

(No Model.)

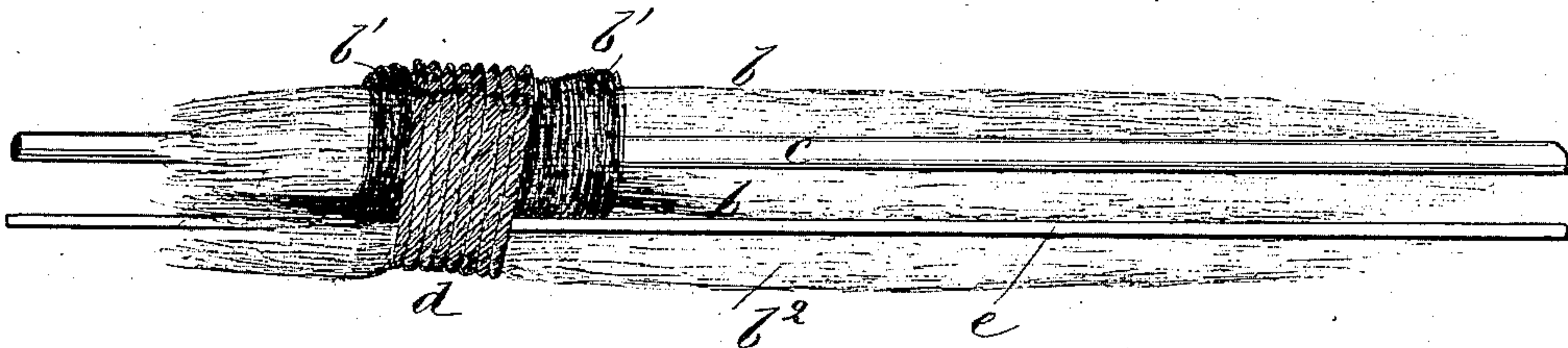
W. L. BAILEY & L. T. & L. D. KNIGHT.

HORSE COLLAR.

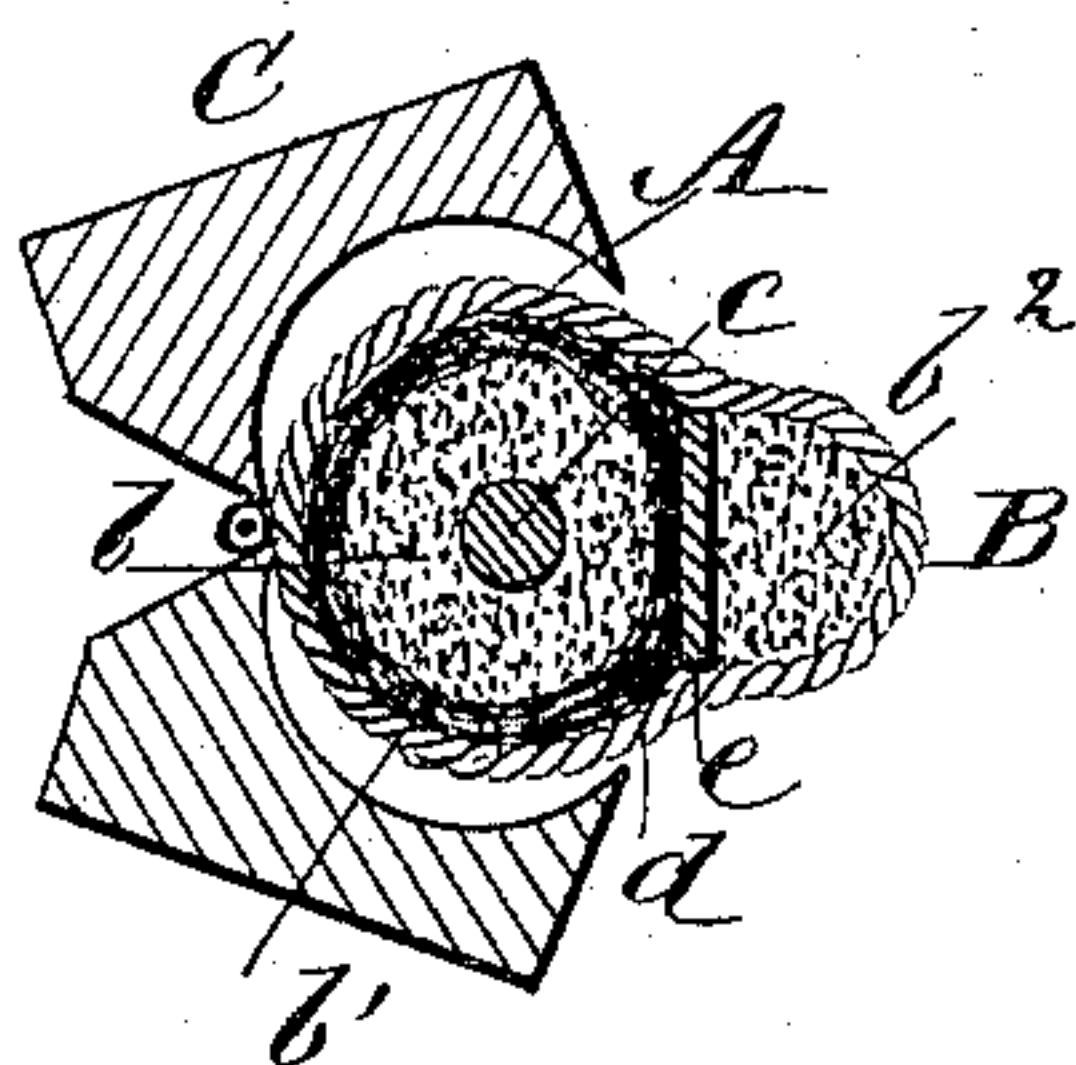
No. 343,748.

Patented June 15, 1886.

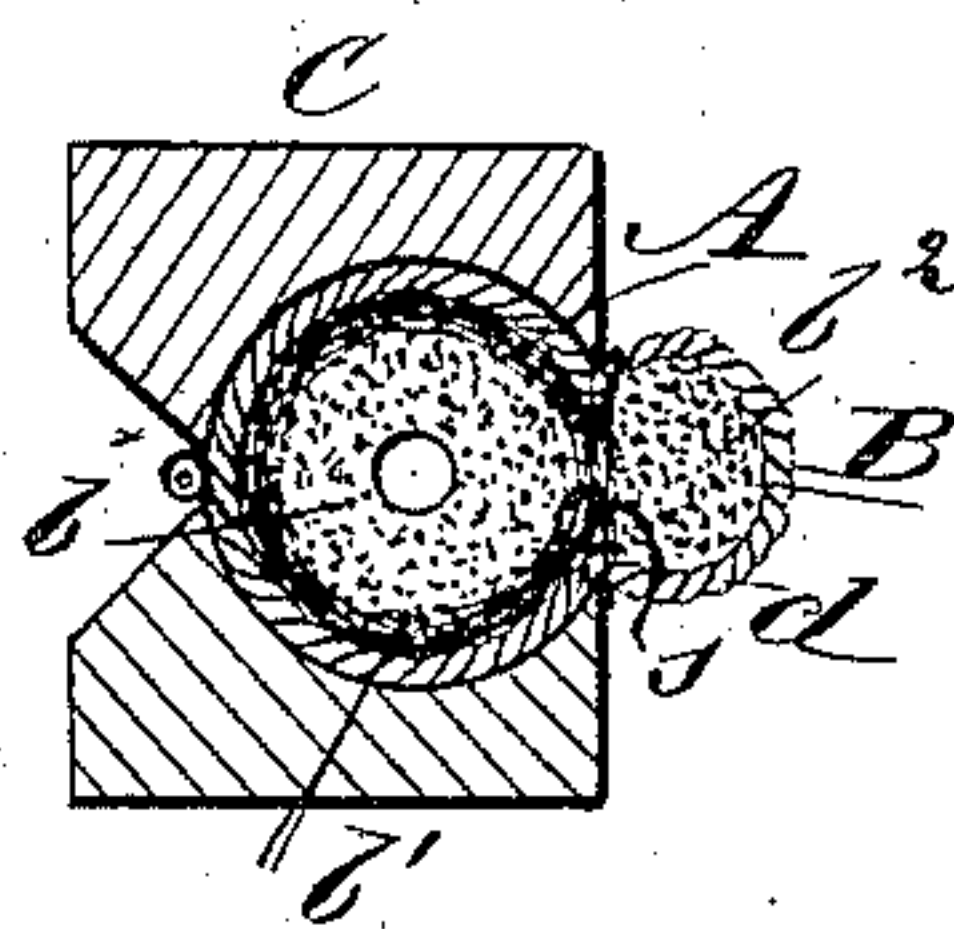
*Fig. 1*



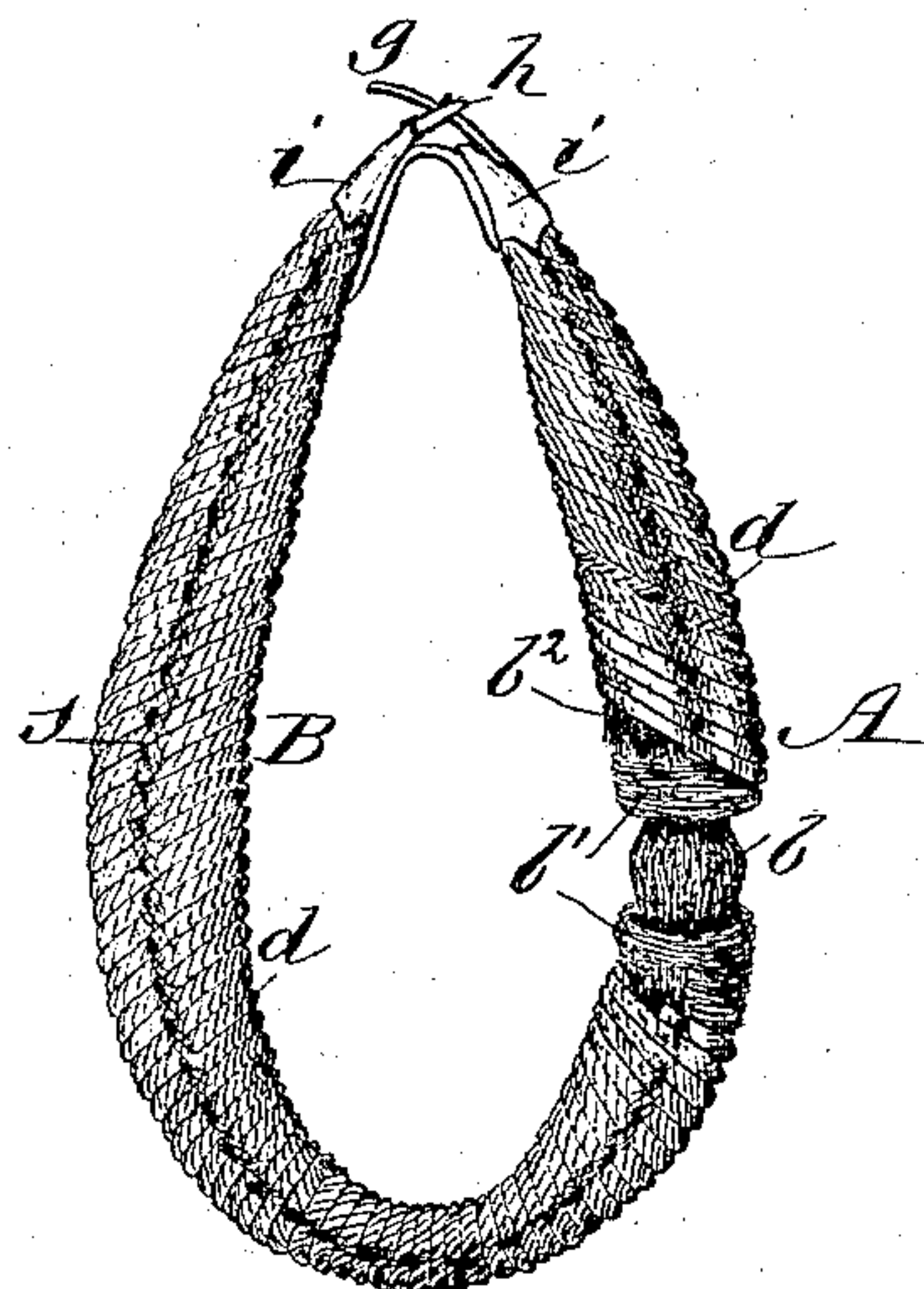
*Fig. 2*



*Fig. 3*



*Fig. 4*



WITNESSES:

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# UNITED STATES PATENT OFFICE.

WILLIAM L. BAILEY, LEONARD T. KNIGHT, AND LENIS D. KNIGHT, OF  
CALVERT, TEXAS.

## HORSE-COLLAR.

SPECIFICATION forming part of Letters Patent No. 343,748, dated June 15, 1886.

Application filed November 13, 1885. Serial No. 182,712. (No model.)

*To all whom it may concern:*

Be it known that we, WILLIAM LUTHER BAILEY, LEONARD THADDEUS KNIGHT, and LENIS DOUGLAS KNIGHT, all of Calvert, in the county of Robertson and State of Texas, have  
5 invented a new and Improved Horse-Collar, of which the following is a full, clear, and exact description.

The object of our invention is to supply a  
10 cheap, durable, easy fitting and self adjusting or flexible horse-collar for farm and other use, and which shall readily adapt itself to the form of the animal, and thereby obviate those abrasions which are so common with the use  
15 of a rigid and unyielding collar.

To these and other ends our collar is made for the most part of what is known as "moss-yarn," with its strands or fibers arranged and the body of the collar subjected to pressure in  
20 a mold or press, substantially as hereinafter described, the whole forming what may be termed a "molded moss-collar," the finishings of which, including the end strap and buckle and protecting-tips, are or may be of the usual  
25 or any suitable materials.

Reference is to be had to the accompanying drawings, forming part of this specification, in which similar letters of reference indicate corresponding parts in all the figures.

30 Figure 1 represents a longitudinal view of the collar, in part, at a certain stage in the course of the manufacture and before it is bent into shape, and Figs. 2 and 3 transverse sections illustrating other stages of its manufacture. Fig. 4 is a partly-broken front view of  
35 the finished collar.

A is the body of the collar, which is formed by laying a number of the filaments or fibers *b* of moss-yarn longitudinally on and around a  
40 spindle, *c*, as shown in Fig. 1, and afterward binding such longitudinal fibers by winding other fibers, *b'*, of moss-yarn on and round the longitudinal fibers to form the rolls which constitute the bearing-pads of the collar.

45 B is the rim of the collar which supports the hames. Said rim is formed by laying together, in even or inverse lengths, a number of strands or fibers, *b<sup>2</sup>*, of the yarn properly adjusted on a bar or divider, *e*, which is placed, as shown in  
50 Fig. 1, in such relation with the body fibers

*b b'* as that it will lie longitudinally between the rim and main body portions of the collar, and so serve to keep said portions apart and in proper position relatively to each other for the necessary subsequent operations.

55 It is not absolutely necessary that the longitudinal strands and fibers *b<sup>2</sup>* of the rim portion should be made of moss-yarn, as any other hard but flexible material will answer, but the longitudinal filaments or fibers *b* of the  
60 main body or body portion and the wound fibers *b'* are both of moss-yarn. The bar or divider *e*, with its longitudinal layers or strands *b<sup>2</sup>*, having been adjusted relatively to the fibers *b* on the spindle *c*, as described, and shown in  
65 Fig. 1, the whole is bound together by winding or wrapping a strand or strands *d* of moss-yarn closely around it and throughout its entire length, thus binding all evenly and securely together. The entire mass, including  
70 the contained spindle and divider, is then placed in a suitably-shaped press-receptacle or divided mold, C, open at both ends, and the spindle *c* and the bar or divider *e* drawn out from the body and rim portions of the collar,  
75 after which pressure is applied to the mold. Said mold or pressing and forming device is of such shape and so constructed that in closing it presses the body A of the collar into the desired shape and clamps the whole bound  
80 mass tightly between the body A and the rim B, as shown in Fig. 3, thus leaving the bound rim portion of the collar exposed and clear or unpressed. The mass forming the body and rim of the collar is then sewed throughout its  
85 length between the rim B and body A, as by stitching *s*. This is done while the body part is under pressure in the mold. The whole is then taken from the mold and bent to the required shape of the collar, and presents then  
90 a perfectly-formed article in one piece. The strap *g*, buckle *h*, end protecting-tips, *i*, and other finishings, may then be applied to the collar in the ordinary or any suitable manner.

In the make-up of this improved collar it  
95 should be noted that the moss-yarn is very durable, and that the body of the collar, being made upon a spindle, is left hollow, or with a cavity through it, which greatly assists in securing the requisite shape while in the mold,  
100



and in preserving the usual slightly-oval inner face, which the collar subsequently acquires by use. Being flexible in all its parts, said collar readily adapts itself to the form of the animal, and so avoids making wounds or abrasions on the horse.

The method herein described of making horse-collars, irrespective of the material of which they are made, it is our intention to make the subject of a separate application for Letters Patent.

Having thus described our invention, what we claim as new, and desire to secure by Letters Patent, is—

1. A molded moss horse-collar having its body A and hame-rim B bound by a yarn wrapper, *d*, arranged to inclose both the body and rim, and secured by stitching between said parts, whereby the body and rim are made to form a strong and single structure, substantially as specified.

2. In a moss horse-collar, the molded and pressed body of the collar having a hollow center, and its interior composed of longitudinal and wound filaments or fibers *b b'* of moss-yarn, in combination with the rim of the collar composed of flexible fibrous material *b<sup>2</sup>*, arranged longitudinally, as described, and a moss-yarn wrapper, *d*, wound around both of said body and rim fillings and united on opposite sides of the collar by stitchings *s* at the junction of the rim with the body, essentially as described.

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Witnesses:

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