

No. 625,714.

Patented May 23, 1899.

T. V. WALLACE.

PROTECTIVE PAD FOR MULES USED IN COAL MINES, &c.

(Application filed Dec. 30, 1897.)

(No Model.)

Fig. 1

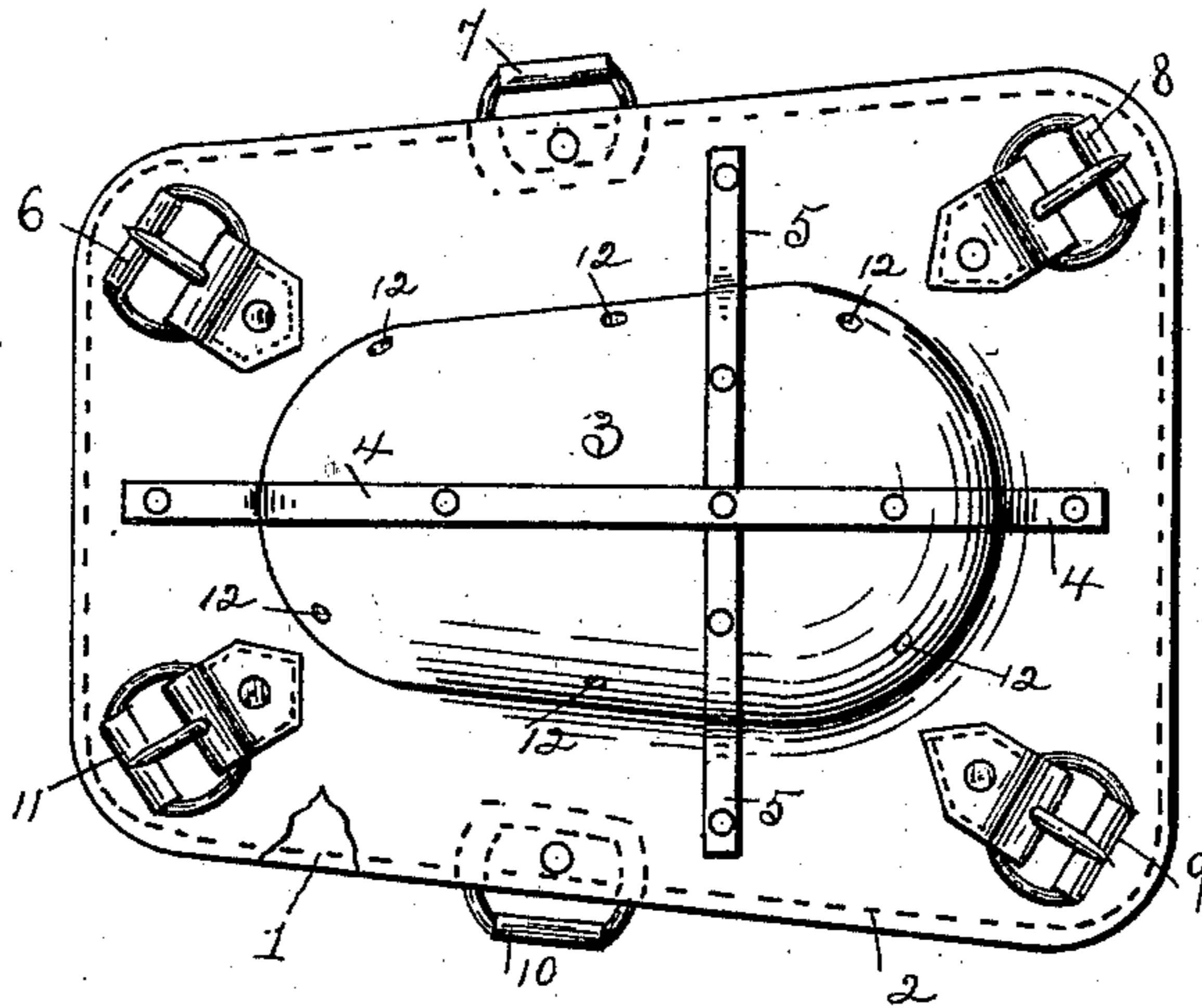
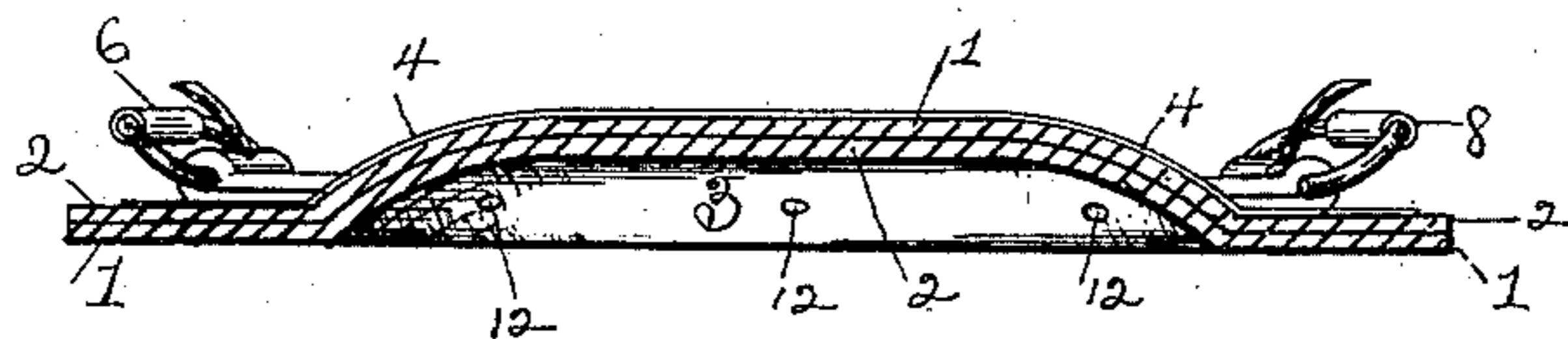


Fig. 2



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# UNITED STATES PATENT OFFICE.

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## PROTECTIVE PAD FOR MULES USED IN COAL-MINES, &c.

SPECIFICATION forming part of Letters Patent No. 625,714, dated May 23, 1899.

Application filed December 30, 1897. Serial No. 664,727. (No model.)

*To all whom it may concern:*

Be it known that I, THOMAS V. WALLACE, a citizen of the United States, residing at Monongahela City, in the county of Washington and State of Pennsylvania, have invented certain new and useful Improvements in Pads for Mules; and I do 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 the figures of reference marked thereon, which form a part of this specification.

This invention relates to certain new and useful improvements in mule-pads.

The invention has for its object the construction of a pad which is especially designed for use upon pit-mules. In the coal regions, where mules are used for drawing out the coal-cars from the pit and where the coal-vein is low, the rump of the mule sometimes comes in contact with the cross-braces at the roof, which results in a sore spot forming upon the rump of the animal, and in order to protect that portion of the mule's body it is necessary to attach a suitable pad to that part. Therefore the object of my invention is to provide a pad which will effectually protect the mule against such injury and which will be hereinafter more specifically described in detail.

In describing the invention in detail reference is had to the accompanying drawings, forming a part of this specification, and wherein like numerals designate like parts throughout both views, in which—

Figure 1 is a plan view of the pad. Fig. 2 is a longitudinal sectional view through the same.

In constructing my improved mule-pad I provide the two sheets of thick leather 1 and 2, which I cement or otherwise secure together and form the upwardly-bulged portion 3 at about the center of the sheet, and after trimming the sheet to the desired shape, as shown, I secure across the bulged portion the brace-

pieces 4 and 5, which are formed from sheet metal and aid in stiffening up the bulged portion, and upon the flat portion of the pad I secure in their proper positions the buckles 6, 7, 8, 9, 10, and 11, to which suitable straps are attached for securing the pad in place. A series of vent-holes 12 are formed through the bulged portion of the pad, so as to allow a circulation of air to pass through.

To put the invention into practice, the pad is placed up over the rump of the mule, so that the bulged portion will cover the projecting portion of the mule's spine at the rump. A pair of straps which lead from the collar and hames are then attached to the buckles 8 and 9. Another pair of straps are attached to the buckles 7 and 10 at their upper ends, and at their lower ends are formed loops through which the traces are passed, and a crupper-strap is attached to the buckles 6 and 11, and by this means the pad is held in place, so that there is no possible chance of it being displaced.

The metal straps crossing each other at right angles not only serve as braces, but also protect the bulged portion from injury from various causes, they crossing each other at the points where injury is most likely to occur.

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

In a pad for mules or other animals, the combination with the leather sheets cemented together and having their central portions bulged outwardly and formed with a series of perforations, and the buckles secured to said sheets at opposite sides, of the metal braces crossing each other at right angles on the outer side of said bulged portion and secured thereto and to the said sheets, substantially as described.

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

THOMAS V. WALLACE.

Witnesses:

JOHN GROETZINGER,  
THOS. MURPHY.