

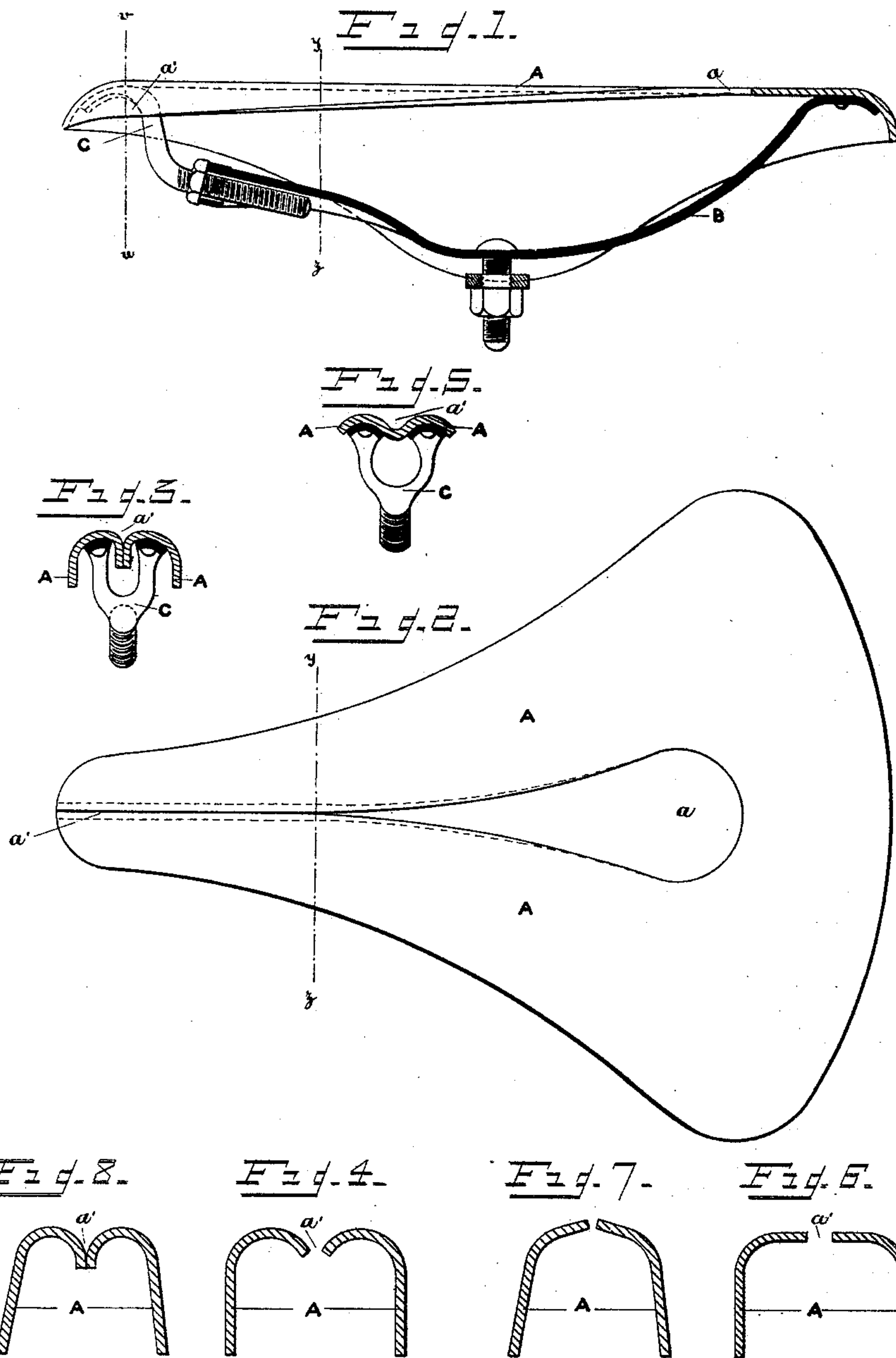
(No Model.)

3 Sheets—Sheet 1.

S. PATTISSON.
SADDLE FOR VELOCIPEDES.

No. 415,253.

Patented Nov. 19, 1889.



WITNESSES:

Arthur Millward Black:
Edward L. Hammond,

INVENTOR.

Sydney Pattison.

By his Attorney.

T. B. & C. Phillips.

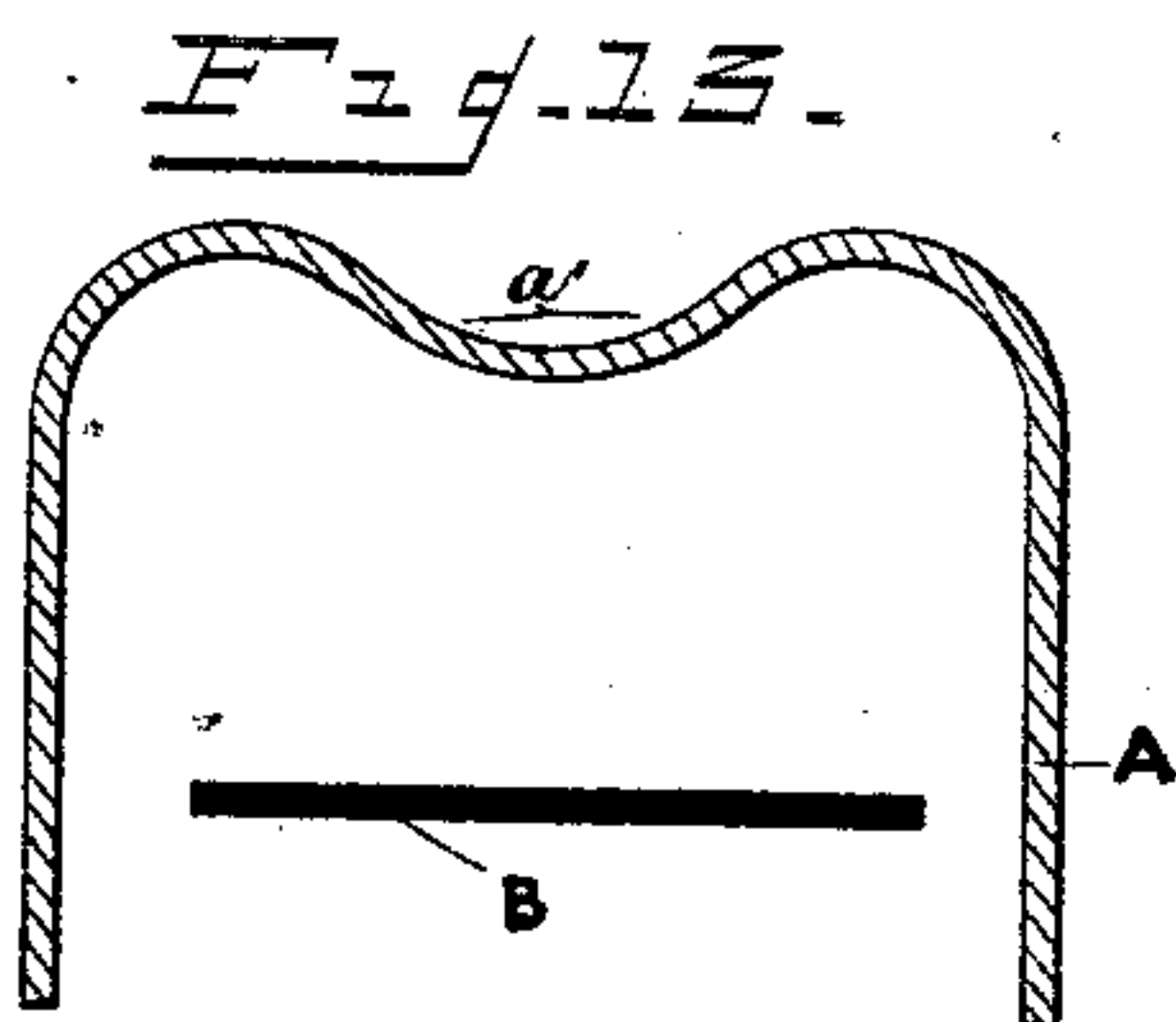
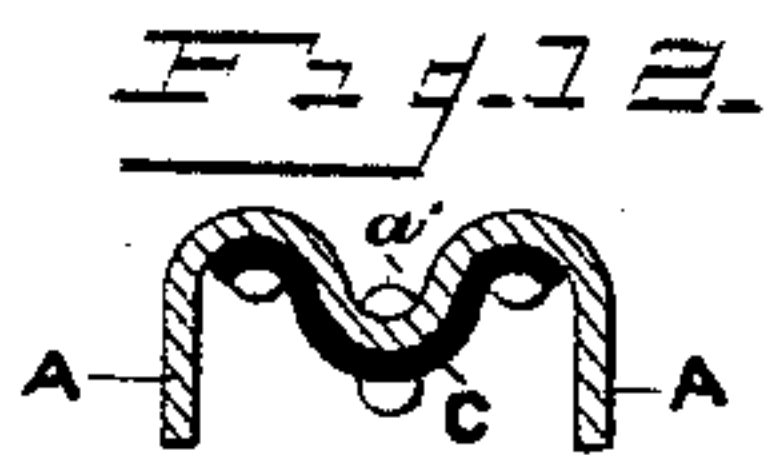
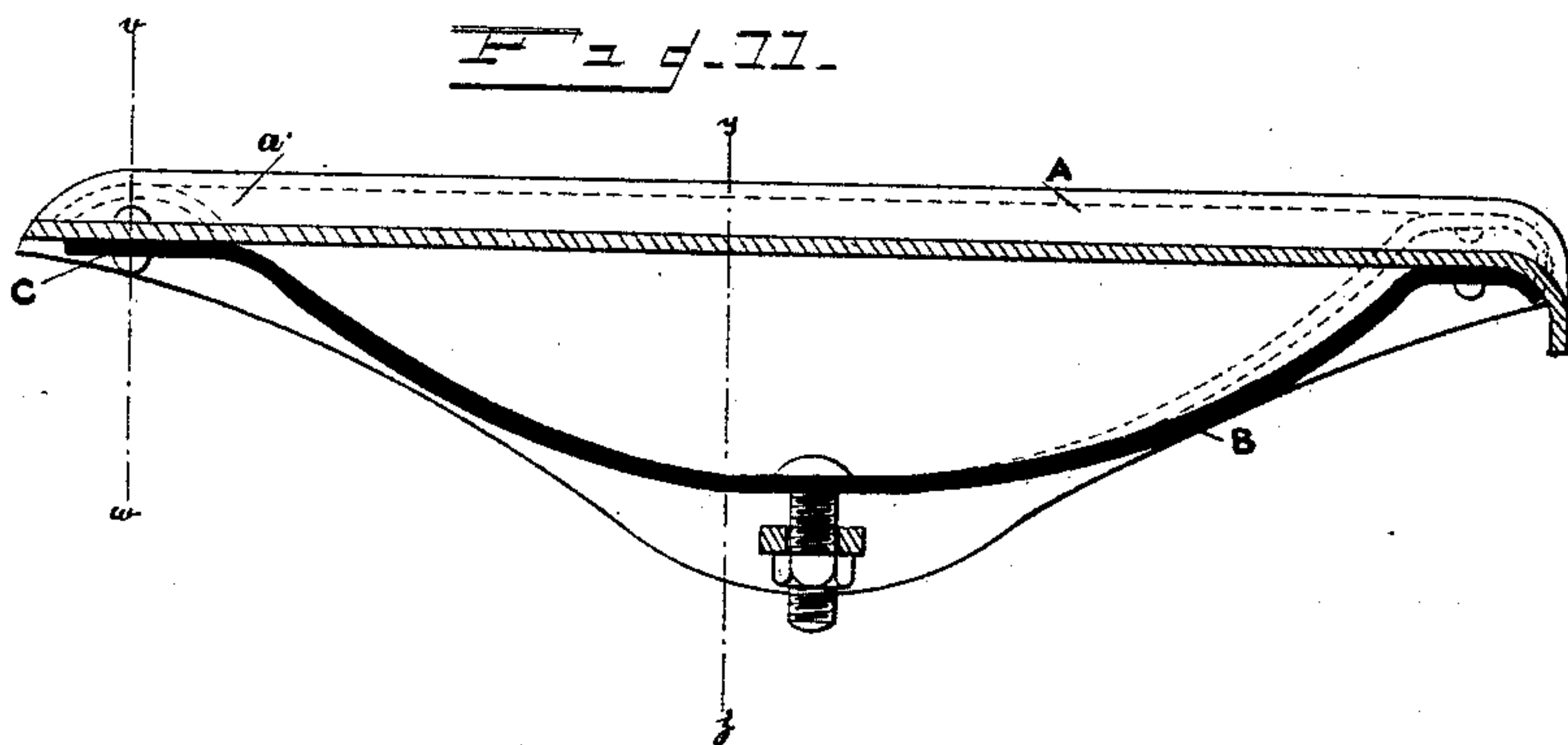
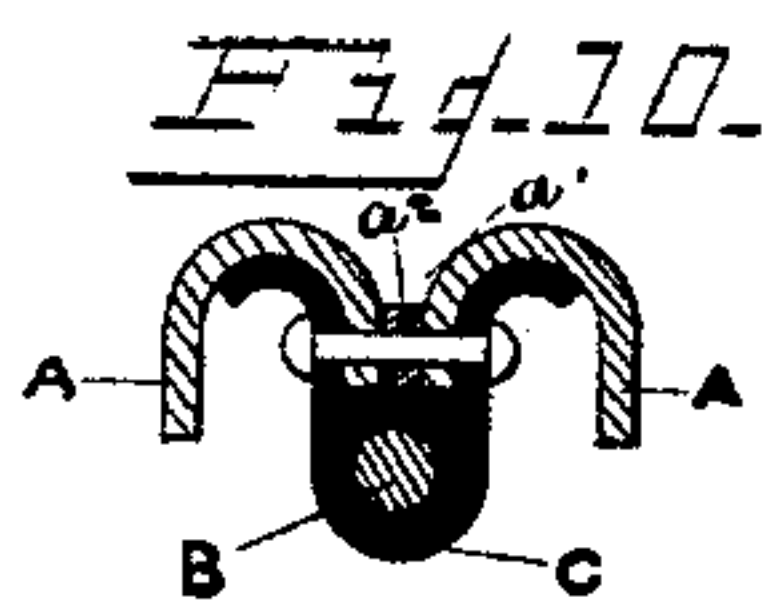
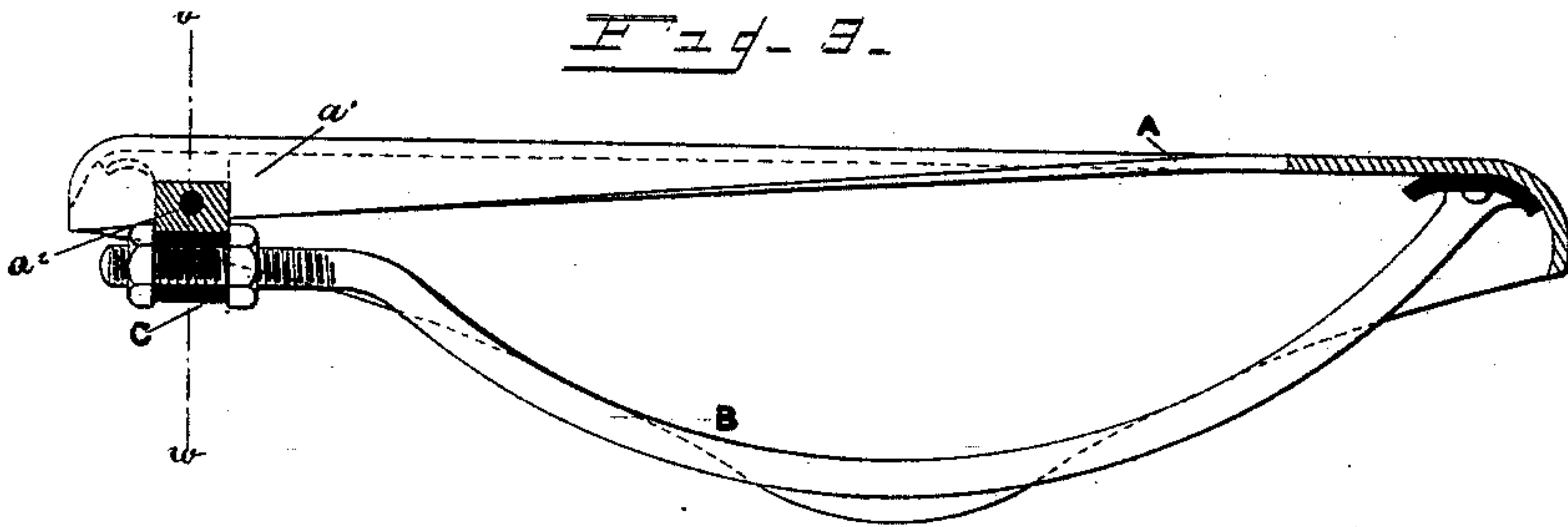
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3 Sheets—Sheet 2.

S. PATTISSON.
SADDLE FOR VELOCIPEDES.

No. 415,253.

Patented Nov. 19, 1889.



WITNESSES:

Arthur Millward Flack.
Edward L. Hammond

INVENTOR:

Sidney Pattison.

By his Attorney.

Robert S. Phillips.

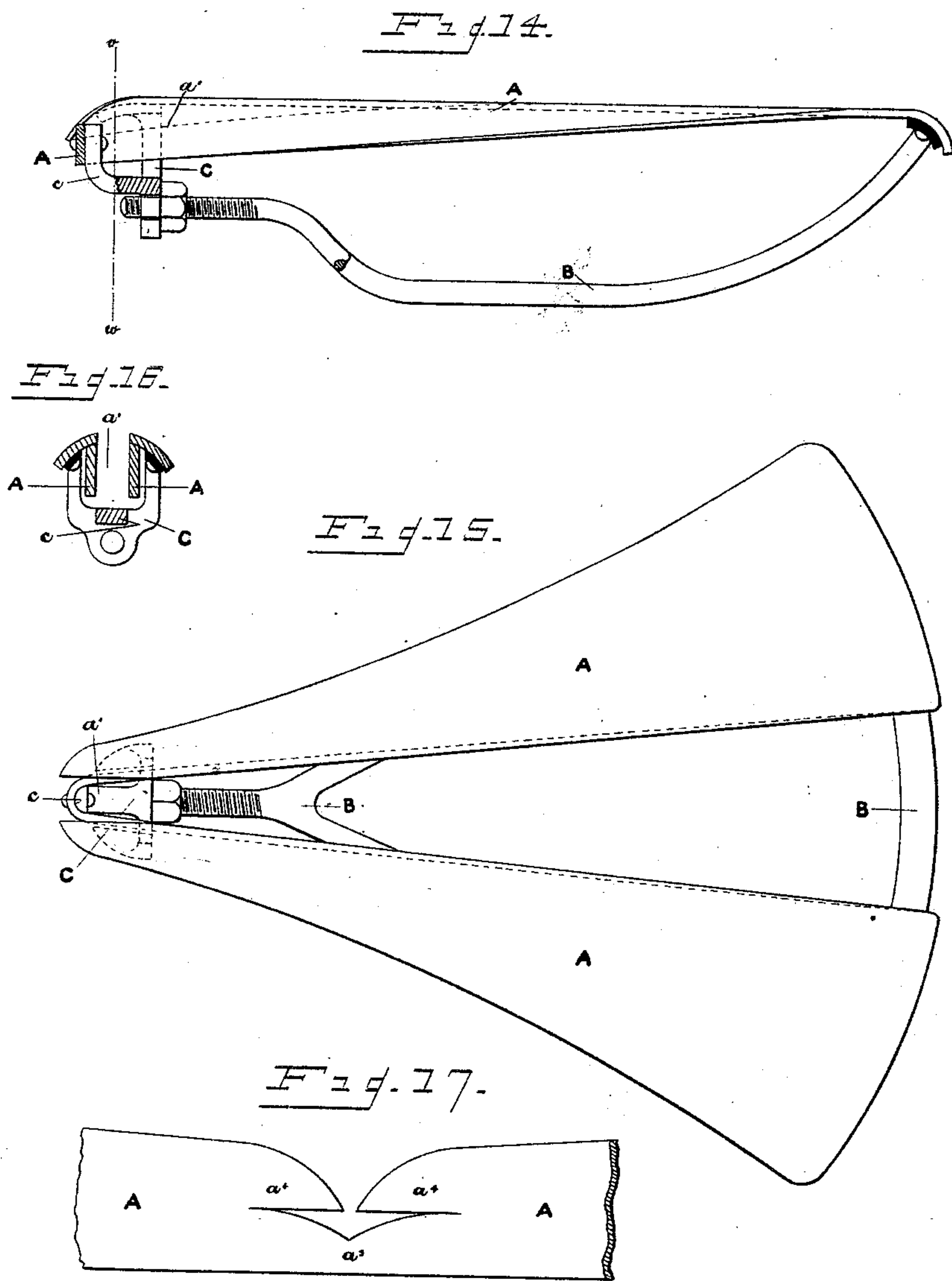
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3 Sheets—Sheet 3.

S. PATTISSON.
SADDLE FOR VELOCIPEDES.

No. 415,253.

Patented Nov. 19, 1889.



WITNESSES:

Arthur Millward Black.
Edward L. Hammond.

INVENTOR.

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UNITED STATES PATENT OFFICE.

SIDNEY PATTISSON, OF LONDON, COUNTY OF MIDDLESEX, ENGLAND.

SADDLE FOR VELOCIPEDES.

SPECIFICATION forming part of Letters Patent No. 415,253, dated November 19, 1889.

Application filed July 29, 1889. Serial No. 319,007. (No model.) Patented in England May 19, 1888, No. 7,442.

To all whom it may concern:

Be it known that I, SIDNEY PATTISSON, a subject of the Queen of Great Britain, residing at London, in the county of Middlesex, England, have invented a new and useful Improvement in Saddles for Velocipedes, (for which I have obtained a patent in Great Britain, No. 7,442, bearing date May 19, 1888,) of which the following is a specification.

My invention relates to an improvement in the saddles of velocipedes; and it consists, first, of forming a groove or channel through the nose or peak of the saddle, the said groove or channel being continued either throughout the whole length of the saddle or as far as is found necessary, and, secondly, of a means of constructing the groove or channel and preserving its shape under the weight of the rider; and it has for its object the avoidance of pressure on the perinæum when a rider is seated on the saddle.

It has become a recognized fact among the medical faculty that very serious harm is being developed by the continued use of the existing types of saddles, which allow the weight of the rider to rest largely on the perinæum.

I attain the object of my invention in the manner illustrated by the accompanying drawings, throughout the several views of which similar parts are marked with like letters of reference.

Figures 1 and 2, Sheet No. 1, are views in longitudinal sectional elevation and plan, respectively, of my improved saddle; and Figs. 3 and 4 are views in transverse section on the lines *vw* and *yz*, respectively, of Figs. 1 and 2. Referring to these figures, the leather cover or seat A is riveted or otherwise fixed to the rear end of the supporting-frame B in the usual manner. The frame B may be of any suitable shape or form. The leather cover or seat A is split longitudinally from near to the usual opening *a*, at or near to the rear of the saddle, right through to the front, forming two distinct parts. The front part of the supporting-frame B, which in screw-tension saddles, as illustrated, consists of a suitably-shaped plate having a threaded shank by which it engages with the forward end of the frame B, is formed in the shape of a fork C, as most clearly shown by Fig. 3. To this

fork the two parts of the leather seat A are riveted or otherwise fixed, the inner edges of the divided parts being turned inward, as illustrated, to prevent their rising. The top of the fork C may be shaped to form a groove or channel of any desired width, and in case of grooves or channels of extra width the tops are formed of such a convex shape as will insure the edges of the split parts of the leather seat curving downward.

Fig. 5, Sheet No. 1 of the accompanying drawings, illustrates a modification in which the groove or channel *a'* is formed without splitting the leather seat, the front end of the leather seat being riveted or otherwise fixed to the fork C, with the necessary fullness in the center to form the groove or channel.

Figs. 6 and 7 of the accompanying drawings are sections of the leather seat of an ordinary saddle with the usual slot in it, the former showing the slot *a'* in the seat in its normal state and the latter when any one is seated on the saddle. It will be observed from Fig. 7 that the slot *a'*, under the weight of a rider, disappears and the edges thereof meet and ridge up, thereby increasing the pressure on the perinæum. On the other hand, by constructing a saddle according to my invention the sides of the slot *a'* of the leather seat, when they are pressed together by the rider's weight, meet together and move downward, as illustrated by Fig. 8 of the accompanying drawings, thereby always preserving the slot or channel *a'* in the center of the seat, and consequently avoiding all pressure on the perinæum. If desired, the leather cover or seat may be made out of two separate pieces instead of out of one piece split longitudinally.

Fig. 9, Sheet No. 2 of the accompanying drawings, is a view in longitudinal sectional elevation, and Fig. 10, Sheet No. 2 of the accompanying drawings, is a view in transverse section on line *vw*, Fig. 9, showing another method of carrying my invention into practical effect. In this case the leather seat A is shaped and fixed to the rear part of the frame B, as hereinbefore described; but it is fixed to the fork C by one or more transverse rivets, either with or without a thickness piece *a²* interposed between the turned-over sides

of the split seat A, as it is desired to make the slot or channel a' wide or narrow. By placing the fixing-rivets transversely the turned-over edges of the bifurcated seat are more effectually prevented from rising.

Figs. 11, 12, and 13, Sheet No. 2 of the accompanying drawings, the former being a longitudinal sectional elevation and the two latter transverse sections on the lines vw and yz , respectively, illustrate a modification of my invention in which the slot or channel a' is formed without dividing the leather seat, and preferably, though not necessarily, right through from one end of the saddle to the other. The supporting-frame B is formed in the usual manner; but instead of having the front part of a convex shape, as is usual, it is made of a concave shape, as shown by Fig. 12. This concave plate is the equivalent of the fork C. The rear part of the frame B may also be provided with a curved hollow if it is desired to form the channel a' through the whole length of the saddle. The leather seat A is not in this case divided, but the shape of the channel a' is preserved by riveting or otherwise fixing the leather A to the bottom of the concave plate C, as illustrated.

Figs. 14, 15, 16, and 17, Sheet No. 3 of the accompanying drawings, illustrate a further modification of my invention. Fig. 14 is a view in longitudinal sectional elevation. Fig. 15 is a view in plan. Fig. 16 is a view in transverse section on line vw , Fig. 14, and Fig. 17 is a diagram illustrating the manner of cutting the leather seat. In this modification the leather seat A is formed out of one piece of leather cut at the center of its length, as illustrated by Fig. 17. The ends of the leather seat A are fixed to the rear part of the frame B by rivets or otherwise, and the front parts a^4 are riveted to the fork C, mounted on the front end of the frame B. The part a^3 is passed over a short vertical arm c , fixed to or forming part of the fork C, and is preferably, though not necessarily, riveted or otherwise fixed thereto, and the parts a^4 are riveted to the prongs of the fork C. By this arrangement the slot or channel a' is more pronounced and the turned-over sides of the edges of the leather forming the slot or channel a' are more effectually prevented from rising. It will be noticed that the top of the vertical stud c is kept below the top of the fork C, so that the slot or channel is uninterrupted right through. If desired, this construction of saddle may be combined with any suitable spring

or spring-frame to form a combined saddle and spring.

I would have it understood that I do not limit myself to the exact details of construction hereinbefore described, and illustrated by the accompanying drawings; but I hold myself at liberty to make such changes and alterations as fairly fall within the spirit and scope of my invention.

I am aware that prior to the date of my invention the leather seats or covers of saddles have been formed with slits or openings in them, and also that some combined saddles and springs have been made in which the leather seat or cover has been split, though not forming an uninterrupted slot or channel right through to the nose or peak of the saddle. I therefore do not broadly claim such devices; but

What I do claim as my invention, and desire to secure by Letters Patent, is—

1. The combination, with a leather saddle provided with a longitudinal furrow having downwardly-bent sides and extending through the saddle-peak, of a frame for supporting the seat portion and also supporting the leather peak on each side of the said furrow, substantially as and for the purpose set forth.

2. The combination, with a leather saddle provided with a longitudinal furrow having downwardly-bent sides and extending through the saddle-peak, of a frame for supporting the seat portion, and a bifurcated bracket for supporting the leather peak on each side, whereby said furrow is not obliterated by the weight of the rider, substantially as and for the purpose set forth.

3. The combination, with a leather saddle provided with a longitudinal open-bottomed furrow having downwardly-bent sides and extending through the saddle-peak, of a frame supporting the seat portion and also supporting the peak on each side of the furrow, and having the downwardly-bent furrow sides rigidly secured to it, whereby said furrow is preserved from obliteration under the weight of the rider, substantially as and for the purpose set forth.

In witness whereof I have hereunto signed my name in the presence of two subscribing witnesses.

SIDNEY PATTISSON.

Witnesses:

ROBT. ED. PHILLIPS,
EDWARD J. HAMMOND.