

(No Model.)

C. STEIN.
BICYCLE SADDLE.

No. 485,434.

Patented Nov. 1, 1892.

FIG 1

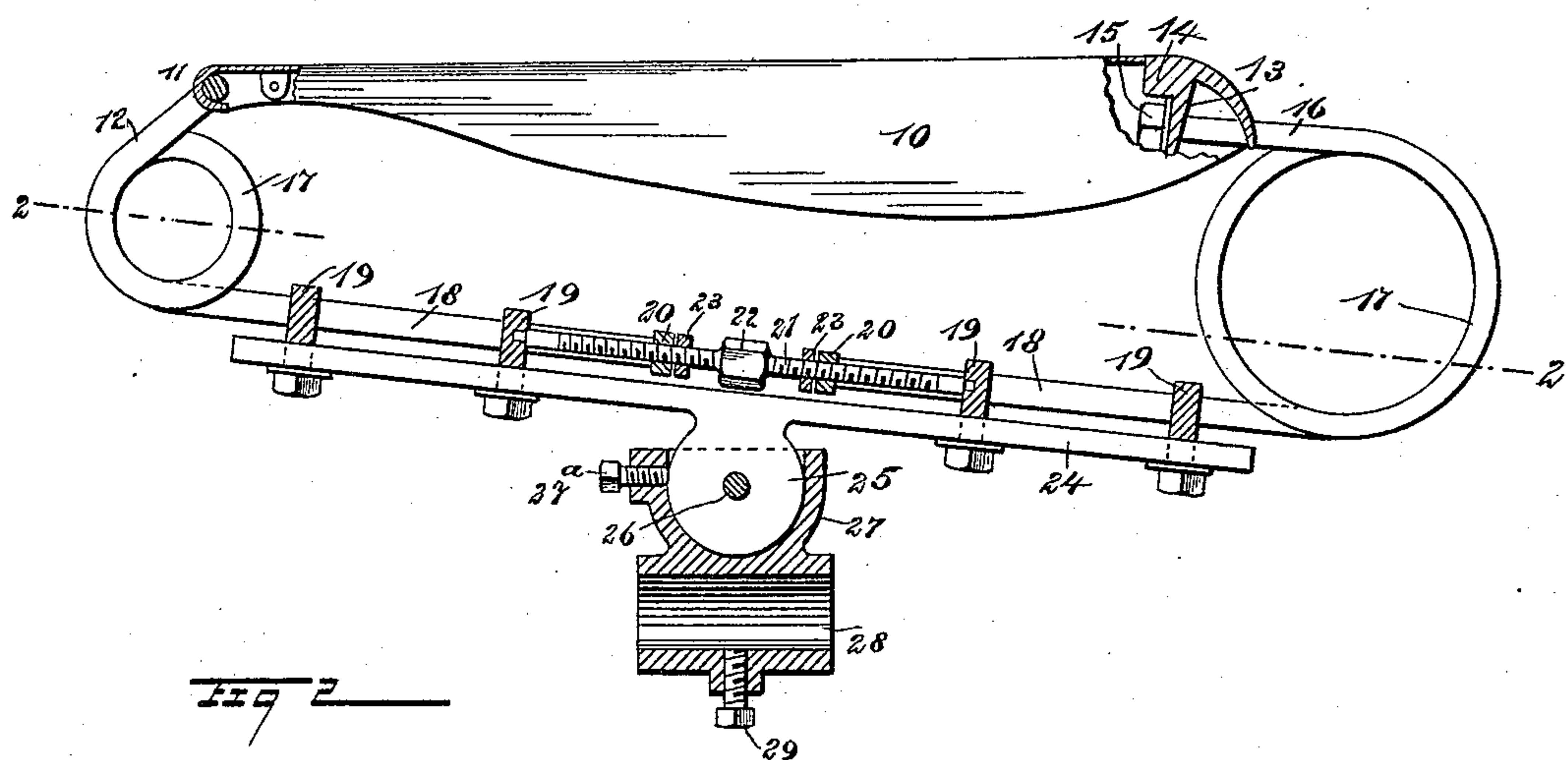


FIG 2

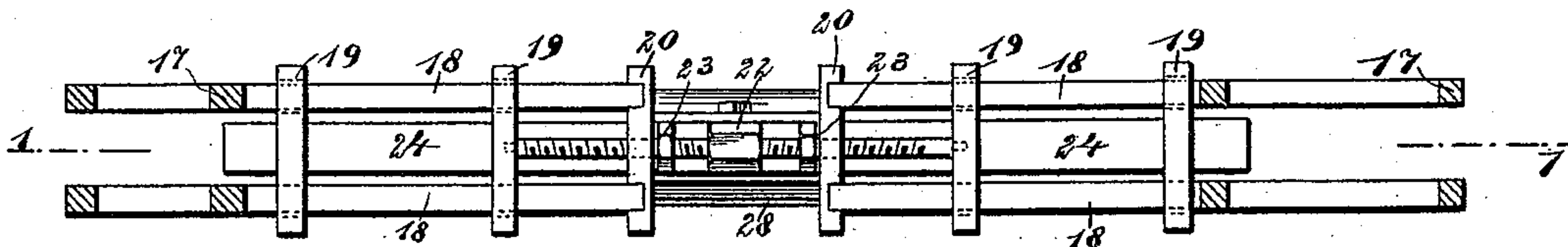
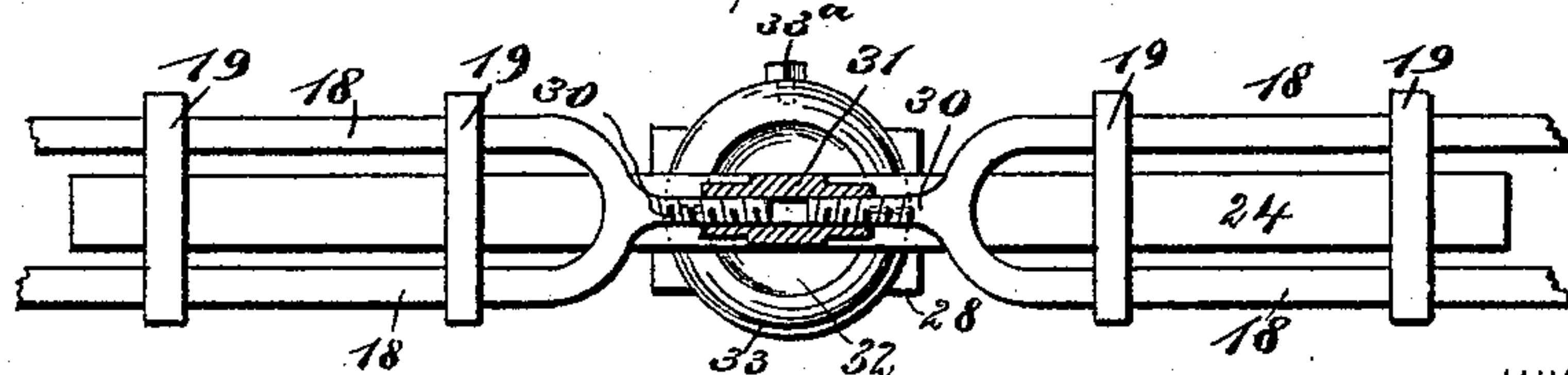


FIG 3



WITNESSES:

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UNITED STATES PATENT OFFICE.

CHARLES STEIN, OF MEADVILLE, PENNSYLVANIA.

BICYCLE-SADDLE.

SPECIFICATION forming part of Letters Patent No. 485,434, dated November 1, 1892.

Application filed December 2, 1891. Serial No. 413,786. (No model.)

To all whom it may concern:

Be it known that I, CHARLES STEIN, of Meadville, in the county of Crawford and State of Pennsylvania, have invented a new and Improved Bicycle-Saddle, of which the following is a full, clear, and exact description.

My invention relates to improvements in bicycle-saddles, and more especially to saddles which are adapted for use upon safety-bicycles; and the object of my invention is to produce a saddle of simple construction, which may be economically made, which may be instantly adjusted so as to give the desired tension to the seat and its supporting-springs, and which may be instantly adjusted so as to bring the seat to the desired inclination or angle in relation to the machine.

To this end my invention consists in a bicycle-saddle the construction of which will be hereinafter described and claimed.

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

Figure 1 is a broken vertical longitudinal section of the bicycle-saddle embodying my invention on the line 1 1 in Fig. 2. Fig. 2 is a sectional plan on the line 2 2 in Fig. 1, and Fig. 3 is a broken sectional plan of a modified form of the device.

The saddle is provided with the seat 10, which is of the usual construction and may be of any approved form, and the seat is provided at one end with a hook 11, by means of which it is secured to the spring 12. At the other end the seat is provided with a flange 13, having an overhanging portion 14, which shields the nuts 15, by means of which the rear end of the seat is secured to the springs 16, and the overhanging portion thus protects the rider from injurious contact with the nuts.

The springs 12 and 16 are of the usual kind and need no detailed description, the springs having the usual coils 17 and having parallel members 18, which members extend beneath the seat 10 and are held to slide in the guide-blocks 19, which guide-blocks are bolted to a supporting-plate, as described below.

The parallel members 18 of each spring 12 and 16 terminate in a yoke 20, which yoke is provided with a centrally-threaded bore which

receives the screw 21, and the screw has a central wrench head or nut 22, by means of which it may be turned. The screw 21 has one end provided with a right thread and the other with a left, and the ends of the screw are journaled in the middle guide-blocks 19. It will thus be seen that by turning the screw the yokes 20 and the springs carried thereby may be either drawn together or forced apart, so that the tension of the springs, and consequently of the seat, may be very nicely regulated.

As a precaution against the slipping of the screw jam-nuts 23 are used, the nuts being mounted on the screw and adapted to be turned up against the yokes 20. The guide-blocks 19 are bolted to a spring-plate 24, which plate has centrally on the under side a depending disk 25, which is pivoted, as shown at 26, in a socket 27, carried by the sliding head 28, which is mounted on the saddle-supporting bar in the usual way and held in place by a set-screw 29.

It will be seen that the plate 24 and the seat 10, carried by the plate, may be tilted so as to be held at any desired inclination in relation to the head 28 and the rest of the machine, and to hold the plate 24 and seat in place a set-screw 27^a is employed, which projects through a thickened side of the socket 27 and impinges on the disk 25.

In Fig. 3 I have shown a modified form of the device, and in this case the parallel members 18 of each spring 12 and 16, instead of terminating in a yoke, are merged or joined together to form a screw 30, the screw connected with the members of one spring being a right screw and the opposite screw a left screw, and the two screws fit in a corresponding nut 31, which serves as a turnbuckle, and by means of which the spring members may be brought together or forced apart, so as to regulate the tension of the springs and seat. In this case the plate 24 is provided on the under side with a ball 32 instead of with a disk 25, and the ball fits in a socket 33, carried by the head 28, and the ball is held in place by a set-screw 33^a, which projects through the socket and impinges on the ball.

From the foregoing description it will be seen that to adjust the tension of the seat and its supporting-springs it is only necessary to

turn the screw 21 or the nut 31, as the case
may be, and that by loosening the set-screw
27^a or 33^a the seat may be adjusted so as to
bring it at the right inclination, and then by
5 tightening the set-screw it may be held firmly
in place.

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

10 The combination, with the tilting support-

ing-plate 24 and the right and left screw 21,
journaled in blocks 19 on the supporting-plate,
of the bicycle-springs held to slide in the guide-
blocks, and the yokes 20, connecting the ends
of the springs and threaded to fit the threads 15
of the screw, substantially as described.

CHARLES STEIN.

Witnesses:

WARREN B. HUTCHINSON,
C. SEDGWICK.