(No Model.)

H. W. LESTER.

SADDLE.

No. 578,409. Patented Mar. 9, 1897.

Fig. 1.

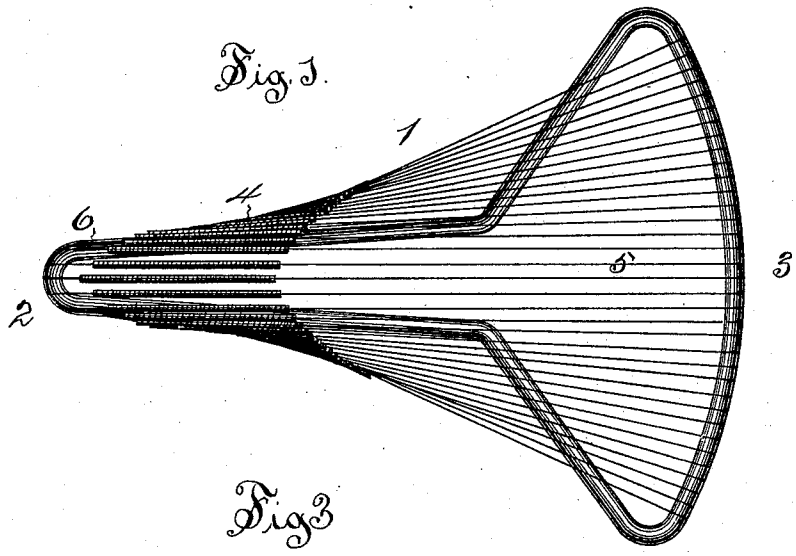


Fig 3

Fig 2.

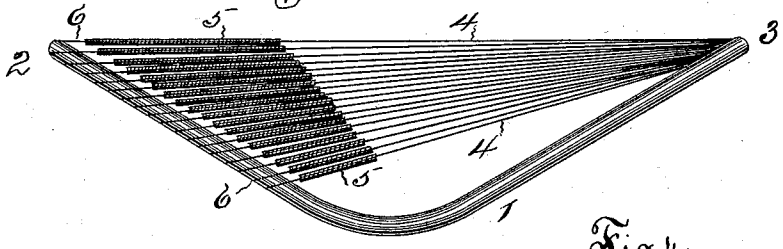
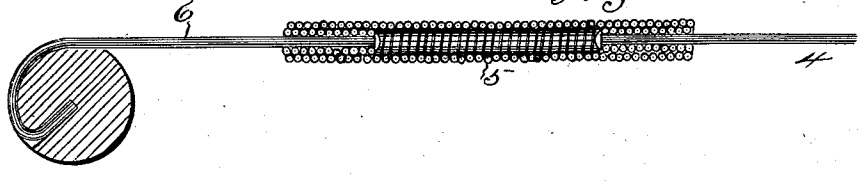


Fig. 4.



Witnesses
Scott H. Smith.
E. J. Hyde.

Inventor
Howard W. Lester, by
Wm. R. Williams
atty.

UNITED STATES PATENT OFFICE.

HOWARD W. LESTER, OF EAST HARTFORD, CONNECTICUT, ASSIGNOR OF ONE-HALF TO FREDERICK C. ROCKWELL, OF HARTFORD, CONNECTICUT.

SADDLE.

SPECIFICATION forming part of Letters Patent No. 578,409, dated March 9, 1897.

Application filed May 31, 1895. Serial No. 551,098. (No model.)

To all whom it may concern.

Be it known that I, HOWARD W. LESTER, a citizen of the United States, residing at East Hartford, in the county of Hartford and State of Connecticut, have invented certain new and useful Improvements in Saddles, of which the following is a specification.

The invention relates to the class of saddles that are used on bicycles, tricycles, and the like vehicles; and the object is to provide a light, simple, and cheap saddle for such machines, having an elastic seat that will freely conform to the figure of the rider without excessive rubbing or chafing, that will retain its shape and elasticity under various conditions of atmosphere and not stretch or shrink, that will be cool and pleasant for the rider and not unduly wear the clothing, that can be easily cleaned, and that can be readily repaired if it becomes damaged.

Referring to the accompanying drawings, where the invention is illustrated, Figure 1 is a plan of the saddle. Fig. 2 is a side view of the same. Fig. 3 is a detail view of one of the seat-wires, and Fig. 4 is a greatly-enlarged detail view of a portion of one of the seat-wires.

In the views, 1 indicates the frame of the saddle, which is usually formed to shape from a stiff piece of steel rod. This rod is bent in forming, so that the sides of the frame at the front end are nearly parallel as they rise up to form the pommel 2 from the part where the clamp is to be secured for attaching the saddle to the machine, while the sides of the frame at the rear diverge from the clamp-section as they rise and the back curves around to the sides to form a wide cantle 3.

Extending across the frame from the narrow pommel to the wide cantle are the seat-wires. Each of these seat-wires is composed of a long section 4 of a single strand of fine stiff wire that at the rear end is attached to the cantle portion of the frame and a spring-section 5, connected with the front end of the single-strand section 4, and another single-strand section 6, that connects the spring-section 5 with the pommel portion of the frame.

The single-strand sections 4 are made of such length that the rider of the machine, sitting on the saddle, will rest on these sections. The frame at the cantle and pommel sections is notched, grooved, or recessed by sawing, milling, or drilling, so as to receive the ends of the wire strands in such manner that the saddle will be smooth, and it is preferred to drill holes in the frame where it receives the wires, so that the ends of the wires may be hooked into these holes to prevent them from coming off, as shown in Fig. 4. The ends of the wires may be soldered or brazed to the frame, if desired, but it is preferred that they be left free, so that each strand may be removed when desired for tightening the spring or for the substitution of a new wire should one become damaged or broken. Usually the short-strand sections 6 of the wires are soldered or otherwise securely connected with the ends of the spring-sections, whereas the ends of the long sections 4 are adjustably connected with the spring-sections in order that the tension of the springs may be regulated.

The ends of the single-strand sections may have soldered or otherwise secured to them coils or springs somewhat smaller in diameter than the spring-sections 5, and then these ends may be turned or screwed into ends of the spring-sections to the desired distance in order that the total length may be made longer or shorter. With this construction the single-wire strands can be adjusted to proper tension and can be independently removed if they become damaged, bent, or broken, and they can be readily shortened if they become too much stretched.

This saddle is cheap in construction, for the frame is readily shaped and each of the wires is easily formed and attached in position with the proper adjustment. The saddle is strong and is light in weight. The single-wire strands afford a firm and smooth seat for the rider and a seat that will conform to the figure without undue chafing or rubbing. The spring-sections located near the pommel portion of the saddle will give sufficient elasticity, so that the seat-wires will lengthen and conform themselves to the shape of the rider, and the springs are located in such a position that in opening and closing as they yield they do not rub and wear the clothing as when the strands are composed entirely of coils of wire.

This seat can be easily cleaned, and if subjected to water or moisture it will not stretch and shrink out of shape or stiffen up, as leather, and should one of the strands or wires become damaged or stretched it can be quickly removed and another substituted.

I claim as my invention—

1. A saddle having a frame consisting of a single rod bent to rise toward the front and form a narrow pommel and to rise toward the rear and form a wide cantle, with individual spans having flexible non-elastic-strand seat-sections near to and connected with the cantle and elastic spring-sections near to and connected with the pommel, the non-elastic and the elastic sections of each span being connected together, substantially as specified.

2. A saddle having a frame consisting of a single rod bent to rise toward the front and form a narrow pommel and to rise toward the rear and form a wide cantle, with individual spans having flexible non-elastic-strand seat-sections near to and connected with the cantle, flexible non-elastic strand-holding sections near to and connected with the pommel, and elastic spring-sections between and connecting the strand-sections of each span, said spring-sections being located nearer the pommel than the cantle, substantially as specified.

3. A saddle having a frame consisting of a single rod bent to rise toward the front and form a narrow pommel and to rise toward the rear and form a wide cantle, with individual spans having flexible non-elastic-strand seat-sections near to and connected with the cantle, and spiral spring-sections near to and connected with the pommel, said strand-sections being adjustably connected with the spring-sections whereby each span may be independently lengthened or shortened, substantially as specified.

HOWARD W. LESTER.

Witnesses:
H. R. WILLIAMS,
SCOTT SMITH.