

S. M. PALMER.
Horse-Collar.

No. 205,294.

Patented June 25, 1878.

Fig. 1

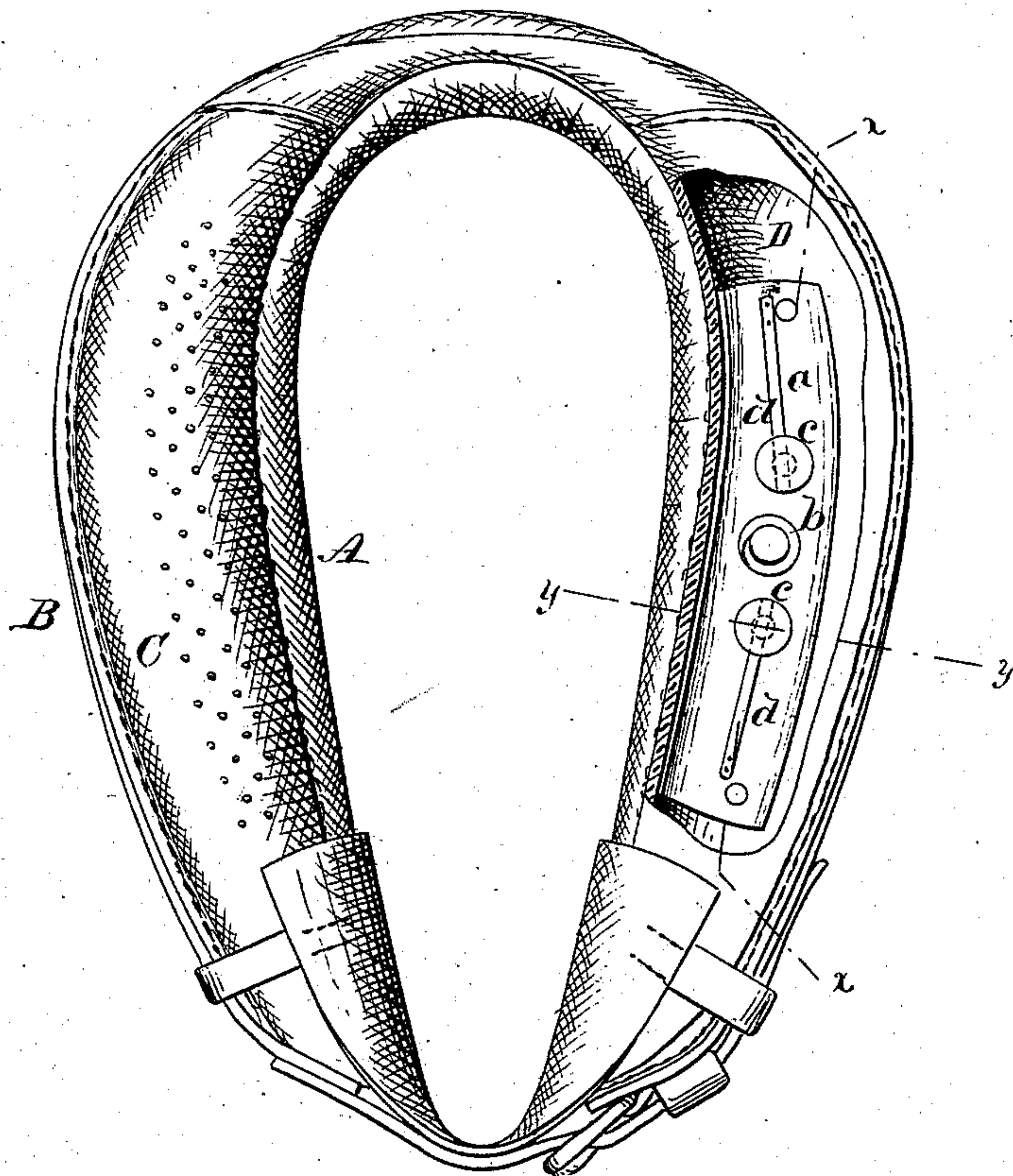


Fig. 2

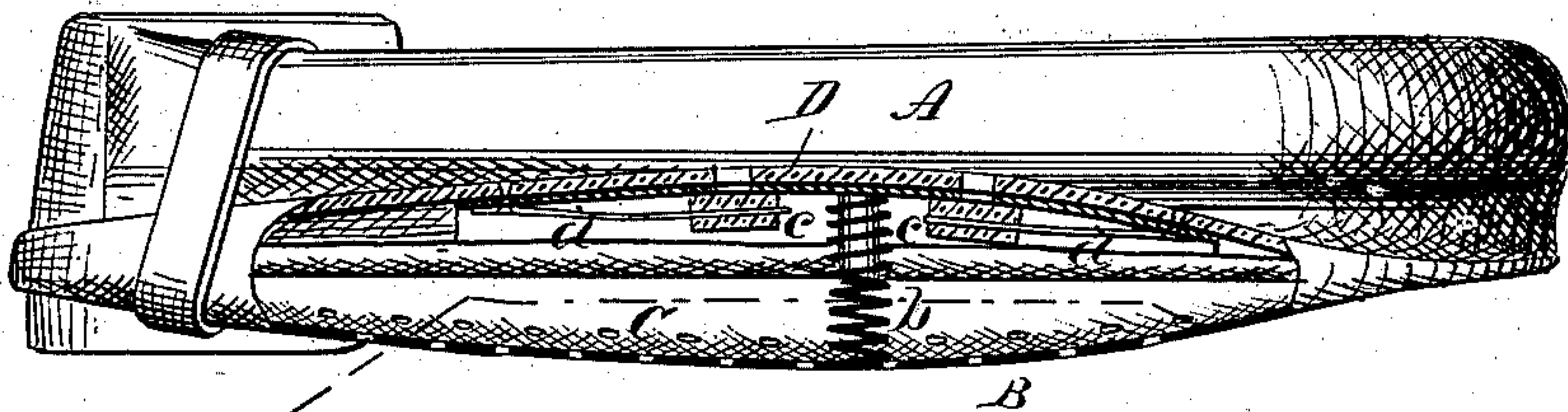
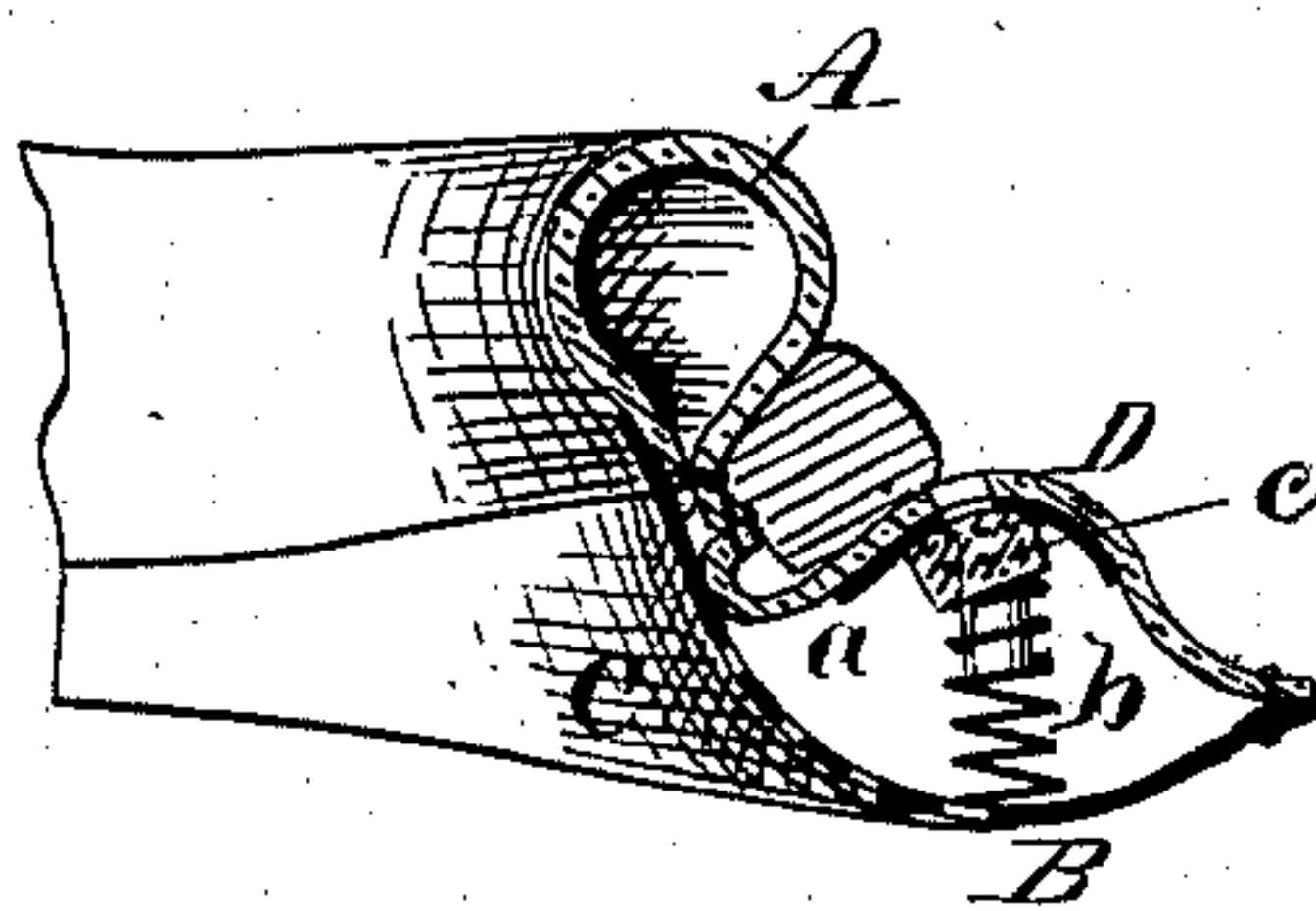


Fig. 3



WITNESSES:

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UNITED STATES PATENT OFFICE.

SAMUEL M. PALMER, OF GLENS FALLS, NEW YORK.

IMPROVEMENT IN HORSE-COLLARS.

Specification forming part of Letters Patent No. **205,294**, dated June 25, 1878; application filed December 22, 1877.

To all whom it may concern:

Be it known that I, SAMUEL M. PALMER, of Glens Falls, in the county of Warren and State of New York, have invented a new and Improved Horse-Collar, of which the following is a specification:

Figure 1 is a side elevation, partly in section, of my improved horse-collar. Fig. 2 is a longitudinal section taken on line *x x* in Fig. 1. Fig. 3 is a transverse section taken on line *y y* in Fig. 1.

Similar letters of reference indicate corresponding parts.

My invention relates to collars for draft-horses; and it consists in a hollow perforated metallic pad, and in a device for forcing air through the perforations of the said pad, as hereinafter more fully described.

Referring to the drawing, A is the roll of the collar, which is made in the usual way; and B is the pad, which is composed of the perforated metallic face portion C and the leather back D. The metallic face is perforated, and is made in the usual form.

The leather back D is stiffened by a bar, *a*, of iron, which is riveted to the inner surface of the leather back, and is thrown outward by a strong spiral spring, *b*.

The leather back and the iron bar are apertured, and the apertures are covered by valves *c*, which are held over the apertures by springs *d*.

The trace is attached to the hames in the usual way, and draws across the convex surface of the back of the pad. When the

shoulder of the horse moves forward, the back of the pad is drawn downward toward the perforated face, and the air contained by the pad is forced out through the perforations of the metallic face against the skin of the horse; and when the horse's shoulder moves backward, the pad regains its former shape, and air is drawn into the pad through the valve-apertures, ready to be discharged through the perforated face when the pad is again thrown forward.

By means of my improvement the shoulders of the horse are prevented from galling, and galled and lame shoulders may be cured.

In some cases the air-forcing device may be dispensed with, as the perforations alone afford a certain amount of ventilation.

Having thus described my invention, I claim as new and desire to secure by Letters Patent—

1. A horse-collar having a perforated metallic face and a device for forcing air through the said perforated face, substantially as herein shown and described.

2. The combination, in a horse-collar, of the perforated metallic face C, the elastic apertured back D, stayed by the bar *a*, the spring *b*, and valves *c*, substantially as herein shown and described.

SAMUEL M. PALMER.

Witnesses:

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