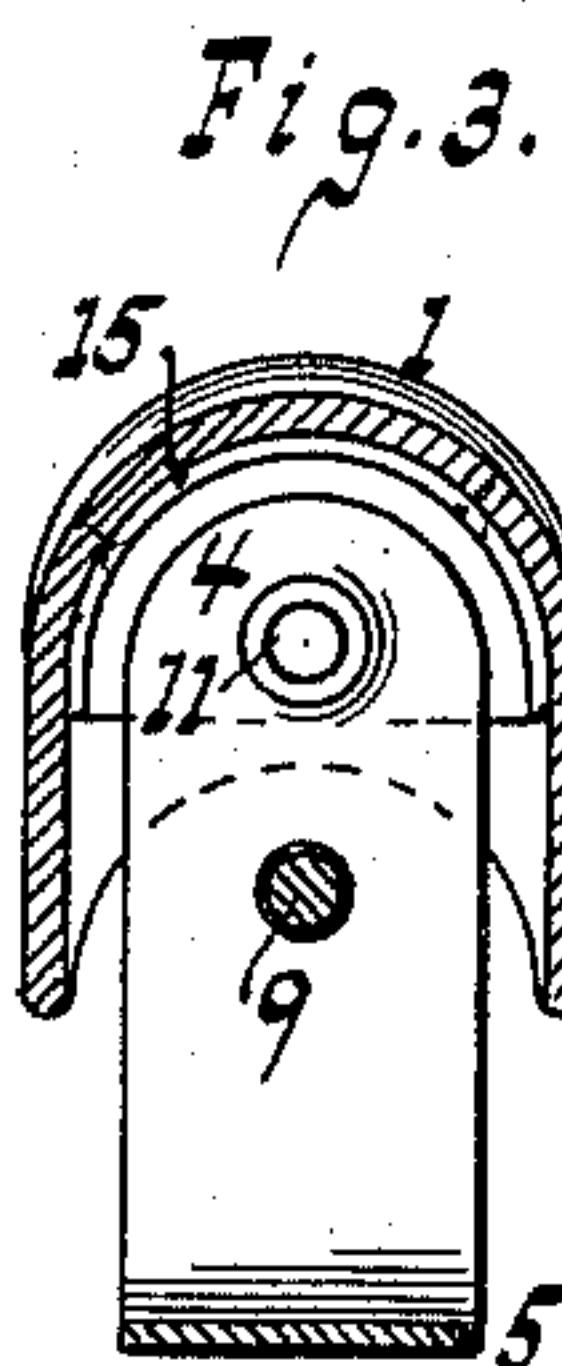
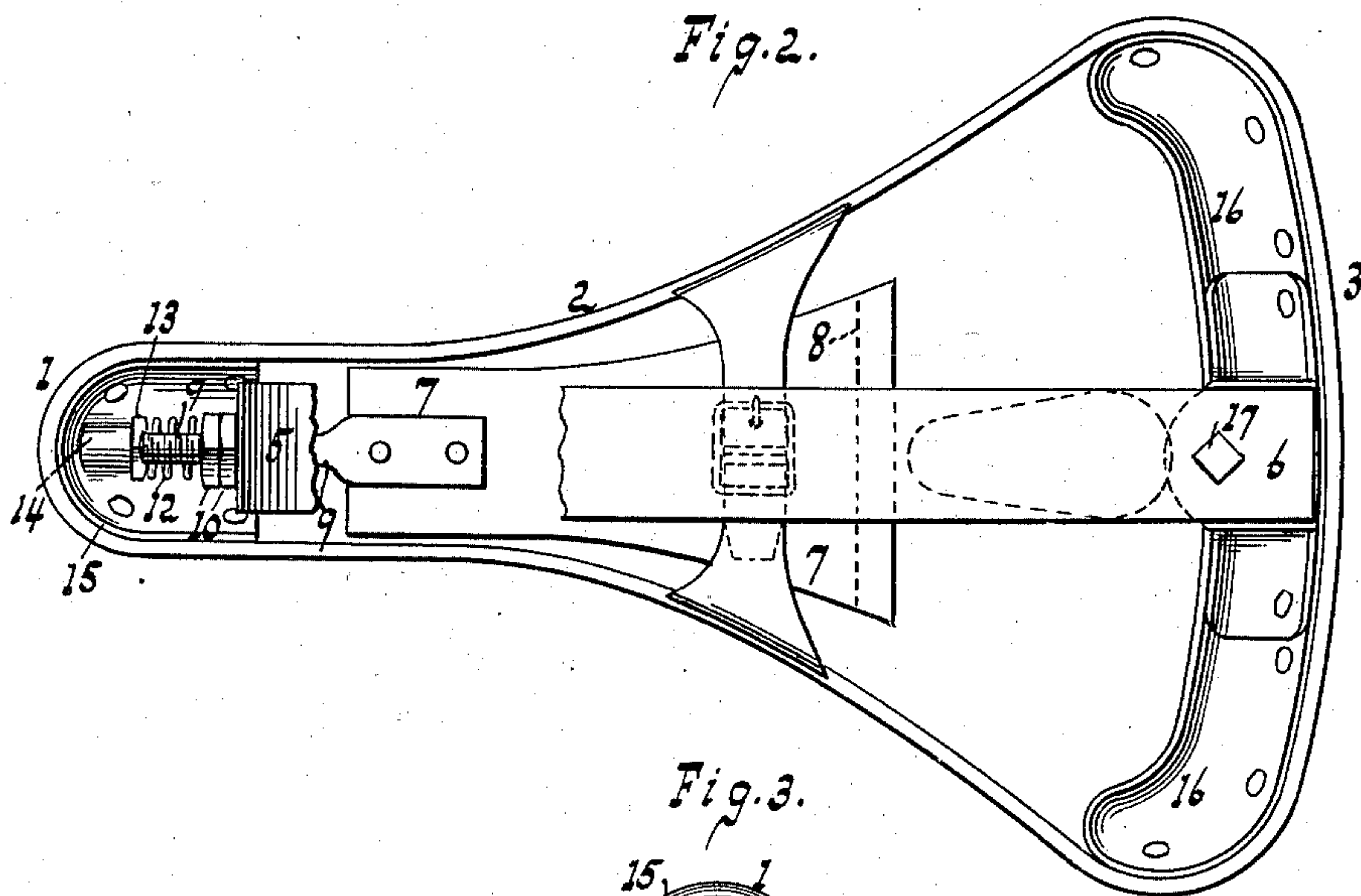
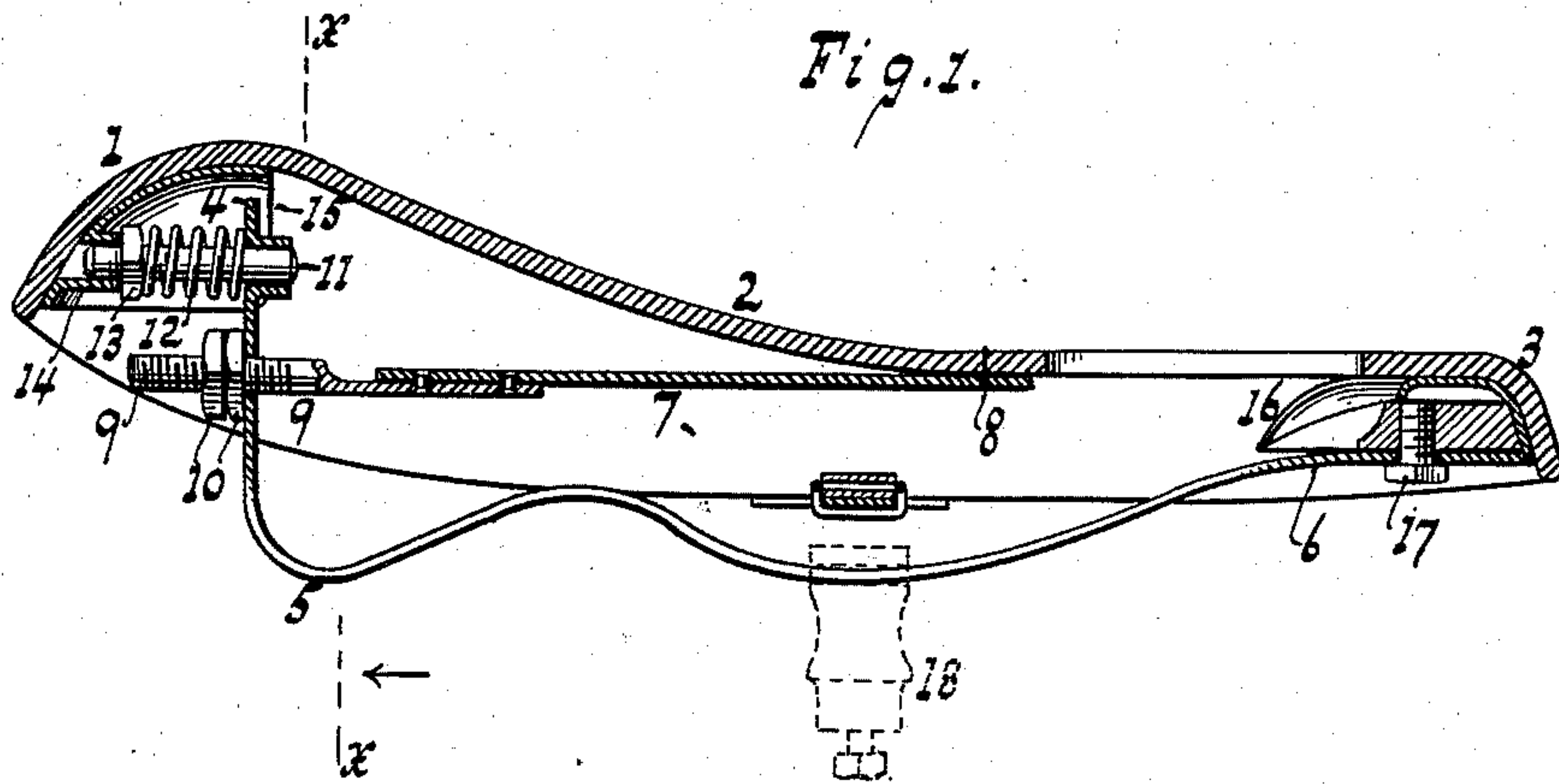


(No Model.)

H. BRIGGS.  
SADDLE.

No. 567,881.

Patented Sept. 15, 1896.



WITNESSES:

*William Miller*  
*Chas. E. Poensgen.*

INVENTOR

*Henry Briggs*

BY *Hauff + Hauff*

ATTORNEYS



# UNITED STATES PATENT OFFICE.

HENRY BRIGGS, OF HASBROUCK HEIGHTS, NEW JERSEY.

## SADDLE.

SPECIFICATION forming part of Letters Patent No. 567,881, dated September 15, 1896.

Application filed October 24, 1895. Serial No. 566,768. (No model.)

*To all whom it may concern:*

Be it known that I, HENRY BRIGGS, a citizen of the United States, residing at Hasbrouck Heights, in the county of Bergen and State of New Jersey, have invented new and useful Improvements in Saddles, of which the following is a specification.

The object of this invention is to provide a saddle or seat which will enable the rider to sit easily or without being inconvenienced while riding or when being jolted; and the invention resides in the novel features of construction set forth in the following specification and claims and illustrated in the annexed drawings, in which—

Figure 1 is a sectional side elevation of a saddle. Fig. 2 is an inverted plan view of a saddle. Fig. 3 is a section along  $x x$ , Fig. 1.

The saddle comprises a pommel and a cantle, the portion 1 2 of the saddle being conveniently designated the "pommel" portion or "front" portion, and the portion 2 3 being conveniently designated the "cantle" portion or "rear" portion. A spring-support 4 5 6, composed, as here shown, of an elastic metal plate, is extended longitudinally under the saddle 1 2 3. The horizontally-arranged spring portion 6 supports the cantle and the vertically-arranged spring portion 4 supports the pommel or horn.

The saddle is provided with a connection or tension 7, made to engage the spring-support along the portion 4 5.

When a weight bears onto the saddle, as, for example, when a rider is in position, said weight tends to draw or move the spring portion or supporting portion 4 away from the pommel or toward the cantle. This flexing of the support portion 4 is especially marked when the rider is being jolted or bounced. When the support portion 4 is thus moved or flexed away from the pommel, the front portion 1 2 of the saddle tends to sag or soften so as to avoid distressing or hurting the rider at a tender portion.

The tension 7, as here shown, is composed of a longitudinally-arranged strip of leather or other suitable material, sewed or otherwise secured at its rear end, as at 8, to the central portion of the saddle and riveted or otherwise secured at its front end to a stem or screw 9, made to extend through an eye in

the spring portion 4 5 and provided with a nut or nuts 10 seated or suitably tightened against said spring portion.

The spring portion 4 5 does not touch or directly engage the pommel, but is yieldingly connected thereto. A slide or stem 11, passing through an eye in the spring portion 4 5, is subjected to the action or pressure of a spring 12, seated against said spring portion and against a head or nut 13 on the slide. Said slide engages or sits into a socket or seat 14 on a reinforcement or inlay 15 in the pommel. This spring 12 secures a yielding or spring connection or support between the spring portion 4 5 and the pommel.

The cantle and spring portion 6 are shown rigidly connected, a reinforcement or inlay 16 at the cantle being secured by bolt or fastening 17 to said spring portion. These inlays or reinforcements 15 and 16 are advantageously made of metal or strong material, the saddle 1 2 3 being of softer material, as leather.

The spring portion 4 5 being bent or deflected toward the pommel or at an angle to the spring portion 5 6, said spring portion 4 5 is in convenient position for holding the pommel or horn at a proper elevation and for being suitably engaged and flexed by the tension 7. Manifestly the spring 4 5 6 is of such strength as not to be collapsed or broken or excessively bent by the weight of a rider.

The saddle can be used on bicycles or velocipedes, but of course its use is not limited to such devices, nor is the invention limited to the construction shown, as the latter can be changed without departing from said invention, the object of which is to cause the movements or jolts of the rider to soften or flex the pommel portion, so as to avoid injury or distress to the tender portions of the rider.

A clamp or fastening is indicated at 18 for securing the saddle-support in a desired place, as, for example, on a bicycle or vehicle frame. This construction also enables the saddle to be adapted to individual requirements. For example, if the rider desires to have the pommel more or less hard, without changing the character of any other saddle part, the nut 13 is either set up to tighten or increase the tension or action of the spring 12, a reverse motion of the nut 13 manifestly lessening the



action or pressure of said spring and tending to soften the pommel.

If it is desired to harden or soften the cantle portion without affecting the pommel or horn, the nut or nuts 10 are set up or relaxed, according as said cantle is to be hardened or softened.

By adjusting the saddle so that the hard portion of the saddle is that portion in contact with the gluteal muscles, while the softer part of the saddle contacts with the sensitive organs, the rider will be able to sit or ride easily and without distress.

What I claim as new, and desire to secure by Letters Patent, is—

1. The combination with a saddle, and a spring-support arranged under the saddle and extending toward the saddle-pommel, of a tension device located beneath the saddle and connected with the latter and with the end of the spring-support which extends toward the saddle-pommel, for drawing or moving the spring-support in a direction away from the pommel of the saddle as the latter is weighted, substantially as described.

2. The combination with a saddle, of a spring-support composed of an elastic plate extended longitudinally under the saddle, connected therewith at its rear end portion and having its front end portion extended vertically toward the saddle-pommel, and a tension device connected at one end to the saddle and at the other end with the said vertically-extended portion of the elastic plate, said tension device acting to draw or move the vertically-extended front portion of the elastic plate in a direction away from the pommel of the saddle as the latter is weighted, substantially as described.

3. The combination with a saddle, of a spring-support composed of an elastic plate extended longitudinally under the saddle, connected therewith at its rear end portion and having its front end portion extended vertically toward the saddle-pommel, and a tension device connected at its rear end with the saddle and adjustably connected at its front end with the said vertically-extended portion of the elastic plate, said tension device acting to draw or move the vertically-extended front portion of the elastic plate in a direction away from the pommel of the saddle as the latter is weighted, substantially as described.

4. The combination with a saddle, of a spring-support composed of an elastic plate extended longitudinally under the saddle

and having its front end portion provided with a spring connection with the saddle-pommel, and a tension device connected with the saddle and with the said spring-support and acting to draw or move the latter in a direction away from the pommel of the saddle as the latter is weighted, substantially as described.

5. The combination with a saddle, of a spring-support composed of an elastic plate extended longitudinally under the saddle and having its rear end connected therewith, a spring interposed between the front end of the said spring-support and the pommel of the saddle, and a tension device connected with the saddle and with the said spring-support and acting to draw or move said spring-support in a direction away from the pommel of the saddle as the latter is weighted, substantially as described.

6. The combination with a saddle, of a spring-support composed of an elastic plate extended longitudinally under the saddle and having a vertically-extended front end, a tension device connected at one end with the saddle and at its other end with a spring-support, a reinforcing-piece secured in the pommel of the saddle and having a socket or seat, a slide or stem mounted in the socket or seat and connected with the vertically-extended front end portion of the spring-support, a spring arranged on said slide or stem between the said socket or seat and the vertically-extended end of the spring-support, and means for varying the tension of the spring on the slide or stem for rendering the pommel more or less rigid, substantially as described.

7. The combination with a saddle, and a spring-support arranged under the saddle and connected at its rear end therewith, of a spring interposed between the front end of the said spring-support and the pommel of the saddle, means for adjusting the tension of said spring for rendering the pommel more or less rigid, and a tension device connected at one end with the saddle and at the other end with the spring-support, substantially as described.

In testimony whereof I have hereunto set my hand in the presence of two subscribing witnesses.

HENRY BRIGGS.

Witnesses:

WM. C. HAUFF,

E. F. KASTENHUBER.