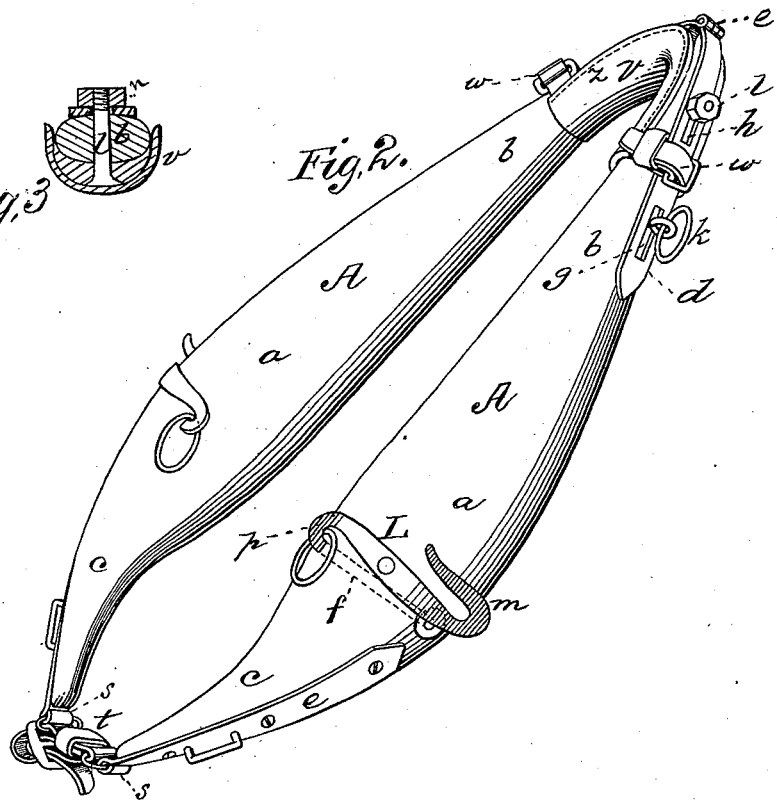
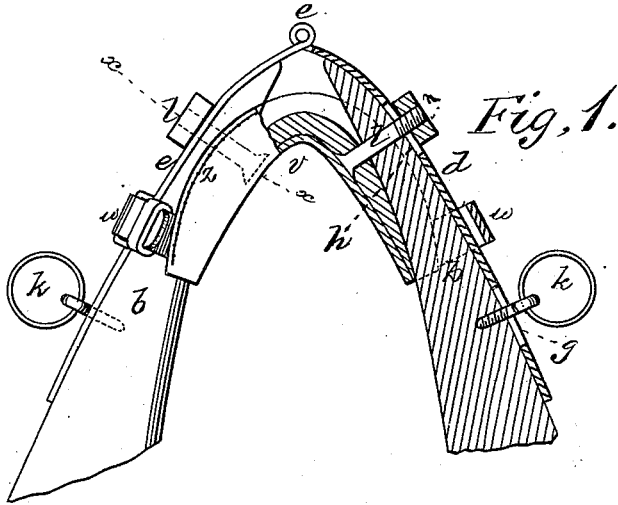


J. J. CROWLEY.
Horse-Collar.

No. 209,025.

Patented Oct. 15, 1878.



WITNESSES
Villette Anderson.
A. J. Chasi.

INVENTOR
John James Crowley
by E. W. Anderson.
ATTORNEY

UNITED STATES PATENT OFFICE.

JOHN J. CROWLEY, OF ACKLEY, IOWA.

IMPROVEMENT IN HORSE-COLLARS.

Specification forming part of Letters Patent No. 209,025, dated October 15, 1878; application filed September 14, 1878.

To all whom it may concern:

Be it known that I, JOHN J. CROWLEY, of Ackley, in the county of Hardin and State of Iowa, have invented a new and valuable Improvement in Wooden Horse-Collars and Hames Combined; and I do hereby declare that the following is a full, clear, and exact description of the construction and operation of the same, reference being had to the annexed drawings, making a part of this specification, and to the letters and figures of reference marked thereon.

Figure 1 of the drawings is a representation of an upper-end view, partly in section, of my combined collar and hames. Fig. 2 is a perspective view of the same; and Fig. 3 is a detail section taken through the line *x x*, Fig. 1.

The nature of the invention consists in the construction and novel arrangement of parts, as hereinafter more fully shown and described.

In the accompanying drawings, the letters A A designate the adjustable wooden side pieces or pads, which consist each of a swell or body, *a*, an upward-curved narrow tapering extension, *b*, and a downward-curved tapering extension, *c*, also of small thickness in comparison with the body portion. These extensions are sufficiently arched to come nearly together over and under the neck when the collar is in place, and they are braced and strengthened by exterior metallic straps *d* and *e*, which respectively extend from the body portion along said upward and downward extensions, projecting slightly beyond each for connecting purposes. The upper plates, *d*, are centrally hinged together, as shown at *e*, and each is provided with two slots, *g* and *h*, in line with each other, for the passage of the stem of the line-ring *k* and the bolt *l*, whereby the plate is connected to the body-piece, said bolt passing through the upper extension, the under side of which is countersunk for the bolt-head, so as to make a smooth finish. This construction permits some adjustment of the pads, providing for lowering or raising them according to requirement, the adjustment being secured by tightening the nuts *n*. The lower straps, *e*, are provided with end loops *s*, through which the connecting-strap *t* is passed. Passing around under the upper narrow extensions, *b*, is an angular leather guard or billet, *v*, the ends of which are provided with straps *w*, whereby it is con-

nected with the extensions *b*. The sides of this guard are raised or flanged at *z* to protect and cover the hinged portion and prevent injury to the horse thereby.

L indicates a bent S-shaped plate, having an elongated lower branch or extension, *f*, which, when said plate is secured transversely across the lower portion of the swell of the pad, extends through an oblique hole in said pad to the exterior, where it is secured by riveting or heading it on a plate or by means of a washer. This plate is designed to provide at its rear end a hame-hook, *m*, and at the bend in front a loop, *p*, for the breast-strap ring.

This collar is designed to be sufficient for general use without covering; but, if desired, it may be covered, or pads may be tacked thereon.

I am aware that it is not new to connect wooden collar-sides by a hinge and straps, and that a leather under-pad for the neck is not new. Hence I do not claim such devices broadly.

Having described this invention, what I claim, and desire to secure by Letters Patent, is—

1. A horse-collar consisting of the adjustable wooden pads A, having the swells *a*, through draft-hooks L *f*, and the upper and lower curved extensions *b c*, braced and connected by the slotted metallic straps *d*, hinged together above and below by the metallic straps *e*, having end loops, the hinged portion being protected by the detachable flanged under-pad *v*, strapped around the upper extensions, substantially as specified.

2. A wooden horse-collar having the S-shaped draft-hook L secured to the face of the side piece transversely, and having an extension, *f*, of the lower branch passed obliquely through the side piece to the exterior, and there secured, the bend at the commencement of the extension forming the breast-strap-ring loop, substantially as specified.

In testimony that I claim the above I have hereunto subscribed my name in the presence of two witnesses.

JOHN J. CROWLEY.

Witnesses:

J. H. REESE,

H. S. HOLLINGER.