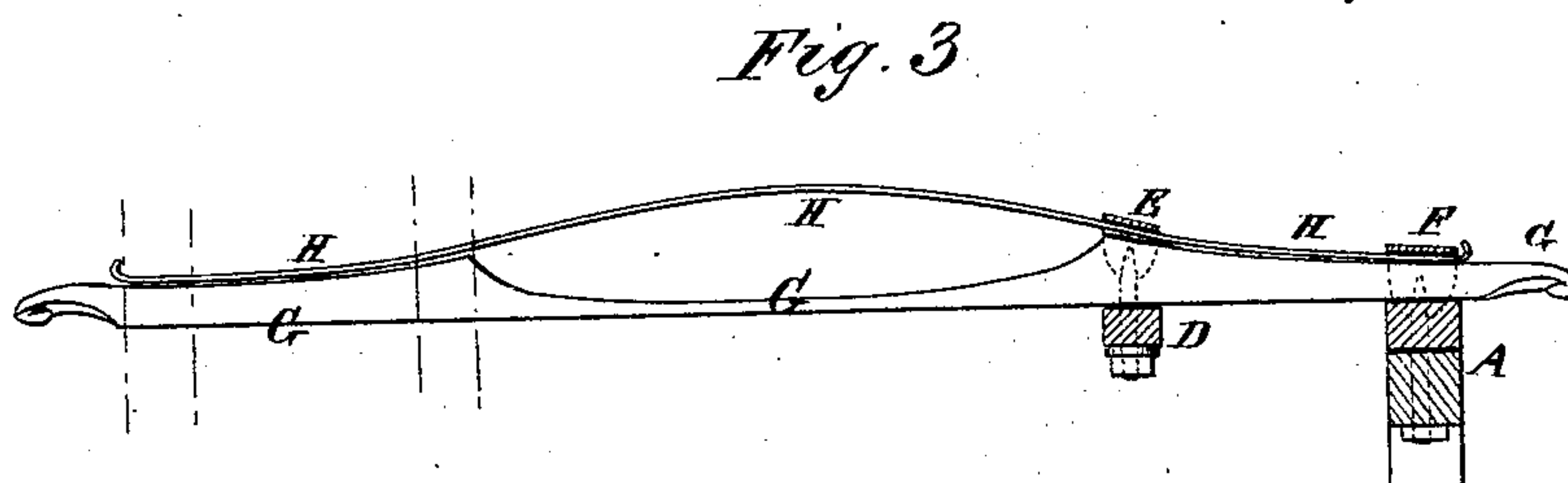
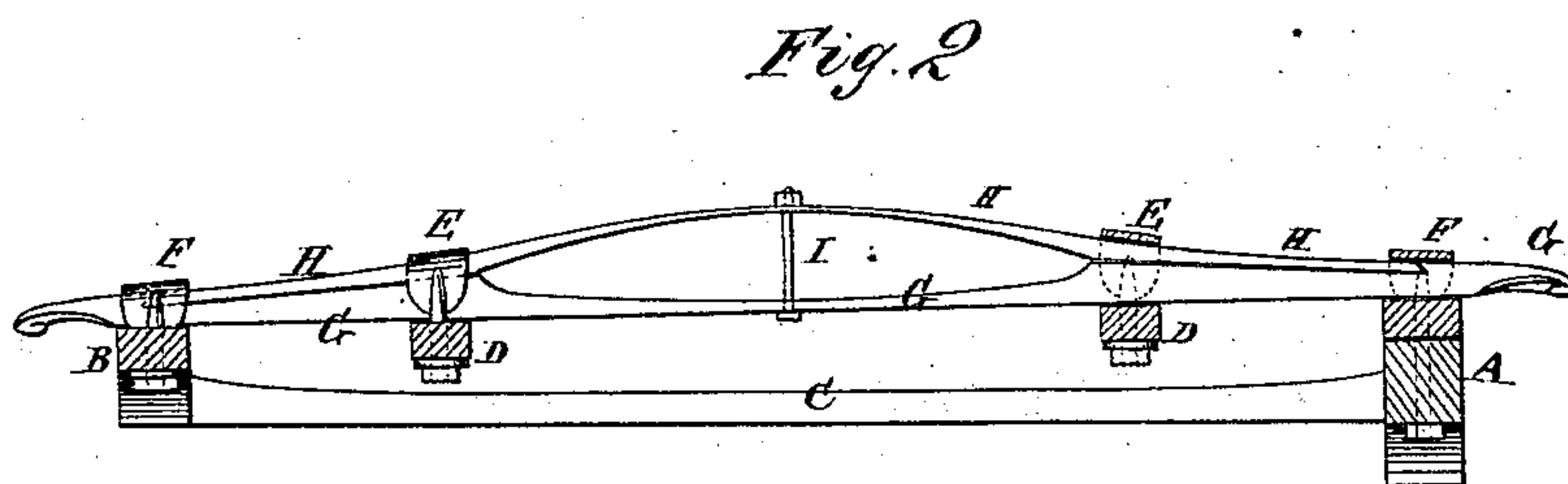
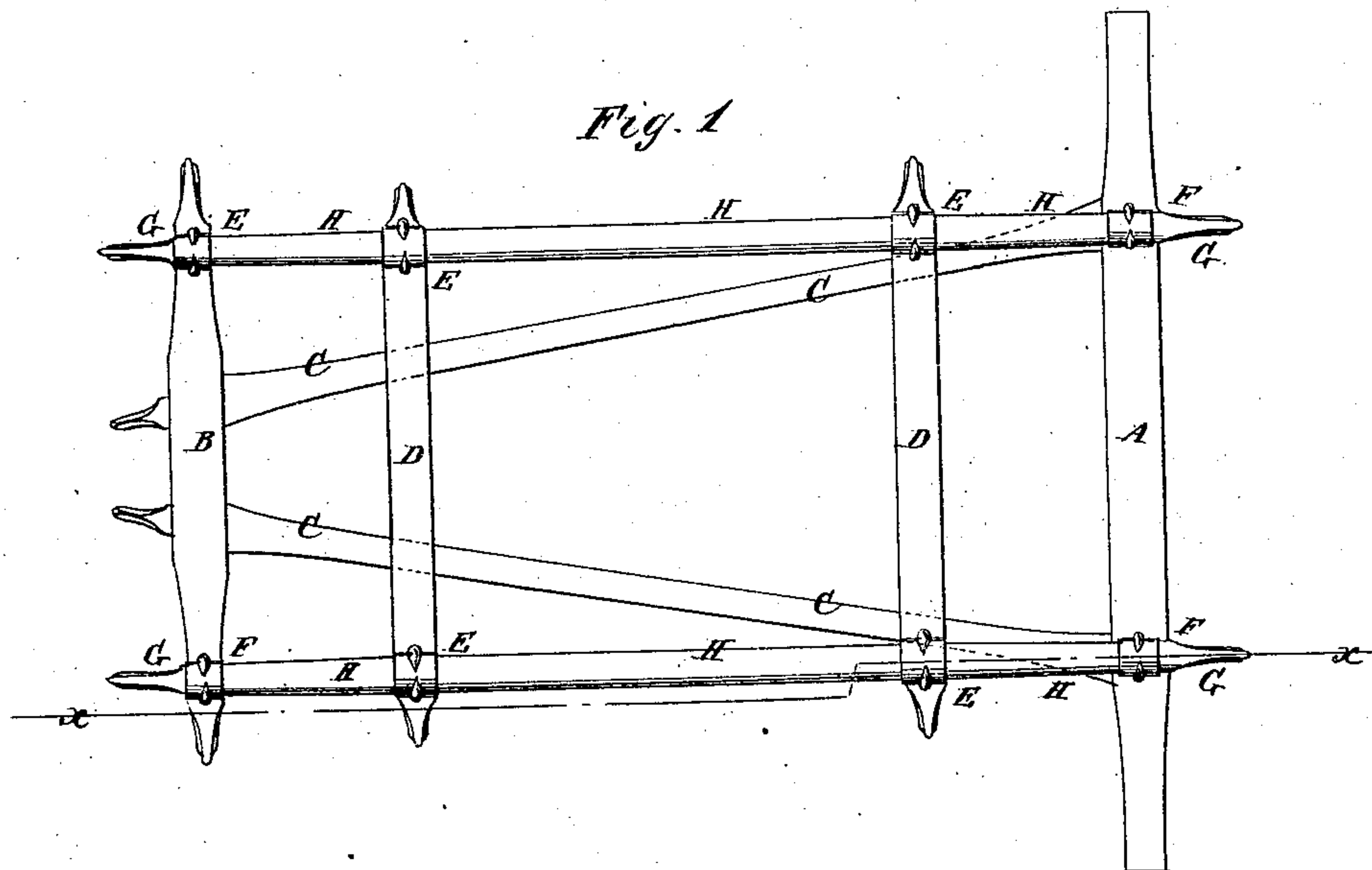


J. W. COE & D. MERRITT.
Side-Bar for Vehicles.

No. 159,302.

Patented Feb. 2, 1875.



WITNESSES:

A. W. Almqvist
Alex F. Roberts

INVENTOR:

J. W. Coe
BY *D. Merritt*
Mumford
ATTORNEYS.

UNITED STATES PATENT OFFICE.

JOHN W. COE AND DANIEL MERRITT, OF WILLIAMSBURG, NEW YORK.

IMPROVEMENT IN SIDE BARS FOR VEHICLES.

Specification forming part of Letters Patent No. **159,302**, dated February 2, 1875; application filed October 27, 1874.

To all whom it may concern:

Be it known that we, JOHN W. COE and DANIEL MERRITT, of Williamsburg, Kings county, New York, have invented a new and useful Improvement in Truss Side Bars for the Running-Gear of Wagons, of which the following is a specification:

Figure 1 is a top view of the running-gear of a wagon, to which our improved truss side bars have been applied. Fig. 2 is a side view of the same, partly in section, through the line *x x*, Fig. 1; and Fig. 3 is a detail view, showing a modification of the truss side bar.

Similar letters of reference indicate corresponding parts.

Our invention has for its object to furnish an improved side bar for the running-gear of wagons, which shall be light, and at the same time strong, and less liable to sag than when made in the ordinary way.

Each of said bars is made up of two parts, which are elastic at their middle to provide for expansion vertically, whereby the desired spring action is obtained. The expansion is limited by a tie-bolt, as hereinafter described.

A is the rear bolster. B is the forward bolster. C are the reaches. D are the cross-bars, to which the body of the wagon is secured, and which are secured to the side bars by the clips E. F are the clips by which the side bars are secured to the bolsters A B, or to the ends of the springs when springs are used. The side bars are each made of two pieces or parts. The lower part, G, is made straight or nearly straight, and, when made of wood, we prefer to make it somewhat lighter in the middle. The piece G has shoulders formed upon its upper side beneath the clips F, to receive the ends of the upper part, H, which part H is made a little longer than the space between

the said shoulders, so that the middle part of the said piece H may be slightly sprung or arched upward, as shown in Figs. 2 and 3. The pieces G H are securely clamped to each other, and to the cross-bars D and bolsters or springs A B, by the clips E F.

The two parts G H of the side bars may both be made of wood, or the lower part may be made of wood and the upper part of metal, or both parts may be made of metal, as may be desired.

The middle parts of the two pieces G H are elastic, so that, when weight is applied to the cross-bars D, the said middle parts will spring from each other, and will immediately return to their former position when the said weight is removed.

The parts of the pieces G H between the clips E F may be so formed as to fit upon each other, as shown in Figs. 2 and 3, or they may be so formed as to leave a space between them, between the said clips E F; or they may be made of nearly uniform thickness, and may have blocks interposed between them beneath the clips E.

Having thus described our invention, we claim as new and desire to secure by Letters Patent—

The combination of side bars, consisting of the parts G and H, having elastic central portions cut away, arched, or separated, to form a set of compound springs, and the cross-bars D, attached thereto for supporting the carriage-body, as shown and described.

JOHN W. COE.
DANIEL MERRITT.

Witnesses:

T. C. DISBROW,
JOHN FELLOWS.