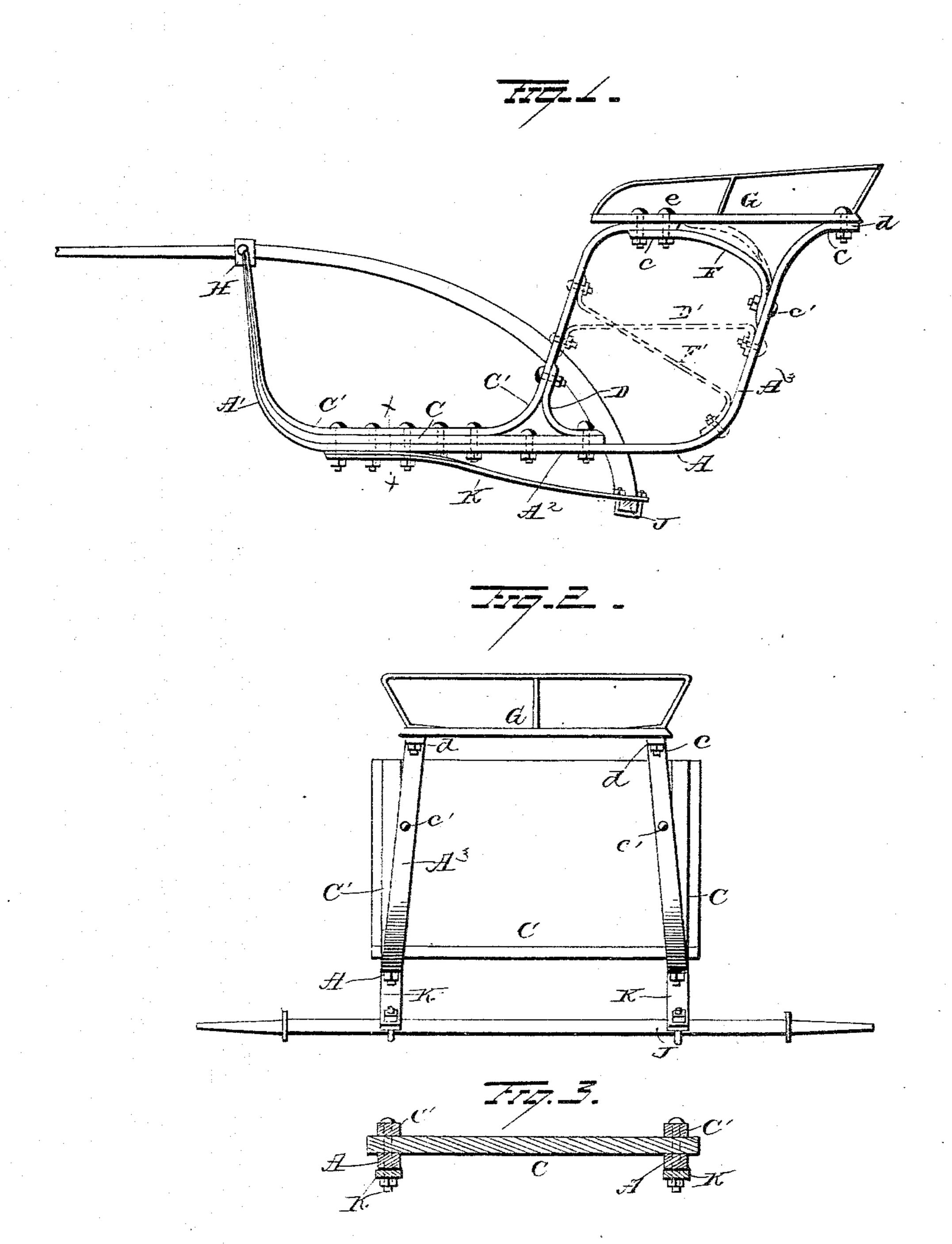
(No Model.)

## F. L. PERRY.

TWO WHEELED VEHICLE.

No. 356,887.

Patented Feb. 1, 1887.



S. Y. Nollingham Geo. Followning. Francis D'AVENTOR Attorney

## United States Patent Office.

## FRANCIS L. PERRY, OF CANANDAIGUA, NEW YORK.

## TWO-WHEELED VEHICLE.

SPECIFICATION forming part of Letters Patent No. 356,887, dated February 1, 1887.

Application filed October 19, 1886. Serial No. 216,659. (No model.)

To all whom it may concern:

Be it known that I, Francis L. Perry, of Canandaigua, in the county of Ontario and State of New York, have invented certain new 5 and useful Improvements in Bodies for Two-Wheeled Vehicles or Sulkies; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it ap-10 pertains to make and use the same.

My invention relates to an improvement in the bodies of two-wheeled vehicles or sulkies.

The object of my invention is to so improve present methods of constructing the bodies of 15 two-wheeled vehicles that great strength and lightness are secured, together with a beautiful and stylish appearance and a low initial cost for material and labor required for their production.

A further object is to combine with the body springs in a simple and effective manner.

With these ends in view my invention consists in certain features of construction and 25 combinations of parts, as will be hereinafter described, and pointed out in the claims.

In the drawings making a part of this specification, Figure 1 is a longitudinal section of the vehicle-body. Fig. 2 is a rear end 3c elevation of body and springs. Fig. 3 is a cross section on line X X, Fig. 1.

Referring to the drawings by letter, A represents the side sills of the vehicle-body. These are preferably made of hard elastic 35 wood, and bent into form substantially as shown; but, if desired, iron or steel plates of proper thickness and width, to insure lightness and stability, may be used. It will be noticed (see Fig. 1) that the graceful combina-40 tion of curves of the material of these sills produces a form that is elegant in appearance and of great strength. The front portions, A', are bent upwardly, the degree of curvature given being so proportioned as to present a neat ap-45 pearance, and not injuriously affect the integrity of the material. This is particularly necessary if wood is used in the manufacture of the sills.

The portions A<sup>2</sup> of the sills A are made 50 horizontal for a sufficient length to provide foot-space for the occupant, and at a point, A<sup>3</sup>, I

the material is again bent with an easy curve upwardly and rearwardly at c, these combinations of curved portions giving an S form to the rear of the body.

The floor C (see Fig. 1) is placed upon the two bottom sills, A. It is preferably made of wood boards of a thickness suited to the purpose, and to permit the flooring to be made to neatly conform to the top surface of the sills 6c A. The floor C is extended upwardly to form a dash-board at the front, as shown, and to the rear a proper distance to extend beneath the seat. Upon the floor B are placed the cappieces C'. These are made to line edgewise 65 with the bottom sills, A, and are given suitable bends to cause them to conform to the floor-surface C.

The front ends of the cap-pieces C'extend upwardly, and both the lower sills, A, and the 70 cap-pieces C' are tapered gradually on their of a sulky or two-wheeled vehicle a pair of sides, so that a junction of these graduallytapered parts, with the floor between them, will present a neat and workmanlike appearance edgewise of the dasher. The floor and 75 superimposed sills C' are secured in place upon the bottom sills, A, by lag-screws or carriagebolts, preferably the latter.

The rear portion of the cap-pieces C' are curved to correspond substantially in shape to 80 the conformation of the back of the vehicle, which is modified S shape. The free ends of both the bottom sills, A, and the cap-pieces C' are extended to a height suitable to form supports from and rear of the seat-frame and seat 85 G, which is suitably secured in position by bolts or other means at the points ed. The seat G has low flaring sides and back board to receive and hold in place a cushion or iron rail, as shown.

Upon each side of the body or frame a brace, F, is attached. These are arched, as shown in Fig. 1, and are preferably made of metal; but I do not restrict myself to this material in their manufacture, as the cap-pieces may con- 95 tinue around, as at dotted lines. These braces F are secured to the sills A by bolts c'. The other ends, that extend upwardly and forwardly, are secured beneath the ends of the cap-pieces C', a single bolt, e, on each side roo serving to bind the seat and two braces together at these points.

At D are shown two braces, one on each side of the body. These are arched or curved, as shown, to give strength and stiffness with the least amount of material to effect this, and they are rigidly attached to the bottom boards or sills and rear face of the cap-pieces C' by bolts that are inserted through their ends at these points. If preferred, these braces D and F may be replaced by the cross-braces D' and F', that are shown in dotted lines in Fig. 1.

It will be noticed by inspection of Fig. 1 that the union of the braces F and D with the sills A, cap pieces C', and seat-frame G together form a combination of curved braces that stiffen the side framing of the sulky body in the best possible way to economize material and produce a light, strong, and handsome vehicle.

At the top edge of the dash-board, on each 20 side, a suitable hinged joint, H, is provided, to pivotally swing or attach the body at these points to the shafts or cross-bar.

In Fig. 1 is shown the peculiar form of springs I prefer to use in combination with this body. These springs K are located beneath the sills on each side, and are secured to them by bolts that pass through the springs, sills, flooring, and cap-pieces, so as to bind these parts together firmly. The free ends of these springs K are attached to the axle J by clips or shackles in a secure manner.

The simplicity, lightness, and low cost of production of this method of providing for an elastic suspension of the body to the axle are self-evident points in its favor.

The front portion of the vehicle-body below the seat may be covered by boarding it up, if desired, and the rear may be covered with thin boards of suitable wood or other material when desired, and painted, varnished, or otherwise finished to suit the taste of the builder.

Many slight changes might be made in the features of construction of this invention without departure from its spirit or scope. I there-

fore do not restrict myself to the exact forms 45 or precise configuration of the parts of the device shown.

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

1. In a two-wheeled vehicle-body, the combination, with two bottom sills that are curved, as shown, of two cap pieces, flooring between the sills and cap-pieces, and a seat supported at its rear edge by the sills and at its front 55 edge by the cap-pieces, substantially as set forth.

2. In a two-wheeled vehicle-body, the combination, with the bottom sills, curved as shown, of two cap-pieces and two braces that 65 connect the sills and cap-pieces below the seat, on each side of the body, and a seat, substantially as set forth.

3. In a two-wheeled vehicle body, the combination, with two bottomsills, two cap-pieces, 65 and flooring between them, of two side braces that connect the vertical rear portions of the bottom sills to the top ends of the cap-pieces at their point of juncture with the seat-frame, a seat, and two lower side braces that secure 70 the bottom sills to the rising cap pieces, substantially as set forth.

4. In a two-wheeled vehicle body, the combination, with two bottomsills, two cap-pieces mounted upon these sills, and flooring interposed between the cap-pieces and sills, of a seat supported at its front edge by the cappieces and at its rear edge by the sills, two upper side braces of the frame, and a hinge or pivoted joint on each side of the top edge of 80 the dasher, substantially as set forth.

In testimony whereof I have signed this specification in the presence of two subscribing witnesses.

FRANCIS L. PERRY.

Witnesses:

L. C. HALL, JOHN CALLISTER.