

(No Model.)

P. J. GRANDY.
HARNESS.

2 Sheets—Sheet 1.

No. 290,038.

Patented Dec. 11, 1883.

Fig. 1.

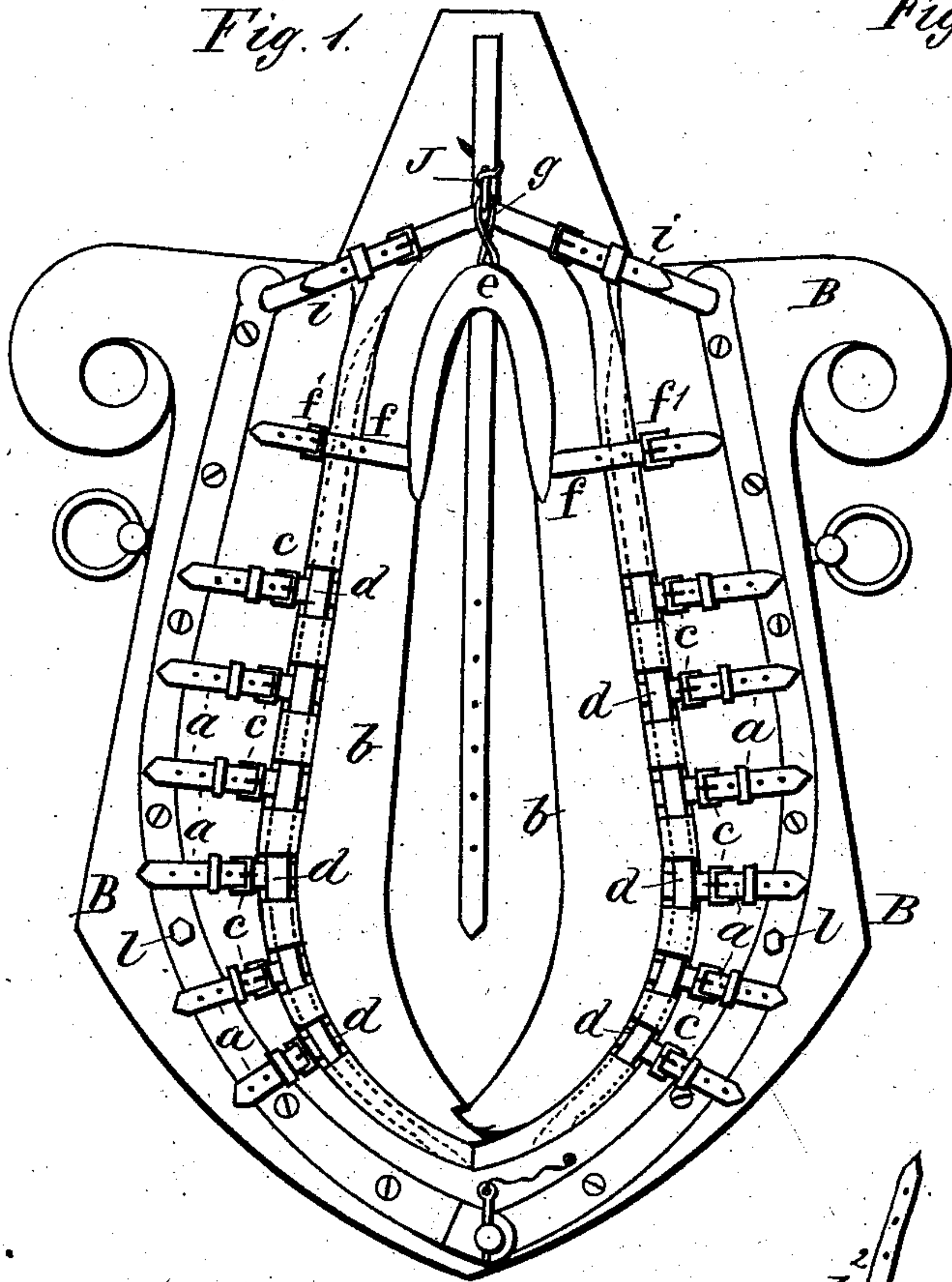


Fig. 2.

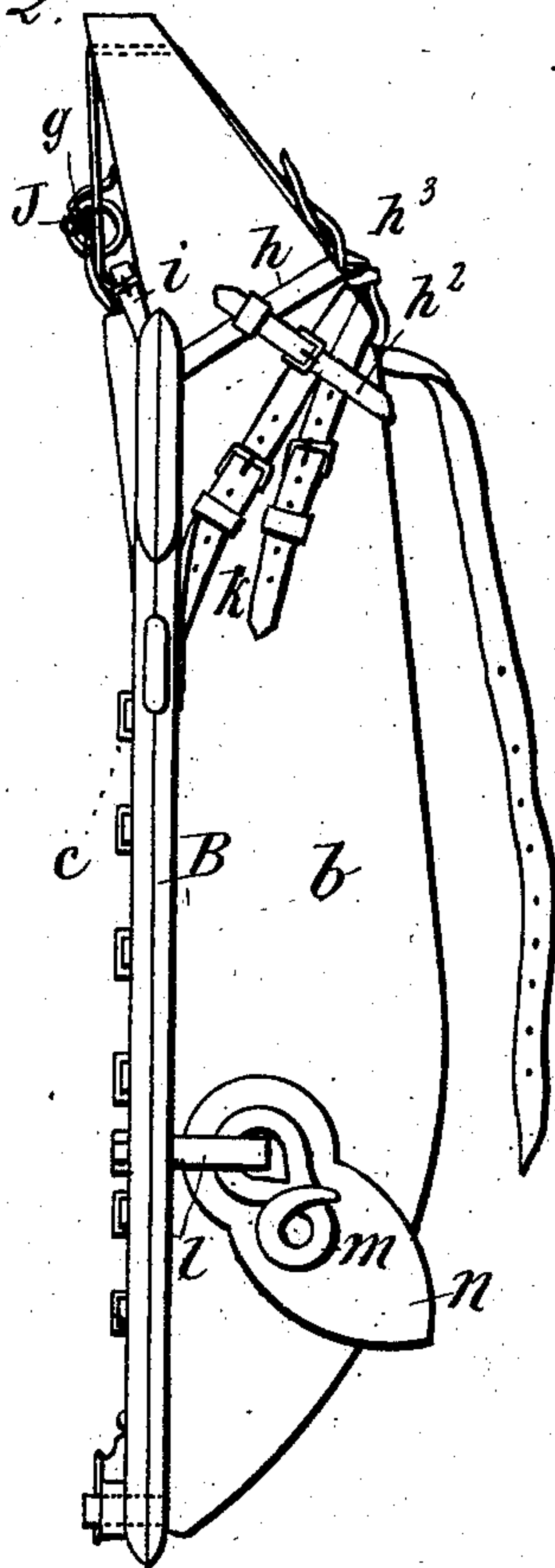
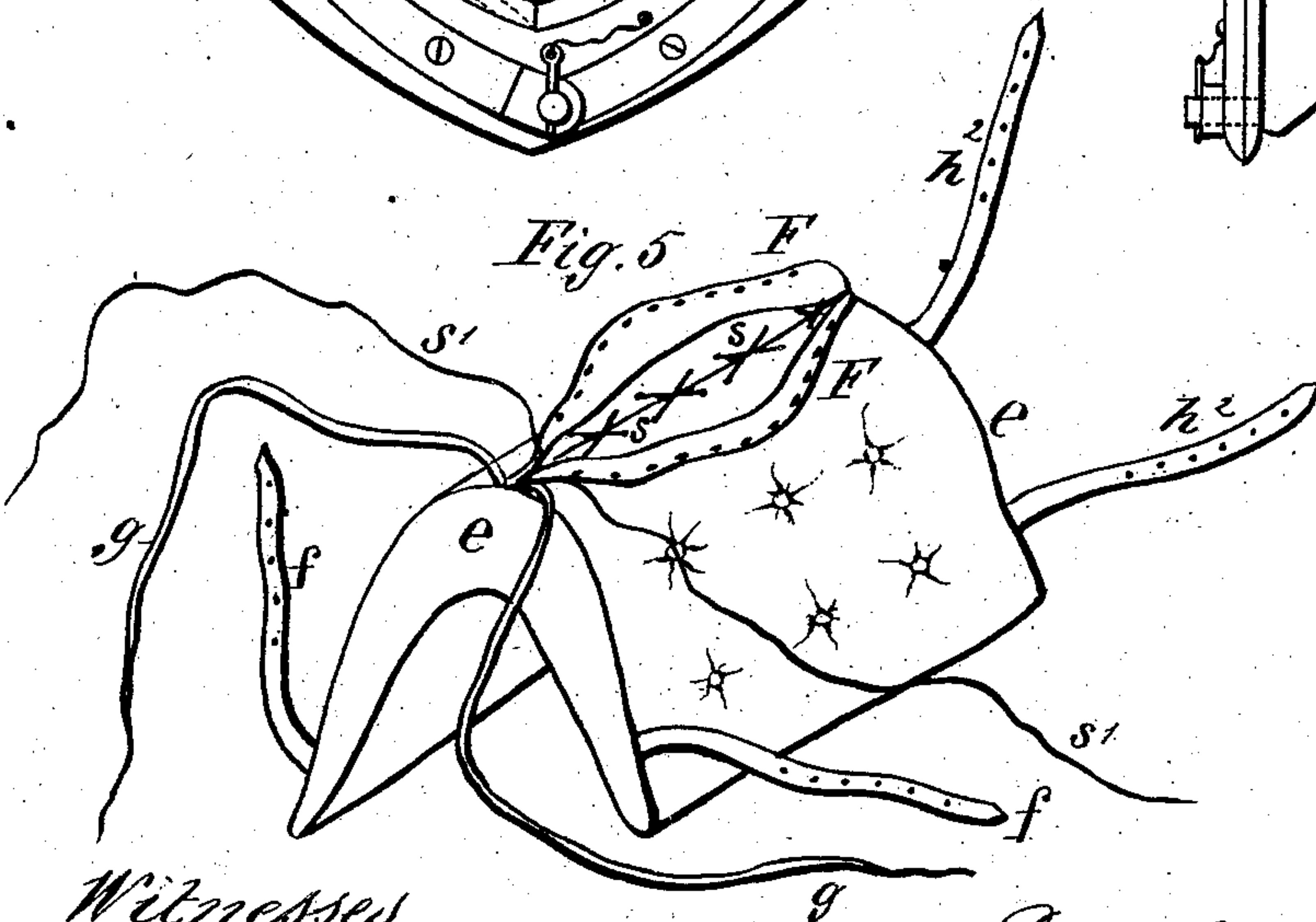


Fig. 5.



Witnesses
W. S. Boulter.
J. W. Knotts

Inventor
P. J. Grandy
per Henry Orth
his atty

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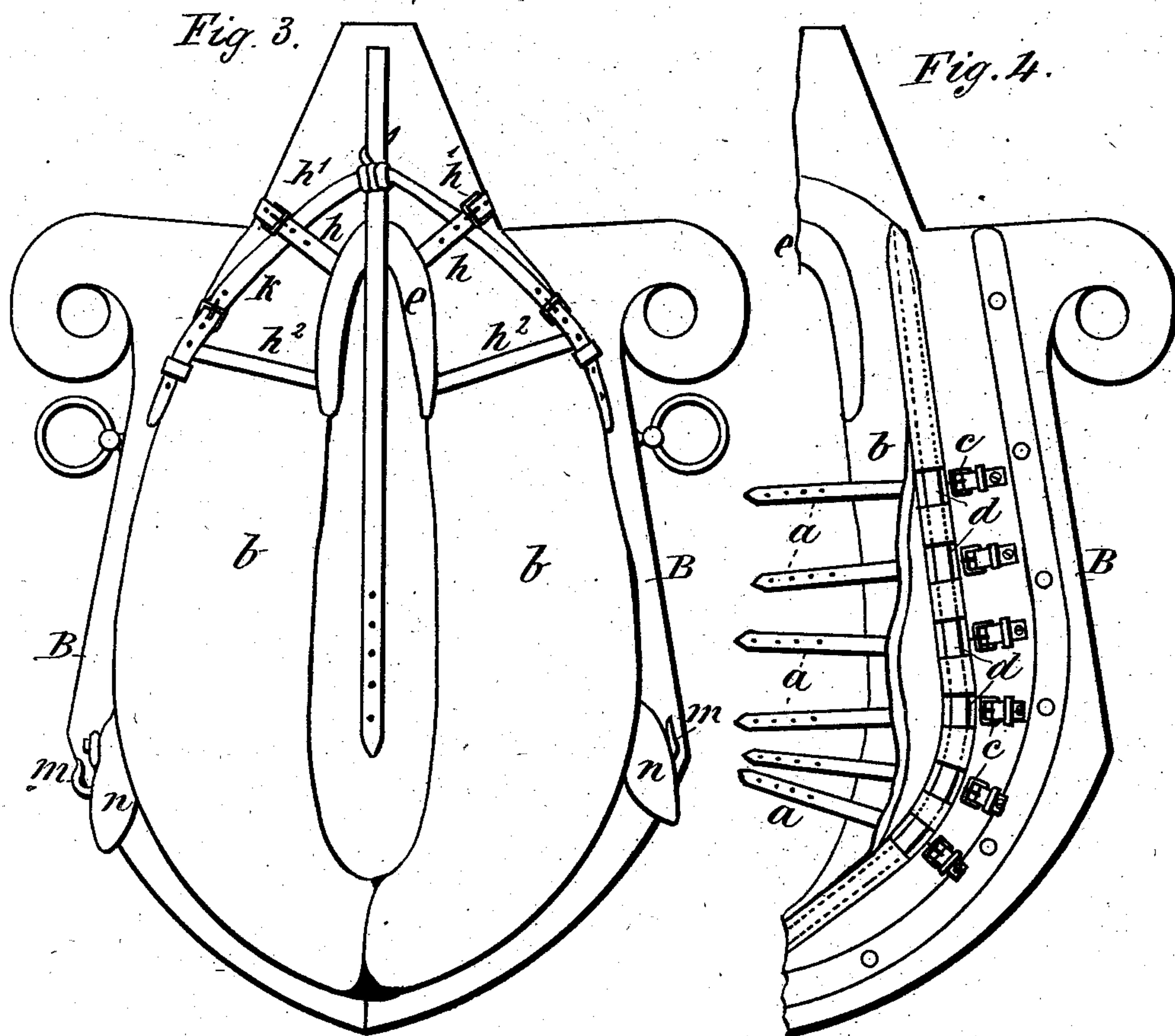
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Inventor
Pierre Justin Grandy
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UNITED STATES PATENT OFFICE.

PIERRE JUSTIN GRANDY, OF MARGAUX, FRANCE.

HARNESS.

SPECIFICATION forming part of Letters Patent No. 290,038, dated December 11, 1883.

Application filed May 28, 1883. (No model.) Patented in France November 3, 1882, No. 151,858.

To all whom it may concern:

Be it known that I, PIERRE JUSTIN GRANDY, a citizen of the French Republic, and a resident of Margaux, in the French Republic, have invented certain new and useful Improvements in Harness, (for which I have obtained Letters Patent in France under date of November 3, 1882, No. 151,858;) and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to the letters of reference marked thereon, which form a part of this specification.

My invention relates to improvements in the construction of horse-collars, and has for its object, more especially, to provide a convenient means for making the repairs without necessitating the services of a mechanic skilled in the trade.

In the accompanying drawings, Figure 1 is a front elevation of the collar and hames; Fig. 2, a side elevation, and Fig. 3 a rear view, thereof. Fig. 4 is a side elevation, showing the manner of stuffing the collar. Fig. 5 is a perspective view of the withers saddle or pad.

Like letters of reference indicate like parts wherever such may occur in the above figures of drawings.

a a a indicate straps attached to the after wale or body side, *b*, of the collar. *c c c* are buckles secured to the hames B, whereby the straps *a* are secured in position. Two straps, *d d*, run under and over the facing of the fore wale or small roll of the collar, as shown in Figs. 1 and 4, to form loops for the passage of the straps *a*, that secure the collar firmly to the hames. By means of this construction, the collar may be readily opened or unfolded and the stuffing removed and fresh stuffing inserted, whenever such is necessary, as shown in Fig. 4.

e is the withers saddle or cushion. (Shown in perspective in Fig. 5.) It is constructed to be opened, whenever required, by means of the strings *s s*, and has two flaps, *F F*, to cover the top or laced portion of the cushion, said flaps being united by means of strings *s' s'*, to protect the cushion against wear by contact

with the upper part of the hames. The cushion is secured to the hames at the front by means of straps *f* and strings *g*, the former being secured by buckles *f'*, Fig. 1, secured to the small roll or fore wale of the collar, and the latter are tied to a loop, *J*, secured to the hames. The cushion is secured to the hames and collar in rear by straps *h*, secured to buckles *h'*, attached to the hames and by straps *h²*, secured to buckles *h³*, attached to the collar, as shown in Fig. 2. As will be seen, this cushion or pad is detachable from the collar, and constructed so as to provide a ready means for stuffing it, which may be done to a greater or less extent, and thereby give the collar a greater or less opening at that point, and as the stuffing of the collar itself may be regulated the said collar can be adjusted, within certain limits, to the dimension of the neck of the horse that is to wear it.

k k are two straps that serve to secure the upper or withers portion of the collar to the hames.

i i are straps by means of which the hames are adjusted relatively to the collar at the upper part.

l l are iron tenons that receive the trace-hooks *m*, the collar being provided with a leather flap, *n*, at the point where the hooks *m* and trace ends are liable to chafe and wear the collar, thus insuring the latter against undue wear from this cause.

The harness-saddle may also be provided with a pad arranged like the withers pad or cushion, so as to afford a means for stuffing it when necessary.

Having thus described my invention, what I claim, and desire to secure by Letters Patent of the United States, is—

1. In a horse-collar, the combination, with the fore wale or small roll, the straps *d*, arranged as described, and the straps *a*, attached to the body side of the collar, of the hames B, having buckles *c*, substantially as described, for the purposes specified.

2. The combination, with the collar *b* and hames B, of the straps *k*, substantially as described, for the purposes specified.

3. In a horse-collar, the combination, with the collar, a withers-pad, and the hames, of the strings *f*, straps *g*, buckles *f'*, and the loop

or ring J, constructed and arranged for co-operation substantially as and for the purposes specified.

4. The combination, with the collar *b*, hames
5 B, and withers-pad *e*, of the straps *h*² *k*, arranged for co-operation substantially as shown and described.

In testimony that I claim the foregoing I have hereunto set my hand this 1st day of April, 1883.

PIERRE JUSTIN GRANDY.

Witnesses:

L. TOUSSAINT,

CAMILLE CHARROPPIN.