

(No Model.)

R. G. LEIGHTON.
Harness Pad.

No. 231,594.

Patented Aug. 24, 1880.

Fig. 1.

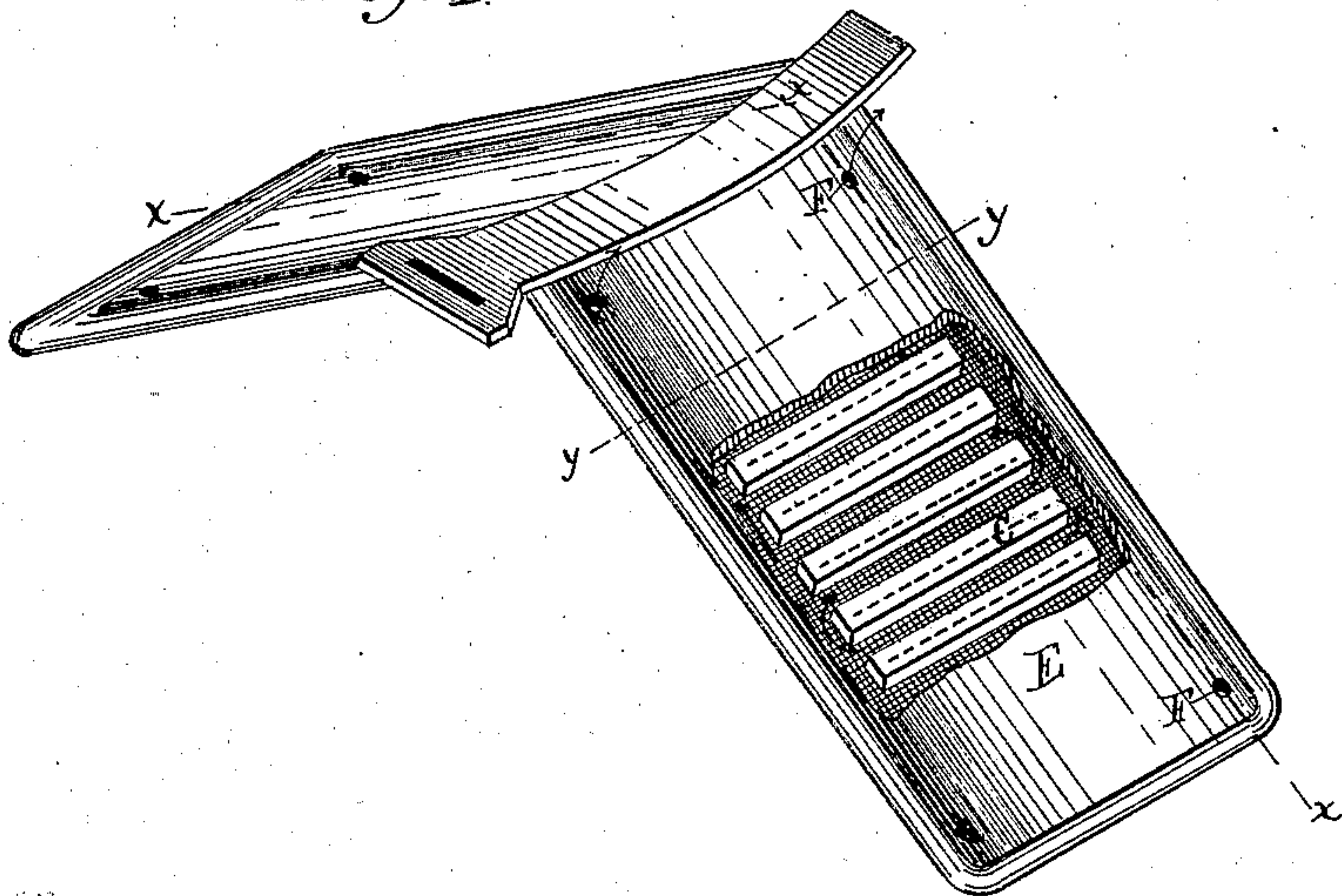


Fig. 2.

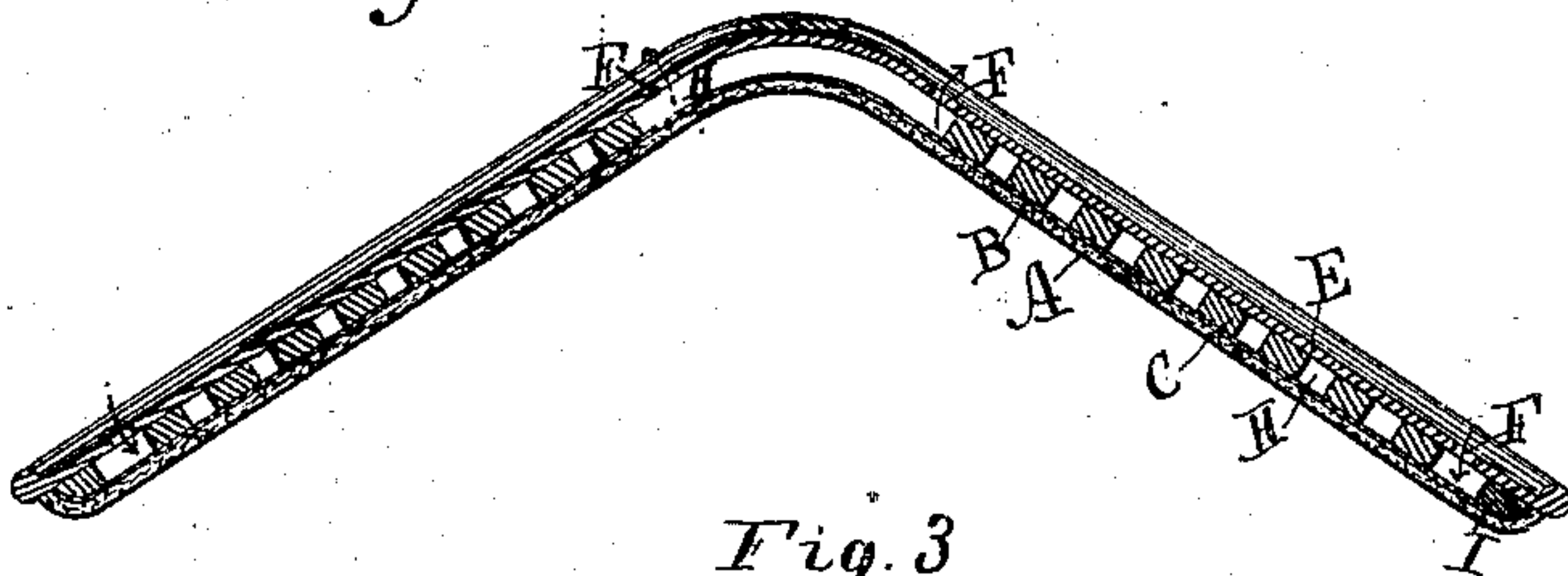
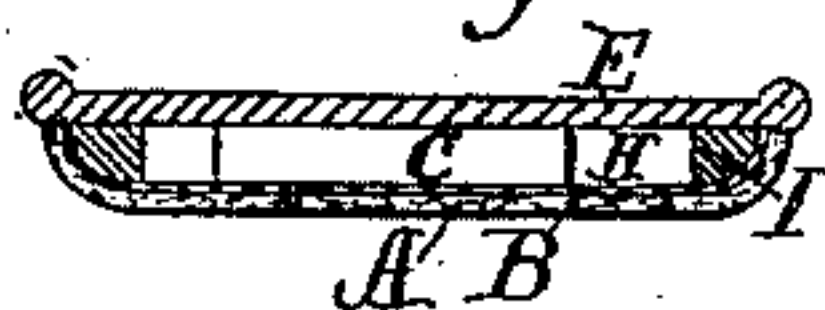


Fig. 3.



Witnesses:
W. A. R. Boothby,
E. J. Lyford.

Inventor:
Roscoe G. Leighton,
by S. W. Bates, his atty.

UNITED STATES PATENT OFFICE.

ROSCOE G. LEIGHTON, OF SKOWHEGAN, MAINE.

HARNESS-PAD.

SPECIFICATION forming part of Letters Patent No. 231,594, dated August 24, 1880.

Application filed June 12, 1880. (No model.)

To all whom it may concern:

Be it known that I, ROSCOE G. LEIGHTON, a citizen of the United States, residing at Skowhegan, in the county of Somerset and State of Maine, have invented certain new and useful Improvements in Harness-Pads; and I do hereby 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 letters or figures of reference marked thereon, which form a part of this specification.

My invention relates to improvements in harness-pads; and the object of my invention is to provide a pad which may be worn next the body of the horse and under various parts of the harness without overheating.

In the accompanying drawings, Figure 1 is a perspective view with certain parts cut away to show the interior arrangement. Fig. 2 is a section through *xx* of Fig. 1. Fig. 3 is a section through *yy* of Fig. 1.

A is a sheet of felt or cloth, which forms the under side of the pad and comes next to the body of the horse. Next above the felt A, and sewed or otherwise fastened to it, is a sheet of wire-netting, B, and extending about the entire outside edge of the pad is the leather or pasteboard strip I, and above this is placed the sheet of leather E, which forms the top or upper side of the pad. The edges of these parts named are united, forming a bead, or in any suitable manner.

The strip I is inserted about the edge of the pad, between the netting B and the leather E, for the purpose of forming an air-space, H, within the body of the pad. Within this air-space, and sewed to the wire-netting B, are the strips or bridges of leather or other suitable material, C, arranged transversely across the pad, and separated from each other by a space of about their own width, though this space may be more or less, as hereinafter specified. The strips C do not extend the entire width of the pad, but are short enough to allow an air-space next the edge of the pad. A con-

tinuous air-space is thus formed within the body of the pad, which will allow of a complete circulation of air.

Passing through the leather E at various points near the edge of the pad are the vent-holes F, which connect with the air-space H. When the pad is placed next the body of the horse the felt A becomes heated and heats the air contained in the air-space H immediately above it. This heated air, rising, passes around the edges and through the openings formed by the bridges C, and finally out at the vent-holes F near the top of the pad. New air is meanwhile drawn in through the holes F at the lower corners of the pad, and thus a circulation is kept up within the body of the pad. It is evident that this circulation of cool air tends to carry rapidly away the heat which comes from the horse's body through the felt A.

The wire-netting B is cooling in itself, and affords no obstacle to the action of the air upon the felt A. The main purpose of the netting is to keep the felt even and smooth by preventing it from crowding into the spaces between the bridges C C. This netting may even be dispensed with when the bridges C are sufficiently near together.

The bridges C may be arranged in a variety of different ways, either transversely, longitudinally, or otherwise, and they may also be at various distances apart. It will be best, however, to place them as far apart as may be and still preserve the uniform shape of the pad, in order to secure a free circulation of air.

The bridges C may be of leather, pasteboard, or other suitable material, and they may be secured within the body of the pad in any proper manner.

The openings F should be near the edge of the pad, in order to be free from that part of the harness which rests on it; but instead of passing through the upper leather, E, they may open directly through the edge of the pad.

The pad here shown is such a one as is used under the saddle; but it is evident that those

of substantially the same construction may be applied to collars, breeching, and other parts of a harness where pads are used.

I claim as my invention—

5 1. The harness-pad composed of the felt A, wire-netting B, bridges C, and top leather, E, containing vent-holes F, all substantially as and for the purpose set forth.

10 2. A harness-pad made up of the layer of felt A, joined to the top leather, E, (containing

vent-holes F,) between which are inserted the strips or bridges C, arranged to form a continuous air-space, substantially as and for the purpose set forth.

In testimony whereof I affix my signature in presence of two witnesses.

ROSCOE G. LEIGHTON.

Witnesses:

F. A. WALDRON,
S. W. BATES.