No. 616,178. Patented Dec. 20, 1898.

G. F. BARRON.

BICYCLE SEAT.

(Application filed Sept. 16, 1896.)

(No Model.)

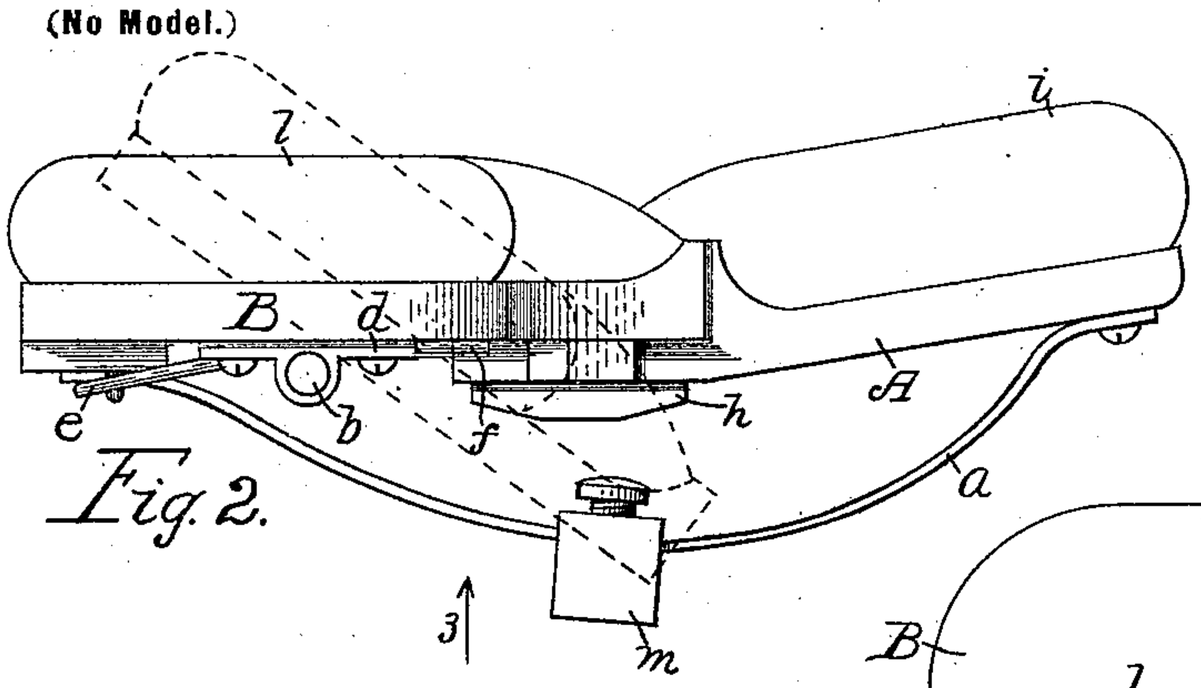

Fig. 2.

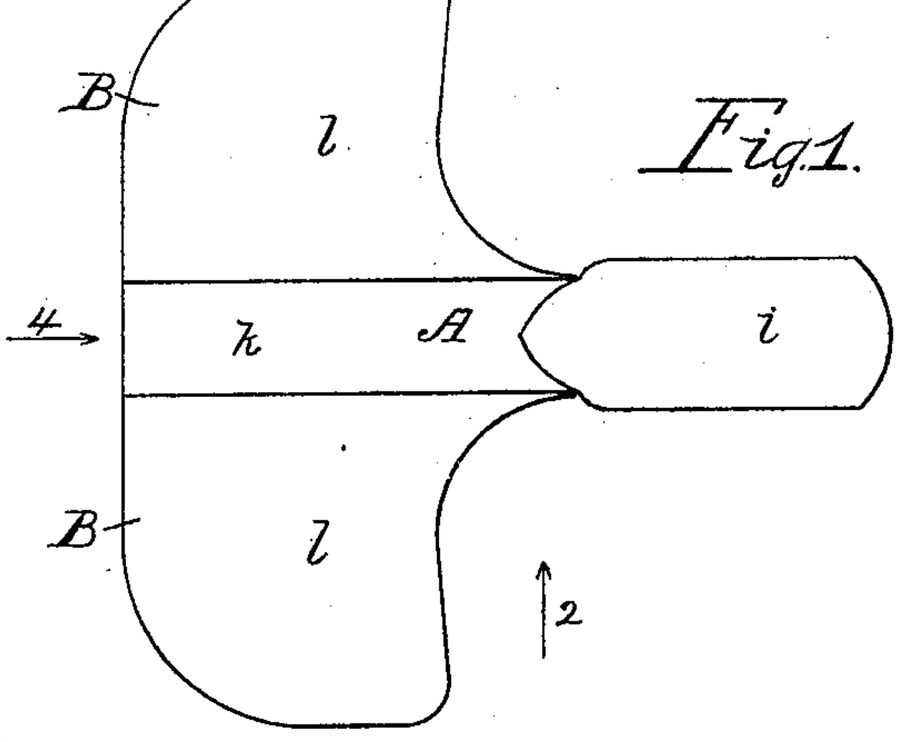

Fig. 1.

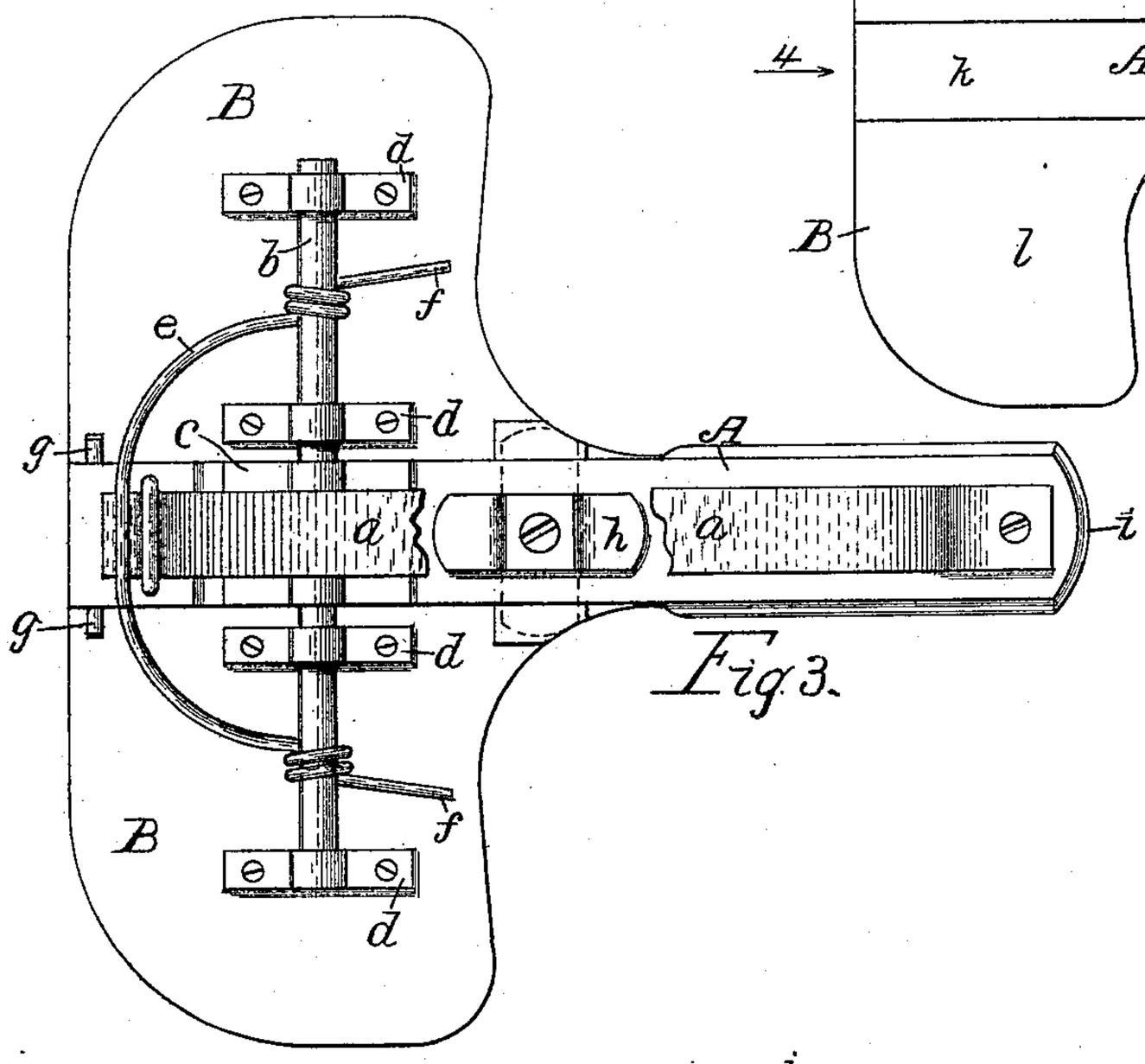

Fig. 3.

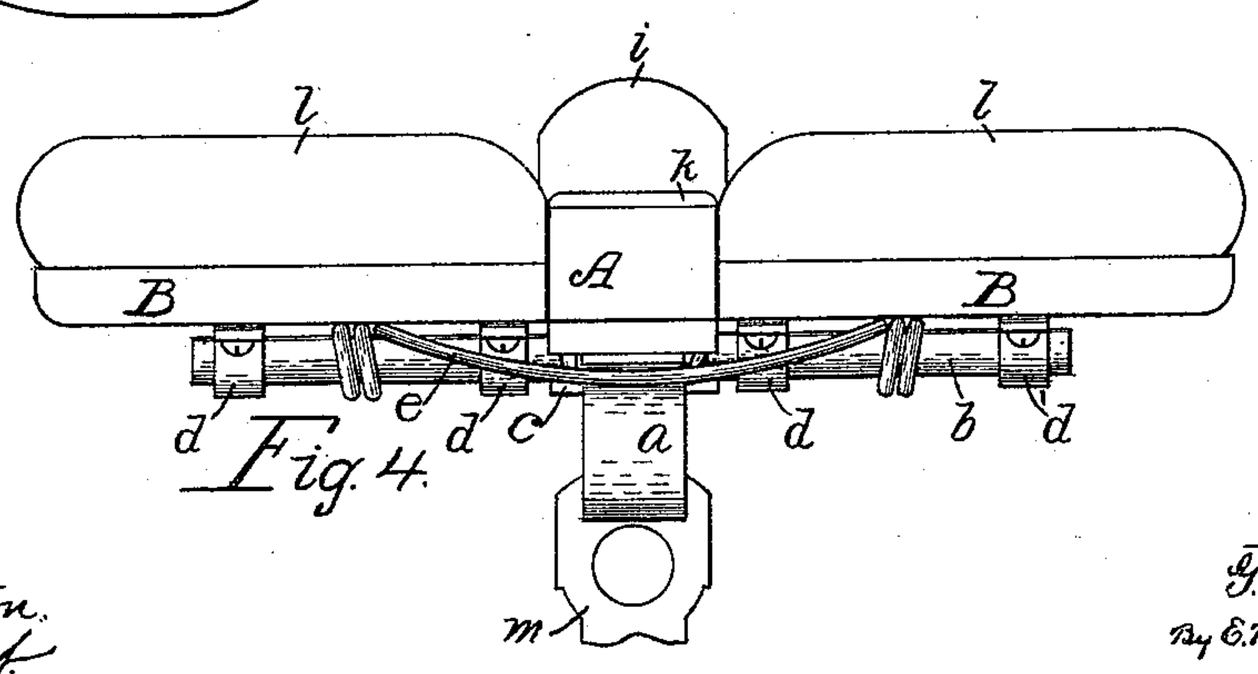

Fig. 4.

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UNITED STATES PATENT OFFICE.

GEORGE F. BARRON, OF PALMYRA, NEW YORK.

BICYCLE-SEAT.

SPECIFICATION forming part of Letters Patent No. 616,178, dated December 20, 1898.

Application filed September 16, 1896. Serial No. 605,964. (No model.)

To all whom it may concern:

Be it known that I, GEORGE F. BARRON, of Palmyra, in the county of Wayne and State of New York, have invented a new and useful Improvement in Bicycle-Seats, which improvement is fully set forth in the following specification and shown in the accompanying drawings.

The object of my invention is to produce a seat for bicycles which shall be easy and comfortable for the rider, the seat having parts adapted to turn on axes to correspond with the motions of the legs of the rider while turning the pedals.

This seat consists of three main parts or pieces—viz., a narrow longitudinal middle piece supported by the frame of the bicycle and two side pieces or wings for supporting the weight of the rider, one on either side of the middle piece and held to turn or rock on bearings in vertical directions as the position of the rider changes in propelling the bicycle.

The invention is hereinafter fully described and more particularly pointed out.

Referring to the drawings, Figure 1, drawn to a small scale, is a plan of the seat. Fig. 2 is a side elevation seen as indicated by arrow 2 in Fig. 1, parts being shown in two positions by full and dotted lines. Fig. 3 is a view of the under surface of the seat. Fig. 4 is a rear view seen as indicated by arrow 4 in Fig. 1.

The seat consists of a middle longitudinal part or piece A, made of wood, light metal, or other suitable material, connected with the frame of the bicycle. This piece is narrow and mounted upon some suitable supporting-spring *a*, of common construction, and provided at its under surface and near the rear end with a transverse horizontal shaft *b*. The shaft is held by means of a stout clip *c*, Fig. 3, secured rigidly to the piece A.

At either side of the piece A and supported by the latter is placed a side piece or wing B, which side pieces together form the seat proper or serve to directly hold the weight of the rider. Each wing is provided at its under surface with bearings *d d* for the shaft *b*, the ends of which shaft project some distance at either side of the piece A. By means of this construction the wings are adapted to rock or tilt in vertical directions on their bearings upon the shaft independent of each other. A spring *e*, having bearings upon the part A and against the under surfaces of the wings B B, acts to control the wings and normally hold them horizontal, as shown in full lines in Fig. 2. This spring may be of any convenient form or kind, the one shown being made of spring-wire wound about the shaft near either end, the extreme ends *f f* of the spring pressing upward against the respective wings near their front edges. The spring *e* being thus arranged tends to turn the front edges of the wings upward, and to prevent the wings being turned too far in that manner stops are provided, which consist of pins *g g*, Fig. 3, rigid in the piece A and in position to bear against the respective wings.

As either foot of the rider is pressed downward to carry the pedal to its lowest position the part of the leg above the knee inclines sharply downward, which brings a heavy downward pressure temporarily against the forward edge of the wing. The latter being adapted to turn, as stated, yields to this pressure by tilting forward, as shown by dotted lines in Fig. 2, which relieves the pressure at the edge of the wing and distributes it over the upper surface of the wing, much to the relief and comfort of the rider. Thus the two wings alternately tilt or rock as one, and then the other foot of the rider moves downward and upward in following the pedals in their circular courses around the axle.

A button *h*, Figs. 2 and 3, is provided at the under surface of the piece A, which being turned transversely to said piece, as shown by dotted lines in Fig. 3, has its ends in position to bear against the under sides of the respective wings and so serves to hold the latter in horizontal positions whenever it is wished by the rider to make these parts of the seat relatively stationary.

The wings B B of the seat are provided with thick pads or cushions *l l* of suitable kind, and the middle piece A is provided at its forward end with a high pad or cushion *i*, while between the wings the cushion *i* is reduced to a thin body or covering *k*, Fig. 4. Thus constructed this portion of the piece A is depressed considerably below the level

of the pads or cushions *l l* of the wings which sustain the weight of the rider.

The seat is joined to the bicycle by some convenient clip or clamp *m* of well-known form and kind.

What I claim as my invention is—

1. In a bicycle-seat, the combination, with a middle piece provided with means for rigidly securing it longitudinally of the machine, of a wing or side piece pivotally secured at each side thereof, the middle piece being of a greater length than the side pieces, substantially as set forth.

2. In a bicycle-seat, the combination, with a middle piece provided with means for rigidly securing it longitudinally of the machine, of a wing or side piece pivotally secured at each side thereof, the middle piece being of a greater length than the side pieces and having its rear portion of a less height than the side pieces, substantially as set forth.

3. In a bicycle-seat, the combination, with a middle piece provided with means for rigidly securing it longitudinally of the machine, of a side piece secured at each side of the middle piece, stops to the rear of the pivotal point for limiting the rearward movement of the side pieces and a turn-button secured to the middle piece in front of the pivotal point and having its ends adapted to turn under the front ends of the side pieces, substantially as set forth.

4. In a bicycle-seat, the combination with a middle piece provided with means for rigidly securing it longitudinally of the machine, of a rod secured transversely of the same and projecting beyond the sides of the middle piece, a side piece pivotally secured upon each end of the rod, a spring for the side pieces, and a button on the middle piece, the ends of which are adapted to engage with the side pieces and hold them rigidly against pivotal movement, substantially as set forth.

5. A bicycle-saddle comprising a fixed pommel and vibrating side sections all in substantially the same horizontal plane and combining to form the seating-surface of the saddle, substantially as specified.

6. A bicycle-saddle comprising a fixed pommel, and tilting sections in substantially the same horizontal plane and means for locking said sections, substantially as specified.

In witness whereof I have hereunto set my hand, this 11th day of September, 1896, in the presence of two subscribing witnesses.

GEORGE F. BARRON.

Witnesses:
DONALD MCPHERSON,
ADDISON L. ROOT.