

(No Model.)

W. H. HALE.  
SADDLE FOR BICYCLES.

No. 307,458.

Patented Nov. 4, 1884.

Fig. 1

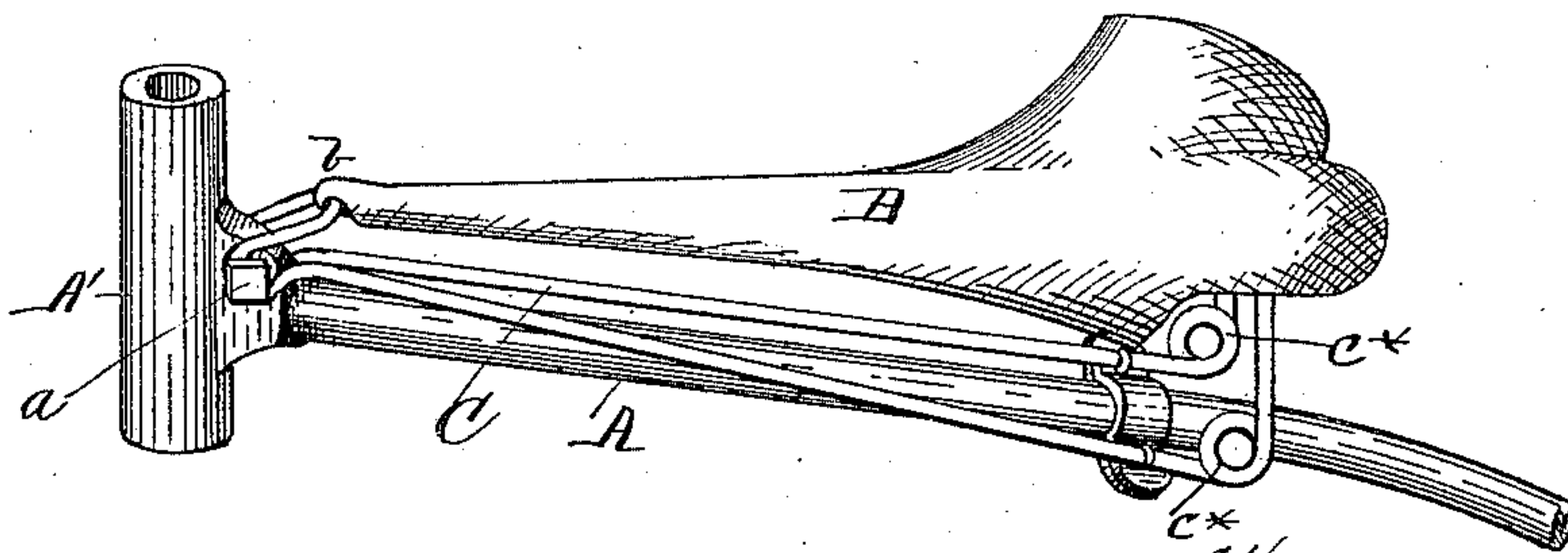


Fig. 2

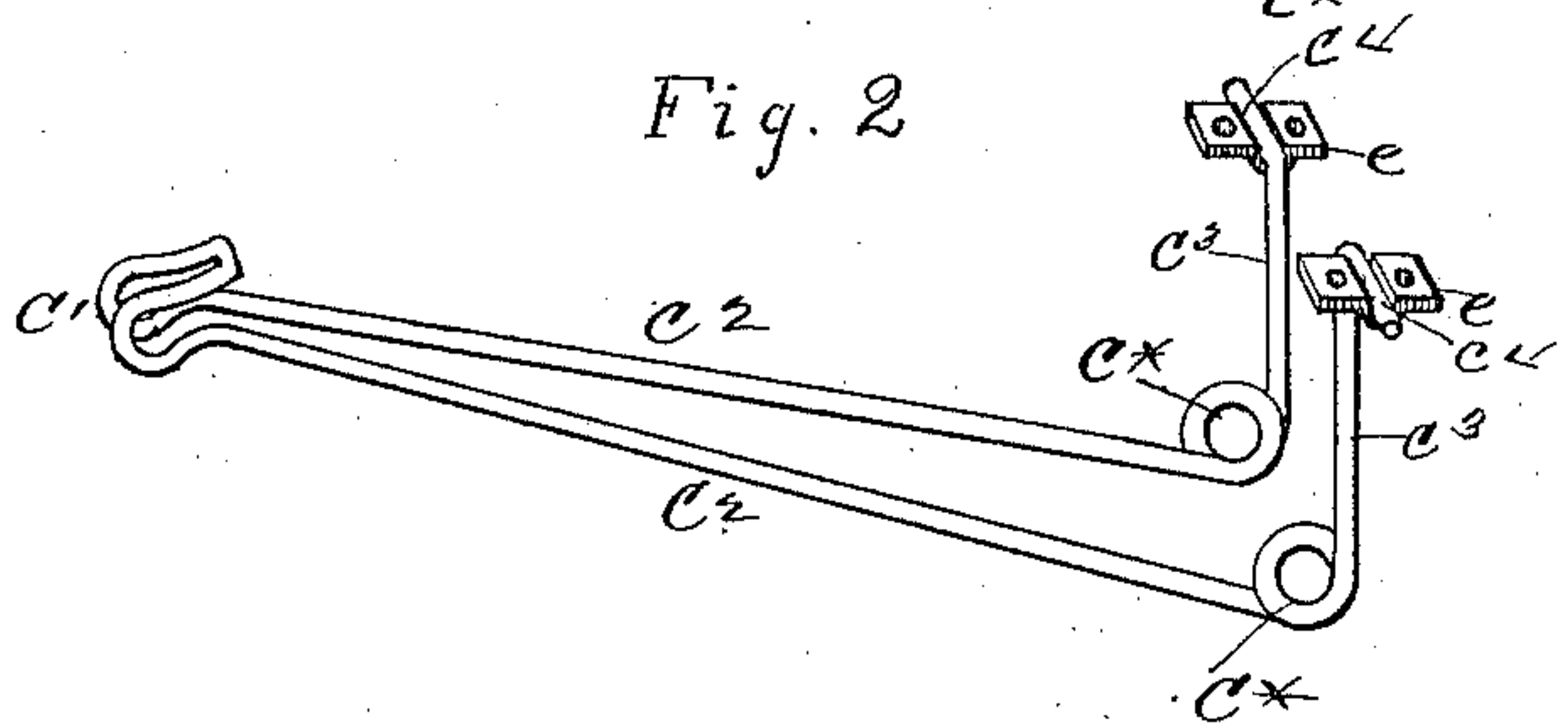


Fig. 3

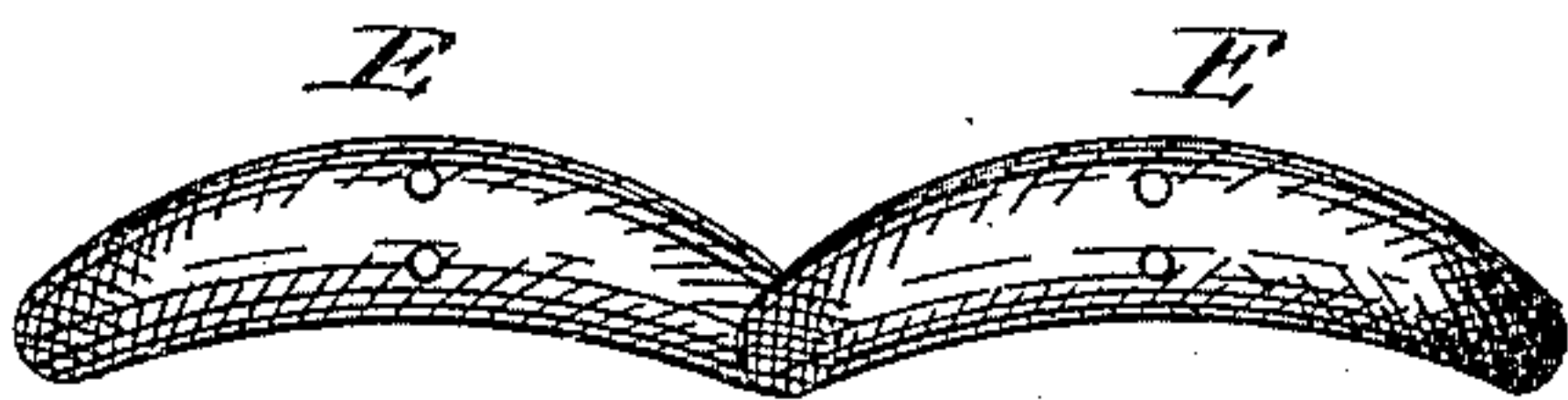


Fig. 4

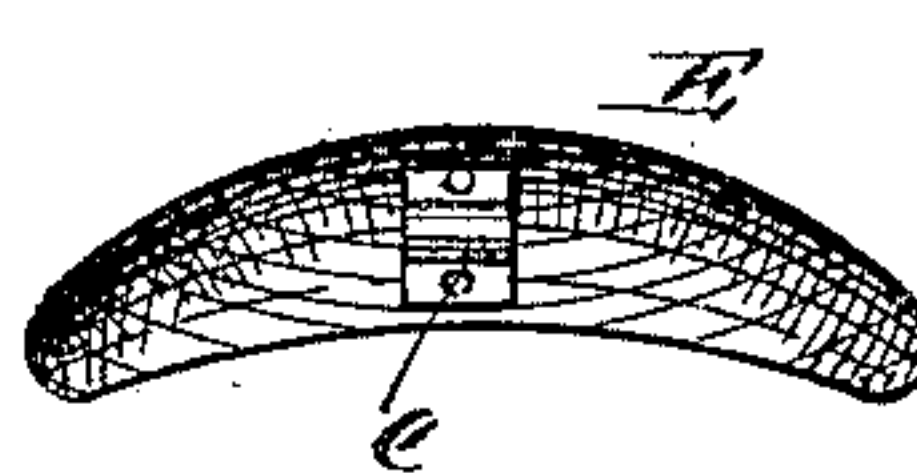
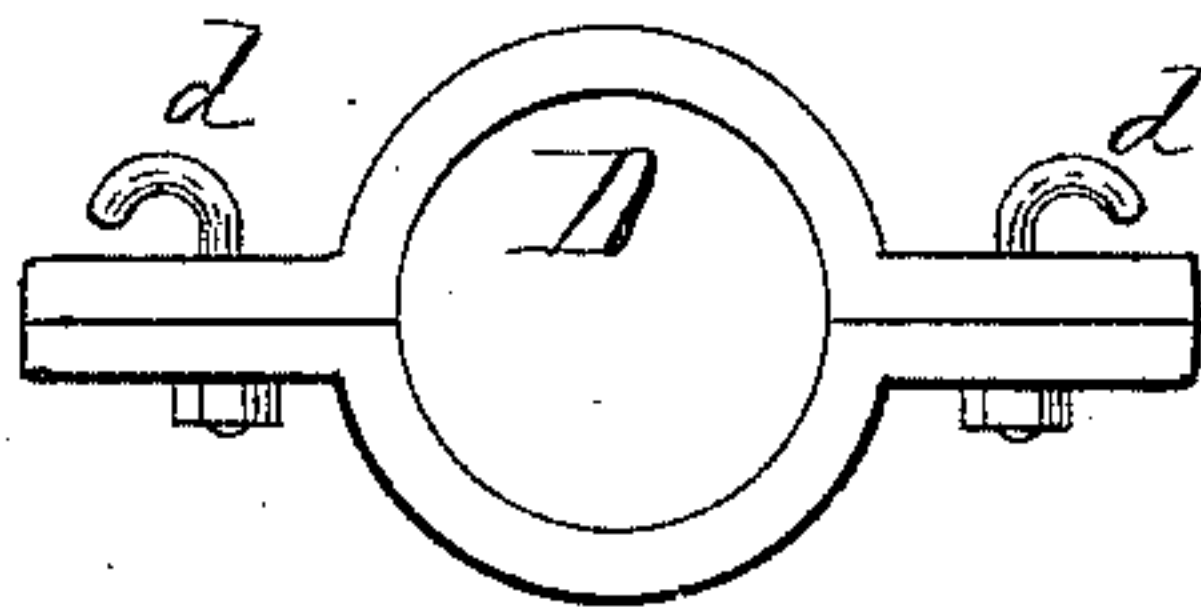


Fig. 3.A



Fig. 5



WITNESSES:

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# UNITED STATES PATENT OFFICE.

WILLIAM H. HALE, OF NEW HAVEN, CONNECTICUT, ASSIGNOR OF ONE-HALF TO JOSEPH WALDO JEWETT, OF SAME PLACE.

## SADDLE FOR BICYCLES.

SPECIFICATION forming part of Letters Patent No. 307,458, dated November 4, 1884.

Application filed April 17, 1884. (No model.)

*To all whom it may concern:*

Be it known that I, WILLIAM H. HALE, a citizen of the United States of America, residing at New Haven, in the county of New Haven and State of Connecticut, have invented certain new and useful Improvements in Saddles for Bicycles, of which the following is a specification, reference being had therein to the accompanying drawings.

My invention relates to saddles for bicycles; and its object is to produce an easy-riding saddle which shall possess a great amount of elasticity and also have the capacity to yield side-wise as the weight of the rider varies to one side or the other.

In the accompanying drawings, Figure 1 is a perspective view of a portion of the backbone of a bicycle with saddle attached. Fig. 2 is a perspective view of the frame detached. Fig. 3 is a plan view of the curved and rounded pieces on which the rear portion of the saddle rests. Fig. 3<sup>A</sup> shows the same with a hinge. Fig. 4 is an inverted view of one of the pieces shown in Fig. 5. Fig. 5 is an enlarged detail view of the clip or cross-piece, which is secured upon the backbone to support the spring.

Similar letters of reference indicate corresponding views in all the figures where they occur.

A is a portion of the backbone of a bicycle, and A' is a sleeve attached thereto, which goes over the post of the machine. B is the saddle. C is the frame therefor, which is formed of a single piece of spring-wire or small metal bar of the shape ordinarily employed in bicycles, but with the addition of my improvement thereto, as will hereinafter be explained.

The portions of the support ordinarily in use are as follows: the hook C' at the point for taking hold of the backbone or sleeve by encompassing the pins *a* and affording a point of attachment for the saddle, as shown at *b*, the slightly-spread limbs *c*<sup>2</sup>, and the upright portions *c*<sup>3</sup>. These upright portions *c*<sup>3</sup> have been joined to the limbs *c*<sup>2</sup> in the supports heretofore constructed without having any means for affording a spring action at this point, and the pressure or weight upon the

uprights would tend to compress the ends *c*<sup>3</sup>. In my invention I provide a bend or coil, *c*<sup>\*</sup>, at the juncture of the uprights *c*<sup>3</sup> with the limbs *c*<sup>2</sup>, which permits the frame to yield and gives it an elastic action without tending to force the limbs forward. The limbs *c*<sup>2</sup> rest upon the ends of the clip D, which is placed upon the backbone, as shown in Fig. 1, and are held thereon by the bended ends of the bolts *d*, as shown in the enlarged view, Fig. 5, which rest over the limbs *c*<sup>2</sup> (see Fig. 1) and hold them. The tops of the upright portions *c*<sup>3</sup> are bent outward, as shown at *c*<sup>4</sup>, and enter eyes *e e*, which are secured upon the rounded and curved pieces E E, which support the rear end of the saddle. These rounded and curved pieces E are of the form ordinarily employed, and are secured to the saddle in the usual way by rivets or otherwise; but instead of making the two pieces rigid or so mounting them as to prevent their moving with respect to each other, I overlap their ends, as shown in Fig. 3, or provide them with a hinge or loose rivet at this point, so that they can move and allow the saddle to yield. The front of the saddle is secured to the point of the support by having a tongue, *b*, bent over the point of the support and riveted or buckled under the saddle in the usual manner.

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

1. A bicycle-saddle frame formed with limbs *c*<sup>2</sup> and upright portions *c*<sup>3</sup>, extending in a vertical direction to their attachment to the saddle, having the bends or coils *c*<sup>\*</sup> at the point where the uprights start, whereby the depression of the seat tends to open the coils, as set forth.

2. The combination, with the saddle, of the curved and rounded pieces E E, overlapping each other, pivoted or hinged together, as and for the purpose set forth.

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

WILLIAM H. HALE.

Witnesses:

GEORGE TERRY,  
THOMAS MILLER.