

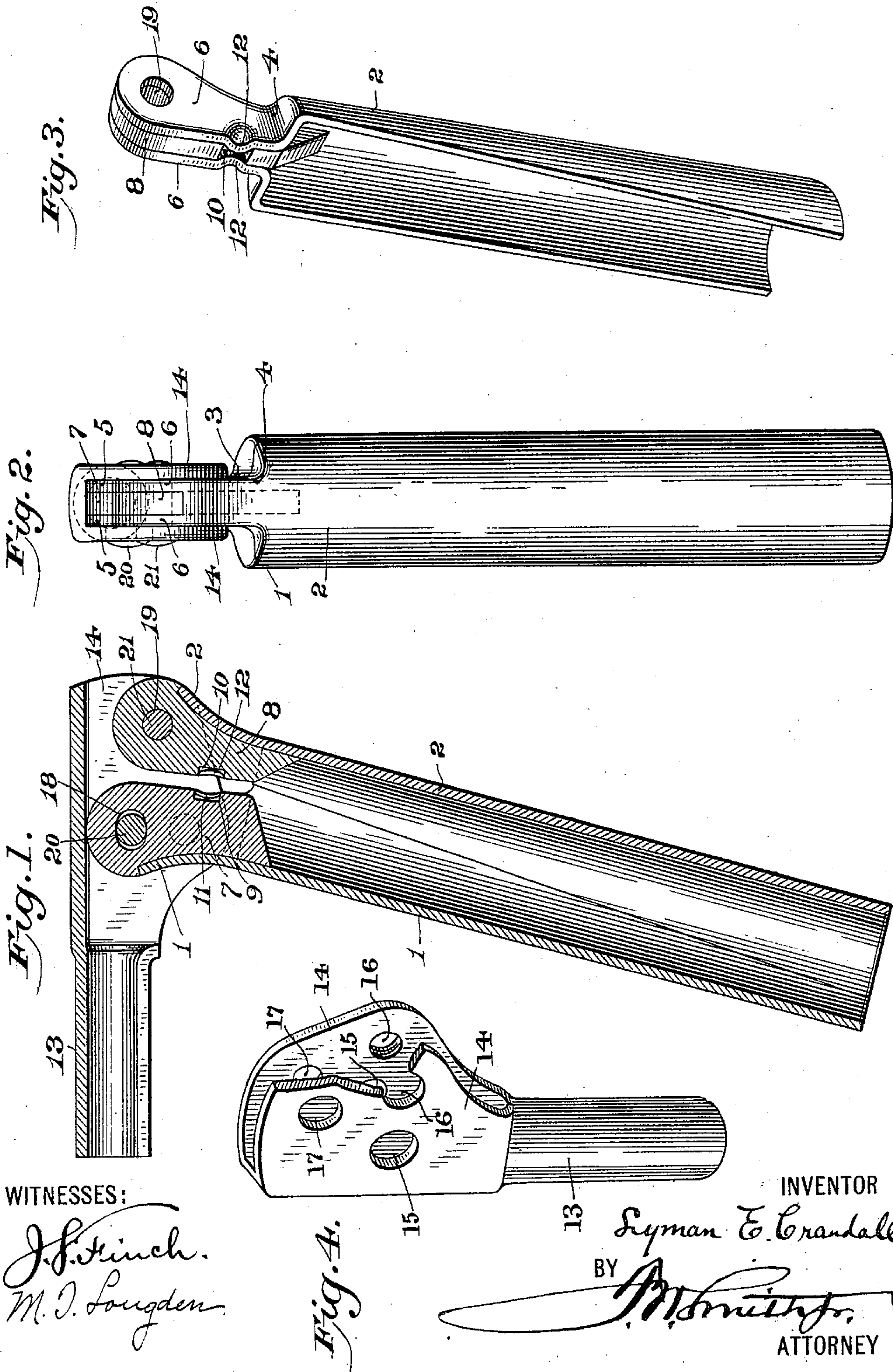
No. 620,422.

Patented Feb. 28, 1899.

L. E. CRANDALL.
BICYCLE SEAT POST.

(Application filed Nov. 28, 1898.)

(No Model.)



UNITED STATES PATENT OFFICE.

LYMAN E. CRANDALL, OF NEW YORK, N. Y., ASSIGNOR TO THE WATSON
AUTOMATIC SEAT POST COMPANY, OF SAME PLACE.

BICYCLE SEAT-POST.

SPECIFICATION forming part of Letters Patent No. 620,422, dated February 28, 1899.

Application filed November 28, 1898. Serial No. 697,654. (No model.)

To all whom it may concern:

Be it known that I, LYMAN E. CRANDALL, a citizen of the United States, residing at New York, in the county of New York and State of New York, have invented certain new and useful Improvements in Bicycle Seat-Posts; and I 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.

My invention relates to seat-posts for bicycles, but is more particularly intended as an improvement upon the construction shown and described in Letters Patent No. 607,181, issued July 12, 1898, to George W. Lord. In this patented construction the inclined members of the seat-post were constructed each in two pieces at the top portions, where the seat-supporting lever was pivoted, and one of these inclined members was provided with an apertured plug in its bottom to admit a spring fastened to the other member, so that both members could be kept together for the sake of convenience. Furthermore, no provision whatever was made in said patent for reversing said lever so that the saddle could be supported either in front of or behind the seat-post, according to the wish of the rider.

My present invention is the result of costly experience gained throughout the past year in the manufacture of these seat-posts, and I am to overcome all the defects heretofore noted; and with these ends in view my invention consists in certain details of construction and combination of parts, such as will be hereinafter fully explained and then specifically designated by the claim.

In the accompanying drawings, which form a part of this application, Figure 1 is a sectional elevation of my improved seat-post; Fig. 2, a rear elevation thereof; Fig. 3, a detail perspective illustrating one of the members of my improved post, and Fig. 4 is a detail perspective of the seat-supporting lever.

Similar numbers of reference denote like parts in the several figures of the drawings.

I form the members 1 2 of my improved seat-post by striking them up out of sheet metal, so that when said members are placed together their meeting edges are oppositely

inclined, while their cross-sections through their general length are circular. The upper portions or heads of these members are integral with the body portions and are formed up so as to present contracted necks 3 4 and plain cheek-pieces 5 6. 7 8 are blocks shaped to generally correspond to the shape of these cheek-pieces and placed between the latter as reinforce-sections, said blocks being cut away to form notches 9 10, and the edges of these cheek-pieces opposite said notches are crimped into said notches, as shown at 11 12.

The seat-supporting lever comprises a cylindrical bar 13, upon which the saddle is clamped, and parallel plates 14, which latter have perforations 15 16 17. The upper extremities of the members 1 2 are pierced through their cheek-pieces and respective blocks, as shown at 18 19, the perforation 18, which is pierced in the member 1, being slightly elongated for the purpose presently explained.

In assembling my improvement for use and in case the saddle is to be placed and supported forward of the seat-post I place the seat-supporting lever over the members 1 2 so that the holes 15 17 will register with the perforations 18 19 in the members, and I then unite these parts by means of suitable pins or screws 20 21.

When the members of the seat-post are in position on a bicycle with the lever 13 extending in a horizontal plane, the elongated perforation 18 will be disposed horizontally, so that it will be clear that any weight upon the lever-bar 13 will tend to force the pin 20 against a perfectly flat surface, so that there can be no wedging or binding action between such pin and perforation 18, such as might render it exceedingly difficult to remove the seat-post.

When the parts are in position, as shown at Fig. 1, the perforations 16 have no function whatever; but when it becomes desirable to reverse the position of the seat-supporting lever the perforations 17 16 are in registration with the openings 18 19, while in this latter instance the perforations 15 have no function.

It will be observed that in both positions of the seat-supporting lever a horizontal line

diametrically through the openings 17 will bisect the space which separates the openings 15 16, so that it will be clear that whether the seat-supporting lever is in one position or the
5 other the pin or screw which extends through the elongated slot 18 will always bear against a perfectly flat surface with no wedging action whatever.

My present improvement possesses great
10 advantages in that my seat-post members are exceedingly cheap and strong and for the further reason that I am enabled to reverse the position of the seat-supporting-lever bar with the greatest facility.

15 Having thus described my invention, what I claim as new, and desire to secure by Letters Patent, is—

In a bicycle seat-post comprising members having oppositely-inclined inner edges, the
20 combination of the perforated heads of the

seat-post members, with the seat-supporting lever having parallel plates through which are formed perforations from side to side disposed in the form of an isosceles triangle, one of said perforations being near the end of said
25 plates while the other two are in the same vertical plane when the bar is in a horizontal disposition, and the pins passed through the perforations in said plates and members and whereby one of said members is pivoted to
30 said plates when the other member is loosely connected between such plates, substantially as set forth.

In testimony whereof I affix my signature in presence of two witnesses.

LYMAN E. CRANDALL.

Witnesses:

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