

No. 611,221.

Patented Sept. 20, 1898.

J. B. McMANUS.

BICYCLE SADDLE.

(Application filed May 23, 1896.)

(No Model.)

Fig. 1.

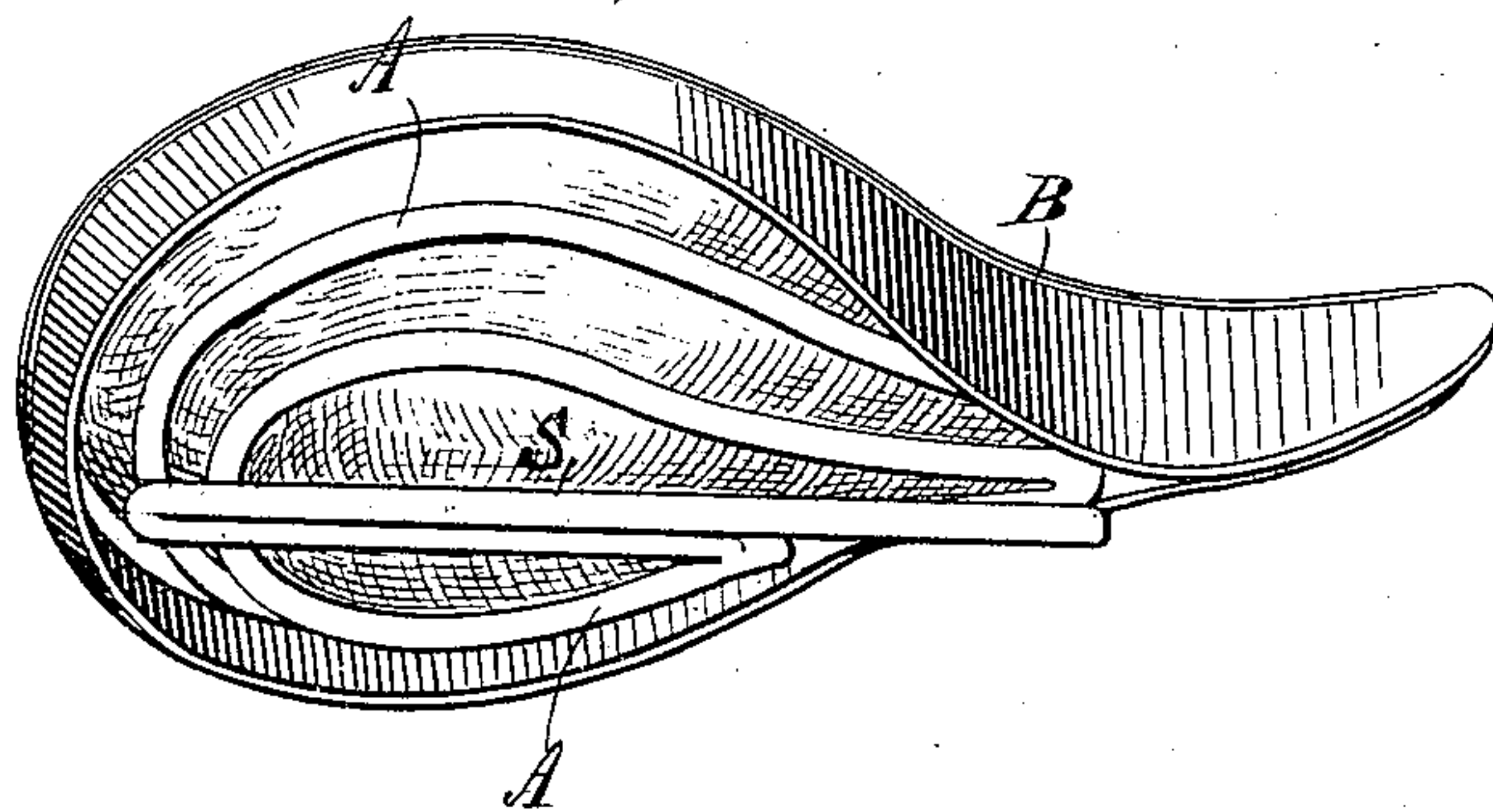


Fig. 2.

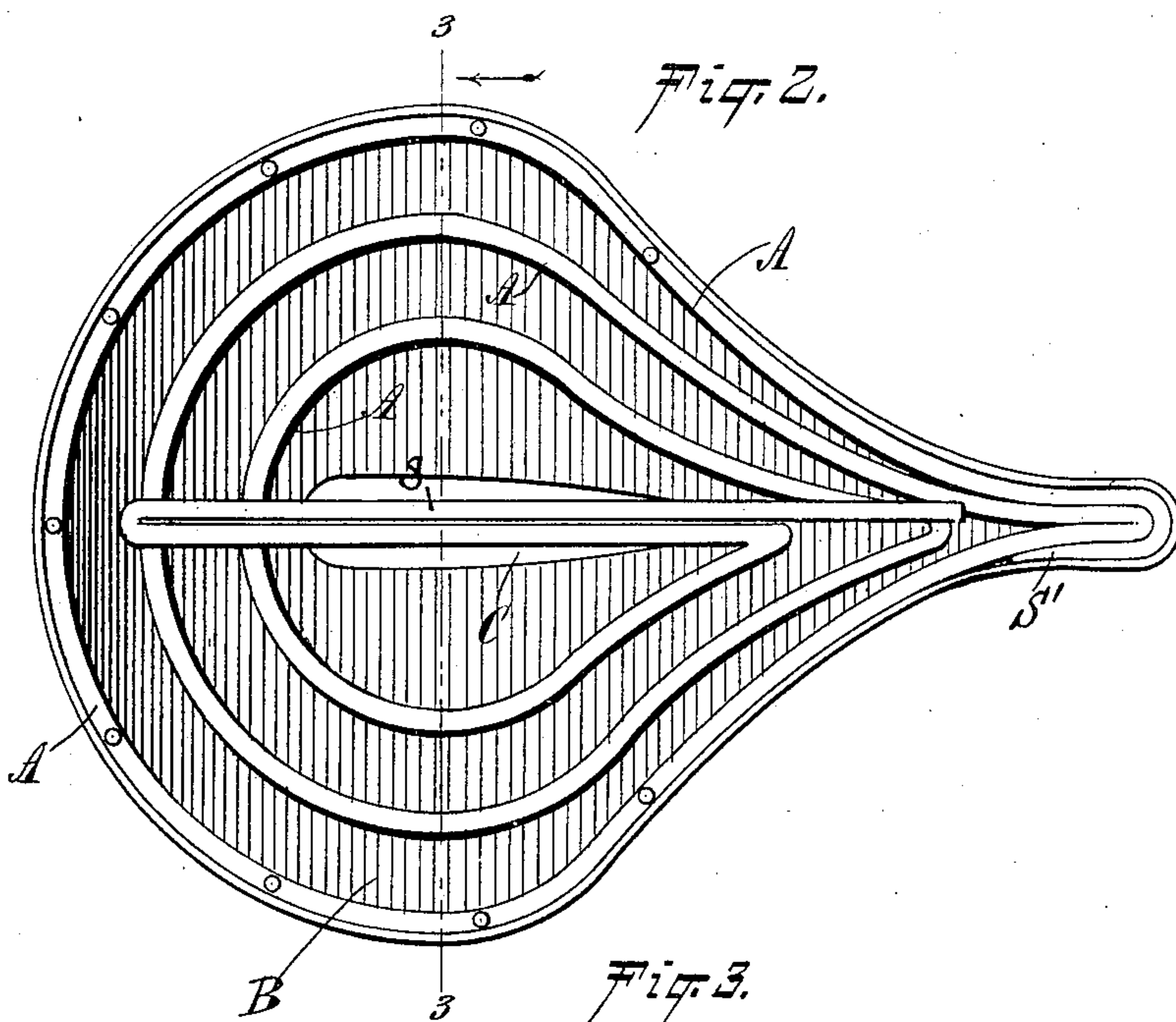
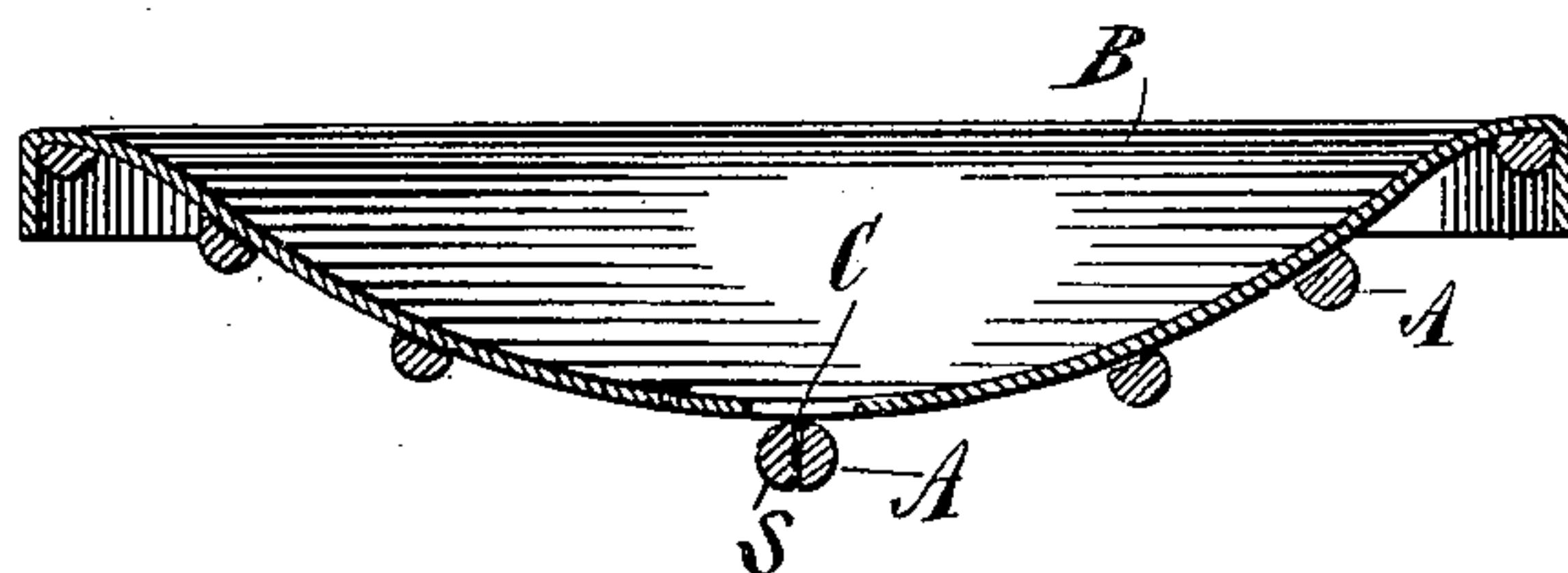


Fig. 3.



WITNESSES:

William P. Goebel.
J. H. Acker.

INVENTOR

J. B. McManus.

BY

Munroe

ATTORNEYS.

UNITED STATES PATENT OFFICE.

JOHN BENJAMIN McMANUS, OF SCHENECTADY, NEW YORK, ASSIGNOR OF ONE-HALF TO ALBERT B. VAN VOAST AND HORACE S. VAN VOAST, OF SAME PLACE.

BICYCLE-SADDLE.

SPECIFICATION forming part of Letters Patent No. 611,221, dated September 20, 1898.

Application filed May 23, 1896. Serial No. 592,731. (No model.)

To all whom it may concern:

Be it known that I, JOHN BENJAMIN McMANUS, of Schenectady, in the county of Schenectady and State of New York, have invented a new and Improved Bicycle-Saddle, of which the following is a full, clear, and exact description.

The object of my invention is to construct a light and durable bicycle-saddle that will automatically adjust itself to the body of the rider and contribute to his comfort and health and that will be adapted for use in connection with a saddle-post without the necessity of an intermediate spring, the saddle of itself possessing the necessary resiliency.

The invention consists in the novel construction and combination of the several parts, as will be hereinafter fully set forth, and pointed out in the claims.

Reference is to be had to the accompanying drawings, forming a part of this specification, in which similar characters of reference indicate corresponding parts in all the figures.

Figure 1 is a perspective view of the saddle, looking from the bottom. Fig. 2 is a bottom plan view of the saddle. Fig. 3 is a transverse section through the saddle, taken substantially on the line 3 3 in Fig. 2.

In carrying out the invention the body of the saddle is preferably made from a single piece of spring material in the form of a strip of wire bent upon itself to the required shape of the saddle, forming a number of coils A, one within another, each coil having more or less of an independent action, the entire body being a distorted helical spring presenting in plan view substantially a pear shape. It will be understood, however, that the spring material constituting the body or frame of the saddle may be made up of a number of pieces connected in any known manner; but preferably, as heretofore stated, a single strip or wire of resilient material is employed in the formation of the body of the saddle.

After the strip or wire has been bent upon itself to give the required shape to the saddle its inner terminal is preferably doubled upon itself and extended in opposite directions longitudinally of the saddle to underlie and reinforce the inner turns or coils of the frame and form an attaching-shank S, as shown in

Fig. 2, and the outer end S' of the strip or wire is beveled and secured to the outer coil at the pommel of the saddle, as shown in such figure. When desired, the attaching-shank, formed by the inner terminal of the strip or wire, may lie wholly within the inner or central coil of the frame. Normally each inner coil of the saddle-frame is below the plane of the next outer coil, imparting a concaved form to the frame, and the entire body is provided with a flexible covering B, of leather or other suitable material, which may extend downward beyond the margin of the said body a predetermined distance, as shown in Figs. 1 and 3. Ordinarily the covering or seat B of the saddle has an opening C, made longitudinally in the central portion thereof, especially back of the pommel or between the cantle portion of the saddle and the pommel. The saddle may be attached to the saddle-post in any suitable manner. The attachment is preferably made by means of the shank S, which is rigidly connected with the seat-post of the bicycle and which forms a support and reinforce for the overlying turns of the coiled frame when the weight of the rider is applied thereto.

A saddle constructed as above set forth will be light, durable, and comfortable, as well as healthful, and the jolting consequent on the movement of the bicycle or like machine over rough roads or uneven ground will be imparted in a very slight degree or to a minimum extent only to the rider and will be distributed over a considerable area of his body. The covering or seat B is preferably secured only to the outermost coil of the frame, as shown in Fig. 2, and is adapted to rest upon and be supported by the coils of the concaved frame, which coils constitute a plurality of resilient seat-engaging supports increasing in rigidity toward the center and lowest portion of the frame. The concaved form of the saddle enables it to conform to the shape of the buttocks of the rider and support the muscles with yielding spring-pressure without interfering with the pedaling movements.

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

1. A bicycle-saddle frame comprising a single resilient strip or wire coiled to the form of a distorted helix, and having its inner terminal doubled upon itself and extended in
5 opposite directions longitudinally of the saddle to underlie and reinforce the inner turns of the coil and form an attaching-shank, substantially as described.
2. A seat formed of a length of resilient material curved helically and having one terminal run beneath the seat in the plane parallel
10 to the plane occupied by the seat, such terminal being adapted to be engaged by the

coils of the helix when the coils are depressed by the weight of persons seated thereon. 15

3. A seat formed of a resilient wire coiled into a helix, each convolution of the helix being distorted laterally at one side so as to form a forwardly-projected portion serving as a pommel for the seat and one terminal of
20 the wire being extended beneath the saddle to underlie and reinforce the coils thereof.

JOHN BENJAMIN McMANUS.

Witnesses:

FRANK C. CURTIS,
T. O. OSTERHOLM.