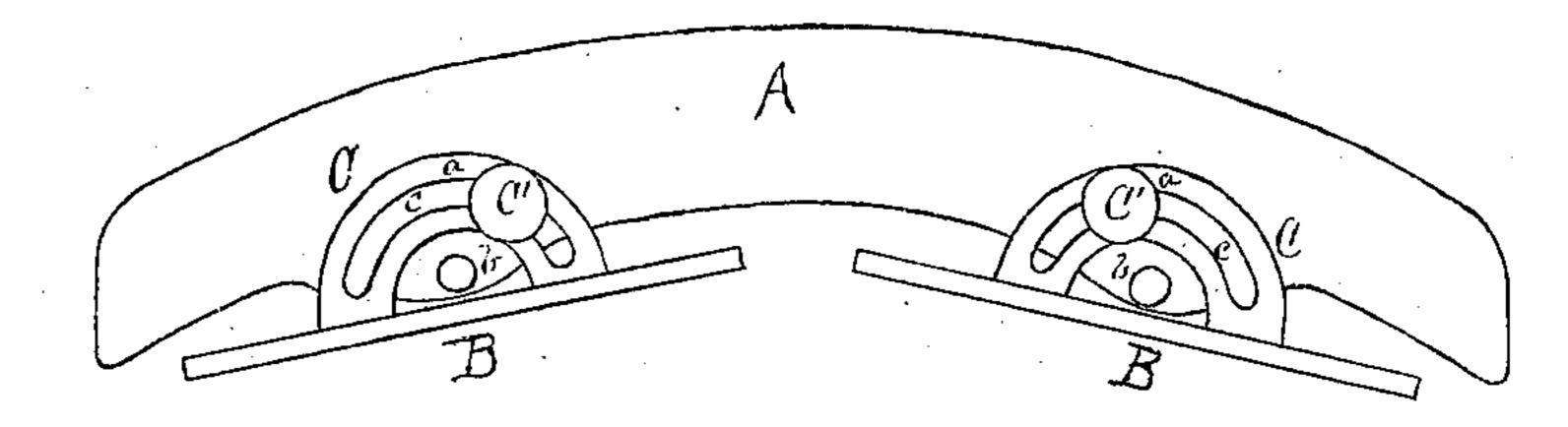
C.M.Mais/101/1,

Cart Saddle.

10.103636.

Patented May 31. 1870.

FIG.



F16:2

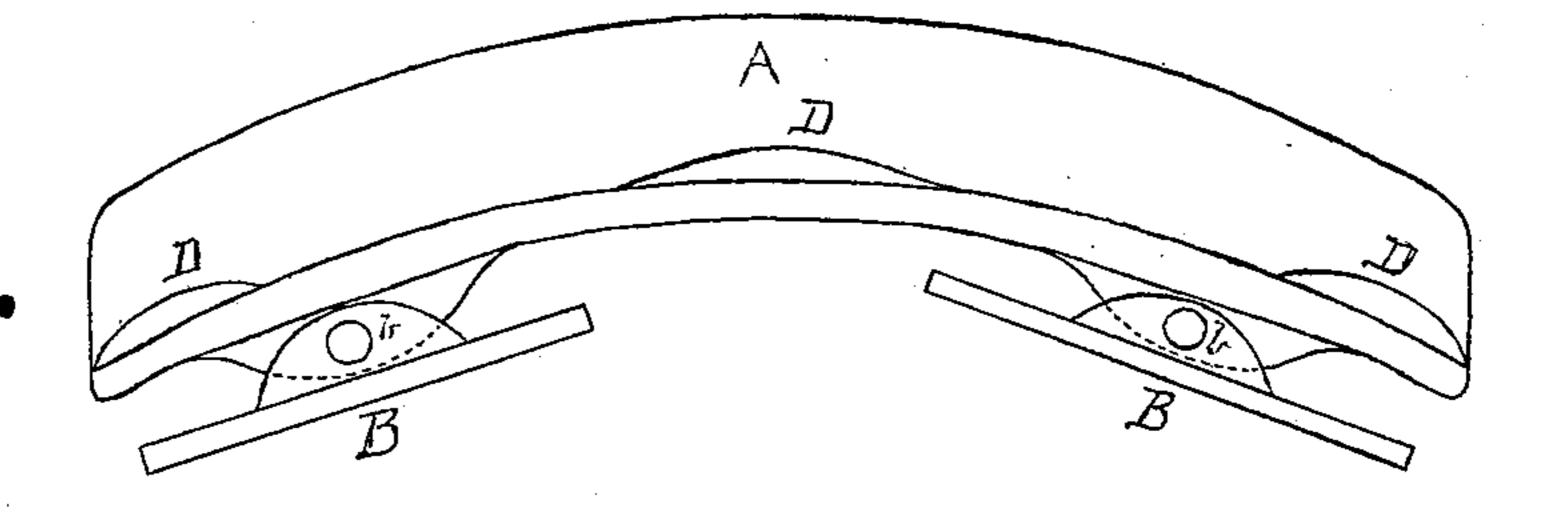
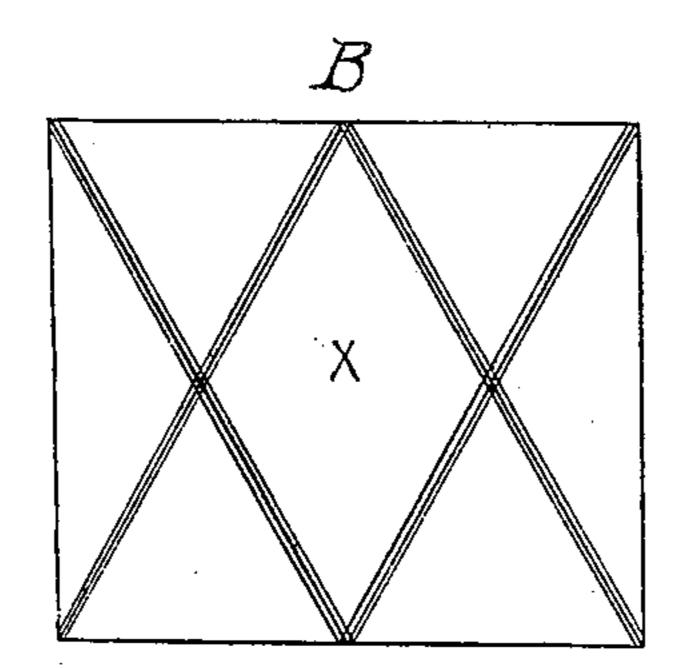


FIG: 3.



 \mathcal{B}

WITNESSES.

Edmn formis. Alfred Holmead. Jr INVENTOR.

Charles K. Marshall.

per 4.8. H. Horneag

Attorney

Anited States Patent Office.

CHARLES K. MARSHALL, OF NEW ORLEANS, LOUISIANA.

Letters Patent No. 103,636, dated May 31, 1870.

IMPROVEMENT IN CART-SADDLES.

The Schedule referred to in these Letters Patent and making part of the same.

To all whom it may concern:

Be it known that I. CHARLES K. MARSHALL, of New Orleans, in the parish of Orleans and State of Louisiana, have invented certain new and useful Improvements in Adjustable Work-Saddles; and I do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the accompanying drawing and to the letters of reference marked thereon making part of this specification, in which—

Figure 1 is a side view of my improved saddle, showing the means whereby its adjustability is regu-

lated.

Figure 2 is a horizontal sectional view through the center of the saddle, and showing the anti-friction bosses.

Figure 3 is a face view of the pads.

The object of my invention is to furnish for the cart and dray-horse an adjustable work-saddle, one in which the pads can conveniently be brought and securely held at any desired point, so as to readily conform to and fit the animal's back, no matter what the contour of the same may be.

My improvement also consists in providing the bridge with bosses, whereby the excessive friction,

caused by the chain, is obviated.

The nature of my invention consists in attaching the pads to the bridge by a hinge joint. These pads may be grooved for the purposes of ventilation, as stated in my former application, and are provided with semicircular slotted bearing plates. Through the slot of said plates, and also through the bridge, passes a bolt, which is fastened by a screw-nut on the

opposite side.

My invention also consists in providing the bridge with bosses, one of which is placed at the center, and one at each end of the bridge, and on the base of the groove in which the chain works. The chain works alone on the bosses, and, consequently, there can only be friction between the saddle and chain at these points of contact, which must necessarily be much less than when the chain works directly in the groove of the bridge, as is the case with the saddle now in general use.

To enable others skilled in the art to make and use my invention, I will now proceed to describe its con-

struction and operation.

A is the ordinary grooved bridge, and is of iron. B B are the pads, and are to be also of iron, or other hard unyielding substance.

These pads may be grooved, for the purposes of ventilation, as stated in my former application, and as shown at x, fig. 3.

The bridge A and pads B B are connected by a

hinge-joint, b b.

C C are the slotted metallic bearing-plates.

Through the slots c c of these plates, and also through the upper section, a a, of the ears of the bridge, pass the bolts C'C'.

These bolts are fastened by nuts, and by means of which the pads can be adjusted, and securely retained or locked at any desired point simply by tightening the nuts.

D D are circular metallic anti-friction bosses, and may be cast with the bridge, or otherwise attached thereto. These bosses are on the base of the groove in which the chain works, and are situated at the center and extreme ends of the same.

The great advantage of these bosses is found in the fact that they do away with that excessive friction which is experienced in the use of the present saddle.

It will be observed that the chain only rests on the center of the arch of the boss, and, consequently, all the friction incident to the use of my saddle arises from the contact between the bosses and chain at these points, while, in the present saddle, the chain rests immediately in the groove, the entire base surface of the same being exposed to its frictional contact. The saddle thus described is exceedingly cheap and durable, as it may be made entirely of iron.

Having thus fully described my invention,

What I claim therein as new, and desire to secure

by Letters Patent of the United States, is-

1. The pads B B, when they are attached to the bridge A by means of the slotted plates C C, the same being held by means of bolts C' C' and nuts, whereby they can be adjusted and held at any desired point, substantially as described.

2. The bosses D D, when construced and arranged as described, so as to relieve the base of the groove in which the chain works of all undue friction, sub-

stantially as described.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

C. K. MARSHALL.

Witnesses:

EDWIN JAMES, HORACE BROWN.