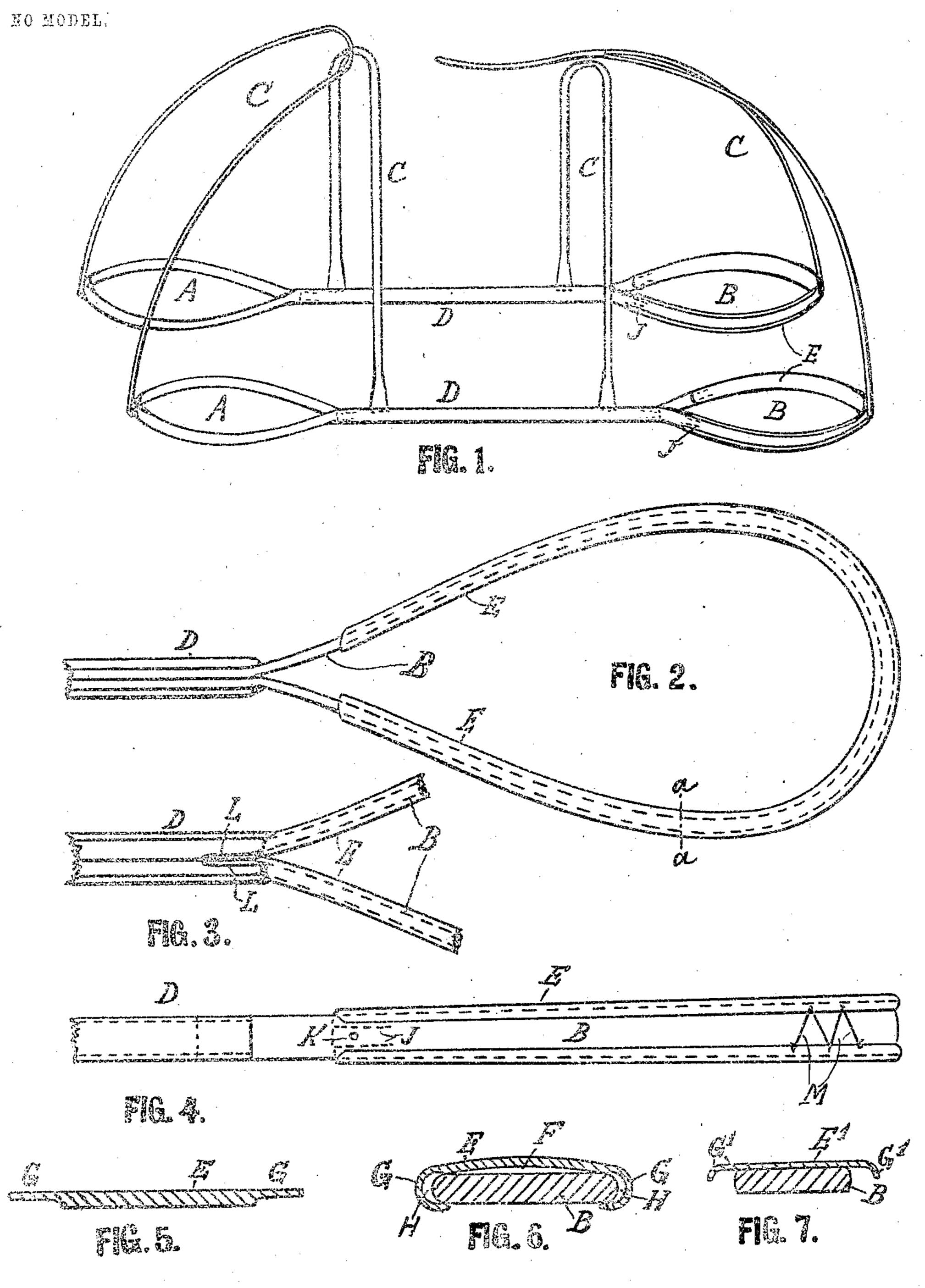
## J. FENSTERMAKER.

HOPPLE.

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## UNITED STATES PATENT OFFICE.

JAMES FENSTERMAKER, OF ST. PAUL, MINNESOTA.

## HOPPLE.

SPECIFICATION forming part of Letters Patent No. 735,866, dated August 11, 1903.

Application filed November 20, 1902. Serial No. 132,182. (No model.)

To all whom it may concern:

Be it known that I, James Fenstermaker, a citizen of the United States, residing at St. Paul, in the county of Ramsey and State of Minnesota, have invented certain new and useful Improvements in Hopples; and I do 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 hopples, especially the class used on trotting and pacing horses, but may also be applied

to other classes of hopples.

The objects of the invention are, first, to provide a hopple with means which will prevent or minimize chafing on the legs of the horse; second, to make the improved means for said purpose applicable as an attachment to new and old hopples and easily exchangeable on and transferable to any hopple of the same class; third, to cheapen the manufacture of the leg-rings of hopples. These objects I attain by the novel construction and arrangement of parts illustrated in the accompanying drawings, in which—

Figure 1 is a perspective side view of a common trotting and pacing hopple with my improvement applied to the two back rings marked B. Fig. 2 is an enlarged top view of one of the rings B. Fig. 3 is a portion of Fig. 2 modified. Fig. 4 is a side view of Fig. 2. Fig. 5 is an enlarged cross-section of the leather strap from which I make the attachment. Fig. 6 is an enlarged cross-section on the line a a in Fig. 2. Fig. 7 is a modifica-

tion of Fig. 6.

Referring to the drawings by letters of reference, A represents the front, and B the hind or back, leg-rings of the hopple. All of those rings may be provided with my improvement, which may be termed a "ring-lining" or "loop-lining;" but I have illustrated the same only on the back rings, as that will explain the invention.

o C C and D are the well-known body-straps and supports of the hopple, which need not be here described.

In common hopples the leg-rings A and B are made of the same width and hard leather as the straps D, and even if slightly wider 55 and softer they are still so hard, narrow, and rough or sharp-edged that they chafe the horse seriously, especially when the ring during the trotting of the horse is thrown with its upper or lower edge against the leg of the 60 horse. It is to overcome these defects in hopple-rings that I provide an internal lining E, of the best loop leather, which is susceptible of a very fine polish of its hair side, which I turn toward the horse's leg. Besides the 65 smoothness of surface thus provided I also form the lining into the peculiar shape shown in Fig. 6 and indicated already in the blank in Fig. 5—namely, that the middle portion of the cross-section of the lining bulges away 70 from-the ring, as at F in Fig. 6, forming a spring and air cushion where the rings mostly come in contact with the horse's legs-and if the upper or lower edges of the ring be thrown against the leg the thin flexible curved edges 75 G, with air-spaces H between them and the ring B, serve to likewise reduce greatly the chafing effect of the blow or contact of the ring with the horse.

The lining E is cut from the leather, sof- 80 tened, pressed, or formed into shape, dried and polished, and then attains such a springlike character that it needs simply to be forced upon the ring from the inner side of it and it will grasp firmly over the edges of the ring 85. and stay in place by itself. Still I fasten the ends of the lining to the ring of hopples already made with rivet, like K in Fig. 4, or, better yet, with a few stitches J; but if the lining is made at the same time the hopple is 90 made the ends of the lining may preferably be sewed into the ends of the straps D, as shown at L in Fig. 4. In either case the lining may be removed for repair or exchange by simply cutting the few stitches holding its of ends. If the lining should be made of very thin leather or be so unduly exposed to sweat or rain as to become loose on the ring, it may be held in place by a few stitches or a lacing from edge to edge of it, as indicated by the 100 lines M in Fig. 4.

Besides the advantages already indicated it will be observed that by the use of my ringlining the ring itself may be very cheaply and roughly made from the extensions of the straps D or otherwise and then provided with my covering or lining, which is wider, smoother, and more flexible than the ring 5 could be made, even at a cost far exceeding the cost of the lining. It will also be understood that even if my lining is made in the modified form of its body or edges (shown in Fig. 7) and secured to the hopple in any convenient manner it still has the great advantage of reducing friction on the horse by being of greater vertical width than the ring and by having yielding edges.

Having thus described my invention, what I claim, and desire to secure by Letters Pat-

ent, is-

1. In a hopple, the combination with the leg rings or loops of the hopple, of an easily-removable smooth lining placed inside the ring and having curved edges clasping over the upper and lower edges of the ring to keep

the lining in place.

2. In a hopple, the combination with the leg rings or loops of the hopple, of an easily25 removable smooth lining placed inside the ring and having curved edges clasping over the upper and lower edges of the ring to keep the lining in place, the ends of the lining being secured to the ring, substantially as described.

of a hopple, of a smooth flexible lining at the inner side of the ring the same having its edges curved outwardly and clasping over the edges of the ring with the intervening space H between the edges of the ring and

the clasping edges of the lining, substantially as and for the purpose set forth.

4. The combination with a ring or loop of a hopple, of a smooth flexible lining inside the 40 ring and having its edges clasping outwardly over the edges of the ring and its middle por-

tion bulged inwardly from the ring.

5. The combination with a ring or loop of a hopple, of a smooth flexible lining inside the 45 ring and having its edges clasping outwardly over the edges of the ring and its middle portion bulged inwardly from the ring, and its clasping edges bulged away from the edges of the ring, substantially as and for the purpose 50 set forth.

6. As an article of manufacture, an internal lining for loops or rings of hopples, the same being made of leather and having the edges G of the leather reduced in thickness and 55 pressed and dried into flexible clasps adapted to clasp over the edges of the ring of the hop-

ple.

7. As an article of manufacture, an internal lining for loops or rings of hopples, the same 60 being made of leather and having the edges G of the leather reduced in thickness and pressed and dried into flexible clasps adapted to clasp over the edges of the ring of the hopple and its main portion of the leather formed 65 with an inward bulge and highly polished.

In testimony whereof I affix my signature

in presence of two witnesses.

JAMES FENSTERMAKER.

Witnesses:
FRED G. TEGELL,
JOE. ENRIST.