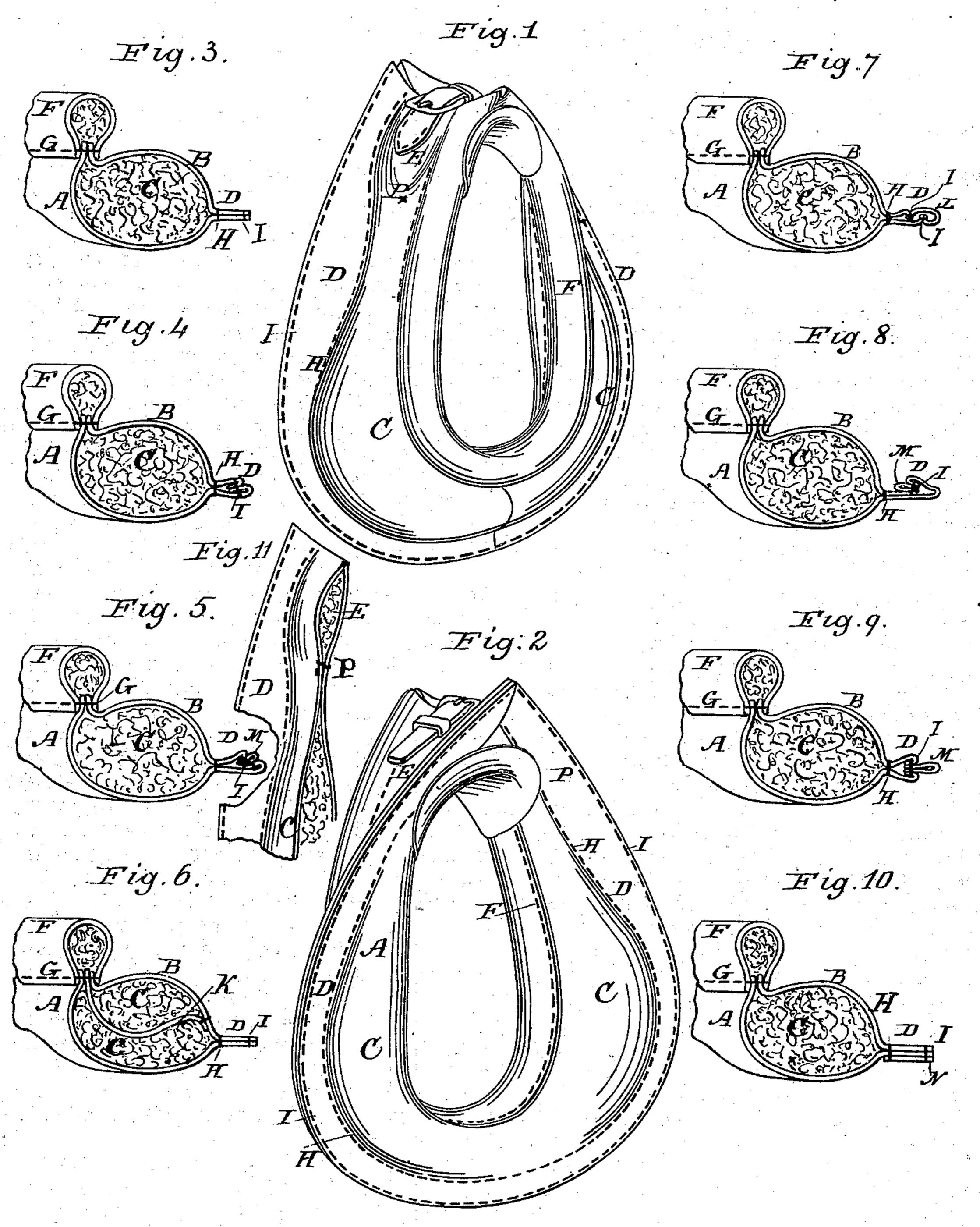
## R. PORTER. HORSE COLLAR.

No. 271,921.

Patented Feb. 6, 1883.



Witnesses:

EE. Masson Philips ha Robert Porter by
A Pollok
his attorney.

## United States Patent Office.

ROBERT PORTER, OF OTTUMWA, IOWA.

## HORSE-COLLAR.

SPECIFICATION forming part of Letters Patent No. 271,921, dated February 6, 1883.

Application filed December 11, 1882. (Model.)

To all whom it may concern:

Be it known that I, ROBERT PORTER, of Ottumwa, Wapello county, Iowa, have invented a new and useful Improvement in 5 Horse-Collars, which improvement is fully set

forth in the following specification.

This invention comprises certain special constructions of the collars used in harness for horses whereby in the manufacture of said 10 collars liability to rupture at the seams in stuffing is diminished, and whereby, also, the durability of the collars when made is increased, and the appearance and fitting improved.

In the most common form of collar the body is composed of two pieces of leather or other material—to wit, a face on the side next the animal and a back on the opposite side of the collar—and the said pieces are united by a seam 20 at their inside edges, where the rim is attached, and by a second seam at or near their outside edges around the periphery of the collar. The inclosed space between the back and front is stuffed to form the bellies, the afore-25 said second seam giving shape thereto. It is to collars of this kind that the invention more particularly has reference, although it is applicable in whole or in part to other kinds. The seam which gives shape to the bellies will 30 hereinafter be called the "shaping-seam."

In accordance with the first part of the invention, the back and face are made to extend beyond the shaping-seam, and the margins are united or connected outside of the said seam, so that they cannot be pulled apart. Preferably the margins are united by one or more seams additional to the shaping-seam, just mentioned. The wide margins integral with the back and face outside of the shaping-40 seam give sufficient hold to withstand the internal pressure in stuffing without requiring special care on the part of the workman. from being pulled apart, relieves the seam of 45 outside strain which otherwise might in use be brought upon it. The union, also, of the two layers or thicknesses of material gives to each the support of the other and forms a stiff flange not liable to lose its shape, while 50 at the same time the presence of the two lay. ers gives an opportunity for embellishment by ornamental stitching, the use of welts or in-

sertions, and the like means. Further, the rough or unfinished side of both the face and back being placed together will be hid and 55 the flange will on both sides have a finished appearance. The improved double flange is thus at once a source of strength and beauty to the collar. It is essential that it should extend around the enlarged part of the bellies; 60 but it may and preferably does extend also under the throat and over the top. The flange is called a "double flange" because it is composed of at least two layers or thicknesses of material, and not as excluding the idea of 65 three or more layers, since as many additional layers as desired may be used. It is integral with the back and face, because one layer is in one piece with the back and one layer with the face. Where additional layers are used 70 these may or may not be integral or in one piece with either the face or back. The face and back may themselves be made of two or more layers or thicknesses, and all or one or more only of the layers may be extended to 75 form the flange, provided always one layer of the face and one layer of the back are so extended. The face and back may be made both in one piece, as customary in some collars. The seams before referred to may be 80 made of hand or sewing-machine stitches, or of rivets and the like. The layers of the flange may also be riveted by being in one piece of material, or they may be cemented together or otherwise fastened. Both layers 85 may extend clear to the edge of the flange or one may terminate within said edge. The flange may be made to extend beyond the edges of the pieces constituting the back and face.

The second part of the invention consists in providing, in a collar having a double flange, a layer or welt folded over at the edge and fastened to, between, or over the edges of the The union of said margins, by preventing them | face and back. This welt gives a smooth fin- 95 ished or rounded edge to the flange. Under this part of the invention the flange is preferably integral with the face and back.

The third part of the invention consists in the formation at the top of the collar of a pad 100 independent of the bellies, although formed between the same pieces constituting the back and front.

In the accompanying drawings, which form

a part of this specification, Figures 1 and 2 are perspective views from opposite sides of a horse-collar embodying the invention, and Figs. 3 to 10 sectional views, showing different constructions of the flange embodying the first part of the invention. Fig. 11 is a partial view in section of the collar shown in Figs. 1 and 2, the same illustrating the manner of stuffing the collar.

view in section of the collar shown in Figs. 1 and 2, the same illustrating the manner of stuffing the collar. A is the face; B, the back; C, the bellies; D, the flange; E, the independent top pad, and F the rim. The face and back are at their inner edges attached to each other and to the rim F in any ordinary or suitable way—as by ! 15 the seam G, as shown. The shaping-seam H is run at a distance from the edges about equal to the width to be given to the flange D, and the margins of the face and back are also united by the seam or seams I. As shown 20 both seams H I extend around the collar, except at the opening on top, so that the flange practically surrounds the collar. As before pointed out, however, this is not essential since the flange need not extend under the throat 25 nor over the top, although it is most advantangeous for it to be so. As shown in Figs. 1, 2, and 3, the margins of the face and back are of equal width, and they are united by a single plain exposed seam. Other seams could 30 be run through the margins, if desired. In Fig. 4 the margin of the face is the wider, the edges of both are turned in, and they are united by a plain exposed seam. In Fig. 5 the edges of both margins are turned in, a folded 35 welt, M, is inserted, and the whole joined together by a concealed seam. In Fig. 6 the collar has on each side a false belly, formed by the division K. This piece could also be extended into the flange. In Fig. 7 the two mar-40 gins are united or connected through the folded piece L, to which each are stitched by a concealed seam. In Fig. 8 the margin of the face is the wider. It is turned over the other margin, which is left flat, a welt, M, is inserted, and 45 the whole held together by an inside seam. In Fig. 9 the edges of both margins are turned in and a welt, M, is inserted, the said welt extending the flange. In Fig. 10 the construction is the same as in Fig. 3, except that the 50 extra piece N is applied to the margin of the face. This extra piece is useful when the face

is of cloth, the said piece being of leather and

serving to give finish to the flange. The flange

could be modified in various other ways with-

out altering its essential characteristics. In 55 all the figures the double flange has one layer integral with the face and another with the back. A folded welt could be inserted between or folded over the edge of the face and back, and the whole united by the shaping-seam. The 60 fold makes a smooth finished edge.

The shaping-seam H, Figs. 1 and 2, is at the upper end of the bellies run toward the rim, so as to contract the bellies at that point, and is then run out to leave an enlargement at E. 65 In manufacture the bellies are first stuffed, leaving the top of the case vacant. The opening are then closed by the stitches P, or by other suitable means. The upper enlarged part E is then stuffed. The stuffing may ex-70 tend over the top of the collar, or it may be divided. The enlarged portion may be made to take in or not take in the upper part of the rim, as desired.

It is obvious that portions of the invention 75 may be used separately, and that the whole or any part may be used as well in closed collars, or collars opening at the bottom or at other points, as in collars opening at the top, as

shown.

The shape and dimensions of the flange may be varied within wide limits. When the double flange does not extend all the way around the other parts can be left with a flange of single thickness or without any at all.

Having now fully described my said invention and the manner of carrying the same into

effect, what I claim is—

1. In a horse-collar, the double flange formed integral with the face and back of the collar, 90 and extending around the bellies or the bellies and other parts, and having the margins of the face and back outside the shaping-seam united or connected, substantially as described.

2. In a horse-collar having a double flange, 95 a folded welt fastened to, between, or over the edges of the back and face of the collar, sub-

stantially as described.

3. A horse-collar having an enlarged part at the top of the collar, stuffed independently 10c of the bellies, substantially as described.

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

ROBERT PORTER.

Witnesses:

A. Pollok, Philip Mauro.