

(No Model.)

J. B. HAINES, Jr.
RIDING SADDLE.

No. 532,419.

Patented Jan. 8, 1895.

FIG. 1.

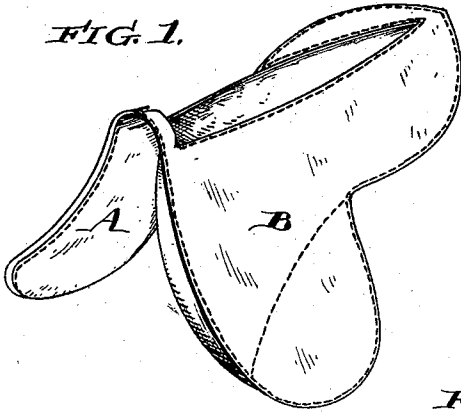


FIG. 5.

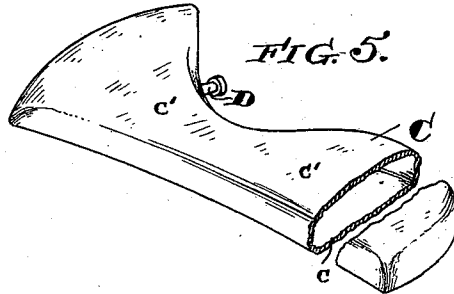


FIG. 2.

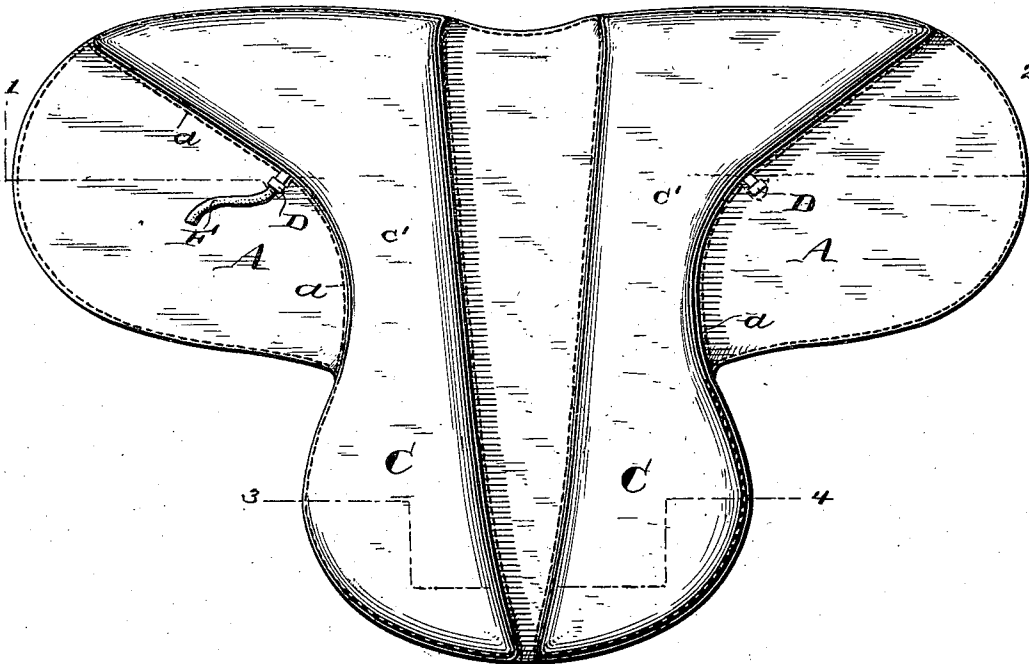


FIG. 3.



FIG. 4.



Witnesses:
Henry D. May
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Inventor:
John B. Haines
per Mark Wilks Esq.
Att'y.

UNITED STATES PATENT OFFICE.

JOHN B. HAINES, JR., OF PHILADELPHIA, PENNSYLVANIA, ASSIGNOR, BY DIRECT AND MESNE ASSIGNMENTS, TO CLARA E. HAINES, CHARLES H. HIRST, RUDOLPH WINTERSTEIN, AND W. O. FREYTAG, OF SAME PLACE.

RIDING-SADDLE.

SPECIFICATION forming part of Letters Patent No. 532,419, dated January 8, 1895.

Application filed May 3, 1892. Renewed October 24, 1893. Serial No. 489,054. (No model.)

To all whom it may concern:

Be it known that I, JOHN B. HAINES, JR., a citizen of the United States, and a resident of the city and county of Philadelphia and State of Pennsylvania, have invented a new and useful Improvement in Pneumatic Riding-Saddles, of which the following is a clear and sufficient specification, reference being had to the drawings annexed.

My invention relates to that class of saddles in which confined air is used as the means of padding the same to the horse. The advantage of a confined fluid for this purpose has been recognized but the faultiness of the means by which the broad idea has been endeavored to be carried out has prevented it from being successfully applied, and there may be said to be no pneumatic saddles now on the market except those made under my directions.

The object of my invention is to make pneumatic saddles strong enough to stand the usage which they must bear, to enable the saddle to fit the animal closely without heating him, to give the rider a firm and secure seat which will not rock, to make the air bag easy to inflate and strong when inflated without increasing the thickness of the walls of the bag and various other objects which will appear in the specification.

Figure 1 is a view of the portions of the saddle, to which my improvement has reference, in perspective. Fig. 2 is a view of the same parts laid flat (this position being impossible however in the complete saddle), the parts resting on the horse toward the observer. Figs. 3 and 4 are sections on the lines 1—2 and 3—4 of Fig. 2 respectively. Fig. 5 is a view of the pad in perspective.

In all the figures of my drawings the seat and tree are omitted since I think my invention more clearly illustrated without them.

The same letters indicate similar parts throughout the specification and the various figures of the drawings.

B, B, designate the parts which are placed beneath the tree of the saddle, and are outside the padding proper, and which are technically called the "outer pad covers." They are made of a suitable material; stiff leather

or an analogous material being the usual material. They are usually shaped in the configuration shown in the drawings with side pieces extending down at the side of the horse, which are not ordinarily padded, and the rounded portions beneath the seat. Ordinarily these pad covers are connected together by a piece of ticking or other suitable material, which extends over the horse's withers. These pad covers are held in place by the tree which fits into the pad covers and holds them and consequently the pads in position on the horse. The seat of course rests on the tree and can be constructed in the ordinary or any convenient manner. On the inner sides of the outer pad covers B, B, are placed the inner pad covers A, A, which are made of leather or analogous material, such as ticking or duck both of which are reasonably non-stretchable. I connect together these pad-covers around the space where the padded portion of the saddle is by stitching or similar means which will hold the two covers together pretty closely along the line *d, d*, bounding the padding. This inner pad cover is fulled where the padding is placed so that when extended to its complete fullness by the pressure of the inflated rubber bag within (which will presently be described) it will assume the form of the pad, and, by restraining the elastic bag, will determine the shape of the pad and secure it from bursting under the pressures which are always brought to bear on the saddle and sometimes brought to bear on it very unevenly. This air-containing bag C, is placed between the pad covers and constructed of rubber or analogous material, and preferably shaped so that its inflation will lead it to take the shape of the fullness between the pad covers. A rough idea of the shape of the bag when inflated is shown in Fig. 5 although the thickness of the walls as shown is greatly exaggerated. These walls need not be over one sixty fourth of an inch thick, such thickness giving ample strength when the bag is placed between the pad covers, since by the bag's inflation the walls of the bag C are pressed against the pad covers, which, being inelastic, hold it firmly in shape and give the rider a secure seat and prevent him from being rocked

from side to side as would happen were the pads capable of being indefinitely swollen, and, being made of a material of considerable tenacity holds the bag securely on all sides and gives it the requisite strength without requiring the bag to be so thick as to impair its flexibility or ease of inflation. The interposition of the inner pad cover between the horse and the rubber, also serves to cool the horse by permitting a slight passage of air between it and the horse and thus keeping the rubber from heating the horse. To this bag I place a tube, by which the bag C is inflated and provide this tube with a valve for retaining the air in the bag. Sometimes I attach an additional tube F, to make the bag to be inflated without bringing the face of the inflater disagreeably near the pad. This bag C, can be removed and replaced when necessary. Ordinarily the saddle is not inflated when not

in use. It is inflated to a sufficient extent to bring the walls of the inflated bag C, against the sides of the pad cover next to it, when the saddle is on the animal, and is girthed and strapped in the usual manner.

Having now described my invention, what I claim, and desire to secure by Letters Patent, is—

A riding saddle consisting of an inner pad cover, an outer pad cover and an inflatable bag of air-tight material contained between said pad covers and closely inclosed by same, the pocket formed by said covers being narrowed and made shallower at the middle part whereby two bearing surfaces one forward and one back of the rider are secured.

JOHN B. HAINES, JR.

Witnesses:

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