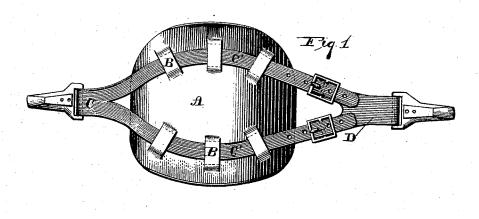
(No Model.)

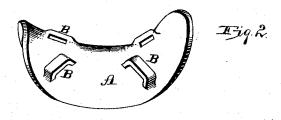
## L. E. CRANE.

HORSE COLLAR PAD.

No. 263,027.

Patented Aug. 22, 1882.





Witnesses.

Ed. amus.

Linny Loverson

Inventor

n E, Grane

Stout & Underwood

Attorneys.

## UNITED STATES PATENT

LAUREN E. CRANE, OF ROCHESTER, MINNESOTA, ASSIGNOR OF ONE-HALF TO JAMES M. WILLIAMS, OF SAME PLACE.

## HORSE-COLLAR PAD.

SPECIFICATION forming part of Letters Patent No. 263,027, dated August 22, 1882.

Application filed November 22, 1881. (No model.)

To all whom it may concern:

Be it known that I, LAUREN E. CRANE, of Rochester, in the county of Olmsted, and in the State of Minnesota, have invented certain new and useful Improvements in Paper Supports or Pads for Horse Collars; and I do hereby declare that the following is a full, clear, and exact description thereof.

My invention relates to an improved con-10 struction of horse-collar supports or pads, as will be more fully set forth hereinafter.

In the drawings, Figure 1 is a top view of my improved support or pad and its connecting-straps, and Fig. 2 is a perspective view of 15 the said pad.

Heretofore these supports or pads have been usually made of sole leather, and also of iron, zinc, or other metal, all of which are expensive, and a metal pad (unless it be covered with 20 leather) will attract the sun's rays in summer and be uncomfortable to the horse.

I propose to make my pad wholly or chiefly of paper, and the preferred form is that shown in the accompanying drawings, wherein the pad 25 is shown molded complete from paper-pulp. In some instances I propose to add a leather bottom to the pad, or a bottom composed of ground-leather scraps compressed and vulcanized, this latter being much cheaper than sole-30 leather, and answering the purpose nearly or quite as well; but in all cases paper is the important element of my pad, and I always propose to employ a paper top, whether I line the under side of the pad with other material or 35 not.

A represents the pad, and B B the loops or receptacles for the strap. This latter I make in two parts in the manner shown.

C represents one part of the support-strap, 40 and is preferably about an inch and a half in width at its undivided portion, and is provided at its outer end with a snap or other hook for attachment to the breast-ring of the hames. The free end of the strap C is in two parts, C' 45 C', as shown, formed by simply dividing the

strap a certain distance, each portion being, therefore, preferably, about three-fourths of an inch in width, and holes are punched in these ends for attachment to buckles on the divided 50 ends of the strap D, which is otherwise of

similar style and width, and which has a hook for attachment to the opposite side of the hames-ring.

The object of a collar pad or support and the manner in which it raises the collar up from 55 pressure upon the neck of a horse are too well known to require elaborate description, and it is sufficient to say that its chief use is to prevent abrasion of the collar on a sore or bruised surface, and to permit air to circulate between 60 the collar and the top of the horse's neck, so as to heal any bruise or sore already there, as well as to prevent future injuries.

I may use any kind of paper or paper-pulp for the construction of my improved pad, and, 65 as stated, I prefer to mold it directly into the required shape, the loops B being thus integral with the pad. A paper having linen fiber inserted therein is excellent for the purpose, and when the pad is wholly composed of paper I 70 prefer to add to the pulp tannin or oak-bark, or some equivalent astringent, as I have found that this produces a good effect.

My pad could be made by cementing together thicknesses of paper—such as common 75 brown paper united by marine glue—which would be impervious to water; but when made directly from the pulp it is a better article. I also sometimes give the whole pad a rubber coating as a further protection against the in- 80 fluence of wet weather, and may modify my device in various ways without departing from the spirit of my invention.

The advantages of my pad over those in use are greater cheapness and lightness, with equal 85 durability; and the all-paper molded pad has the further advantage of impossibility of separation or detachment of parts, owing to the fact that the loops are made integral with the pad, and not riveted, bolted, or sewed thereto; but 90 when I make the pad with paper top and leather or other bottom I may, if desired, make the loops separate and of any material—such as metal or leather—and in such event I would rivet or stitch them into place, the bolt or 95 stitches (as the case might be) extending through the whole and securing the loops and the several thicknesses of the pad all firmly together.

I might employ caoutchoue or other water- 100

proof material in place of leather for the skirt or under side of the pad, and my pad might be made without the described top loops, but connected to the horse-collar by straps in various ways instead, although in ordinary cases I prefer the construction and method of attachment described.

Having thus described my invention, what I claim as new, and desire to secure by Letters Patent, hereby reserving for future applications all modifications of my pad herein described which present differences of construction too marked to be included in the protection to be afforded by the patent applied for in the present case, is—

1. A molded paper horse-collar support or pad having tannin or similar astringent incorporated within the pulp of which it is made, as set forth.

2. In combination with the pad A and loops 20 B, the divided or bifurcated straps C and D, for attachment to the hames on a horse-collar, as set forth

In testimony that I claim the foregoing I have hereunto set my hand this 8th day of No- 25 vember, 1881.

LAUREN EDGAR CRANE.

Witnesses:

D. H. WILLIAMS, JAMES M. KING.