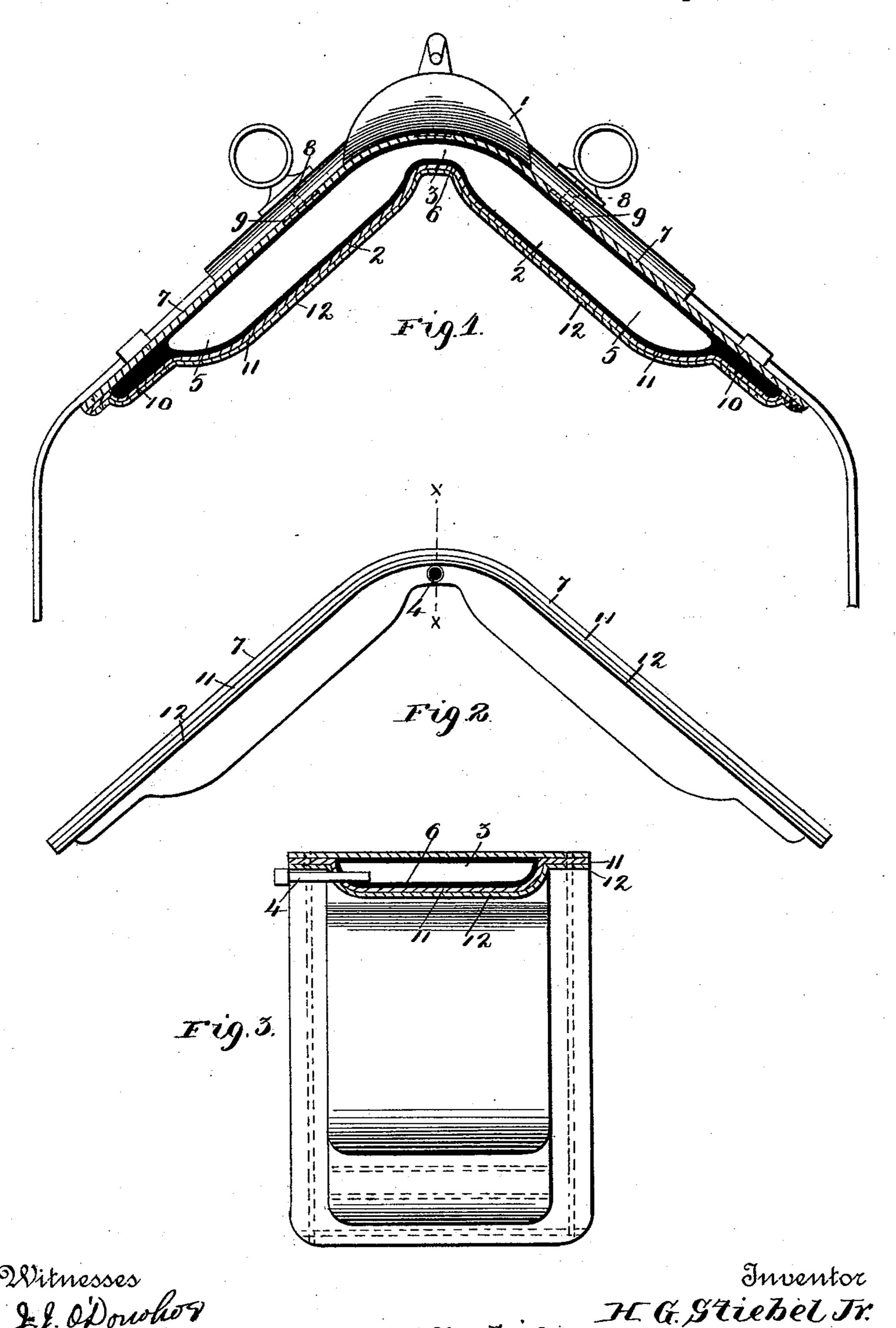
(No Model.)

## H. G. STIEBEL, Jr. PNEUMATIC SADDLE.

No. 538,089.

Patented Apr. 23, 1895.



## United States Patent Office.

HENRY G. STIEBEL, JR., OF ST. LOUIS, MISSOURI.

## PNEUMATIC SADDLE.

SPECIFICATION forming part of Letters Patent No. 538,089, dated April 23, 1895.

Application filed August 23, 1894. Serial No. 521,068. (No model.)

To all whom it may concern:

Be it known that I, HENRY G. STIEBEL, Jr., of the city of St. Louis, State of Missouri, have invented certain new and useful Im-5 provements in Saddles, of which the following is a full, clear, and exact description, reference being had to the accompanying drawings, forming a part thereof.

My invention has relation to improvements 10 in pneumatic horse saddles and consists in the novel arrangement and combination of parts more fully set forth in the specification

and pointed out in the claims.

In the drawings, Figure 1 is a side eleva-15 tion of a saddle with the pneumatic pad and its casing in section. Fig. 2 is a side elevation of the pad and casing covering the same; and Fig. 3 is a section on the line x-x of Fig. 2.

The object of my invention is to construct a saddle which will be provided with a pneumatic or inflatable pad to take the place of the ordinary leather supports now in vogue. By this construction the saddle cannot only 25 be made light, but will in all respects prove a source of comfort to the animal on which the same is placed.

The invention resides in the special construction of the inflatable pad, and in the 30 means for securing the same to the saddle

proper.

Referring to the drawings, 1 represents the ordinary saddle portion, having the hook for the check strap and rings for the reins se-35 cured or mounted thereon. Supporting the saddle proper is a pneumatic pad 2 of rubber or similar inflatable material, its general shape conforming to that of the animal on which it is placed. At its medial reduced 40 portion 3 is attached a nozzle 4 for the reception of an air tube to supply the pad with air or similar gas. Of course the pad is inflated only sufficiently to assume the general contour of the back of the animal on which the 45 saddle is placed.

The pneumatic pad is composed of the medial reduced portion or passage 3, which communicates with the enlarged lateral chambers 5. By this arrangement the saddle is made 50 to conform to the shape of the animal, and

lower edge 6 serves as a partial support for the inner end of the nozzle 4 passed thereinto. Intermediate the pneumatic pad and the saddle proper is interposed a sheet 7 of 55 leather, the same being prevented from being accidentally penetrated by the bolts 8 of the rein rings by the interposition of suitable metallic plates 9 between the inner ends of said bolts and the sheet 7. The sheet 7 ex- 60 tends a short distance beyond the terminal sealed extensions 10 of the pad, and to these ends are secured by stitching the ends of the sheets 11 and 12 of leather and cloth respectively, the said sheets being also secured to the 65 sheet 7 by stitching passing through the same and through the extensions 10 of the pad. The several sheets on both sides of the pad are collectively denominated the "casing" and the manner of securing the casing to the ex- 70. tensions 10 of the pad is important, since, whatever strain or pull may be brought to bear upon the casing, is at the same time communicated to the pad, and any or all wrinkling and unequal expansion of the several 75 sheets are thus avoided, the saddle always presenting a smooth and unwrinkled surface to the back of the animal.

The invention is not limited in its application to any particular kind of saddle, being 80 applicable in general to cart, riding, and similar saddles.

Having described my invention, what I claim is—

1. In a saddle, a pneumatic pad comprising 85 a medial reduced portion, lateral enlarged chambers communicating with the same, sealed extensions depending from the outer ends of the said chambers, a suitable nozzle inserted into the reduced portion and sup- 90 ported at its inner end by the lower edge of said reduced portion, and a suitable casing surrounding the pad, the ends of the casing and the sealed extensions being jointly secured to the saddle proper to prevent wrink- 95 ling and displacement of the parts, substantially as set forth.

2. A saddle comprising a saddle portion proper, a pneumatic pad having medial reduced and lateral enlarged communicating 100 chambers, terminal sealed extensions for the the portion 3 being comparatively narrow its I enlarged chambers, a sheet interposed between the saddle proper and the pad, a series of sheets on the opposite side of the pad, said sheets overlapping the sealed extensions, and having their free edges and those of the sealed extensions secured to the saddle proper, a nozzle inserted into the reduced chamber and having its inner end supported by the lower wall or edge of the reduced chamber, and suitable plates located between the saddle

and the sheet interposed between the saddle roproper and pad, to prevent penetration by the rein-ring bolts, substantially as set forth.

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

HENRY G. STIEBEL, JR.

Witnesses:
JAMES J. O'DONOHOE,
C. F. KELLER.