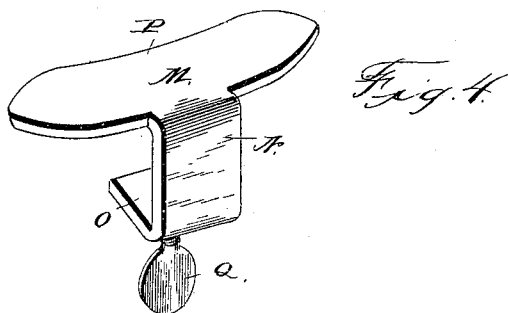
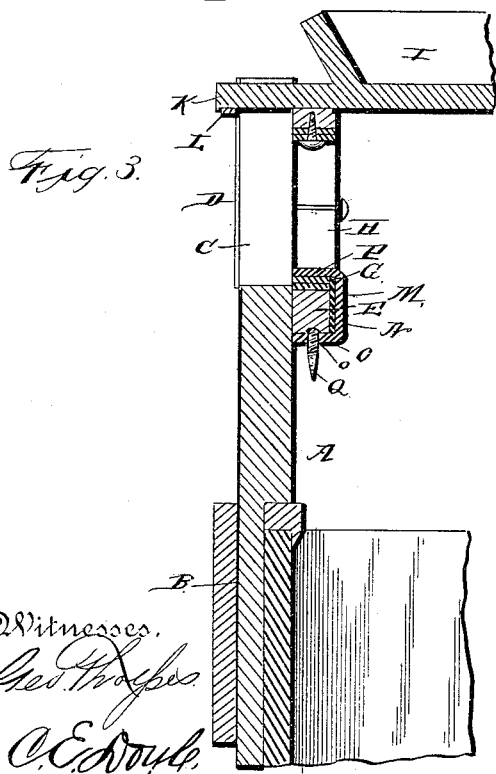
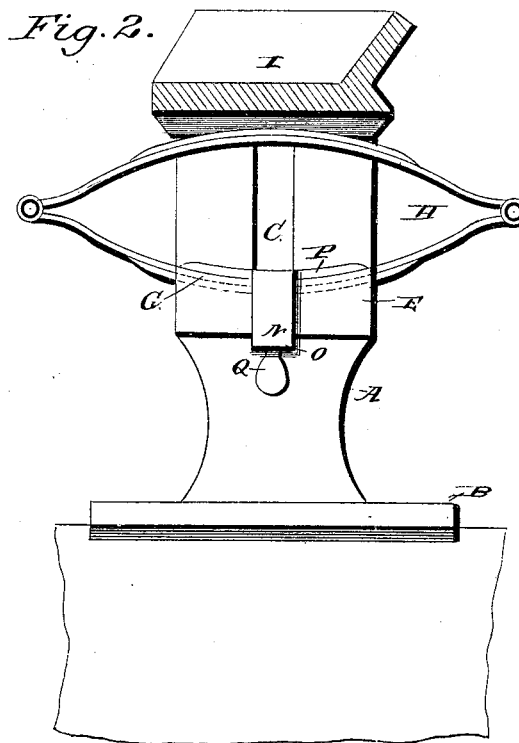
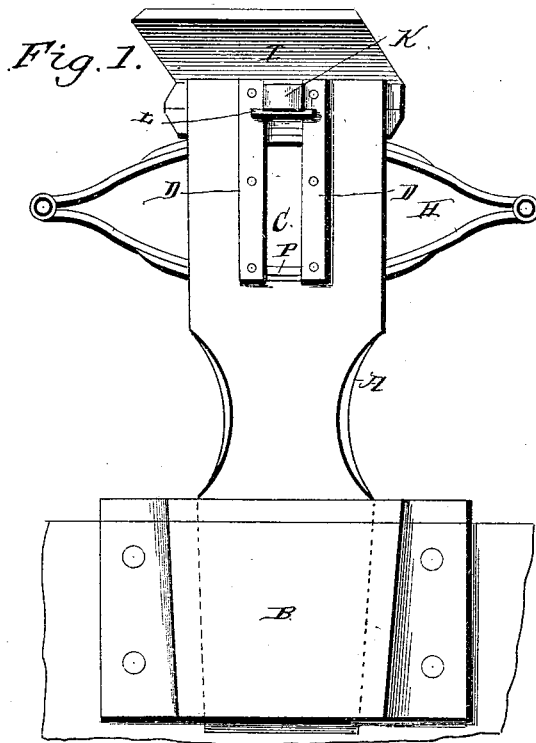


(No Model.)

G. MAHL.
WAGON SEAT.

No. 386,145.

Patented July 17, 1888.



Witnesses,
Geo. Thompson
C. E. Doyle

Inventor,
Geo. Mahl.
By his Attorneys,
C. A. Snow & Co.

UNITED STATES PATENT OFFICE.

GEORGE MAHL, OF SHIPPENSVILLE, PENNSYLVANIA.

WAGON-SEAT.

SPECIFICATION forming part of Letters Patent No. 386,145, dated July 17, 1888.

Application filed February 27, 1888. Serial No. 265,446. (No model.)

To all whom it may concern:

Be it known that I, GEORGE MAHL, a citizen of the United States, residing at Shippensville, in the county of Clarion and State of Pennsylvania, have invented a new and useful Improvement in Road-Wagon Seats, of which the following is a specification.

My invention relates to improvements in seats for wagons, carriages, &c.; and it has for its objects to provide means whereby the seat will be capable of a vertical spring motion, but will be supported against lateral and also forward and backward strain.

It is my object, further, to provide means whereby the seat may be removed from its supports and readily replaced thereon.

With these objects in view the invention consists in a certain novel construction and arrangement of devices, fully set forth herein-after, and illustrated in the accompanying drawings, wherein—

Figure 1 is a side view of a portion of a seat provided with my improvement. Fig. 2 is a longitudinal sectional view. Fig. 3 is a transverse sectional view. Fig. 4 is a detail perspective view of the clamp.

Referring to the drawings, A designates a movable standard, which is stepped at its lower end in a tapered socket, B, which may be secured to any convenient portion of the vehicle. The standard is provided at its upper end with a vertical slot, C, and wear-plates D D are secured to the outer side of the standard on opposite sides of the slot. A bracket, E, is secured to the inner side of the standard, and it is provided on its upper side with a groove, F, formed between the inner side of the standard and the flange G on the inner edge of the bracket. In this groove, which is concaved longitudinally, is seated the lower side of the elliptical spring H, and to the upper side of the said spring is attached one side of the seat I. The seat is provided with the laterally-extending guide-arm K, which projects through the guide-slot C, and is provided on its extremity with the T-head L, which bears against the wear-plates above referred to.

M represents a clamp which is employed to secure the lower side of the spring in the

groove in the bracket E, and it consists of the vertical arm N, the horizontal arm O at the lower end thereof, having a tapped aperture, o, therein, the jaw P, and the set-screw Q, mounted in the aperture o. This clamp is arranged to embrace the bracket E and the lower side of the spring, the jaw P being rounded convexly on its under side to fit the curve of the spring, and the horizontal arm projects under the bracket in such a position that the thumb-screw or set-screw bears against the under side thereof. When the clamp is tightened, the jaw P bears down firmly on the lower side of the spring and binds it in the groove. It will be seen that the guide-arm sliding in the guide-slot allows the seat free vertical movement, whereas there can be no forward and backward or lateral motion. Thus all straining of the parts is prevented.

To remove the seat, the clamp may be loosened or the standard may be taken from its socket. It will be apparent that the spring may be secured rigidly to the bracket or the standard; but I prefer to have it removable, as described.

Having described my invention, I claim—

1. The combination of the standard having a vertical slot therein, the elliptical spring attached firmly at its lower side to the standard, and the seat secured to the upper side of the spring, and the arm K, projecting through the slot in the standard and provided with a T-head to engage the sides thereof, substantially as specified.

2. The combination of the standard having a slot, C, therein, the bracket secured to the standard and having a groove in its upper side, the elliptical spring mounted in the said groove, the seat secured to the spring, and the guide-arm operating in the slot, substantially as specified.

3. The combination, with the standard having a bracket or shoulder thereon, of the elliptical spring bearing on the bracket or shoulder, the clamp embracing the spring and the bracket, and the seat secured to the spring, substantially as and for the purpose specified.

4. The combination, with the standard having a bracket, E, of the elliptical spring

mounted on the bracket and having the seat
secured thereto, and the clamp embracing the
bracket and the lower side of the spring and
having the apertured arm O, the set-screw
5 mounted in the aperture in the said arm, and
the jaw P, bearing on the side of the spring,
substantially as and for the purpose specified.

In testimony that I claim the foregoing as my
own I have hereto affixed my signature in pres-
ence of two witnesses.

GEORGE MAHL.

Witnesses:

J. C. McENTIRE,
A. L. IVONY.