

(No Model.)

2 Sheets—Sheet 1.

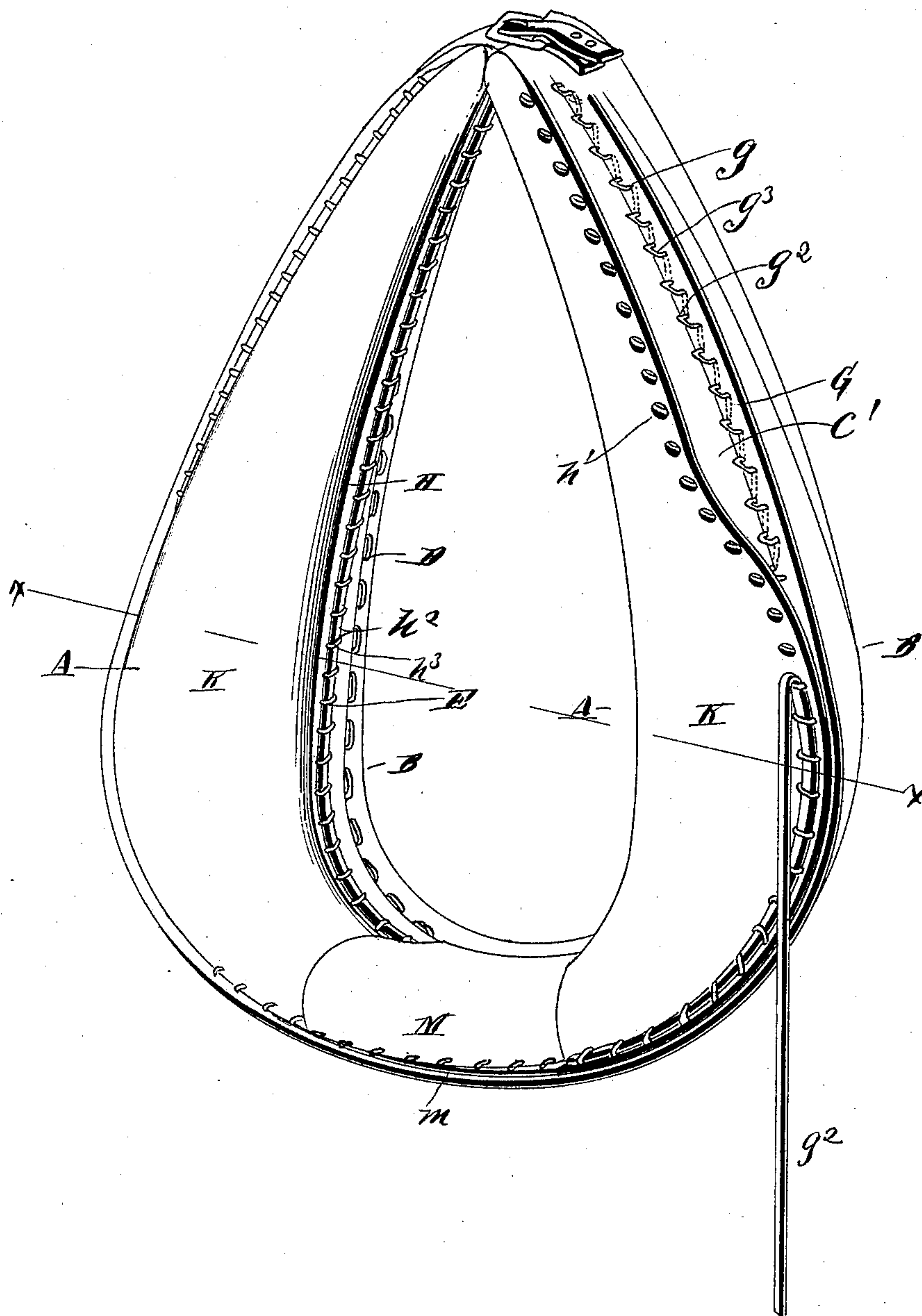
C. F. ALLEN.

HORSE COLLAR.

No. 391,872.

Patented Oct. 30, 1888.

*Fig. 1*



Witnesses.

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By *his* Attorneys

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(No Model.)

2 Sheets—Sheet 2.

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Fig. 2,

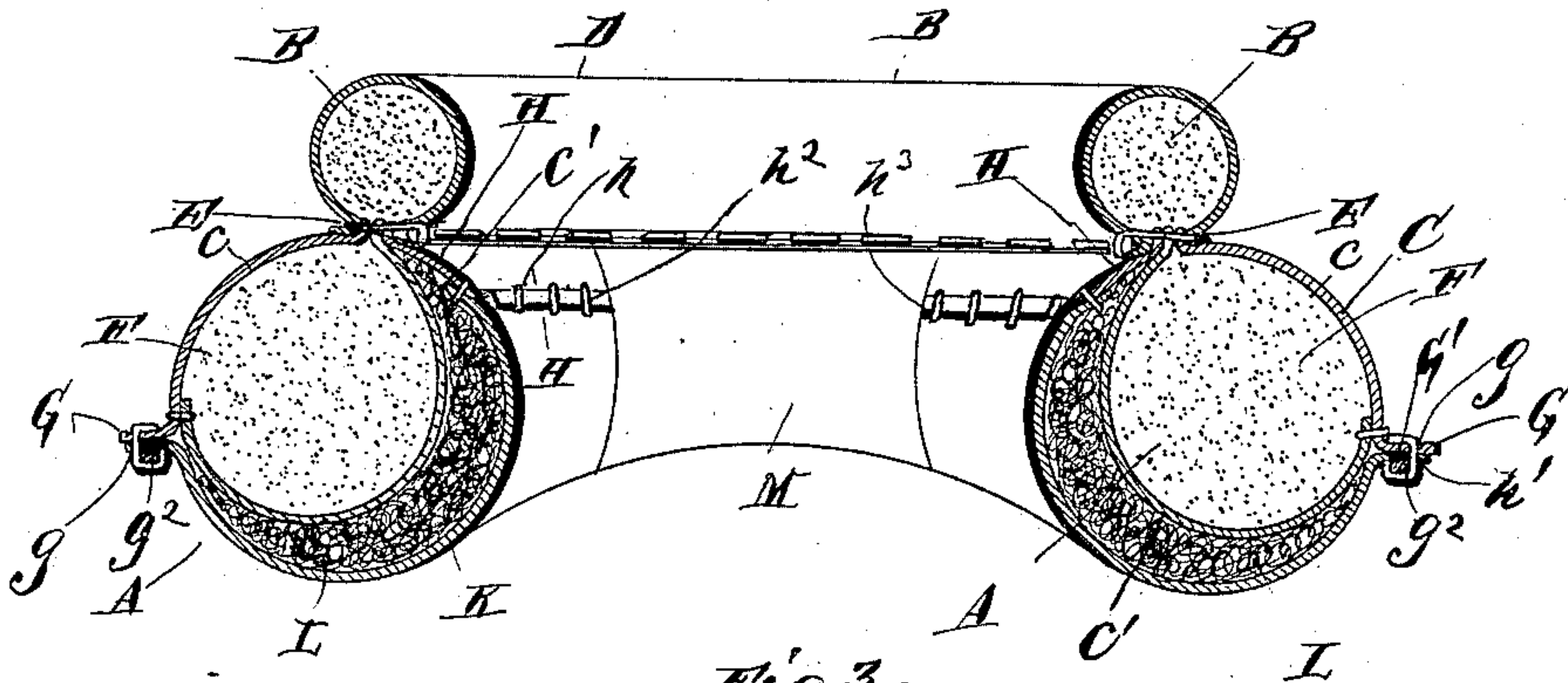


Fig. 3,

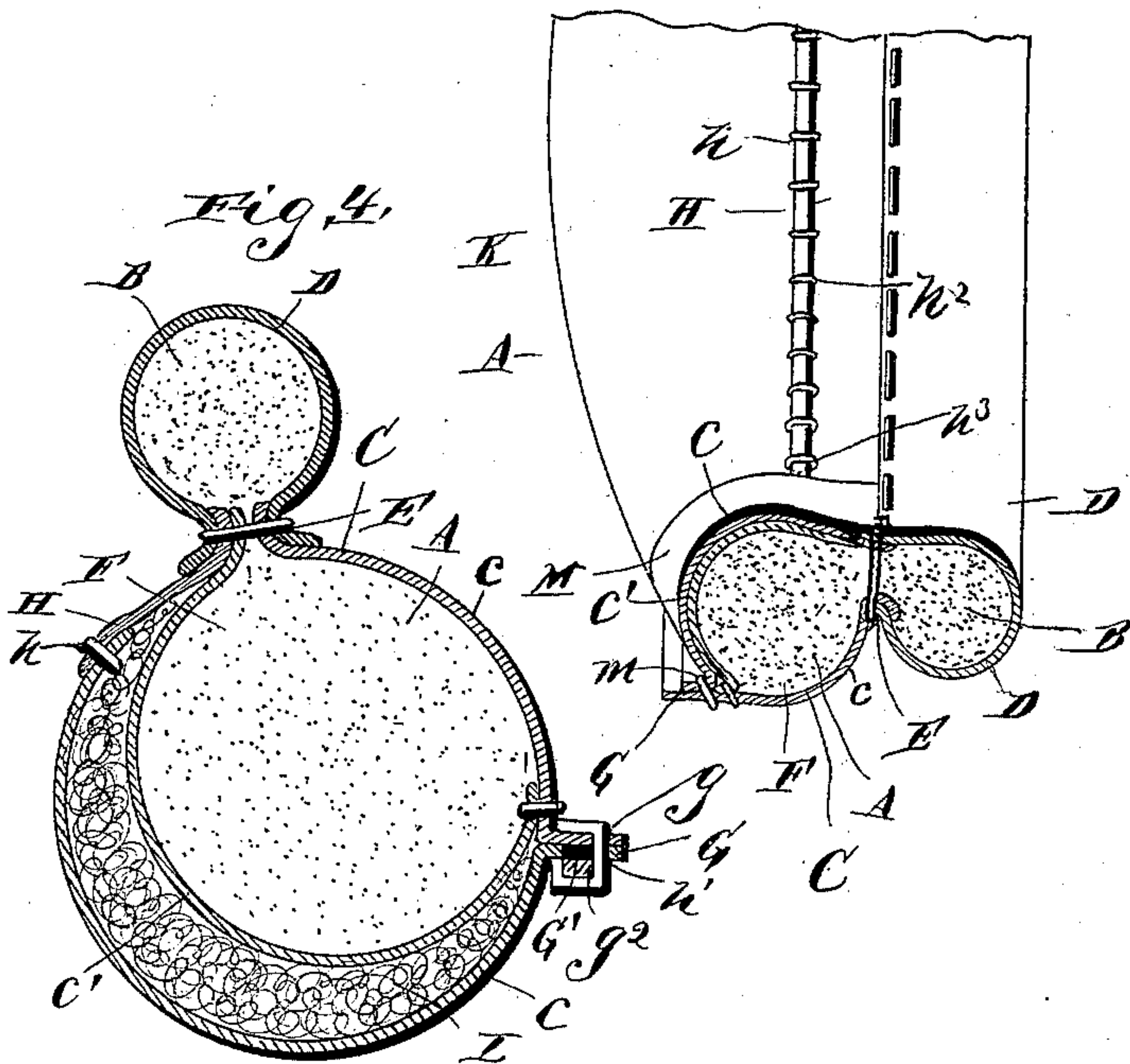


Fig. 4,

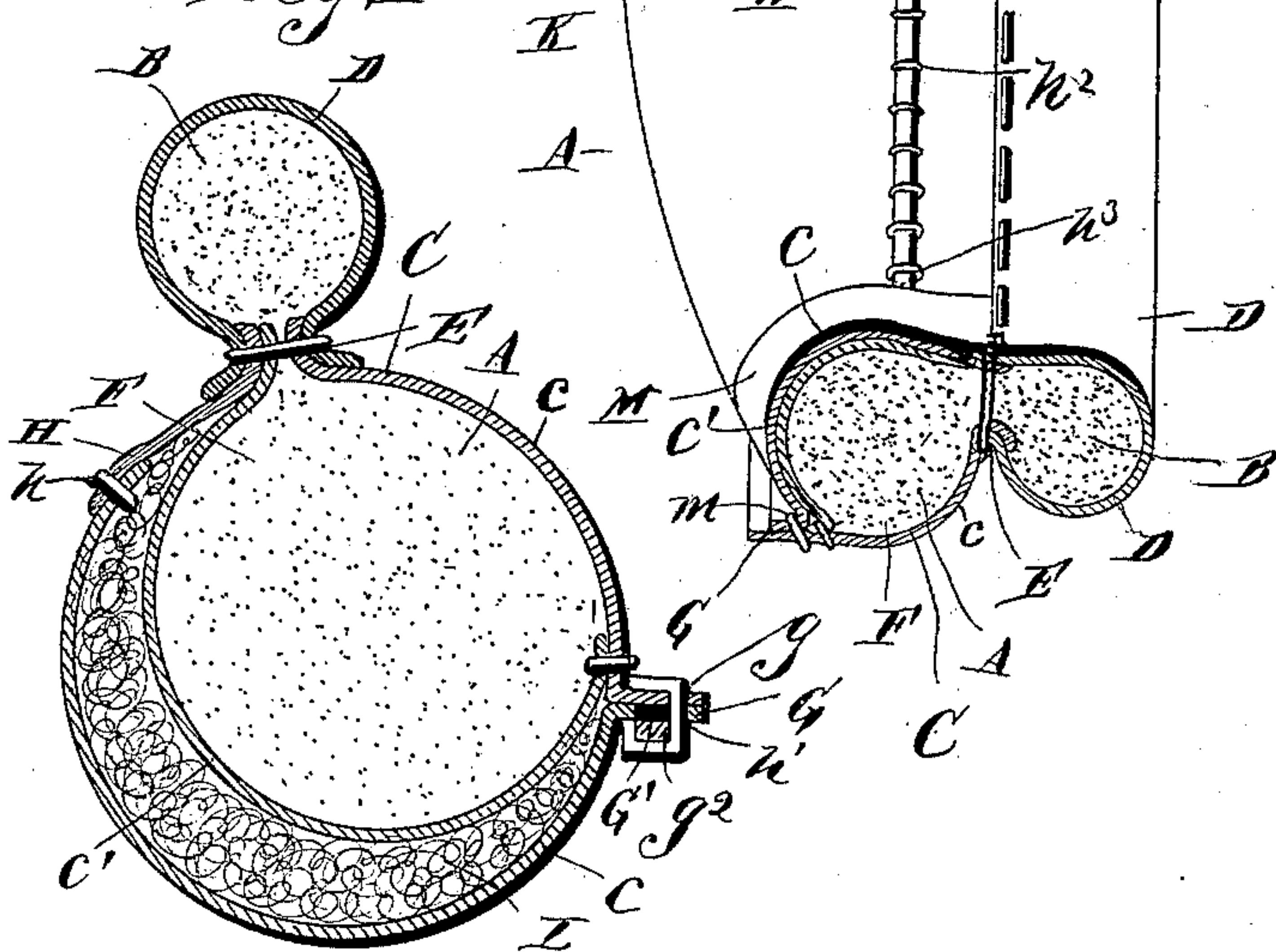
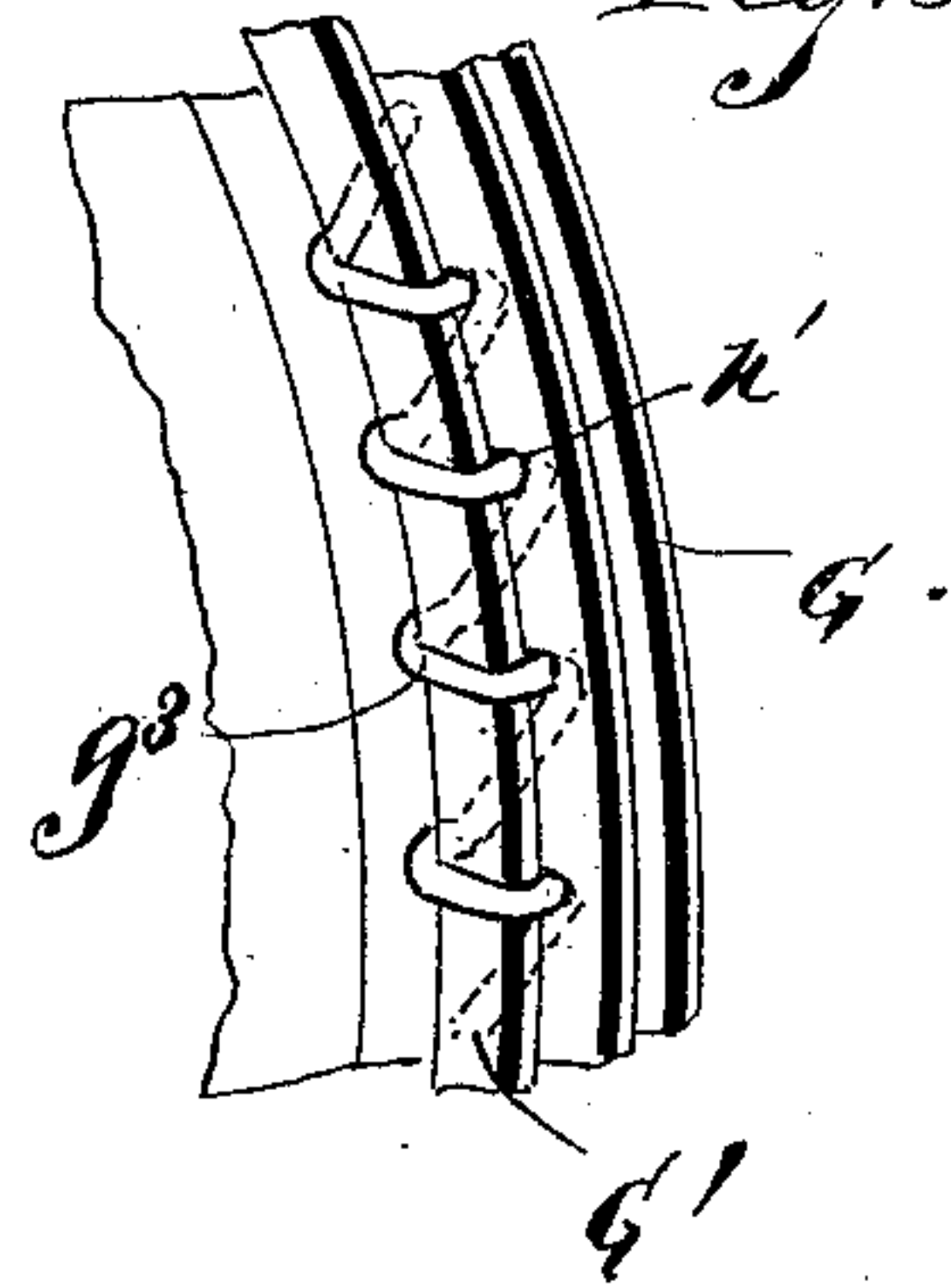


Fig. 5,



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# UNITED STATES PATENT OFFICE.

CHARLES FRANCIS ALLEN, OF BURLINGTON, IOWA.

## HORSE-COLLAR.

SPECIFICATION forming part of Letters Patent No. 391,872, dated October 30, 1888.

Application filed August 4, 1888. Serial No. 281,966. (No model.)

*To all whom it may concern:*

Be it known that I, CHARLES FRANCIS ALLEN, a citizen of the United States, residing at Burlington in the county of Des Moines and State of Iowa, have invented new and useful Improvements in Horse-Collars, of which the following is a specification.

Heretofore it has been the practice to make horse-collars with stationary facings or covers—that is, covers which cannot be readily removed—and therefore when the covers become worn either the collar must be thrown aside as useless or a harness-maker employed to apply new covers. I desire to overcome this difficulty by providing the collar with facings, so constructed that when worn they may be removed and replaced by new ones by the owner of the collar or any unskilled person. Further, it is usual, when working horses in a plow, harvester, &c., to use either bands of woolen material or a similar fabric, or a collar covered with a similar material, for the reason that the perspiration would spoil a collar covered with leather. It is my object to provide means whereby the facings of a collar may be changed at will to suit the character of the work which the horse is designed to do, and for this purpose the said facings are made and attached to the collar in such a manner as to enable them to be readily removed, whereby one collar made according to this invention will serve the purposes of several made in the ordinary way.

With these objects in view the invention consists in a certain novel construction and combination of devices fully described hereinafter in connection with the accompanying drawings, and specifically pointed out in the appended claims.

In the drawings, Figure 1 is a perspective view of a collar embodying my improvements with one of the removable facings loosened to show the manner of removing the same. Fig. 2 is a transverse sectional view of the same on the line *x x* of Fig. 1. Fig. 3 is a vertical central sectional view. Figs. 4 and 5 are detail enlarged sectional views.

Referring by letter to the drawings, A designates the body-roll, and B the neck-roll, of the improved collar, the body-roll being pro-

vided with the cover C and the neck-roll with a cover, D.

The cover C is formed in two parts, namely, an outer facing, *c*, and an inner facing, *c'*, the front edges of which facings are received between the rear adjacent edges of the cover D, and the seam E—which is formed by the connection of these covers—being located in the crease or depression between the body and the neck-roll, will not come in contact with the neck or shoulders of the horse. The facings *c c'* are preferably made of leather and canvas, respectively, and their rear adjacent edges are stitched permanently together to inclose the filling F of hair, moss, or similar suitable material. The rear edge of the facing *c* is extended beyond the seam on the rear side of the body-roll to form the extension or flap G, which is provided throughout its length with apertures *g*. In addition to the front edge of the facings *c* and *c'*, which are received between the edges of the cover D, a welt, H, is stitched therein on the inner side of the body-roll, and this welt is also provided with apertures *h*.

*g*<sup>2</sup> and *h*<sup>2</sup> represent wires or thongs of rawhide, which are respectively laced in the registering perforations *g* and *h*, and are looped up on the outer sides of the extension or flap and the welt to form the eyes *g*<sup>3</sup> and *h*<sup>3</sup>. These wires or thongs are arranged in the above-named perforations when the collar is formed, and are not removed, as the extension or flap and the welt are not liable to need repair or replacement. If a rawhide thong is used it will, when it becomes dry, become as stiff as wire, and therefore retain its shape with the eyes projecting upward, as described.

K represents a removable facing, which is arranged over the inner facing, *c'*, and is provided at its front and rear edges, respectively, with apertures or slots *h'* and *g'*, adapted to receive the eyes *h*<sup>3</sup> and *g*<sup>3</sup>, whereby the cords H' and G' may be passed through the said eyes on the outer sides of the removable facing, and thereby hold the latter in place. Between this removable facing and the inner side of the body-roll—namely, between the removable facing and the inner facing—is arranged the padding L, thereby forming a sweat-pad, which may be removed and replaced by fresh pad-



ding at any time. Also, the said padding may be arranged or portions thereof removed to fit abnormalities of the neck and shoulders of the horse, whereby all chafing of the same may be avoided. The welt is located in the crease or depression between the body and the neck roll, and therefore the connection between the same and the removable facing will not come in contact with the neck of the horse, and the connection between the extension or flap and the rear edge of the removable facing is also in a position to prevent it from coming in contact with the shoulders of the horse.

The extension or flap G, as will be seen, extends entirely around the collar from one end of the main roll to the other, and the welts H H, which extend along the inner sides of the body-roll, terminate a short distance from each other at the bottom of the collar. The removable facings extend down to the lower ends of the said welts and there terminate, and therefore to cover the lower ends of the said facings a guard-flap, M, is provided, which is engaged at its front edge in the seam E, (between the rear edges of the cover D,) and is provided at its rear edge with apertures or slots *m m*, in which are engaged the eyes *g*<sup>3</sup>, through which are passed the lacing-cords G'. When a new facing, K, is to be applied to the collar, the guard-flap is released at its rear edge, and after the facing is secured in place the guard-flap is replaced, thereby covering all loose ends and rough edges. Therefore, in addition to the advantages to be derived from the fact that the padding L may be removed at any time to enable it to be picked over or cleaned, the entire facings K may be removed to enable them to be cleaned or replaced when worn out. These facings may be made of various materials, (suitable to be used under different circumstances,) such as kersey, duck, leather, &c., and either of the facings may be applied to the collar by simply lacing its edges respectively to the welt and the extension or flap, as above described. Facings made of kersey, duck, and other fabrics are preferably used while the horse is plowing, harvesting, &c., and consequently perspiring freely, as the moisture (which would injure a leather-covered collar) does not affect the said fabrics. Further, it is frequently desirable, owing to sore shoulders, to remove the leather facings—which are liable under any circumstances to chafe and irritate—and replace them by facings made of a softer material, as woolen fabrics, &c.

The manner of lacing the removable facings in place will be readily understood. The apertures or slots in the edges of the facings are fitted over the rigid eyes *g*<sup>3</sup> *h*<sup>3</sup>, on the extensions or flap and the welts, respectively, and then the laces G' and H' are passed straight through the projecting outer ends of the said eyes and extend flat along the surface of the removable facing. The eyes are made of such a size as just to extend beyond the outer sur-

face of the facing, so that the said outer surface will remain as unbroken as possible.

Having thus described the invention, I claim—

1. In a horse-collar, the combination, with the body-roll and the neck-roll, of the extension or flap on the rear side of the body-roll, the welt arranged in the crease or depression between the body-roll and the neck-roll, and the removable facings laced at its edges, respectively, to the said extension or flap and welt, substantially as and for the purpose specified.

2. In a horse-collar, the combination, with the body and neck rolls, of the cover D on the neck-roll, the cover C on the body-roll having its front edges secured between the edges of the cover D and provided with an extension or flap, G, the welt H, secured at one edge between the edges of the said cover D, and the removable facing laced at its edges to the extension or flap G and the welt H, respectively, by suitable lacing-cords, substantially as specified.

3. In a horse-collar, the combination, with the body and neck rolls A B, of the cover D on the neck-roll, the cover C on the body-roll consisting of the outer facing, *c*, and the inner facing, *c'*, which are stitched together at their rear edges and are stitched at their front edges between the rear edges of the cover D, the extension or flap G, integral with and formed as an extension of the rear edge of the flap *c*, the welt H, secured in the seam between the covers C and D and arranged in the crease or depression between the body-roll and the neck-roll, and the removable facing laced at its edges to the welt and the extension or flap, respectively, substantially as specified.

4. In a horse-collar, the combination, with the body and neck rolls A B, the cover D on the neck-roll, and the cover C on the body-roll, the adjacent edges of which covers are connected to form the seam E, of the extension or flap G on the rear side of the body-roll, the welts H, secured in the seam E at the front side of the body-roll and terminating at their lower ends a short distance apart, the removable facings K K, laced at their edges to the extension or flap and the said welt, and the guard-flap M, secured at its front edge in the seam E and laced at its rear edge to the extension or flap, the said guard-flap being designed to cover the lower ends of the said removable facings, substantially as and for the purpose specified.

5. In a horse-collar, the combination, with the body-rolls having an extension or flap, G, provided with apertures *g*, of the wire or thong *g*<sup>2</sup>, laced through the said apertures and looped on the outer side of the extension or flap to form the eyes *g*<sup>3</sup>, the removable facing affixed at one edge to the body-roll and provided at its free edge with the apertures or slots to receive the eyes *g*<sup>3</sup>, and the lacing-cord passing



through the said eyes on the outer side of the facing, substantially as specified.

6. In a horse-collar, the combination, with the body-roll having an extension or flap, G, 5 provided with a series of eyes,  $g^3 g^3$ , formed by loops in a wire or thong arranged thereon, of the removable facing provided with openings or slots fitting over the eyes, and the lacing-cord passed through the eyes, substantially as 10 specified.

In testimony that I claim the foregoing as my own I have hereto affixed my signature in presence of two witnesses.

CHARLES FRANCIS ALLEN.

Witnesses:

JOS. S. SCHOTT,  
F. W. BUSER.