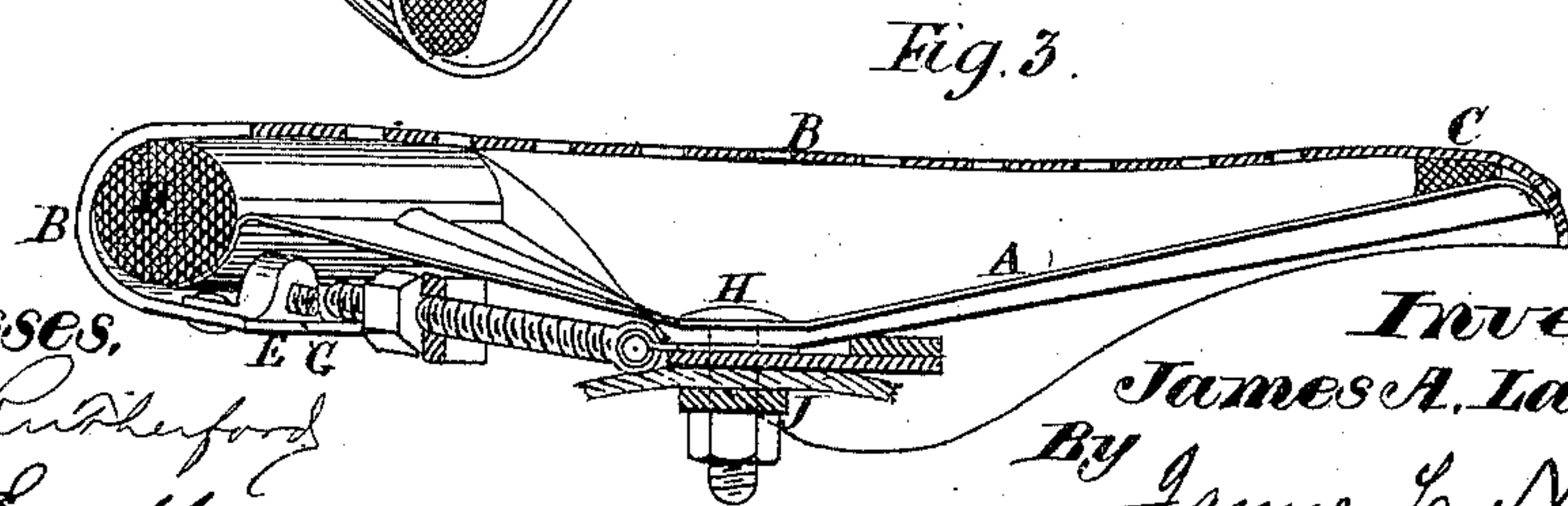
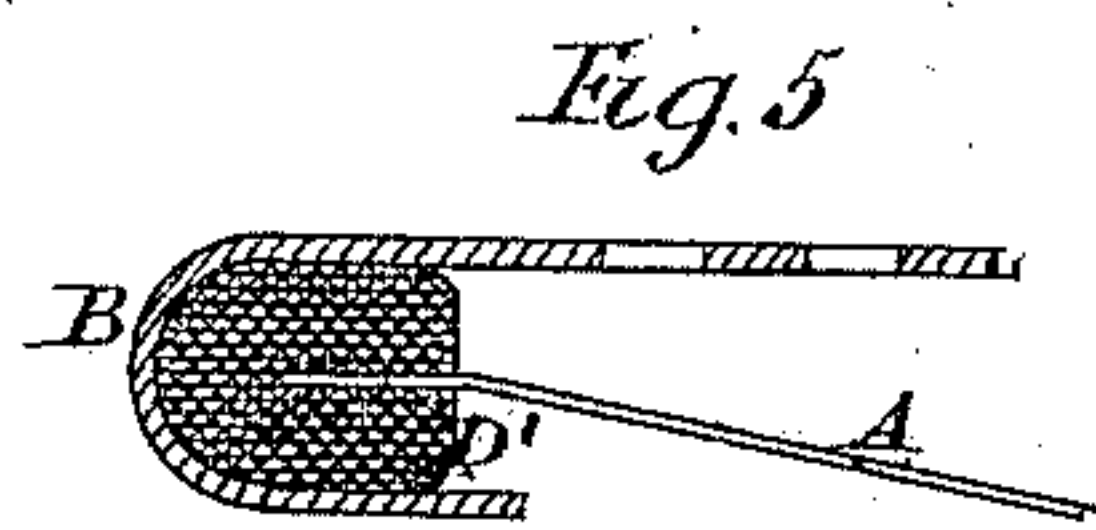
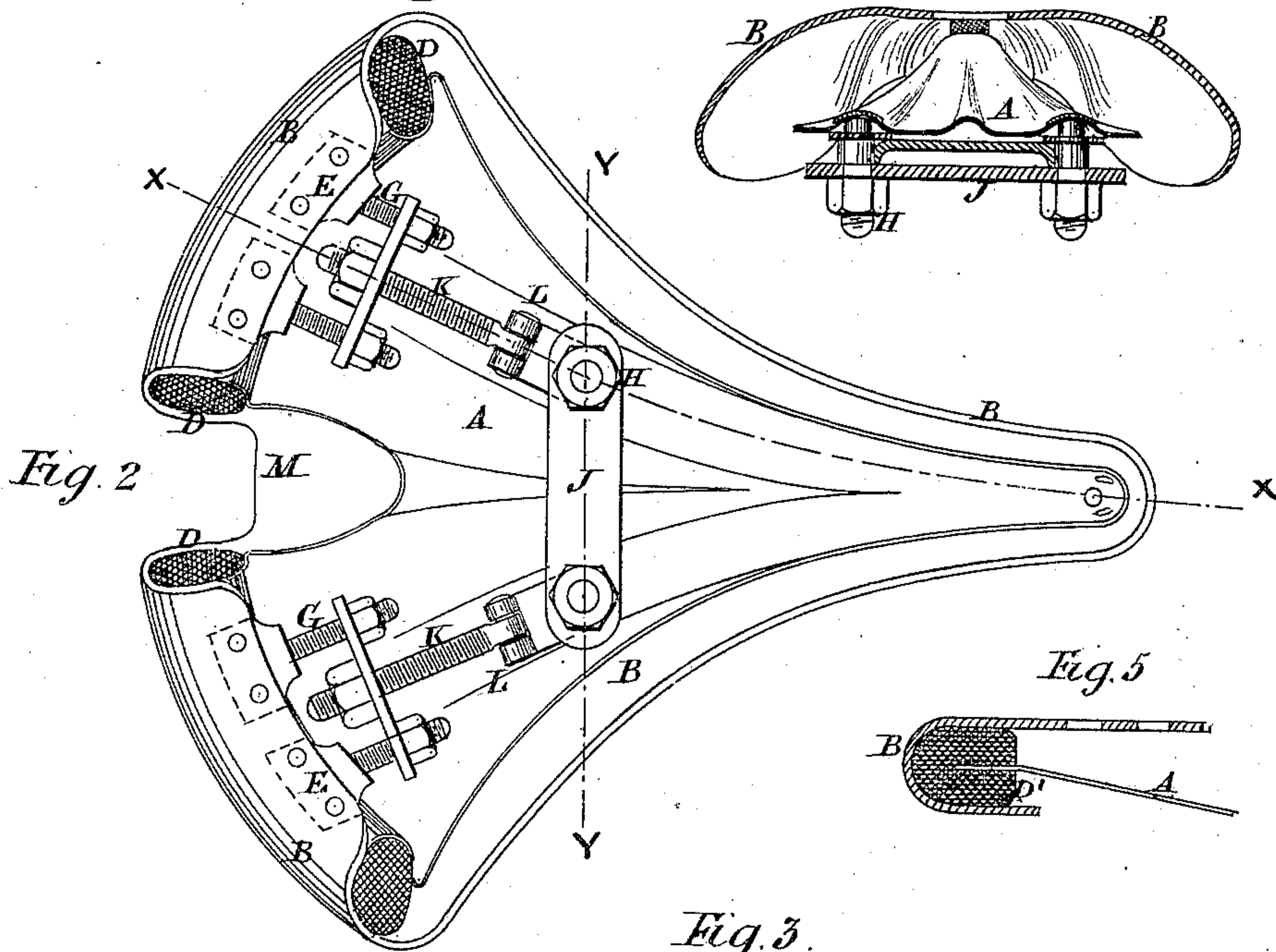
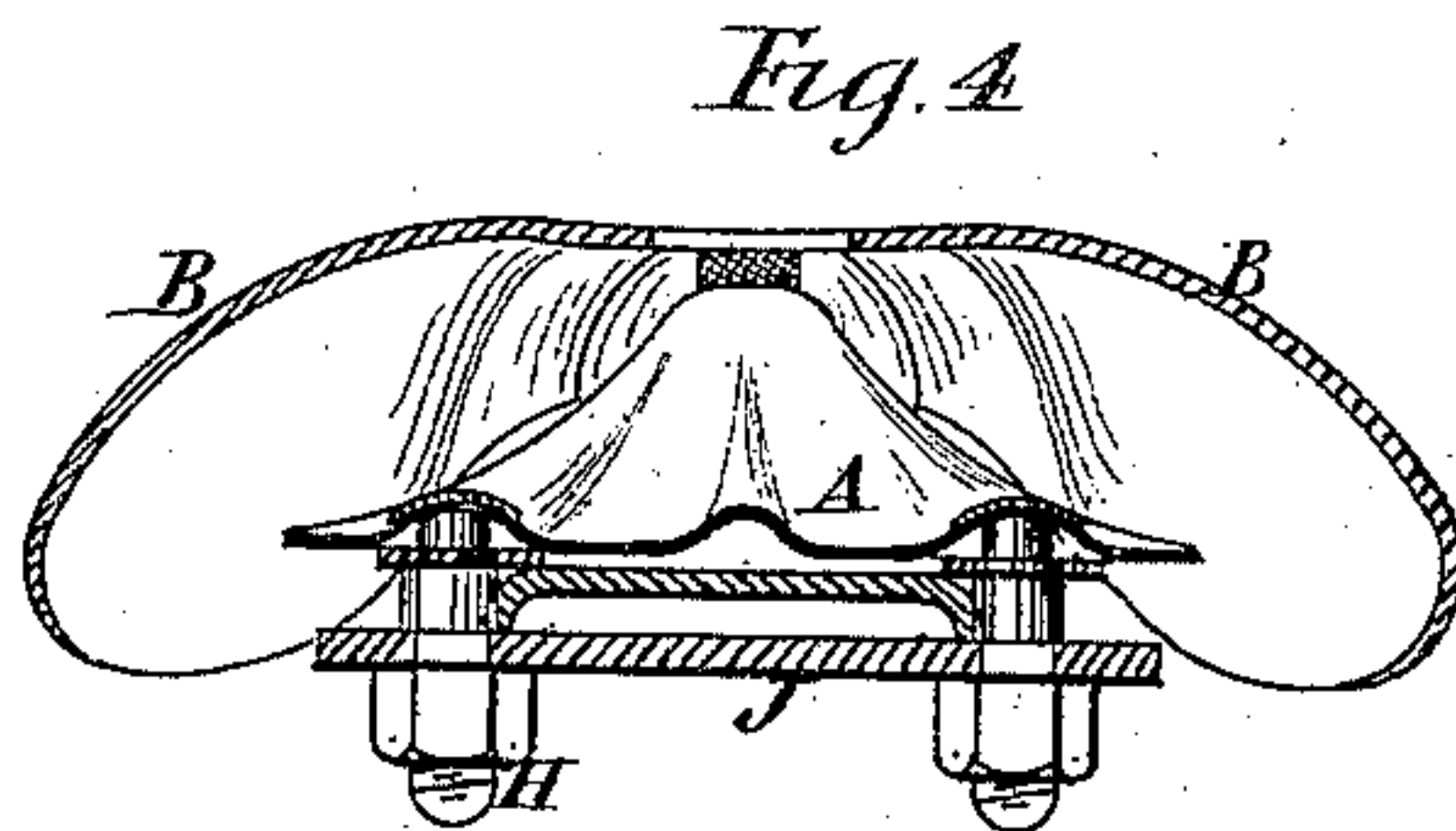
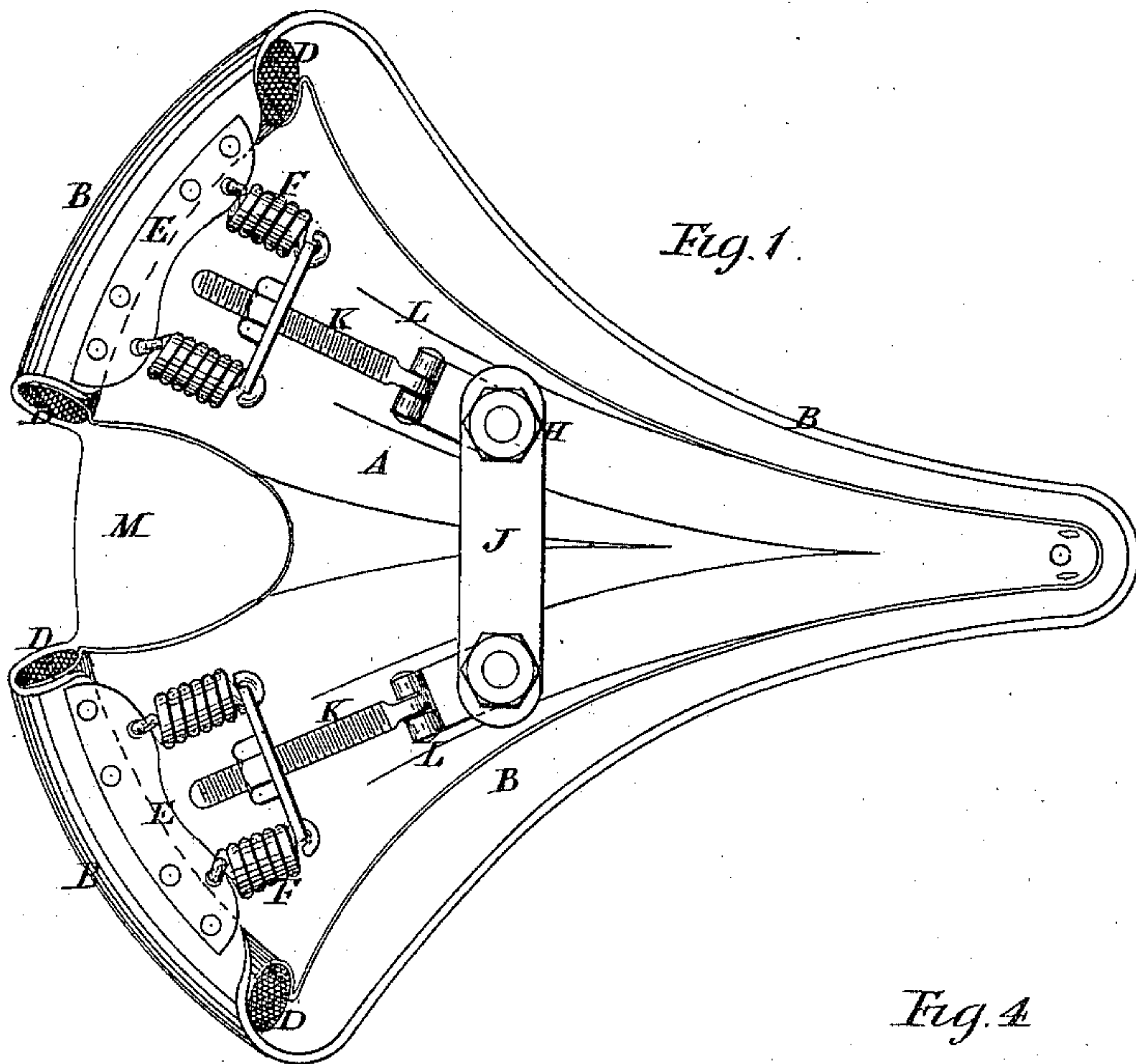


(No Model.)

J. A. LAMPLUGH.
SADDLE FOR BICYCLES.

No. 311,332.

Patented Jan. 27, 1885.



Witnesses,
J. A. Rutherford
Robert Everett.

Inventor,
James A. Lamplugh,
By James L. Norris,
Atty.

UNITED STATES PATENT OFFICE.

JAMES ALFRED LAMPLUGH, OF BIRMINGHAM, COUNTY OF WARWICK,
ENGLAND.

SADDLE FOR BICYCLES.

SPECIFICATION forming part of Letters Patent No. 311,332, dated January 27, 1885.

Application filed October 25, 1884. (No model.) Patented in England August 2, 1884, No. 10,899.

To all whom it may concern:

Be it known that I, JAMES ALFRED LAMPLUGH, a citizen of England, residing at Birmingham, in the county of Warwick, England, have invented a new and useful Improvement in Saddles for Bicycles, Tricycles, and such like Vehicles, (for which I have obtained a patent in Great Britain, No. 10,899, dated August 2, 1884,) of which the following is a specification.

My invention relates to a construction of saddle for bicycles, tricycles, and such like vehicles, the object which I have in view being to provide an elastic seat for the rider free from all jar. For this purpose I construct the saddle as I will describe, referring to the accompanying drawings.

Figure 1 is a plan of the saddle, looking from below and Fig. 2 is a like plan of the same with a modification, to which I will presently refer. Fig. 3 is a longitudinal section taken along the line X X in Fig. 2. Fig. 4 is a transverse section on the line Y Y of Fig. 2, and Fig. 5 is a part longitudinal section showing a modification of Fig. 3.

In these figures corresponding parts are marked by similar letters.

A is a bent steel plate of a form approximately the sector of a circle, corrugated longitudinally to give it stiffness. To the narrow end of this plate is secured the front end of the leather B of the saddle, preferably with a layer, C, of caoutchouc or other elastic material interposed between the leather and the metal. The back end of the plate A is bent into a trough form, into which is cemented or otherwise secured a round band, D, of caoutchouc or other elastic material. The broad end of the leather B is passed partly over the elastic band D and secured to steel strips E. These strips E are connected by several helical springs F, as shown in Fig. 1, or simply by bolts G, as shown in Figs. 2 and 3, to screwed studs H, which project down from the plate A, and which serve to hold by nuts the clamping bar J, by which the saddle is secured to the spring of the vehicle. I prefer to use the

springs F (shown in Fig. 1) when it is desired to have the elastic band D of small diameter. I find, however, that by employing a band, D, of larger diameter, as shown in Figs. 2 and 3, sufficient elasticity is given without requiring the springs F, for which bolts G are substituted. These bolts, as well as the bolts K connecting to the studs H, have nuts for adjusting the elastic strain at the various parts of the leather; also, the bolts K are made with joints at L, and are free to turn on the studs H, so that they can accommodate their positions to suit the relative strains of the parts. The bolts K may be forged of steel, with their broad ends so flexible and elastic as to yield sufficiently in a vertical direction, in which case the joints L may be dispensed with. The plate A is curved downward about the middle, so as to leave a free air-space between it and the leather B, which is preferably perforated for ventilation. Obviously the shape of the plate A might be varied without departing from the character of my invention. For example, the trough-like hollows in which the bands D lie, instead of having circular curvature in plan, might be straight; or, instead of being discontinuous, as shown in Figs. 1 and 2, they might be continued across the gap M, which is cut out merely for the purpose of saving weight.

Instead of round elastic bands D laid in hollows of the plate A, pieces of thick caoutchouc band D may be folded over the hinder edges of A, as indicated in Fig. 5.

Having thus described the nature of my invention and the best way I know of carrying the same into practical effect, I claim—

1. The combination of the bent steel plate A, provided at its rear edge with one or more elastic pads, D, the seat B, attached at its forward end to the plate A, and having its rear edge turned over said elastic pads and adjustably secured to the under side of the plate A by means of screw-bolts K, substantially as described.

2. The combination of the plate A, bent at its rear edge to form a seat for the elastic pads

D, the elastic pads, one or more, resting therein, and the seat B, secured at its forward end to the plate A, and at its rear edge turned over the elastic pads, and adjustably secured
5 to the under side of said plate by means of screw-bolts K, substantially as described.

In testimony whereof I have signed my name to this specification, in the presence of

two subscribing witnesses, this 13th day of October, A. D. 1884.

JAMES ALFRED LAMPLUGH.

Witnesses:

JOS. CHAMBERLAIN,

CHARLES GERRARD,

Clerks to E. T. Ratcliff, Notary Public, Birmingham.