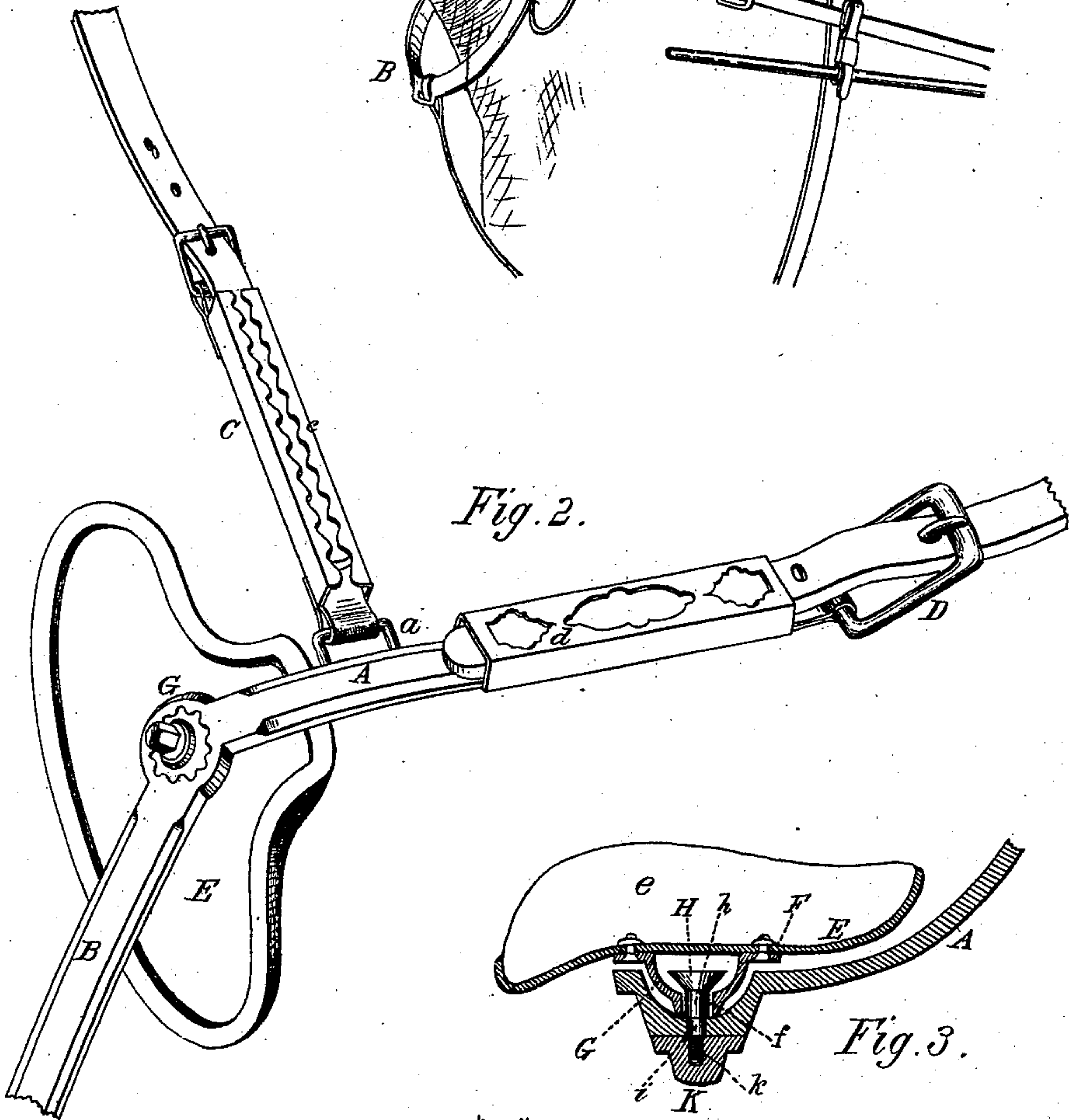
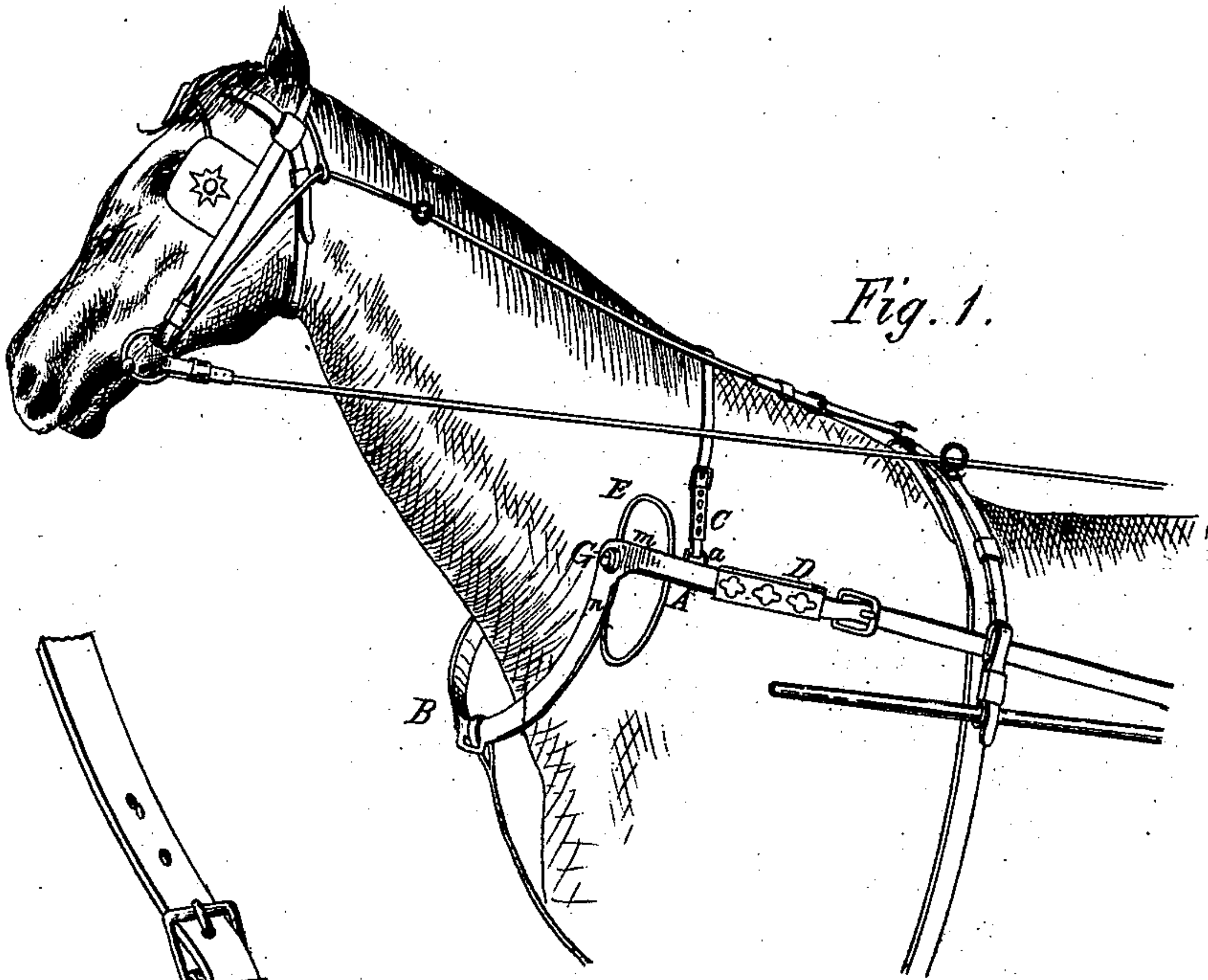


W. GIBBS.

BREAST-COLLAR FOR HARNESS.

No. 189,308.

Patented April 10, 1877.



"A"

Ruth K. Abbott.
Andrew Choffin — } Witnesses.

William Gibbs, Inventor.
by Job Abbott, Attorney.

UNITED STATES PATENT OFFICE.

WILLIAM GIBBS, OF CANTON, OHIO, ASSIGNOR TO LEWIS GIBBS, OF
SAME PLACE.

IMPROVEMENT IN BREAST-COLLARS FOR HARNESS.

Specification forming part of Letters Patent No. **189,308**, dated April 10, 1877; application filed
November 4, 1875.

To all whom it may concern:

Be it known that I, WILLIAM GIBBS, of Canton, in the county of Stark and State of Ohio, have invented certain new and useful Improvements in Breast-Collars for Harness; and that the following is a full, clear, and exact specification thereof, which will enable others skilled in the art to make and use the said invention.

My invention is intended to provide a draft appliance for harness which will obviate the cramping, heating, and choking incident to the use of the ordinary horse-collar or breast-plate; and to this end it consists in the construction of a breast-frame, provided with vertical adjustable pads bearing on the horse's shoulders, and having the front portion, which is in front of the horse's neck, curved down, so as to leave the throat free, said frame being supported by a neck-strap, and having the traces attached to its ends, as is hereinafter more fully shown.

In the accompanying drawing, Figure 1 is a view showing the application of my improvement. Fig. 2 is an enlarged view of a more complete frame and pad; and Fig. 3 is a sectional view of the pad-joint.

A B A is the breast-frame, which may be made of any rigid material, such as steel, malleable iron, or even wood steamed and curved into the proper form, and which has a general U form, the arms of the frame being bent inward at *m m*, to form bearings for the breast-pads, and the forward part B of the frame being bent downward at *n n*, permitting the neck to be free, whatever may be the position of the horse's head, and to form a point of attachment for the martingale or pole-strap, when required.

The staples *a a* form points of attachment for the neck-strap C, by which the frame is suspended from the horse's neck, and the traces D are attached, by buckles, to the rear ends of the arms A, as shown.

The pads E consist of a rigid back-plate having the inner face covered with leather or cloth, well padded with hair or other suitable material; or they may be made of wood, which is a good absorbent of the moisture from perspiration. In either case they are of

elongated form, and set in a vertical position, so as to give ample bearing, and yet avoid pressing the horse's neck, and thus impeding easy action.

These pads could be solidly secured on the frame A B A; but they adapt themselves much better to the horse's motions when adjustably attached to said frame, and my improved joint for such attachment is shown in Fig. 3.

The frame A has a socket, G, formed at the point where the front part B of the frame is bent downward, and the cap F is secured on the back of the pad E, and fits in the socket G loosely, as shown.

The joint-bolt H has its head loosely fitted in the cap F, and the square or other angular-formed portion *h* of its body fits loosely in the hole *f* in the cap, which is of a square or angular form, corresponding with that of the portion *h*, from which it is evident that the pad can have a limited ball-and-socket motion on the bolt H, the lower end *i* of which is squared off, and secured by a nut, K, in the socket G. This limited motion of the pad, in connection with the peculiar form given it, as shown in Figs. 2 and 3, causes it to fit closely on the horse's shoulders at all times, and also keeps it in nearly a vertical position.

A cheap and ornamental strap-loop for the neck-strap may be made of sheet metal, as shown at *c*, the lower end being hooked into the staple *a*, and the upper end into the buckle, and a similar metallic loop-and-buckle attachment, *d*, may be used for the trace D, as shown in Fig. 2.

By running a breech-strap around the horse from the arms A this breast-collar can be used with pole-straps for double teams.

I do not claim, broadly, the construction of a rigid or stiff breast-frame to be used instead of the ordinary leather breast-collar, as this has been shown in Letters Patent No. 115,346, granted May 30, 1871, to James Nellis, on which I claim to have made the following improvements in construction, which—

I claim as my invention, viz:

1. A breast-collar frame, A B A, having the draft-arms A bent inward at *m*, to form draft-bearings for the pads E, and with the front

portion B bent downward at *n* from the plane of the arms A A, substantially as and for the purpose specified.

2. The adjustable draft-pads E, secured in vertical position, substantially as shown, in combination with the collar-frame A B A, for the purpose described.

3. The herein-described draft-pad joint, consisting of cap F, with angular hole *f*, joint-

bolt H, with square or angular bearings *h i*, and frame-socket G, the several parts being constructed and combined substantially as and for the purpose herein specified.

Signed this 22d day of October, A. D. 1875.

WILLIAM GIBBS.

Witnesses:

JOB ABBOTT,

PAUL A. CUENOT.