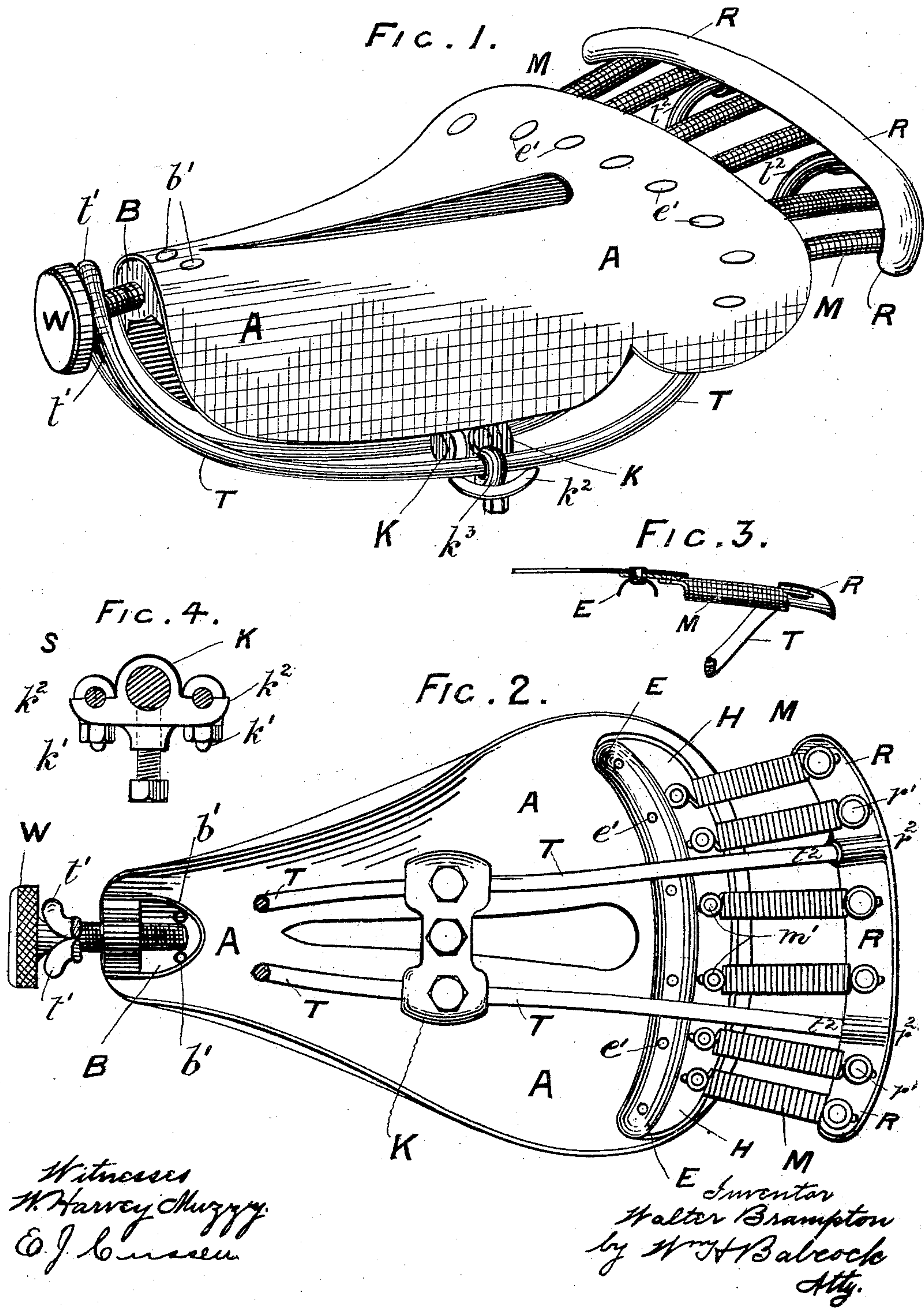


(No Model.)

W. BRAMPTON.  
SADDLE FOR BICYCLES.

No. 473,609.

Patented Apr. 26, 1892.





# UNITED STATES PATENT OFFICE.

WALTER BRAMPTON, OF BIRMINGHAM, ENGLAND.

## SADDLE FOR BICYCLES.

SPECIFICATION forming part of Letters Patent No. 473,609, dated April 26, 1892.

Application filed October 30, 1891. Serial No. 410,304. (No model.) Patented in England June 16, 1891, No. 10,190, and August 23, 1891, No. 14,211.

*To all whom it may concern:*

Be it known that I, WALTER BRAMPTON, manufacturer of cycle-saddles, of the firm of Brampton Brothers, of 24 and 25 Masshouse Lane, Birmingham, in the county of Warwick, England, and a subject of the Queen of Great Britain, have invented certain new and useful Improvements in Saddles for Bicycles, Tricycles, and Such Like Purposes, of which the following is a specification.

This invention has been patented in England, No. 10,190, dated June 16, 1891, and No. 14,211, dated August 23, 1891.

My invention has for its object improvements in saddles for bicycles, tricycles, and such like purposes, and is intended to greatly lessen the vibration transferred from the machine to the rider or riders, and is so designed as to avoid all hard parts, and so as to be flexible in every direction, while affording a substantial seat and support to the rider. It is also so designed and constructed as to be very light indeed, and the rider can adjust the tension of the surface of his saddle without alighting and without any tool, which is a great advantage.

My invention is as follows: The frame upon which the leather seat or other surface of the saddle is supported is made of a rod of round or other steel, iron, or other metal bent round into an eye at the front to receive the adjustment-screw and the two ends pass back to the rear of the saddle, and are there attached by eyes and bolts or rivets or forced into holes, but in any case to the back frame or plate. The rod as it passes along may be bulged out to form a substantial seat for the junction casting or plate or saddle-bar socket to slide, so as to adjust the inclination and balance of the saddle in a most simple manner. These rods may be made either quite stiff or slightly yielding under excessive strains or in some cases the rods may be substituted by a plate to receive the leather or seat part. The surface or seat portion, whether leather or other material, is attached to the front end by means of a plate or nut which carries a thread, into which a suitable hand-screw is fitted. The neck of this hand-screw is formed conical, so as to take an easily-adjustable bearing against the eye formed by the rod before mentioned.

The head of the screw is by preference round and milled and of large diameter, so that the hand has power enough to set it while the rider is upon the machine. The back portion of the leather or saddle surface falls considerably short of the length of the under frame, so as to allow sufficient room for the mounting of intermediate spiral or other equivalent springs which are attached to the back plate by hooks or eyes or other convenient manner, and to the back end of the seat by means of a plate or rod or ears or other convenient manner. In any case the attachments are such as to allow freedom for the elastic qualities of the springs connecting the back of the frame and the back of the saddle-surface to be brought into free use. Of course the strength of these springs and the number of them will depend upon the strength and design of the saddle.

Referring to the drawings annexed hereunto, Figure 1 is a perspective view of the saddle as in use. Fig. 2 is a plan of the underside of the saddle with a portion of the frame-rods removed for the sake of clearness of illustration. Fig. 3 is a section through the back portion of the saddle on the dotted line shown upon Fig. 1; and Fig. 4 is a section through the saddle-bar S, showing the saddle-bar socket K in end elevation.

It will be seen that the surface leather or other material A is fastened at the front end to a socket by three or other number of rivets  $b'$ , and the back part of A is fastened to the bridge-plate E by the rivets  $e'$ . Between the surface A and plate E is the intermediate stout leather or other equivalent piece H, to which the spiral or other equivalent springs M are connected by rivets and washers  $m'$  or their equivalent, and the other end of the springs M are attached to the stout angle or other plate R by means of similar rivets or screws  $r'$ . The tension of the saddle is maintained by the frame-rods T or other equivalent frame. In the case shown the round rod is bent to form an eye at the front end  $t'$ , the back end of the rod  $t^2$  being thrust into the sockets  $r^2$  on the plate R, where they are firmly secured. This rod or frame is so bent, as shown on the plan and elevation, that the saddle-bar socket K draws or forces them



somewhat out of their normal shape, thus avoiding altogether, apart from the tightening-screws  $k'$ , any shake; but these eye-screws  $k'$  lock the socket K in any desired position upon the frame bar or bars T. It will be noticed that the ends  $k^2$  are hollowed at  $k^3$ , so as to hold the bar T very tightly. It will be noticed that the inclination or pitch of the saddle may be influenced by the position of the plate K—i. e., the front end may be raised and the back lowered, or vice versa. The front connection with the frame is made by the hand-adjusting screw W, which passes through the eye of the frame T at  $t'$  and screws into the nut B, which may be of any desired shape, but the one shown is very applicable. The conical neck of this screw W, bearing against the round rod T, gives such a small bearing-surface that the front of the saddle is most easy, adapting itself to the motion of the rider under exceptional strains, which is a quality greatly desired. Of course this shape may be somewhat modified with similar effect. It will be evident that the upper surface of my saddle A with the parts B E R M W may be attached to many other

kinds of frames with similar effect as an elastic saddle.

What I claim, then, is—

1. In a saddle for a bicycle or similar vehicle, the frame T, consisting of a single bar bent at  $t'$  to form two diverging arms, in combination with a leather A, a nut B, attached to the front end of the said leather, an adjusting-screw W, which is straddled by the bent part of the said frame and engages the said nut, and devices between the said frame and the said leather for supporting the latter, substantially as set forth.

2. In saddles for the purpose herein mentioned, the combination of the springs M with their supporting-plates, the adjusting device W and B, and the frame T and saddle-bar socket K, substantially as herein set forth, and shown upon the drawings.

In testimony that I claim the foregoing as my own I affix my name in the presence of two witnesses.

WALTER BRAMPTON.

Witnesses:

GEORGE BARKER,  
GEORGE PRICE.