

**No. 677,705.**

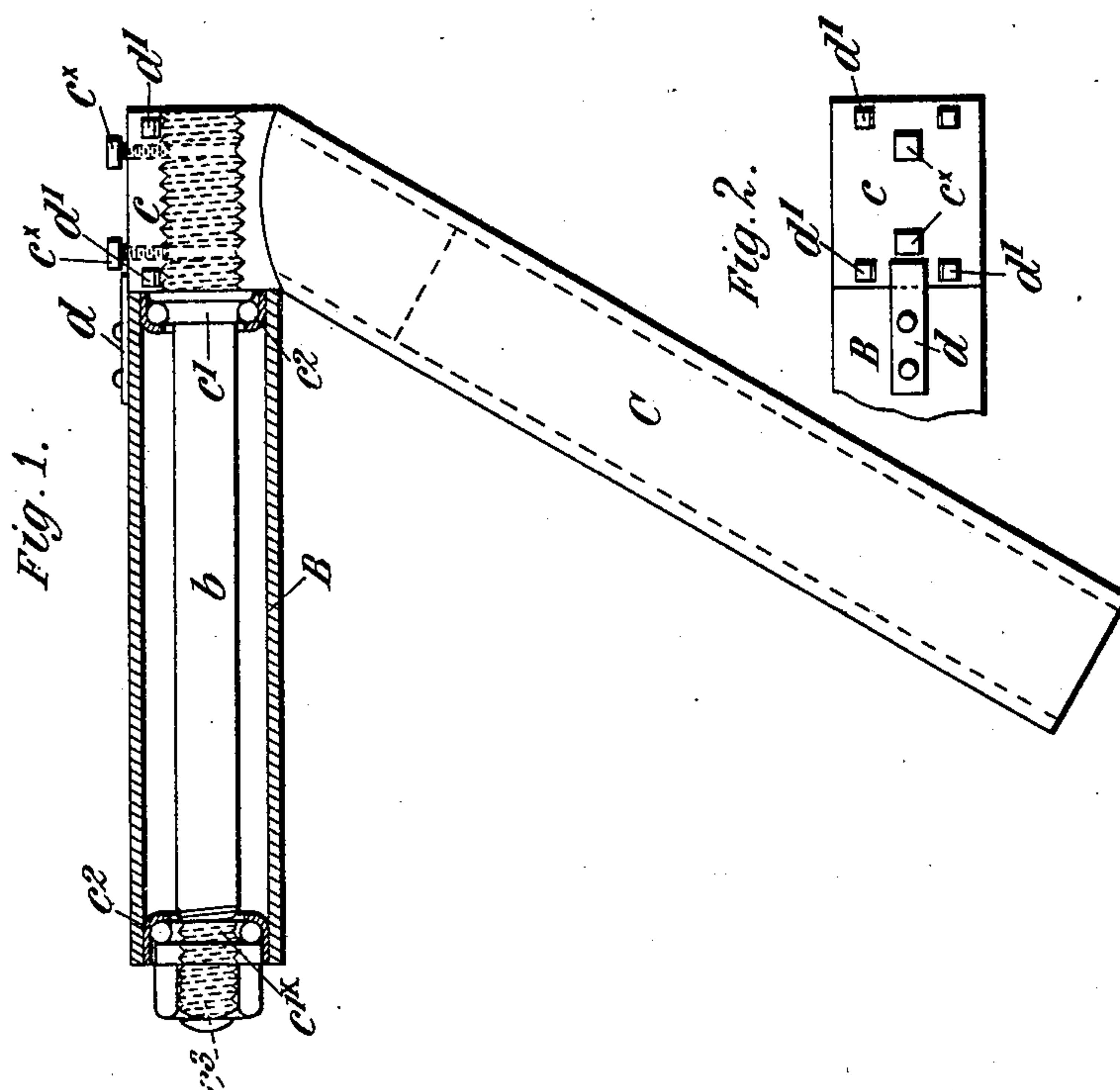
**Patented July 2, 1901.**

**J. A. SHAW-MACKENZIE & E. A. CROWSLEY.**

**SADDLE OR SEAT SUPPORT.**

(Application filed Nov. 8, 1898.)

(No Model.)



Witnesses:  
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# UNITED STATES PATENT OFFICE.

JOHN ALEXANDER SHAW-MACKENZIE AND ERNEST AUGUSTUS CROWSLEY,  
OF LONDON, ENGLAND.

## SADDLE OR SEAT SUPPORT.

SPECIFICATION forming part of Letters Patent No. 677,705, dated July 2, 1901.

Application filed November 8, 1898. Serial No. 695,826. (No model.)

*To all whom it may concern:*

Be it known that we, JOHN ALEXANDER SHAW-MACKENZIE, M. D., residing at 31 Grosvenor street, Grosvenor Square, and ERNEST AUGUSTUS CROWSLEY, cycle agent, residing at 167 Victoria street, London, England, subjects of the Queen of Great Britain, have invented certain new and useful Improvements in Saddle or Seat Supports, More Particularly Applicable to Velocipedes, of which the following is a specification, reference being had to the accompanying drawings.

This invention relates to improvements in saddle or seat supports, and it is more particularly applicable to velocipedes, although it may be employed in connection with other vehicles or machines having pedals for driving them.

The object of our invention is to provide a saddle-supporting device that will permit said saddle to rock in a lateral or transverse direction, and thereby accommodate itself to the movements of the rider in actuating the pedals, the means employed for affording this rocking movement being independent of the construction of the saddle.

According to our invention the portion of the support to which the saddle is secured is pivotally carried by a spindle, so that it is free to turn or oscillate, the amount of its movement being limited by a suitable stop or stops. By this arrangement the center of oscillation may be brought very near to the plane of the seat, so that the lateral displacement of the seat in its oscillatory movement is comparatively small.

In order that our invention may be clearly understood and readily carried into effect, we will proceed to describe the same more fully with reference to the accompanying drawings, in which—

Figure 1 is a part-sectional side elevation, and Fig. 2 is a plan, of one form of our improved saddle-support.

Like letters of reference indicate similar parts in both figures.

B is the saddle-pin or that portion of the saddle-support to which the saddle is attached by means of the clip *a* or by other appropriate means, and C is the saddle-post or that portion of the saddle-support that is secured

to the velocipede or other vehicle or machine to which our invention may be applied. The saddle-post is provided at its upper end with a socket *c*, to which is secured by any suitable means the extremity of the spindle *b*. In the construction shown the end of the spindle screws into such socket and is adapted to be secured therein by the set-screws *c*<sup>x</sup>. The saddle-pin forms the barrel of a ball-bearing carried by the spindle *b*. Said pin is provided with fixed cups or ball-races *c*<sup>2</sup> *c*<sup>2</sup> and the spindle with a fixed cone *c*<sup>1</sup> and an adjustable cone *c*<sup>x</sup> in the well-known manner.

For controlling or limiting the angular movement of the saddle-pin we employ a plate *d*, riveted or otherwise secured to the saddle-pin B, the end of which plate projects beyond said pin and is adapted to come against and to be limited in its movements by the stops *d*<sup>1</sup> *d*<sup>1</sup>, fixed upon the socket *c*. The distance between the stops *d*<sup>1</sup> *d*<sup>1</sup> is arranged to correspond to the extent of oscillatory movement that it is desired to allow to the saddle, a socket *c* being cylindrical and concentric with the axis of the saddle. Any other device may, however, be employed for this purpose.

It will be observed that the saddle-pin is reversible—that is to say, it may be disposed either in front of or at the rear of the saddle-post. In the construction shown in the drawings the reversal would be effected by releasing the set-screws *c*<sup>x</sup>, unscrewing and removing the spindle from the socket, and replacing it therein from the opposite end of said socket. It will be observed in the drawings that a pair of the stops *d*<sup>1</sup> for engaging the plate *d* are provided at each end of the socket *c*, so that whether the pin be arranged to project forwardly or rearwardly the said pin will be limited in its oscillatory movement by the plate *d*.

It will be apparent that slight changes may be made by those skilled in the art which will come within the scope of our invention, and we do not therefore desire to be limited in every instance to the exact construction herein shown and described. It is to be understood that our saddle or seat support is an attachment or accessory to a velocipede or



other vehicle and can replace the usual saddle or seat support, the post C being secured within the saddle-post of the bicycle or the like in an obvious manner. In this way it does  
5 not necessitate a modification in the frame, the saddle, or other parts unless it is made as a permanent part thereof.

What we claim is—

10 1. A saddle or seat support consisting in the combination of a post having a longitudinal socket formed thereon, of a longitudinal tubular saddle-pin to which the saddle is directly attached by the usual means, of a spindle carrying said saddle-pin and detach-  
15 ably secured in said socket, said saddle-pin being capable of slight axial oscillatory movement on said spindle and of means for limiting said movement of the saddle-pin substantially as specified.

20 2. A saddle or seat support consisting in the combination of a post having a longitudinal socket formed thereon, of a longitudinal tubular saddle-pin, to which the saddle is directly attached by the usual means, of a  
25 spindle carrying said saddle-pin and detachably secured in said socket, of a projection

upon the inner end of said saddle-pin, and of stops formed on the end of said socket and between which said projection enters, to limit the axial oscillatory movement of said saddle-pin. 30

3. A saddle or seat support consisting in the combination of a post having a longitudinal socket formed thereon, of a removable spindle adapted to be secured in either end 35 of said socket, of a saddle or seat having a longitudinal tubular saddle-pin adapted to be rotatably mounted upon said spindle, and of a longitudinal projection upon the inner end of said pin and adapted to overlap either 40 end of said socket and to enter between stops on either end of said socket, to limit the oscillatory movement of said saddle-pin.

In testimony whereof we have hereunto set our hands, in the presence of two subscribing 45 witnesses, this 28th day of October, 1898.

JOHN ALEXANDER SHAW-MACKENZIE.  
ERNEST AUGUSTUS CROWSLEY.

Witnesses:

H. ASHLEY NORRIS,  
J. COLLINS.