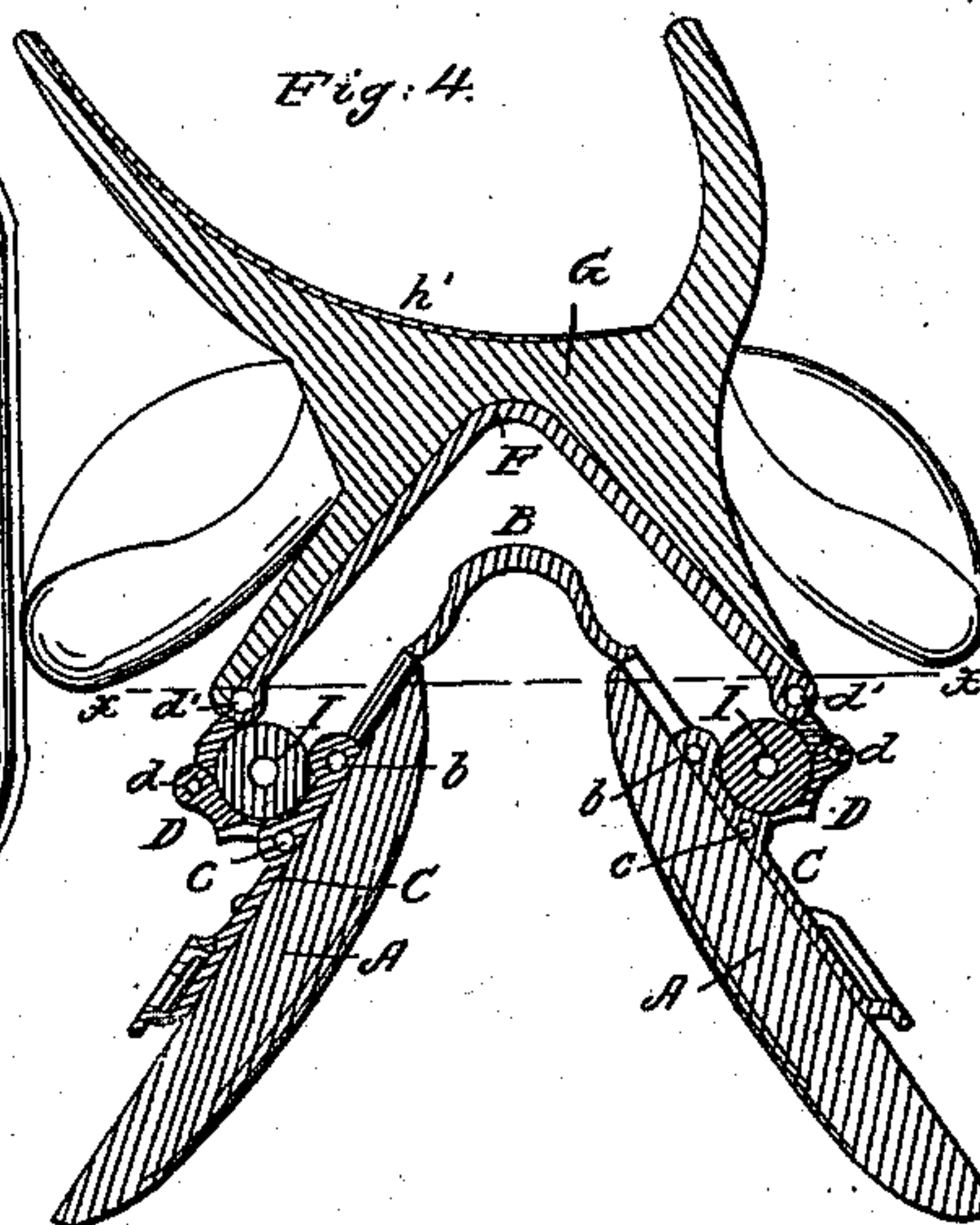
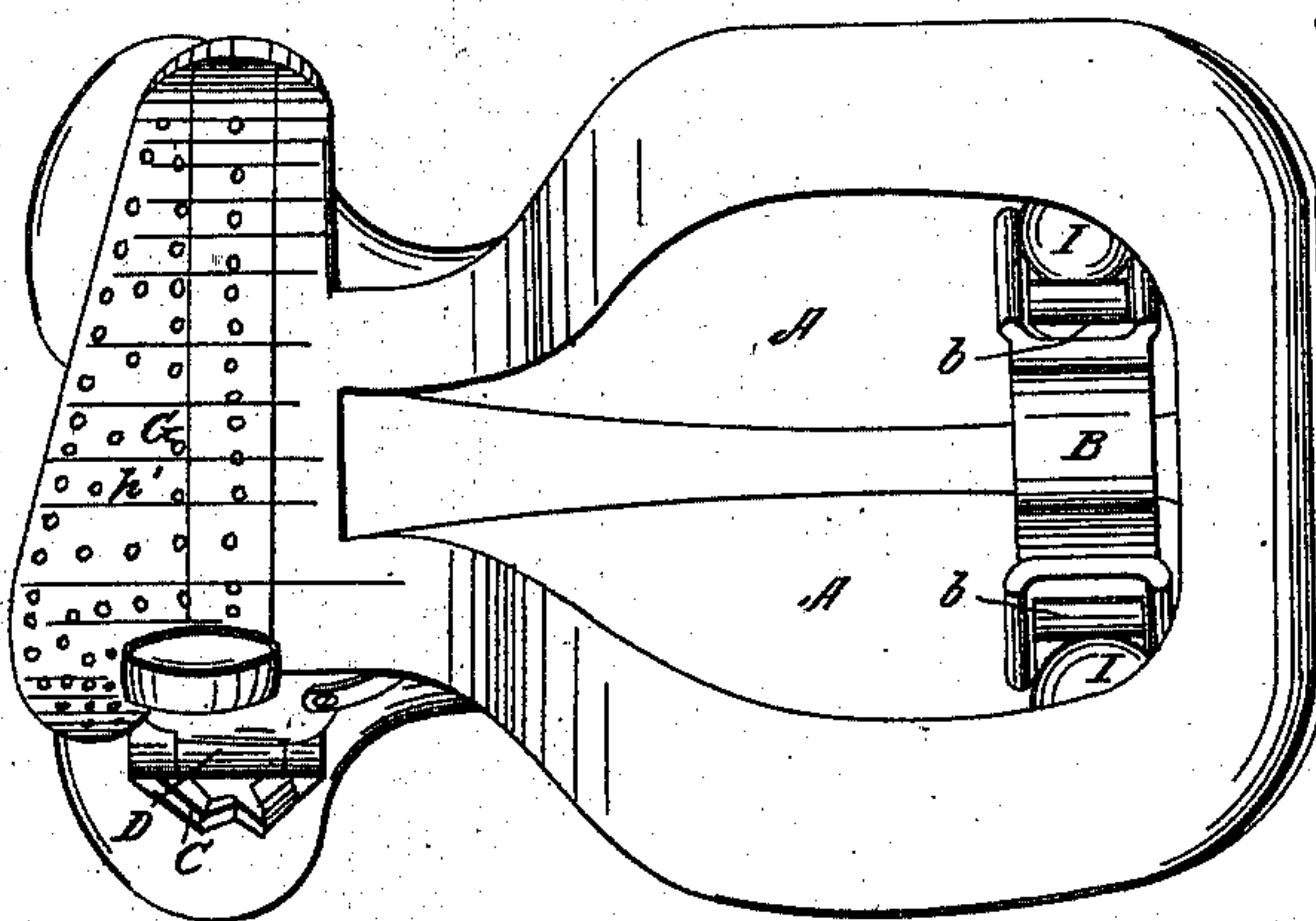
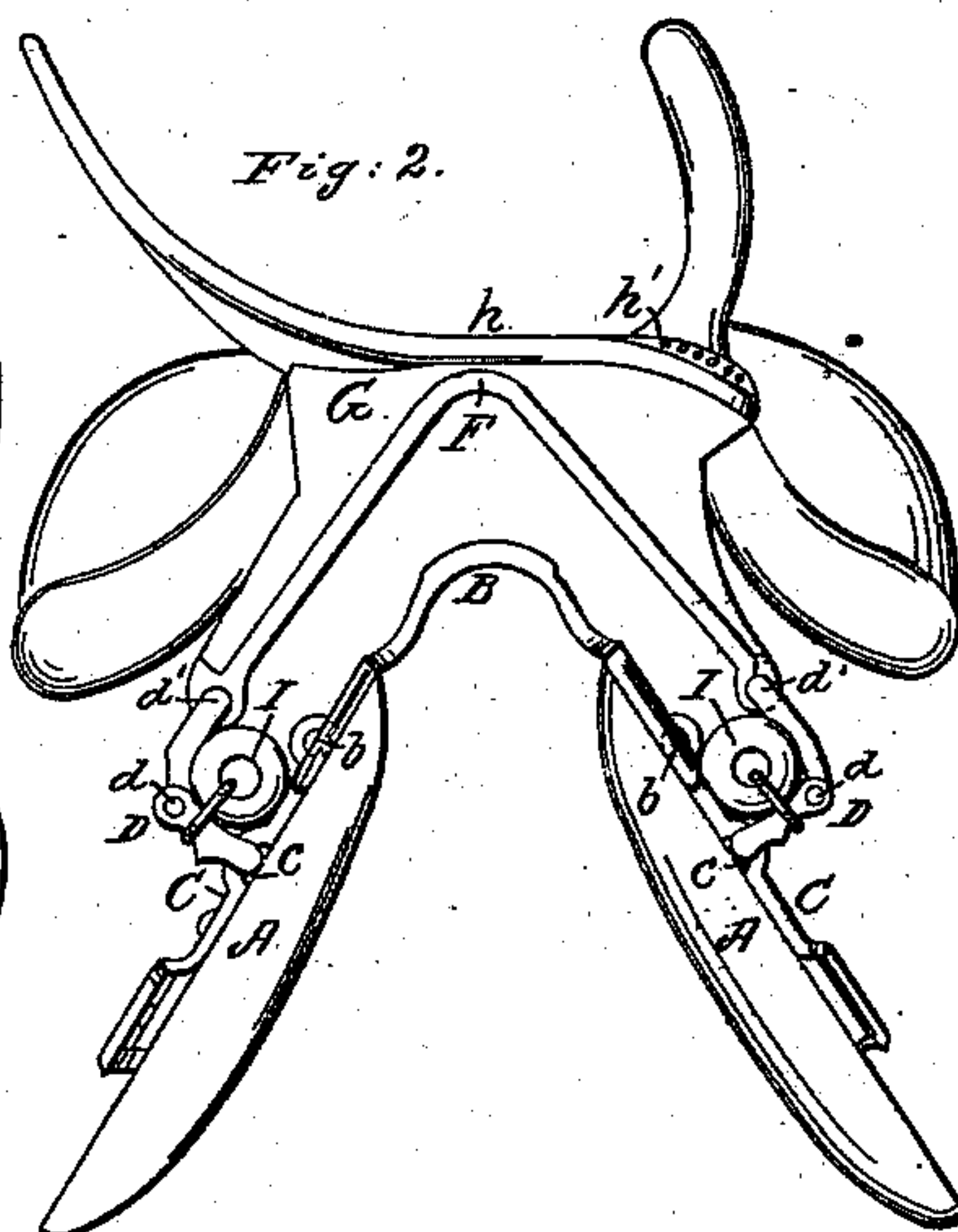
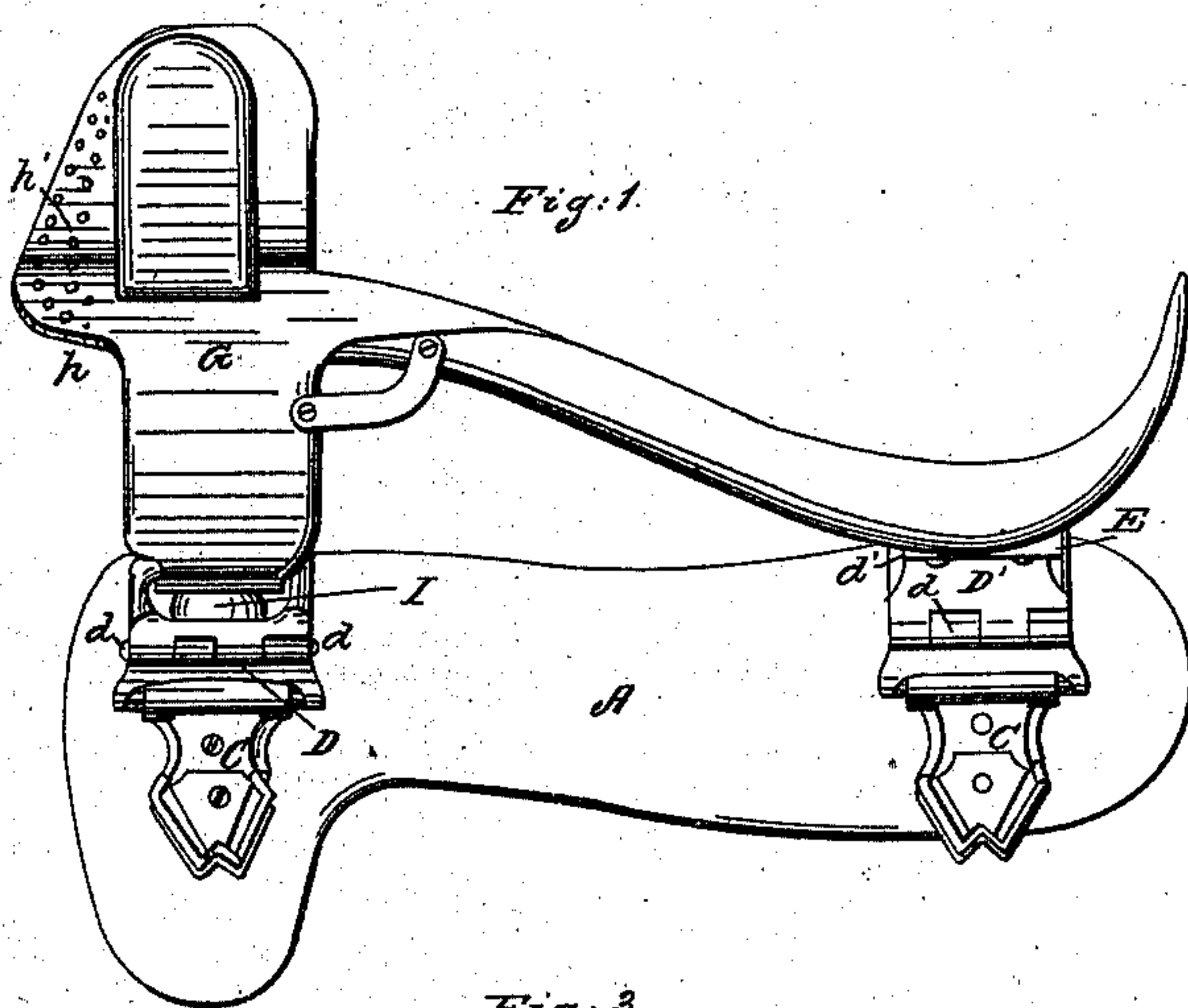


J. STRAUS.
Spring Side Saddle Tree.

No. 103,101.

Patented May 17, 1870.



Witnesses:
William W. Herthel.
Robert Burns.

Inventor:
Jacob Straus.
by his attys.
Herthel & Co.

United States Patent Office.

JACOB STRAUS, OF ST. LOUIS, MISSOURI.

Letters Patent No. 103,101, dated May 17, 1870.

IMPROVEMENT IN SIDE-SADDLE TREES.

The Schedule referred to in these Letters Patent and making part of the same

To all whom it may concern:

Be it known that I, JACOB STRAUS, of St. Louis, in the county of St. Louis and State of Missouri, have made certain new and useful Improvements in Spring Side-saddle Trees; and I do hereby declare that the following is a full and true description thereof, reference being had to the accompanying drawings and to the letters of reference marked thereon.

In this invention the saddle-tree seat is arranged separately from the tree-bars, the connection between these parts being by hinges, and the direct support of the tree-seat upon the bars being by means of springs, securing an easy seat to the rider and avoiding jar upon the animal.

The saddle-bars are, moreover, arranged for self-adjustment on the back of the animal.

Lastly, there are several details of construction of importance in relation to the said features of this invention; these are hereafter fully explained.

To enable those herein skilled to make and use my said invention, I will now more fully describe the same, referring to the accompanying—

Figure 1 as a side elevation; to

Figure 2 as a front view; to

Figure 3 as a plan; and to

Figure 4 as a section at line *x-y*.

The saddle-tree bars *A* are constructed in the form indicated, (approximating to the usual form,) the lower outline and surface being carefully curved to accommodate the horse's or mule's back.

The two bars are connected by U-shaped strap-pieces, *B*, the end rails *b* of which are held under the curved ends of the base or fulcrum-plate *C*, which is secured to the upper face of each bar *A*.

Each tree-bar then is capable of a radial motion from the pivot *b*, thus permitting its adjustment to a wide or narrow-backed horse.

The plate *C* has centrally a second semi-cylindrical groove, *c*, which guides and acts as a fulcrum for the pair of hinge-braces *D D'*; these are hinged at *d*, and the upper one, *D'*, by its end rail, *d'*, connects with the small hook-plates *E*, at the rear of the tree-seat, and with the bent pommel-supporting plate *F* at the forward end of the tree-seat, the connection with *E* and *F* being each time by a hinge-joint, as indicated.

The seat and pommel *G* are of the usual form, and, from the nature of the support upon the hinge-braces *D D'*, it is plain that a vertical movement of the seat *G*, approaching or receding from the bars *A*, is possible.

To equalize said movement I arrange springs *I* between the hinge-shank *D'* and the underlying part of plate *C*.

The curved ends of the parts *C E* and *F* lie in such proximity that they will usually aid to confine the rubber or other spring substance.

In forming the seat the parts will generally receive the usual construction.

To form, however, a lighter, more durable, and easily-constructed pommel-lip *I* construct the same of leather, *h*, properly tacked or fastened to the vertical front sides of the pommel *G*.

Said leather lip *I* then cover with a metallic plate, *h'*, also well tacked on; when, then, the usual padding or "spring" is fitted under the pommel, the tacks fastening will not pass up through, being bent by the plate *h'*, thus avoiding damage to the tree-covering.

The improved tree and saddle thus formed is plainly smooth and easy to ride, avoiding fatigue to woman and beast, and its simplicity of construction and economy of cost will give it a preference in public demand.

Having thus fully described my said invention, What I claim is—

1. The bars *A*, straps *B*, plates *C*, hinged braces *D D'*, and parts *E* and *F*, combined substantially as set forth.

2. The springs *I*, in connection with devices *D* and *D'*, and *C, E* and *F*, in combination with the bars *A* and seat *G*, substantially as and for the purpose set forth.

3. The pommel with its leather lip *h*, protected and strengthened by the metallic plate *h'*, substantially as set forth.

In testimony of said invention I have hereunto set my hand in presence of—

JACOB STRAUS.

Witnesses:

ISAAC MEYER,
N. EVANS ERLE.