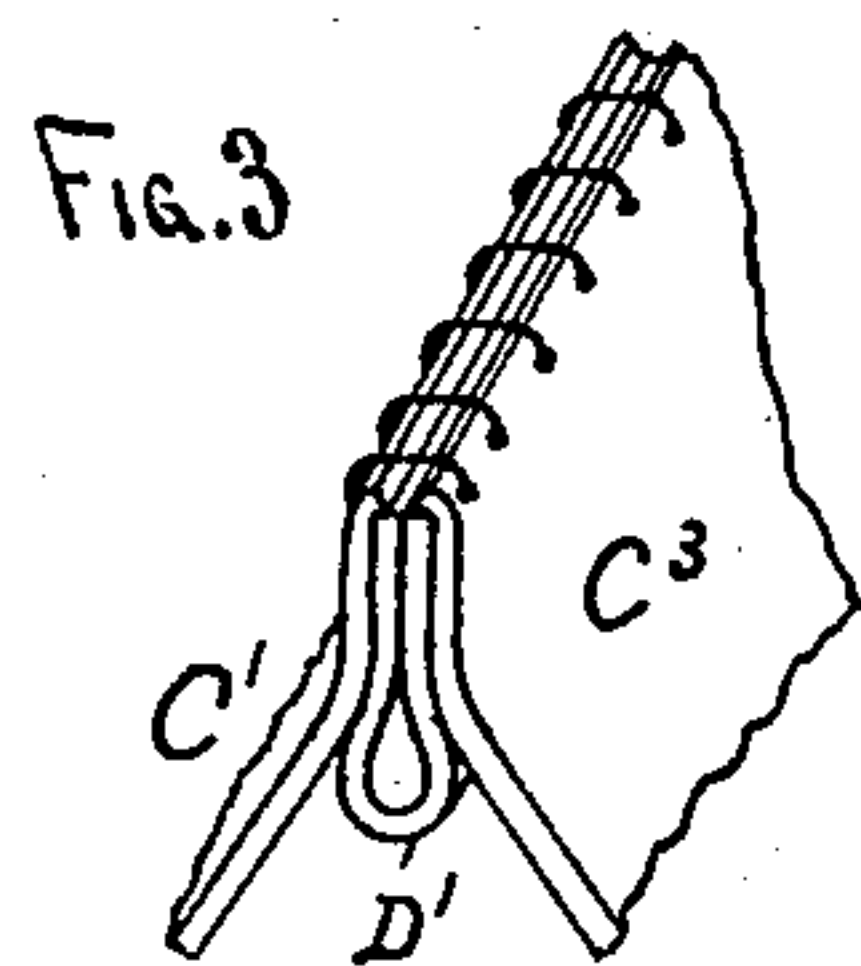
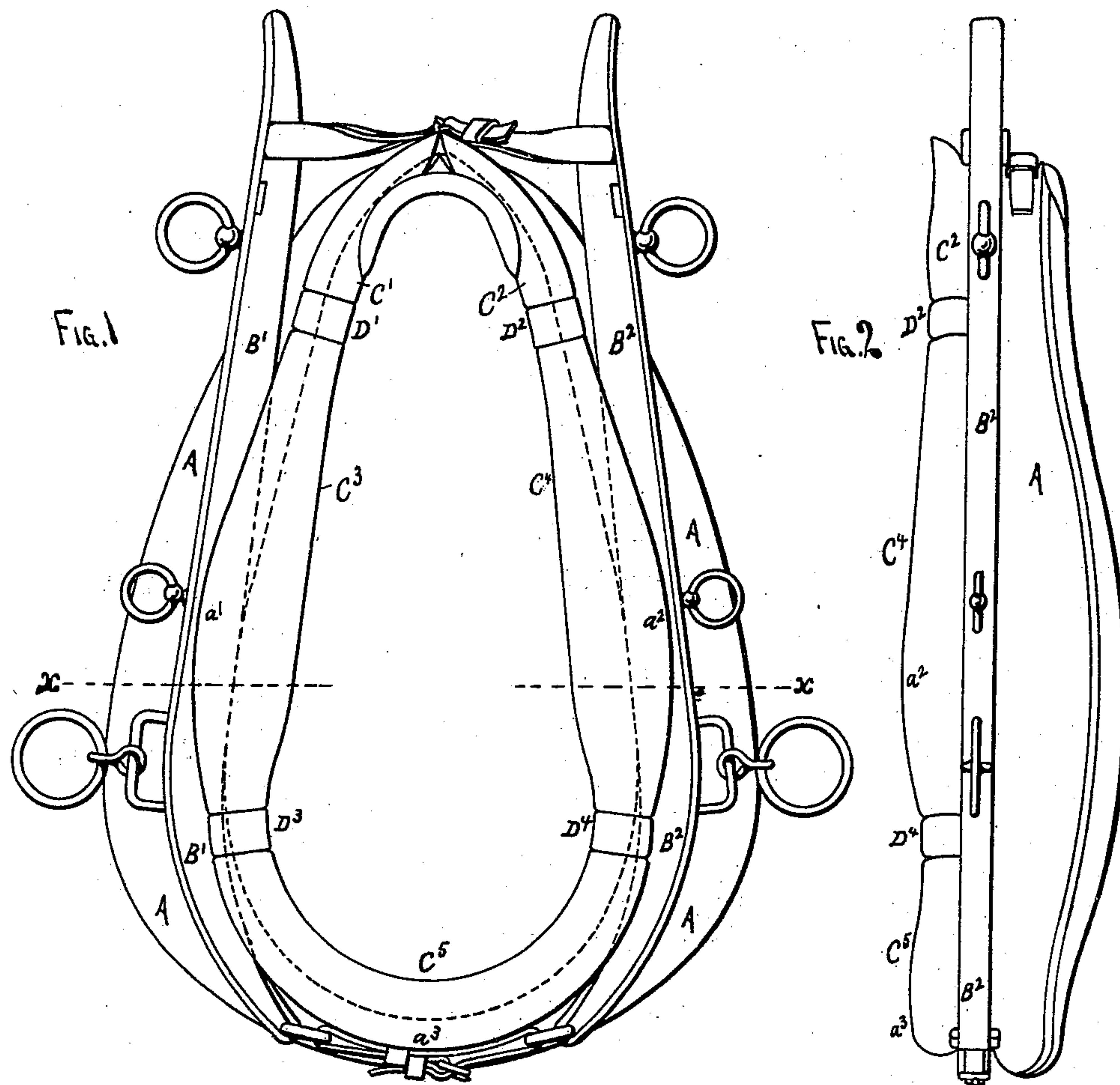
(No Model.)

R. BROWNSON.

HORSE COLLAR.

No. 312,081.

Patented Feb. 10, 1885.



WITNESSES.
Louis Fessenden Jr.
H. S. Webster

Ralph Brownson,
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ATT'YS.

UNITED STATES PATENT OFFICE.

RALPH BROWNSON, OF ST. PAUL, MINNESOTA, ASSIGNOR OF ONE-HALF TO
PETER R. L. HARDENBERGH, OF SAME PLACE.

HORSE-COLLAR.

SPECIFICATION forming part of Letters Patent No. 312,081, dated February 10, 1885.

Application filed June 19, 1884. (No model.)

To all whom it may concern:

Be it known that I, RALPH BROWNSON, a citizen of the United States, and a resident of St. Paul, in the county of Ramsey, in the State of Minnesota, have invented certain new and useful Improvements in Horse-Collars, of which the following specification is a full, clear, and exact description, reference being also had to the accompanying drawings, in which—

Figure 1 is a front elevation, and Fig. 2 is a side elevation, of a horse-collar embodying my improvements, and with a pair of hames attached thereto. Fig. 3 is an enlarged perspective view of a section of one of the joints, illustrating the manner of attaching the parts to each other; and Fig. 4 is a cross-sectional view of the same as it appears when the collar is complete. Fig. 5 is a cross-sectional view of one side of the collar and one of the hames on the line *xx* of Fig. 1.

A is the body of the collar, and B' B² the hames, formed in the ordinary manner. The rim of the collar differs from the ordinary collar, and these points of difference constitute my invention. The ordinary rim is made of nearly the same size throughout, while my improved rim is formed with enlargements or "swells" *a'* *a*² *a*³—two at the sides and one at the bottom. The ordinary rim is usually made of one, or sometimes two, pieces of leather, while my improved rim is formed from five separate main sections, C' C² C³ C⁴ C⁵, and four joint-coverings, D' D² D³ D⁴.

The manner of connecting the different sections of the rim together is an important feature of my invention, and consists in sewing between the two edges of the ends of the sections C' C² C³ C⁴ C⁵ the edges of smaller pieces, D' D² D³ D⁴, as shown in Fig. 3, and then flattening the latter down upon the former, as shown in Fig. 4. By this means the four edges of the leather are firmly held together and the joints protected and hid from sight by the covering-pieces, as shown in Figs. 1 and 2. The joints do not add anything to the weight of the collar, but rather improve its appearance and strengthen the rim. By

thus forming the rim in separate sections and uniting them by the joints, as shown, I gain several important advantages. First, I am enabled to form the central sections, C³ C⁴, and the lower section, C⁵, with the swells *a'* *a*² *a*³, without cramping the remainder of the rim or rendering it liable to wrinkle with use; second, the rim can be formed from smaller pieces of leather, and thus a saving in material secured; third, the rim will be stronger, as the covering-strips D' D² D³ D⁴ and the swells *a'* *a*² *a*³ add strength thereto; and, incidentally, a fourth and important advantage is gained in that the swells *a'* *a*² form guards for the hames to hold them in place upon the collar without the necessity of drawing them up so tightly by the straps or couplings at their ends as to pinch the horse's neck. This latter advantage, I am aware, has been gained by constructions of horse-collars differing from mine; but it is a very important point, as horses are frequently injured and sore spots formed upon them by the pinching of the collar by the hames, rendered necessary to prevent the latter from slipping from the collar. With my improvement this is avoided, as the swells *a'* *a*² will hold the hames in place, even when they are left very loose. The swelled portion *a*³ is also an important feature of this invention, as it adds strength at the hitherto weakest part of the collar, without increasing the weight or giving the collar or rim a clumsy appearance. Another important point gained by this manner of forming the rim is that the hames press inward and come in contact with the point between the rim and body only for a comparatively short distance near the heaviest part of the body and rim, (on the line *xx* of Fig. 1,) and do not press inward upon the rim at any other points; hence the collar below and above the point of contact on the line *xx* is left free to gradually adjust itself to the necks of the animals, and not cause them any inconvenience from unnatural pressure.

Having described my invention and set forth its merits, what I claim is—

1. A horse-collar provided with the sepa-

rate and independent sections $C^3 C^4$, having swelled portions $a' a^2$, substantially as and for the purposes herein specified.

2. In a horse-collar, the combination, with
5 the main body A, of the rim formed of sections $C' C^2 C^3 C^4 C^5$, having swelled portions $a' a^2 a^3$, and joints $D' D^2 D^3 D^4$, substantially as and for the purpose specified.

In testimony whereof I have hereunto set my hand in presence of two subscribing witnesses.

RALPH BROWNSON.

Witnesses:

C. N. WOODWARD,
LOUIS FEESER, Sr.