No. 608,443. Patented Aug. 2, 1898.

M. M. DEEM.

SADDLE FOR VELOCIPEDES.

(Application filed July 17, 1897.)

(No Model.)

Fig. 1.

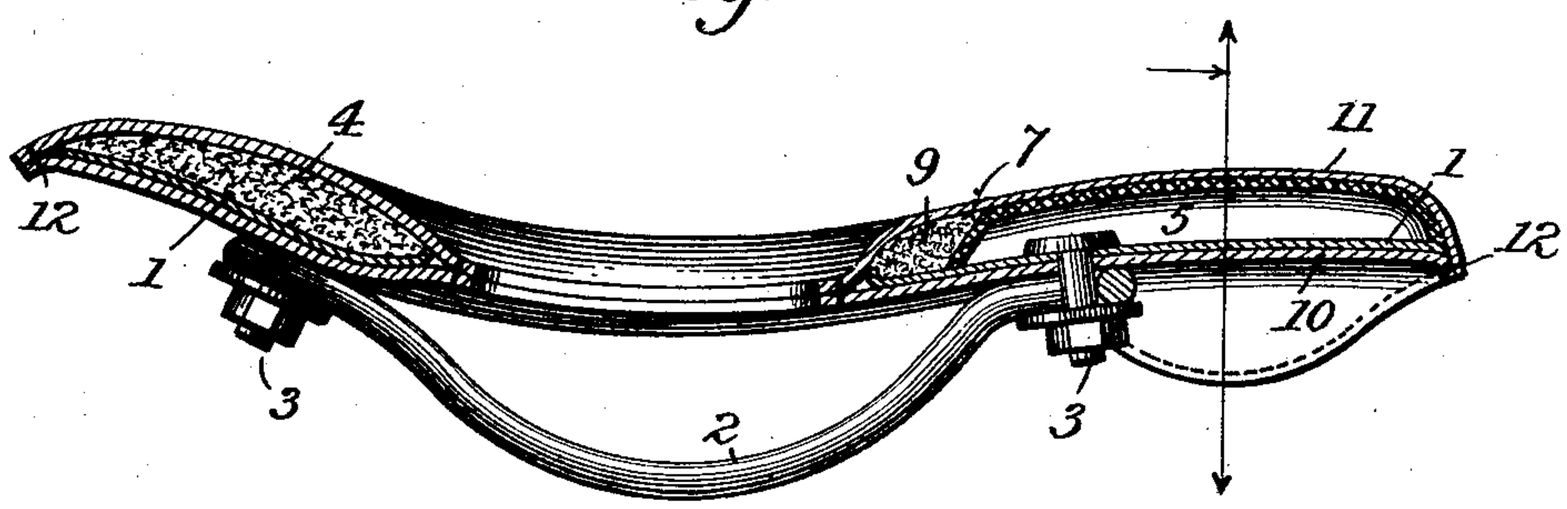


Fig. 2.

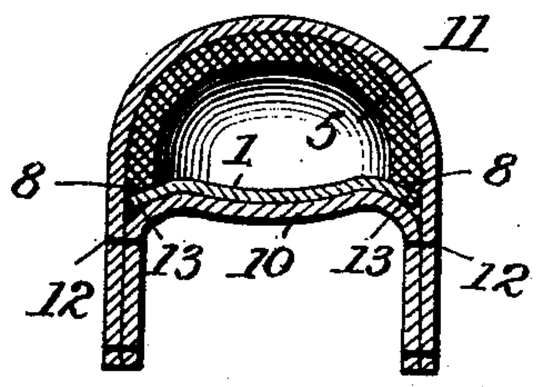
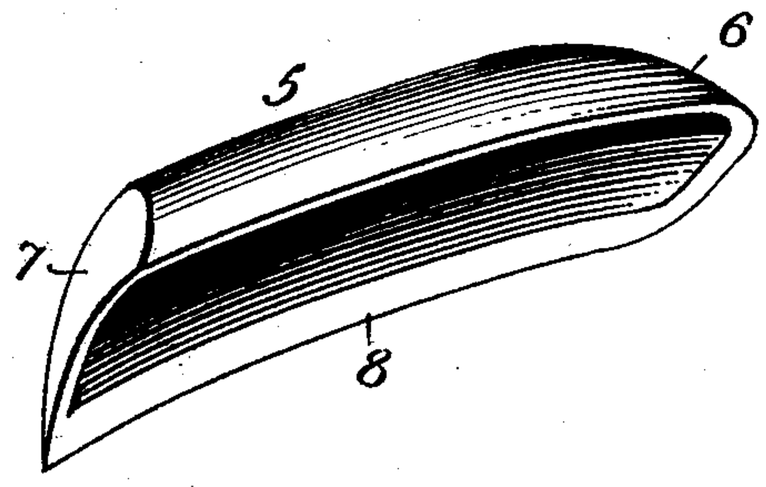


Fig. 3.



Witnesses
J. G. Hinkel
William E. Steffe

Inventor
M. M. Deem
By Watson & Watson
Attorneys

UNITED STATES PATENT OFFICE.

MILLER M. DEEM, OF READING, PENNSYLVANIA, ASSIGNOR OF ONE-HALF TO THE P. & F. MANUFACTURING CO., OF SAME PLACE.

SADDLE FOR VELOCIPEDES.

SPECIFICATION forming part of Letters Patent No. 608,443, dated August 2, 1898.

Application filed July 17, 1897. Serial No. 644,906. (No model.)

To all whom it may concern:

Be it known that I, MILLER M. DEEM, a citizen of the United States, residing at Reading, in the county of Berks and State of Pennsylvania, have invented certain new and useful Improvements in Saddles for Velocipedes, of which the following is a specification.

The object of my invention is to provide a resilient pommel for bicycle-saddles.

Heretofore it has been customary in the construction of such saddles to upholster or pad the various parts of the saddle to suit the comfort of the rider, the amount of padding depending upon the degree of softness required. In some instances, also, pneumatic sacks have been used for the same purpose. Pneumatic sacks are open to the objection that they require valves and are subject to leaks and punctures, which soon destroy their usefulness and render them a source of annoyance. The padding, on the other hand, if made sufficiently soft for comfort, soon becomes packed and the desired effect is lost. In addition to this the cover becomes loose and unsightly. It is particularly desirable, for hygienic reasons and the comfort of the rider, that the pommel shall remain soft; but, for reasons above stated, this end has been difficult of attainment; and it is the object of my invention to overcome these difficulties.

In the accompanying drawings, which illustrate my invention, Figure 1 is a longitudinal section of a saddle embodying my invention. Fig. 2 is a cross-section through the pommel of the saddle, and Fig. 3 is a perspective view of the elastic shell which renders the pommel soft and yielding.

Referring to the drawings, 1 indicates the base of the saddle, which may be made of any suitable material, preferably sheet-steel of a suitable design for the purpose. It is supported by the usual spring-frame 2, which is secured to the saddle by means of bolts 3 at the front and rear.

The rear part of the saddle, upon which the weight of the rider is distributed, may consist of a felt padding 4 of such density that it will not materially pack or shrink in volume under the weight of the rider. Upon the pommel portion of the base 1 I place a shell 5, of elastic material, preferably molded rubber. This shell, as shown in Fig. 2, is practically U-shaped in cross-section, the forward end 6 being rounded and the rear end 7 sloping downwardly and to the rear, as shown in Figs. 1 and 3. The lower edge 8 of the shell conforms in outline to the base upon which it rests. The pommel portion of the plate 1 is preferably inclined at the sides 13, and the lower edges of the shell are beveled to correspond, so that a downward pressure upon the shell will tend to force its edges outward instead of doubling them under, as might occur with a different construction. The padding 4 is cut at its forward end 9 with a suitable slant to overlap the sloping edge 7 of the shell, so that the filling will be continuous. The saddle is covered upon the top and bottom by suitable coverings 10 and 11, which may be permanently stitched at the line of junction 12. When the covers are united, the shell is held permanently in place and is prevented from spreading. The shell, being made from molded rubber of proper strength and resiliency, always has a tendency to resume its original form, thus maintaining the shape of the pommel as well as affording comfort to the rider. In this respect it is superior to ordinary felt padding, and it is more desirable than a pneumatic sack for reasons heretofore stated, and also because when once in position it never becomes necessary to tear open the covers and repair it.

It will be obvious that the form of the shell or cushion may be varied somewhat to conform to the contour of the base-plate and the required shape of the pommel. It is essential, however, that the cushion be made of sufficient resiliency to yield under slight pressure and to return promptly to its normal shape. By the form and arrangement above described, whereby the sides of the cushion are prevented from collapsing, the resistance to pressure gradually increases as the pressure is applied.

By the term "resilient shell," which I have for convenience used in this specification, I mean a hollow body having resilient walls, which body is open, so as to be under atmospheric pressure within and without, as distinguished from pneumatic sacks.

Having described my invention, what I

claim, and desire to secure by Letters Patent, is—

1. In a saddle for velocipedes, the combination with a base-plate, of a cushion upon the pommel portion of said plate consisting of a resilient shell open on its lower side and having its edges resting upon the plate and suitably secured thereto, substantially as described.

2. In a saddle for velocipedes, the combination with a base-plate, of a cushion upon the pommel portion of said plate consisting of a resilient shell open on its lower side and having its edges resting upon the plate, and a covering extending over the shell and securing it to the plate, substantially as described.

3. In a saddle for velocipedes, the combination with a base-plate having a pommel portion, of a cushion upon said portion consisting of an elongated resilient shell arched in cross-section and having end walls 6 and 7 and a covering extending over said shell and securing it to the plate, substantially as described.

4. In a saddle for velocipedes, the combination with a base-plate having a pommel portion, the edges of which are downwardly and outwardly inclined, of a resilient shell substantially U-shaped in cross-section, the edges of said shell being beveled and resting upon the inclined edges of the base-plate, and a cover extending over and closely surrounding said shell, substantially as described.

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

MILLER M. DEEM.

Witnesses:

OSCAR KLINE,

WM. W. FETTER.