No. 645,865. Patented Mar. 20, 1900.

E. E. MALLORY & C. S. STONER.

SADDLE.

(Application filed Oct. 17, 1899.)

(No Model.) 3 Sheets—Sheet 1.

Fig. 1.

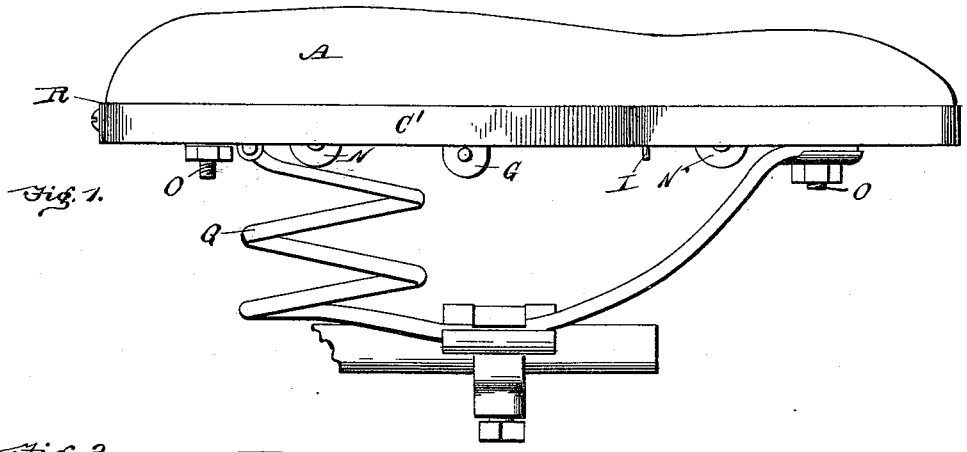


Fig. 2.

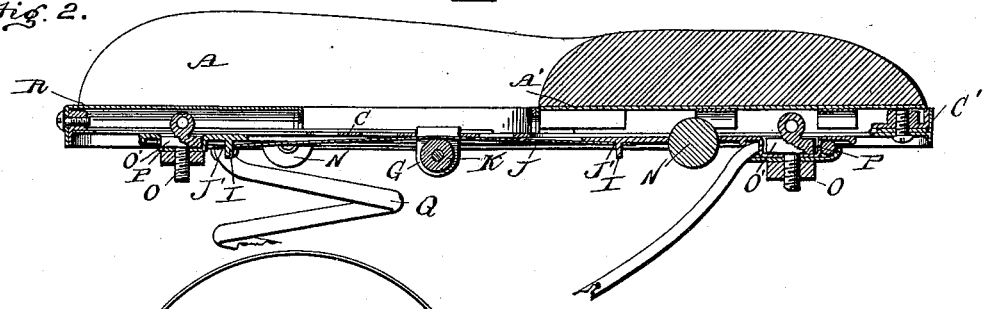
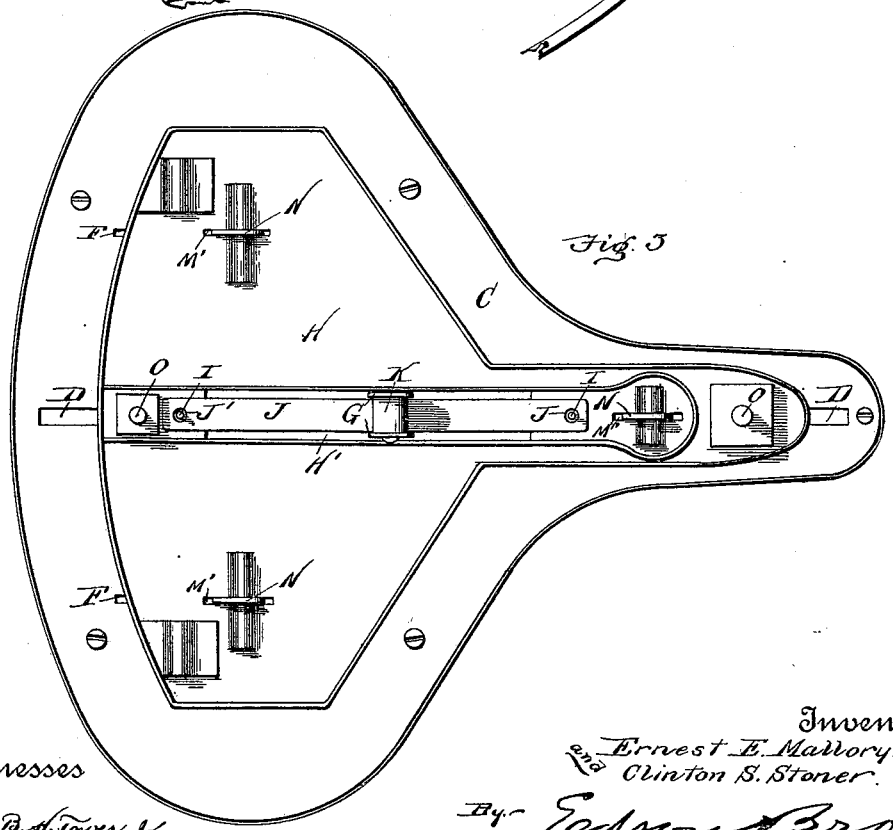


Fig. 3



Witnesses

Edwin B. H. Tower, Jr.

Herbert W. Lawson

Inventors

Ernest E. Mallory.

and Clinton S. Stoner.

By Edson Bros.

Attorneys

No. 645,865. Patented Mar. 20, 1900.

E. E. MALLORY & C. S. STONER.

SADDLE.

(Application filed Oct. 17, 1899.)

(No Model.) 3 Sheets—Sheet 2.

Fig. 4.

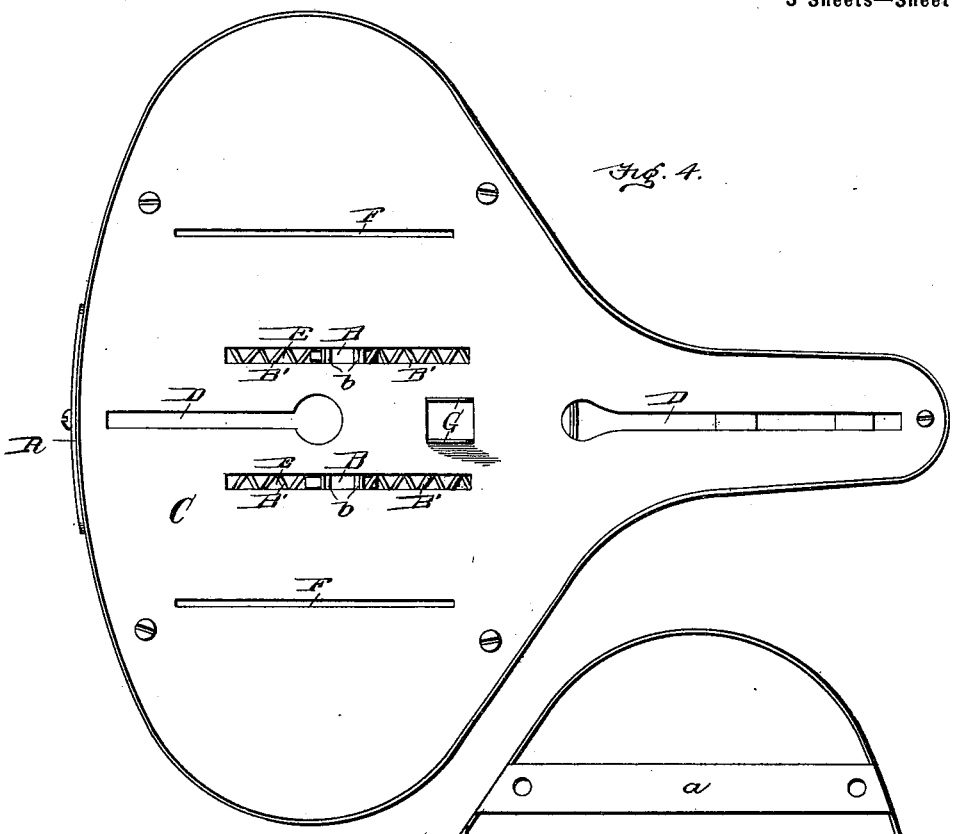
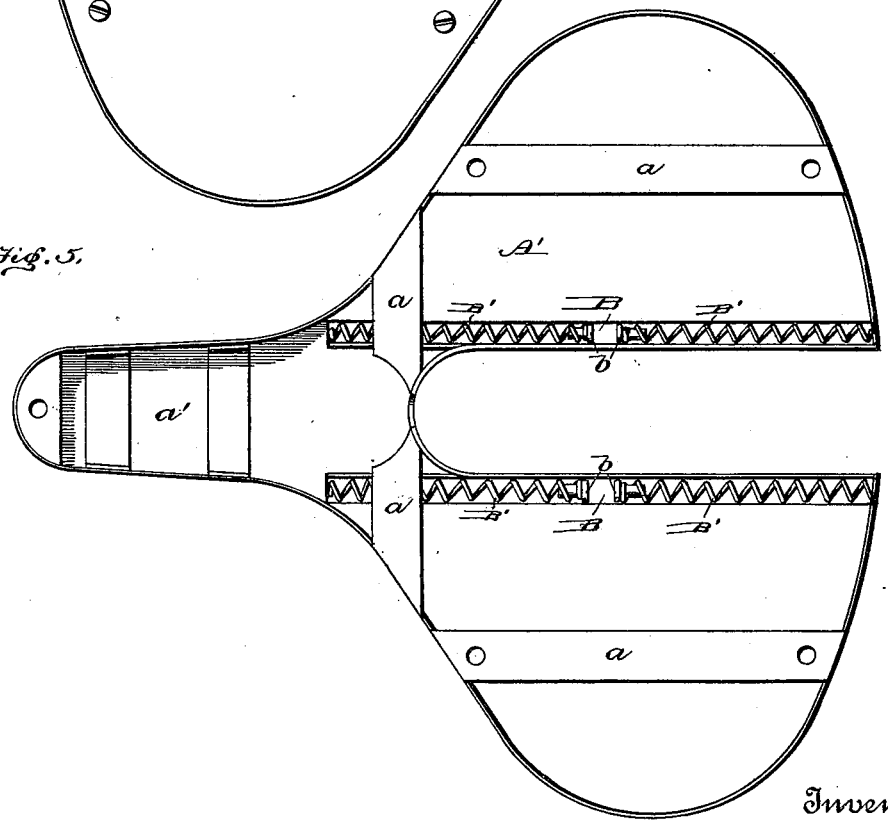


Fig. 5.



Witnesses
Edwin B. H. Tower, Jr.
Herbert D. Lawson.

Inventors
Ernest E. Mallory.
and Clinton S. Stoner.
By— Edson Bros.
Attorneys

No. 645,865. Patented Mar. 20, 1900.

E. E. MALLORY & C. S. STONER.

SADDLE.

(Application filed Oct. 17, 1899.)

(No Model.) 3 Sheets—Sheet 3.

Fig. 6.

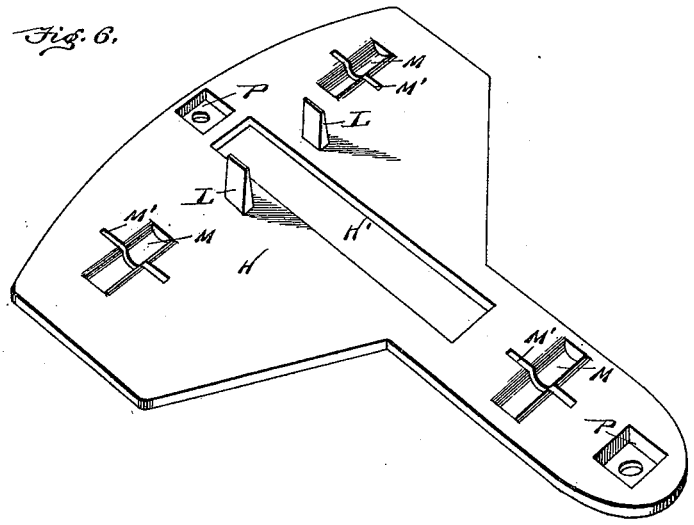


Fig. 8.

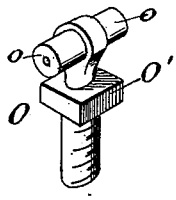


Fig. 6.

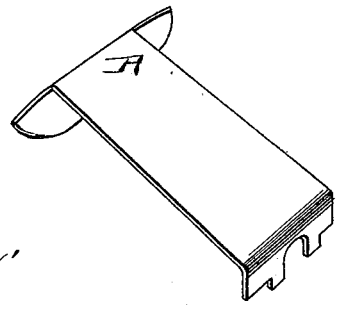
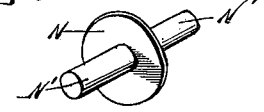


Fig. 7.



Witnesses
Edwin B. H. Tower Jr.
Herbert D. Lawson

Inventors
Ernest E. Mallory.
Clinton S. Stoner.
By Edson Bros.
Attorneys

UNITED STATES PATENT OFFICE.

ERNEST E. MALLORY AND CLINTON S. STONER, OF WEST UNITY, OHIO, ASSIGNORS OF ONE-HALF TO H. CORTEZ MILLER AND JOHN MILLER, OF SAME PLACE.

SADDLE.

SPECIFICATION forming part of Letters Patent No. 645,865, dated March 20, 1900.

Application filed October 17, 1899. Serial No. 733,923. (No model.)

To all whom it may concern:

Be it known that we, ERNEST E. MALLORY and CLINTON S. STONER, citizens of the United States, residing at West Unity, in the county of Williams and State of Ohio, have invented certain new and useful Improvements in Saddles; and we do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

This invention relates to new and useful improvements in bicycle-saddles and is more particularly an improvement upon the saddle shown and described in an application filed by us on May 26, 1899, Serial No. 718,434, allowed August 23, 1899. Its objects are, among other things, to construct a saddle having a sliding seat the mechanism of which is hidden from view, which will prevent tilting of the seat upon its bed-plate, which is neat and durable in construction, smooth in operation, and cheap of manufacture.

To these ends the invention consists in the novel construction and combination of parts hereinafter more fully described and claimed, and illustrated in the accompanying drawings, showing the preferred form of our invention, and in which—

Figure 1 is a side elevation of our improved saddle. Fig. 2 is a central vertical longitudinal section therethrough. Fig. 3 is a bottom plan view of the saddle with supporting-spring removed. Fig. 4 is a similar view of the saddle-seat. Fig. 5 is a view similar to Fig. 4 with the bottom plate removed. Fig. 6 is a top perspective view of the base-plate. Fig. 7 is a detail view of a roller. Fig. 8 is a detail view of a guide, and Fig. 9 is a detail view of a name-plate.

Referring to said figures by letters of reference, A is the padded seat, of the ordinary form, having an inner preferably-metallic bottom A′, provided with two parallel longitudinally-extending grooves B to either side of the center of the saddle, and each of said grooves contains two coiled springs B′, bearing against opposite ends of the grooves and provided at their inner adjacent ends with heads *b*. If desired, this bottom A′ may be suitably strengthened, as by means of plates *a*, placed thereacross, and a recess *a′* is provided at the forward end for the purpose hereinafter described. The seat is provided with a second bottom C, formed of any suitable metal and provided with a flange C′, which overlaps the edge of the seat. This bottom is provided with six longitudinally-extending slots, two, D, being arranged centrally of the bottom, and parallel to these slots and to either side thereof are short slots E, so arranged as to lie directly under and on a line with the springs B′ when the plate C is secured to the seat A. Other slots F are formed in the bottom C, one near each side of the saddle, and these are for the purpose hereinafter described. Between the inner ends of the central slots D two lips G are struck up from bottom C. These lips are adapted to project through a slot H′, extending longitudinally of the bed-plate H, and near each end of said slot, projecting downward from the lower surface of the bed-plate, is a stud I. These studs are adapted to project through eyes J′, formed in the ends of a spring-metal strip J, which bears upon and is held in position by a roller K, mounted between the lips G. Projecting upward from the upper face of bed-plate H are lugs L, adapted to project into the slots E and rest between the heads *b* of springs B′.

Within the upper surface of the bed-plate H, near the rear edge and at the side thereof and near the forward end thereof, are laterally-extending semicircular recesses M, through the center of and at right angles to each of which is a slot M′, said slots adapted to receive disks N, which project up into slots F and are secured to rollers N′, which rest within the recesses M and bear upon the under surface of plate C.

Secured to the bed-plate H, near each end of the slot H′, are bolts or similar devices O, to the inner ends of each of which are secured laterally-extending rollers *o*. These bolts project into the slots D of the bottom C, and the rollers thereon bear upon the upper surface of said bottom to either side of the slots. In order to retain these rollers in position beneath the bottom C, the bolts are preferably

squared, as at O′, which squared portions fit in similar recesses P, formed in the upper surface of the bed-plate.

It is obvious that any suitable supporting-spring, as Q, may be used, and a name-plate, as R, can be attached to the rear edge of the saddle, if desired.

In operation it is obvious that the lugs L will be held in a normal position intermediate the springs B′, which springs will automatically and gradually overcome the longitudinal movement of the saddle-seat upon its bed-plate occasioned by the jarring thereof. It is obvious that the rollers N′ will permit the seat to travel upon the bed-plate easily and smoothly, and the disks N, the lips G, and the bolts O serve to prevent side motion of the seat by moving upon its bed-plate.

It will be understood that the bolts O, with their rollers, will prevent any tilting of the saddle upon the plate H, also that the strip J, which is bow-shaped in section, will assist the springs B′ in retaining the seat A in a normally-central position upon the plate H.

It is obvious that, if desired, the lips G and strip J may be dispensed with, and in such case slot H′ in the bed-plate H would be unnecessary.

It will be understood that the bottom C may be secured to the bottom B of the seat in any suitable manner, screws being preferably used. The flange C′ of bottom C will, as is obvious, serve to protect the edge of the seat A.

In the foregoing description we have shown the preferred embodiment of our invention; but we do not limit ourselves thereto, as we are aware that modifications may be made therein without departing from the spirit of our invention or sacrificing the advantages thereof, and we therefore reserve the right to make such changes as fairly fall within the scope of our invention.

Having thus fully described our invention, what we claim, and desire to secure by Letters Patent, is—

1. In a saddle, the combination, with a bed-plate, of a seat having a slot in the bottom thereof, a bolt, secured to the bed-plate, projecting into said slot, and laterally-extending rollers secured to the bolt and bearing upon the upper surface of the bottom of said seat, substantially as described.

2. In a saddle, the combination, with the recessed bed-plate, of rollers mounted in said recesses, disks secured to said rollers and engaging with slots in the bed-plate, and a seat bearing upon the rollers and adapted to receive the edge of the disks, substantially as described.

3. In a saddle, the combination with the seat, of a double bottom thereto, springs mounted between said bottoms, slots in the lower bottom, a bed-plate, rollers intermediate the bed-plate and lower bottom and having radial flanges or disks, bolts secured to the bed-plate, and lugs formed therewith, said disks, bolts and lugs engaging with said slots, substantially as described.

4. In a saddle, the combination with the seat, of a bottom thereto, lips struck down from said bottom, a roller mounted therebetween, a slotted bed-plate, the lips and roller projecting through said slot, and a metal strip secured to the bed-plate and bearing upon said roller, substantially as described.

5. In a saddle, the combination, with the seat, of a bottom thereto having springs mounted therein, a second or lower bottom secured to the seat and slotted as described, lips struck up from the lower bottom and having a roller mounted therebetween, a bed-plate having a slot adapted to receive said lips and roller, a metal strip bearing upon the bed-plate and said roller, rollers interposed between the bed-plate and seat-bottom, disks or radial flanges on said rollers, bolts secured to the bed-plate and having laterally-extending rollers upon the inner ends thereof, and lugs formed with the bed-plate, said disks, bolts and lugs engaging with their respective slots in the seat-bottom, substantially as described.

6. In a saddle the combination, with a slotted plate, of a roller comprising a cylindrical portion and a radial flange or disk secured thereto at a point intermediate its ends, and contained within the slot of said plate, substantially as described.

7. In a saddle the combination with a plate having slots therein, of a guide-bolt secured to a bed-plate and comprising a bolt portion adapted to slide in said slots, and laterally-extending rollers mounted at one end thereof and adapted to engage said slotted plate, substantially as described.

In testimony whereof we affix our signatures in presence of two witnesses.

ERNEST E. MALLORY.
CLINTON S. STONER.

Witnesses:
GEO. C. RINGS,
H. B. MORRISON.