R. Allison.

Saddle Cloth.

No. 86,798. Patented Feb. 9, 1869.

Fig. 4. Fig. 3. Fig. 2.

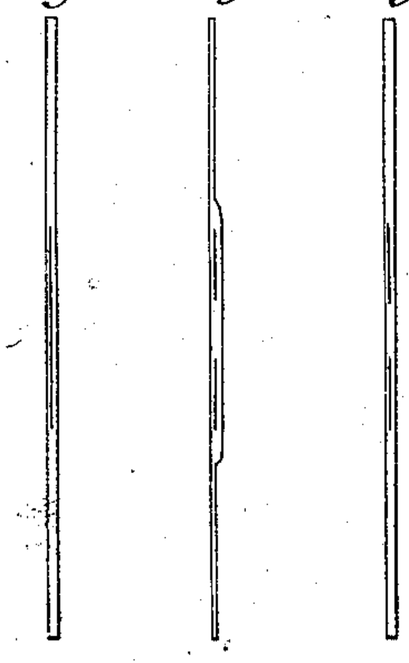


Fig. 1.

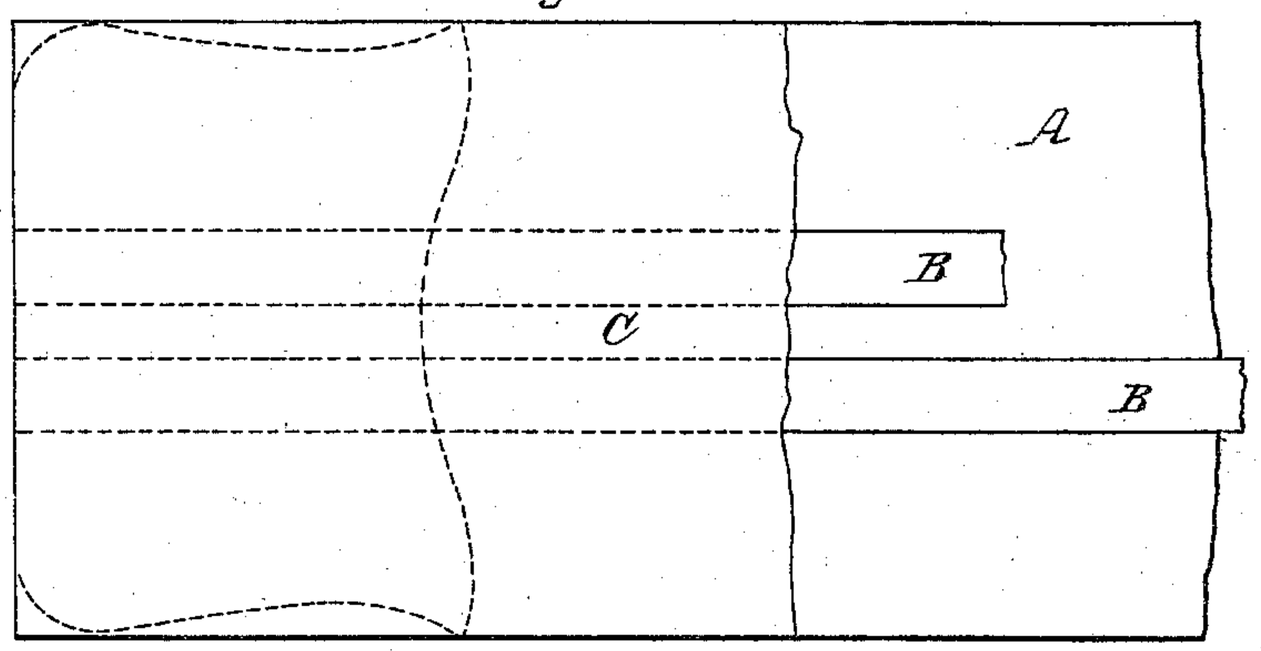


Fig. 5.

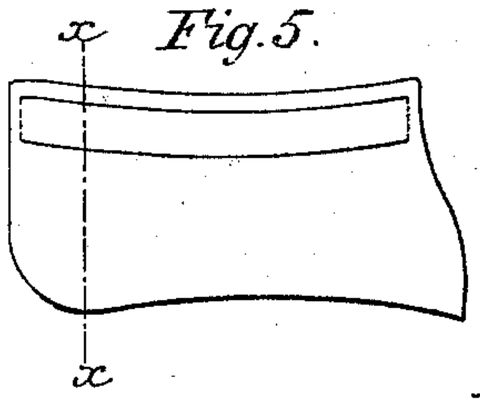


Fig. 6.

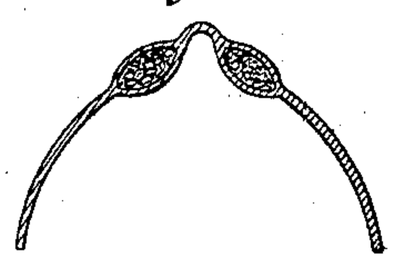


Fig. 10. Fig. 9. Fig. 8.

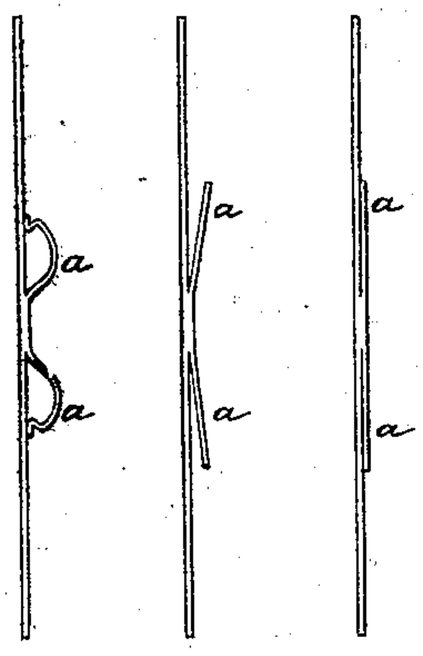
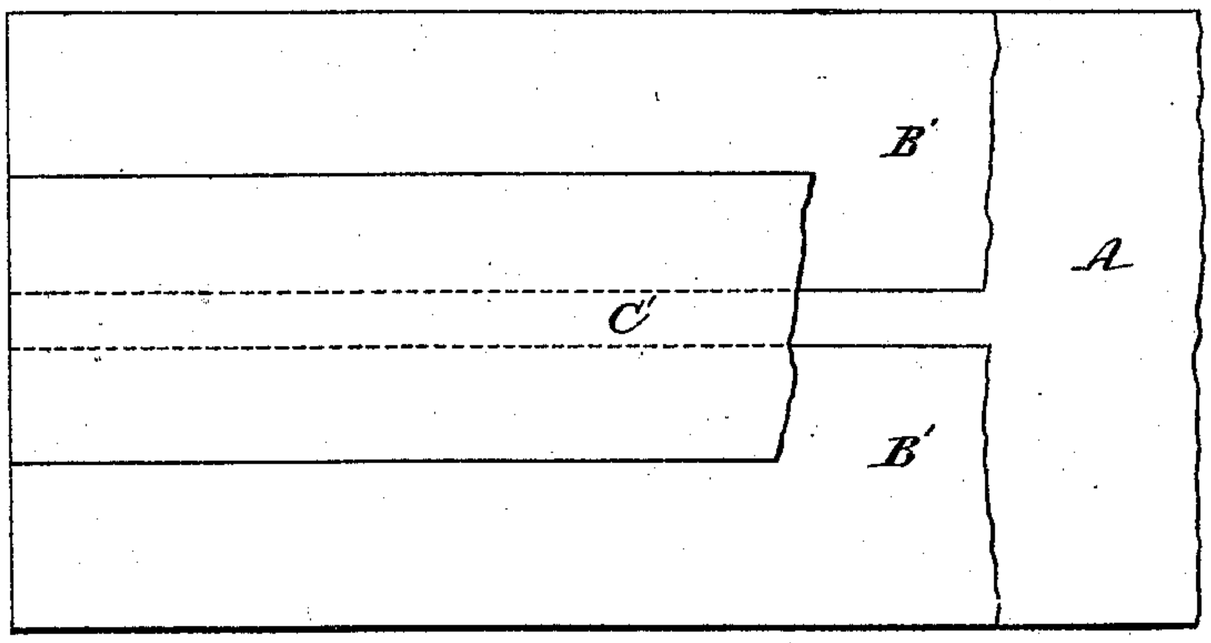


Fig. 7.



Witnesses.

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RICHARD ALLISON, OF NEW YORK, N. Y.

Letters Patent No. 86,798, *dated February* 9, 1869.

IMPROVEMENT IN THE MANUFACTURE OF SADDLE-CLOTHS.

The Schedule referred to in these Letters Patent and making part of the same.

To all whom it may concern:

Be it known that I, RICHARD ALLISON, of the city, county, and State of New York, have invented certain new and useful Improvements in the Manufacture of Saddle-Cloths; and I do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawings, and to the letters of reference marked thereon.

The object of my invention is to produce a cheap, tasteful, and durable saddle-cloth, which, while as light and cool for the horse as possible, is, at the same time, provided with ample and efficient pads or cushions under the bearing-parts of the saddle, whereby the back of the horse is protected from injury, and the weight of the saddle and rider is distributed over that portion of the back of the animal which is most capable of bearing it without detriment.

My invention consists—

First, in a new and useful method or process for forming pads or cushions in or upon the saddle-cloth, by laying two sheets or bats of felting-material together, with strips of non-felting material, such as tightly-woven cotton goods, for example, interposed between them, so as to separate those portions from which it is desired to form the covers or outside parts of the pads or cushions, from the rest and from each other, and felting the two sheets or bats together, whereby there are left, at the points or places where it is desired to have pads or cushions, pockets, slots, or flaps, between or upon what were originally the two said separate sheets. After cutting out, from this material, the saddle-cloth of the proper form and size, these slots, pockets, or flaps, are stuffed with some elastic, yielding substance, and their ends, or their ends and sides, sewed up.

Second, in the application of elastic sponge, a preparation of sponge, partly saturated with glycerine, for which a patent was granted to A. T. Moith, July 25, 1865, to stuff the pads or cushions in a saddle-cloth, substantially as hereinafter specified.

Third, in giving the proper form or curvature, to fit the back of a horse, to the saddle-cloth, and in part to the pads or cushions, by stretching the said saddle-cloth over or upon a model, mould, or former, as hereinafter set forth.

Fourth, of a saddle-cloth of felted material, provided with pads or cushions, which pads or cushions are made substantially as hereinafter set forth.

In the accompanying drawings—

Figure 1 is a plan or diagram, illustrating the method or process of forming the material from which the saddle-cloth is made.

Figure 2 represents an end view of the same.

Figures 3 and 4 represent end views of modifications of the same.

Figure 5 is a side view of my saddle-cloth, formed and completed ready for use.

Figure 6 is a cross-section of the same, on the line *x x*, fig. 5.

Figures 7, 8, 9, and 10, illustrate another modification of the method or process.

The first step in the process of manufacture is to produce a bat or sheet of felt or partially-felted material, A, of the proper width, and of any desired practicable length, and of even or graduated thickness, as preferred.

Two strips of non-felting material, B B, are then laid parallel to each other, and equidistant from a line drawn through the centre of the piece A longitudinally, and a second piece of felt or partially-felted material, C, of the same size as the piece A, as seen in figs. 1 and 2, or narrower, as seen in fig. 3, is laid upon the first piece, A, and the two pieces, A and C, are firmly felted together.

After the felted material is thus formed, and has become dry, the strips B B are drawn out, leaving slots or pockets.

If preferred, a piece of non-felting material, sufficiently wide to cover both of the pieces B B, may be used instead of them, and a single slot or pocket be thus formed, as indicated in fig. 4. In this case, it would be necessary to sew up one side of each pocket or slot to form the pad or cushion.

A double thickness or a tube of thin non-felting material may be laid into the felted material, instead of the strips B B, and left in as a lining, thereby increasing the strength of the slots or pockets.

In the modification of the construction shown in figs. 7, 8, 9, and 10, two strips, B′ B′, are laid on the piece A, a space or strip wide enough to separate the pads to a sufficient distance being left between them, and a bat or piece of felting-material, C′, sufficiently wide to form somewhat more than one side of each pad, and to cover the space between them, is laid on and felted down to the piece A, in the centre, as shown in figs. 8, 9, and 10.

By this means two flaps, *a a*, are formed, and the pads are made by inserting "elastic sponge," hair, or other suitable substance, under the said flap, and sewing down the edge, as seen in fig. 10, and also the ends of the pad.

The sheet of material being properly formed, as described, a piece, nearly of the shape and size of the saddle-cloth, as seen in dotted lines in fig. 1, is cut out and stretched over a former while wet, by which it is made to assume the shape of that portion of the back of the horse, over or upon which it is intended to fit.

The proper form may be given by cutting out a piece from the centre, somewhat in the form of an ellipse, but pointed at both ends, and sewing the edges together longitudinally; but I prefer to use a former, without cutting the centre of the cloth.

After the cloth is formed, in either of the ways described, a sufficient quantity of "elastic sponge," curled

hair, or other suitable material, is stuffed into the slots or pockets, as seen in figs. 1 and 2, or under the flaps *a a*, and the ends, and, if necessary, the sides, are sewed down firmly.

By reference to figs. 5 and 6, it will be seen that the cloth, formed as described, is well adapted to accomplish the desired object, being light and cool at all parts, except where it is necessary to have the pads or cushions placed, and these latter, as made, are strong, cheap, and in nowise liable to shift their positions, or get out of order.

By the use of the "elastic sponge," the pads are effectually prevented from becoming packed and hard, as this substance will not pack, but will always recover at once from the effects of pressure, when such pressure is removed.

It has also the additional advantage of being much cheaper, and more effective in its action than curled hair or other substances, which have heretofore been used for stuffing the pads or cushions.

The sheet, or piece of felted material, ready to be cut up and made into saddle-cloths, may be sold to saddlers and others, to be made up by them, as the subsequent steps of the manufacture are simple and easily carried out.

I do not claim, broadly, the "forming" of a felted saddle-cloth of any construction, by stretching the said cloth over a former, to make it fit properly over or upon the back of the horse, as I am aware that this has been done for many years. Nor do I claim a saddle-cloth entirely of felt, and of graduated thickness, as such a cloth is very difficult to make, expensive, and calculated to heat the back of the horse to an injurious degree.

Having thus fully described my invention,

I claim—

1. The combination, in the process of manufacture, of non-felting material with the material from which the felt is made, as hereinabove described, whereby flaps, slots, or pockets, are formed in or upon the felt, substantially as and for the purpose set forth.

2. The saddle-cloth, provided with pads or cushions, as described, and constructed substantially as and by the means or method set forth.

RICH'D ALLISON.

Witnesses:

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S. H. HURD.