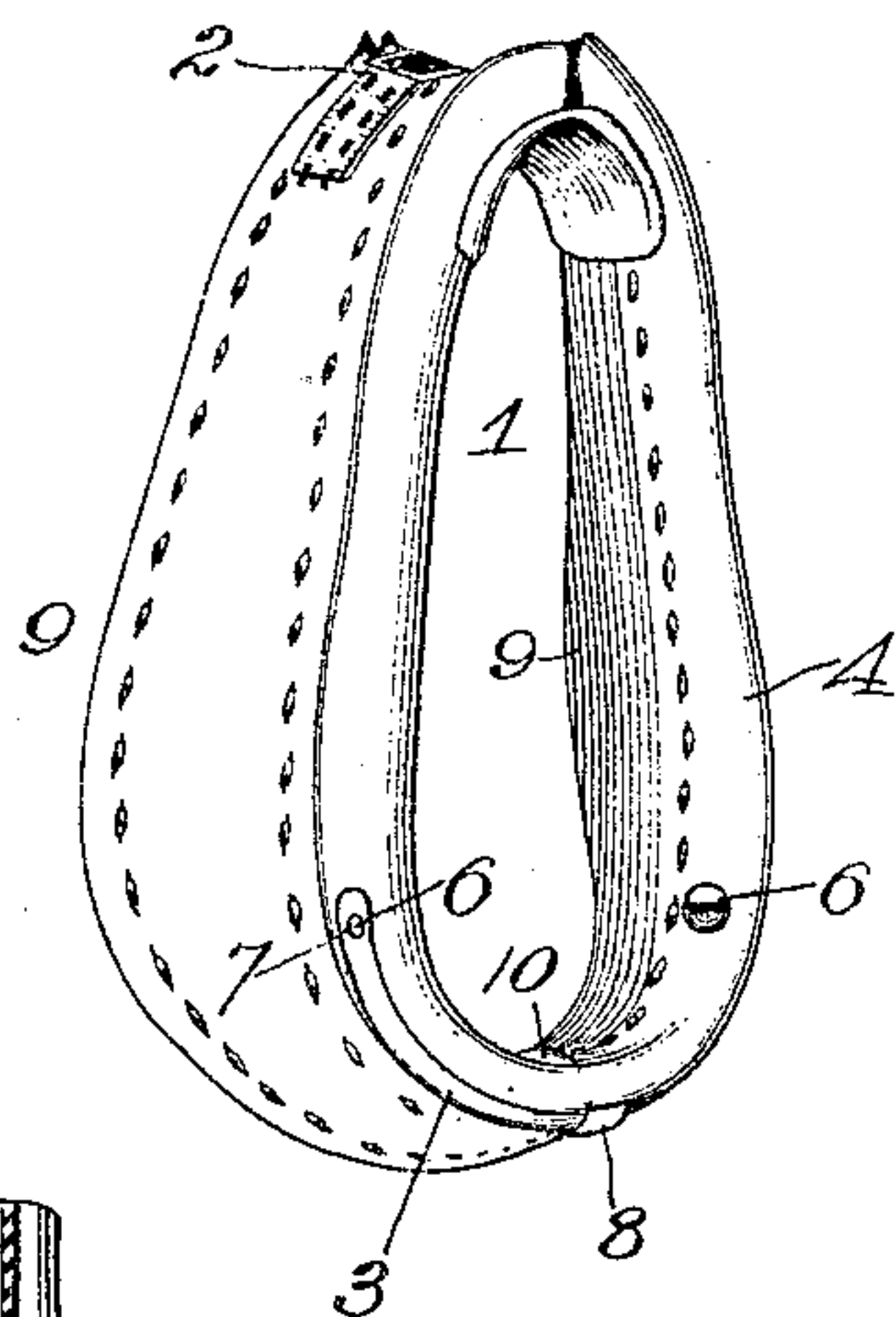


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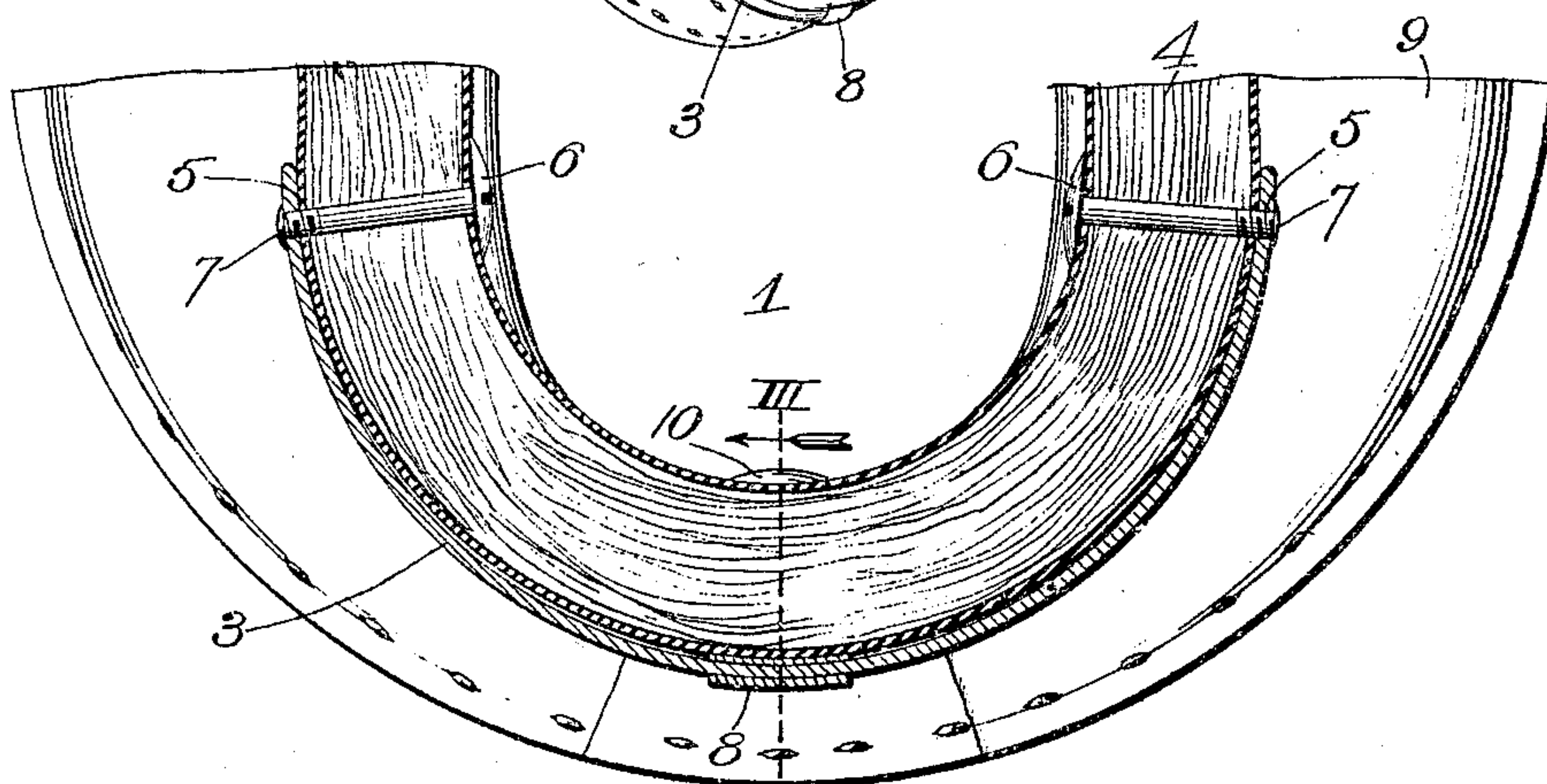
PATENTED SEPT. 12, 1905.

G. E. DU BOIS.  
HORSE COLLAR.  
APPLICATION FILED NOV. 9, 1904.

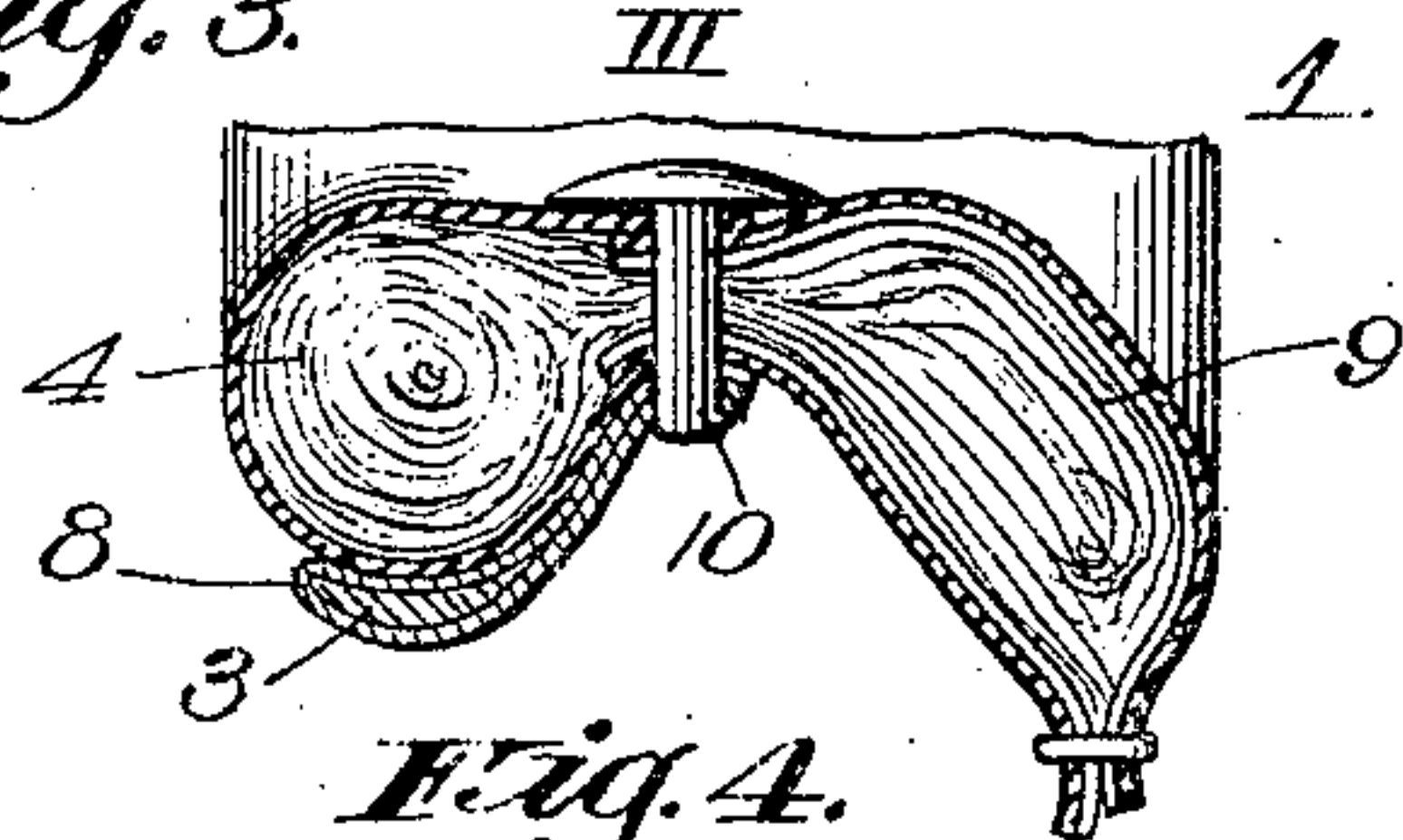
*Fig. 1.*



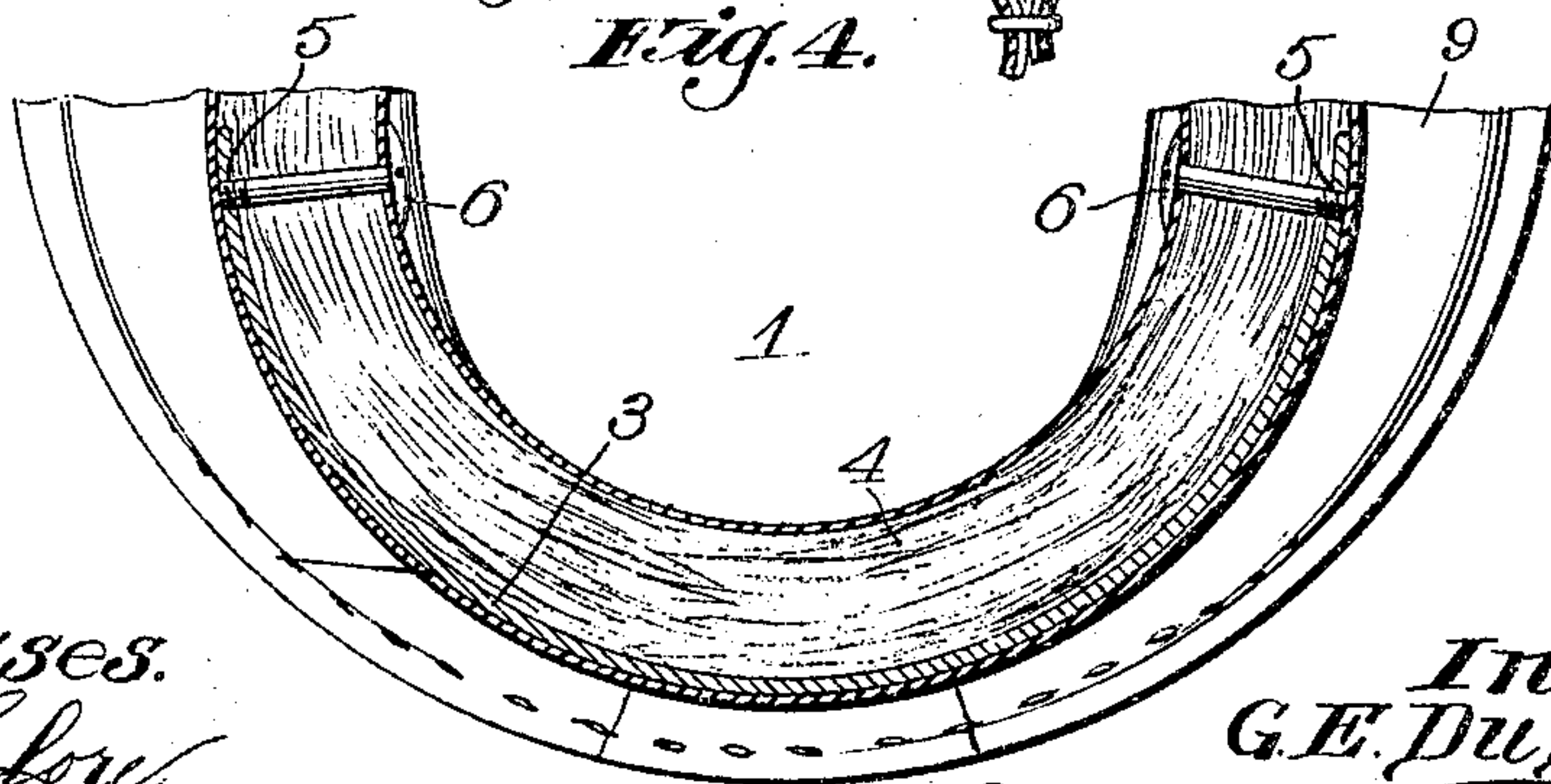
*Fig. 2.*



*Fig. 3.*



*Fig. 4.*



Witnesses.  
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# UNITED STATES PATENT OFFICE.

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## HORSE-COLLAR.

No. 799,547.

Specification of Letters Patent.

Patented Sept. 12, 1905.

Application filed November 9, 1904. Serial No. 232,046.

*To all whom it may concern:*

Be it known that I, GEORGE E. DU BOIS, a citizen of the United States, residing at Lenora, in the county of Norton and State of Kansas, have invented certain new and useful Improvements in Horse-Collars, of which the following is a specification.

This invention relates to horse-collars of that type which open at the top, and has for its object to provide a collar of this type which will not break at the lower end under the manipulation incident to the repeated application of and removal from the neck of the horse.

A further object is to produce a collar of this character of simple and cheap construction.

To these ends the invention consists in certain novel and peculiar features of construction and organization, as hereinafter described and claimed, and in order that it may be fully understood reference is to be had to the accompanying drawings, in which—

Figure 1 is a perspective view of a horse-collar embodying my invention. Fig. 2 is an enlarged vertical section taken through the roll or front portion of the collar. Fig. 3 is a vertical section taken on the line III III of Fig. 2. Fig. 4 is a view similar to Fig. 2, but on a smaller scale and showing a modified construction.

In the said drawings, 1 designates a collar of that type which opens at the top and is provided with suitable devices, as at 2, for effecting the reliable closure of such end. Collars of the type mentioned as heretofore made invariably break at their lower end long before the other parts of the collar show any material wear, this breaking being due to the fact that such end is subjected to considerable strain each time the collar is placed on or removed from the horse, the strain being greater under careless handling. To avoid breakage of the collar at such end even if handled carelessly, and thus prolong the period of service of the collar, I have provided a semicircular plate 3, of sheet-steel or equivalent resilient material, and with such plate reinforce the lower portion of the collar-roll 4. For use on completed collars this steel plate is fitted against the under side of and externally of the roll, as shown in Figs. 1 to 3, inclusive, its upper ends being provided with threaded holes 5 to receive the

threaded ends of bolts 6, extending through the roll and having their heads rounded and sufficiently thin to practically embed themselves in the roll, and thus form no projection to bear and rub against and abrade the neck of the horse, the outer ends of the bolts being upset or riveted, as at 7, to prevent withdrawal. At its middle the plate 3 extends through a metallic loop 8, which extends upward into the hollow or grooved portion between the roll 4 and pad 9 of the collar and is there engaged by rivet 10, extending vertically downward through the collar.

For collars in course of manufacture the plate 3 is fitted within the roll and against the outer side thereof, as shown in Fig. 4, and is secured at its upper ends by the bolts 6, as shown in Fig. 2, the fact that it is secured internally of the roll eliminating the necessity of securing it at any other point, though of course additional bolts or rivets may be employed, if desired.

With a collar reinforced with a resilient plate, as described, it will be apparent that the strain imposed upon the collar when opening or closing it will be borne entirely by said plate, which thus renders the part of the collar most susceptible to breakage as durable as any other part, and it has been found in practice that this spring does not appreciably increase the stiffness of the collar, because said spring-plate readily yields to lateral outward pressure applied at the upper end of the collar, the same being of such length or height that the operator has all the leverage necessary to easily and quickly spring the collar open. The spring furthermore serves to hold the hames more reliably on the collar by preserving the initial diameter of its lower end—that is to say, guards against the tendency of the lower end to collapse, which always follows breakage or weakening at such point, this tendency to collapse obviously rendering the connection of the hames more insecure. If the hames are drawn too tightly, the lower end of the collar when weakened by continued use will pinch the lower portion of the horse's neck and by constant undue pressure will result in abrasion and soreness thereof.

From the above description it will be apparent that I have produced a horse-collar embodying the features of advantage enumerated as desirable in the statement of the



object of the invention and that it is obviously susceptible of modification in minor particulars without departing from the principle of construction involved.

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

10 1. The combination with a collar which opens at the top and is provided with a roll, of a resilient substantially semicircular plate secured to the lower portion of the roll of the collar at the lower end of the latter, and a loop secured to the roll and fitting on the plate.

15 2. The combination with a collar which opens at the top and is provided with a roll, of a resilient substantially semicircular plate secured to the lower portion of the roll of the collar at the lower end of the latter, a loop  
20 extending crosswise of the plate and fitting

upon the same, and a rivet extending through the end of the loop opposite from the plate and through the collar in the plane of the hollow or curved portion thereof.

3. The combination with a collar which 25 opens at the top, of a resilient and substantially semicircular plate externally embracing the lower portion of the roll of the collar at its lower end, rivets extending through the roll and secured to the plate and having heads 30 at their opposite ends externally engaging the roll at the inner side, and a loop engaging the resilient plate externally of the roll and secured rigidly to the collar.

In testimony whereof I affix my signature 35 in the presence of two witnesses.

GEORGE E. DU BOIS.

Witnesses:

S. LARRICK,  
O. B. LARRICK.