

(No Model.)

F. J. & O. J. SPRINGER.

TWO WHEELED VEHICLE.

No. 280,875.

Patented July 10, 1883.

Fig. 1.

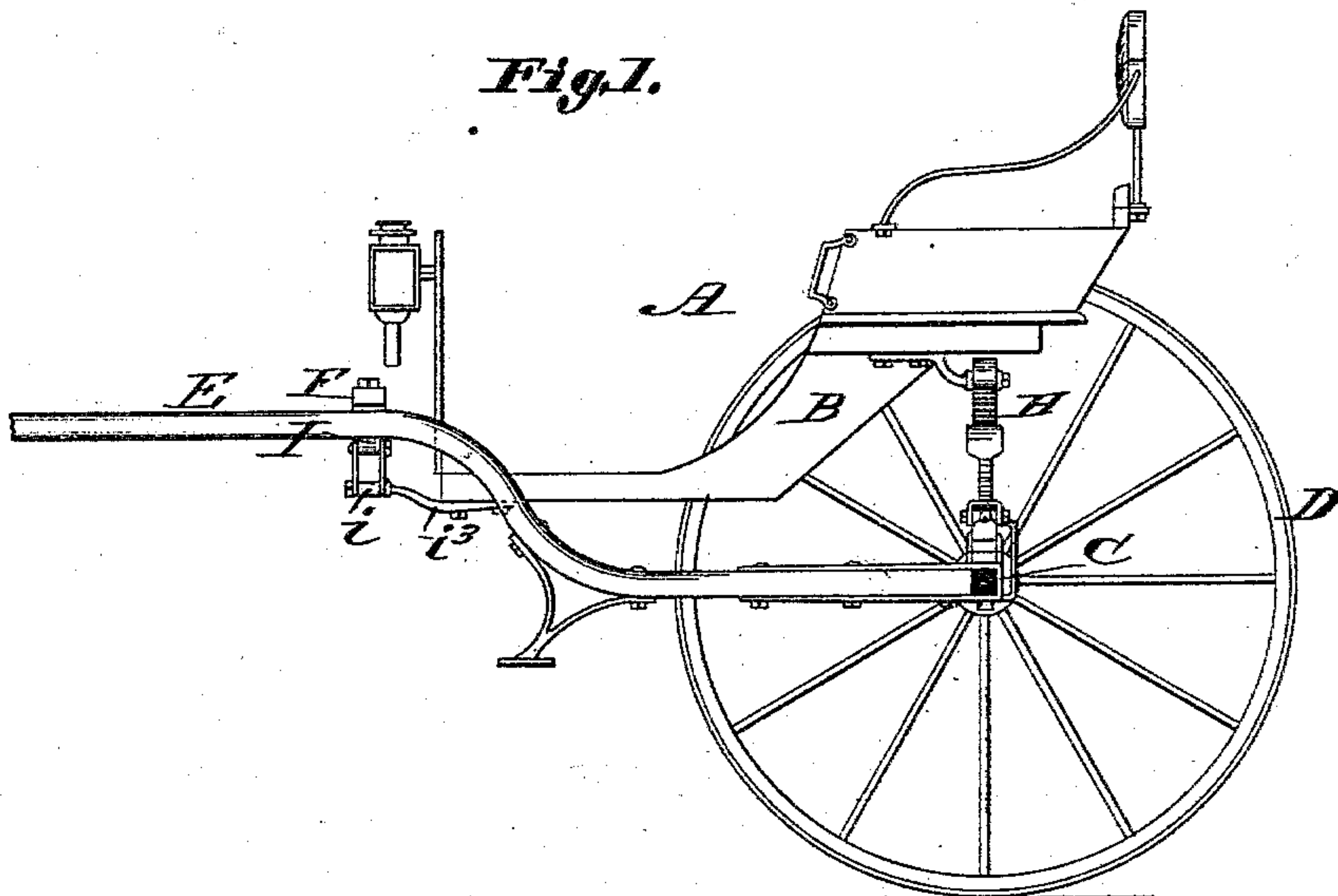


Fig. 2.

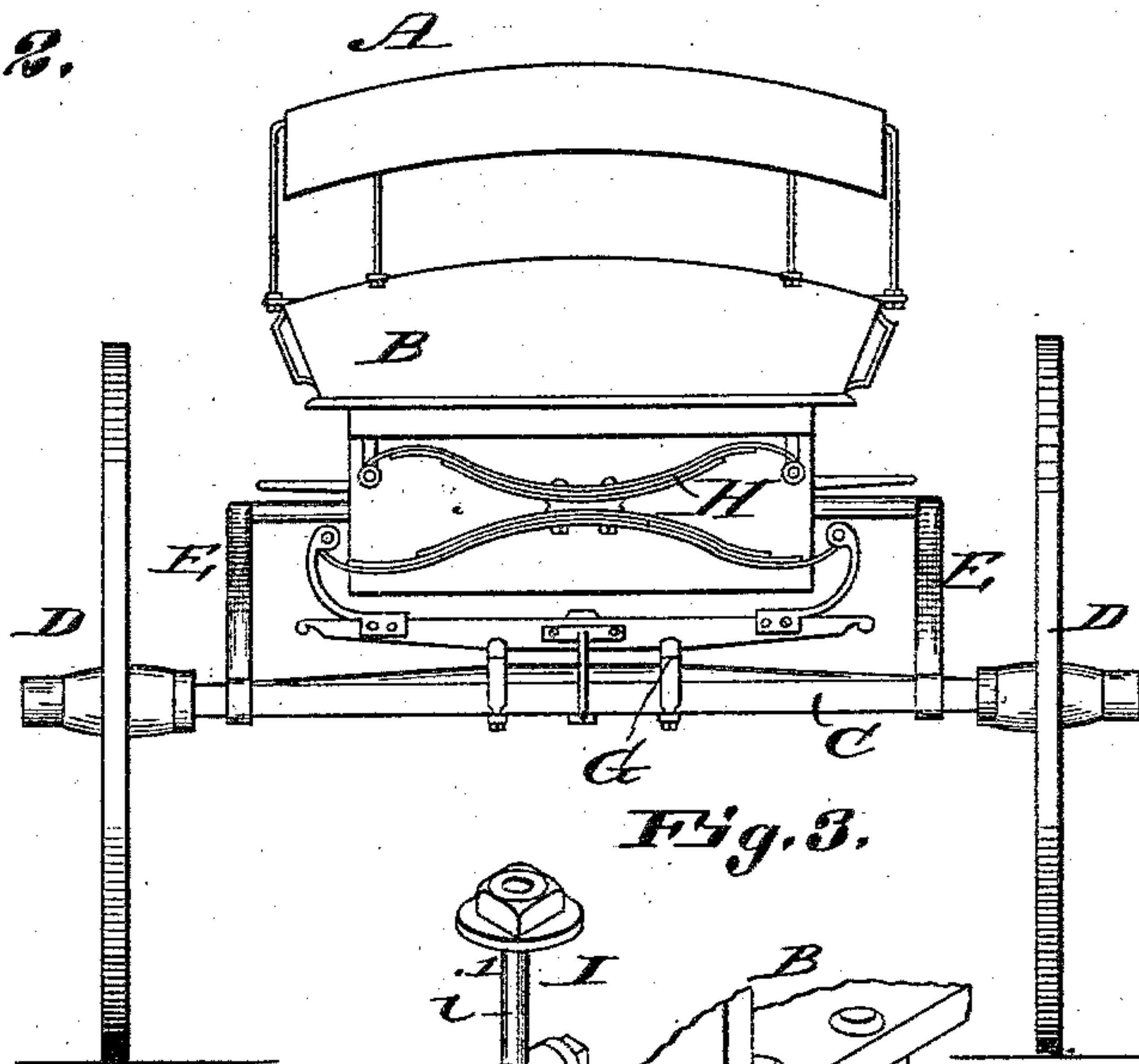


Fig. 3.

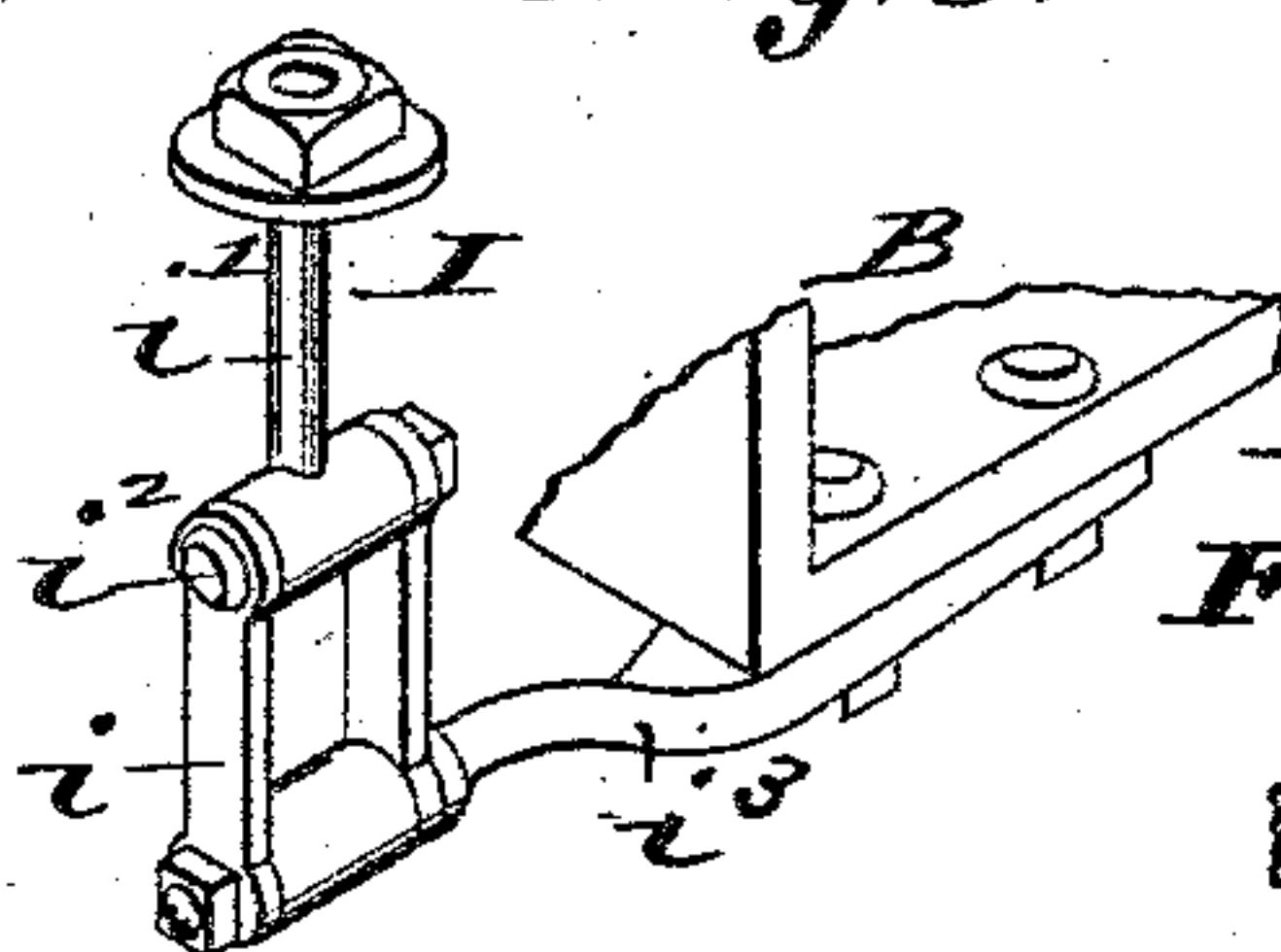
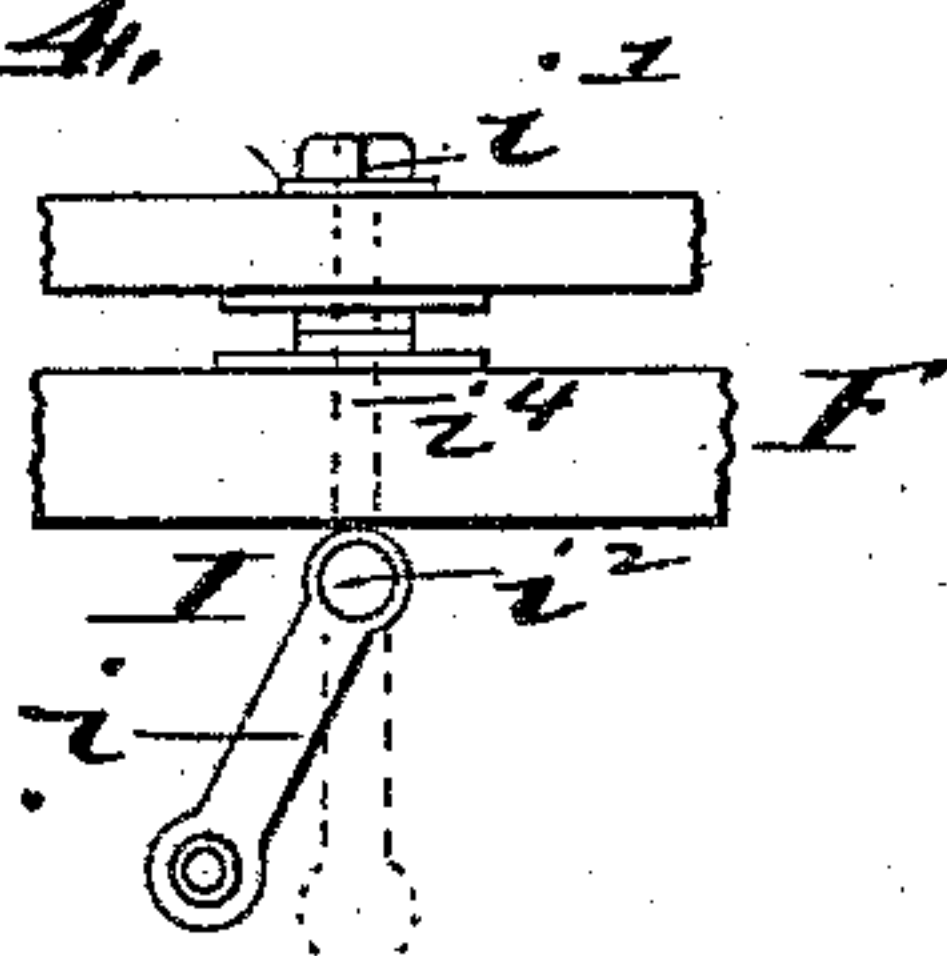
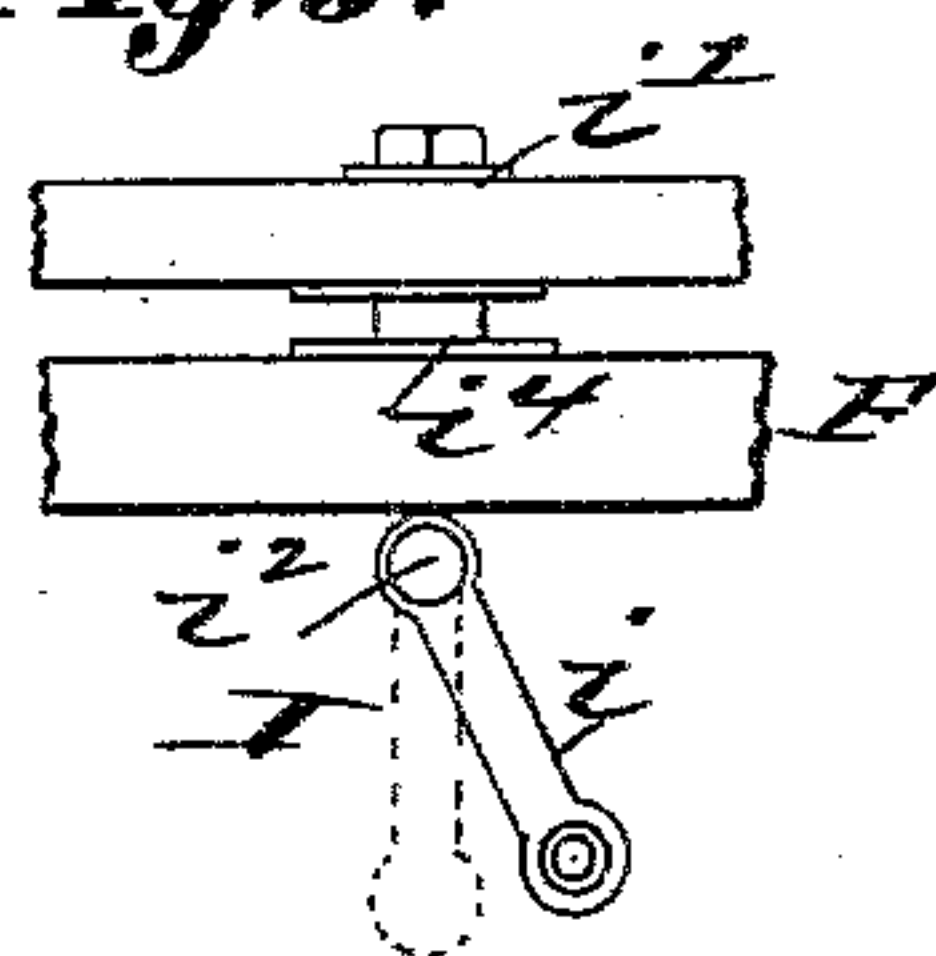


Fig. 4.



Attest:
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Fig. 5.



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UNITED STATES PATENT OFFICE.

FREDERICK J. SPRINGER AND OTTO J. SPRINGER, OF EDWARDSVILLE, ILL.

TWO-WHEELED VEHICLE.

SPECIFICATION forming part of Letters Patent No. 280,875, dated July 10, 1883.

Application filed May 5, 1883. (No model.)

To all whom it may concern:

Be it known that we, FREDERICK J. SPRINGER and OTTO J. SPRINGER, residents of Edwardsville, Illinois, have jointly made a new and useful Improvement in Road-Carts, of which the following is a full, clear, and exact description, reference being had to the annexed drawings, making part of this specification, in which—

Figure 1 is a side elevation, and Fig. 2 a rear elevation, of a road-cart having the improvement; Fig. 3, a view in perspective, upon an enlarged scale, of the toggle and the parts immediately therewith connected; and Figs. 4 and 5 diagrams showing the movement of the toggle.

The same letters denote the same parts.

The design of this invention is to provide an improved means for preventing the rocking, jolting motion of the ordinary road-cart.

It consists, in combination, of a fifth-wheel, which support the cart-body at or toward its rear end, and a joint resembling a toggle-joint, which supports the cart-body at or near its forward end.

Aside from its improved features, the road-cart A may be of the customary form, B representing the cart-body; C, the axle; D D, the wheels; E E, the thills, and F the cross-bar of the thills.

In place of attaching the cart-body or the spring supporting the cart-body directly and rigidly to the cart-axle a fifth-wheel, G, is interposed between the axle and the body—that is, at or toward its rear end the cart-body is so connected with its support (whether that support be the axle or any spring or part above the axle) as to enable the body to swing horizontally thereupon. The preferable mode of pivoting the body for this purpose is that shown—a fifth-wheel, G, immediately above the axle, and connecting the axle with the spring H, which in turn supports the rear end of the body. At its forward end the cart-

body is supported by means of the jointed connection I. This connection is of such a nature as to enable the cart-body to swing laterally upon its bearing at its rear end, but also so that when the forward end of the body tends to swing it also tends to lift. This form of connection resembles, as stated, a toggle-joint having two parts, i and i' , jointed together at i'' , to enable one part to turn vertically upon the other. The cart-body, by means of suitable irons, $i^3 i^3$, is attached to the lower part, i . The upper part, i' , is swiveled at i^4 in the cross-bar. The effect of this connection is this: As the shafts are swayed or vibrated vertically in use, the motions are prevented from being communicated to the cart-body, for the motion of the shafts cannot be communicated to the cart-body without causing the lower part of the joint I to turn upon the upper part of the joint I, as indicated in Figs. 4 and 5; but this tends to lift the forward end of the body. The weight of the body and the load carried act to resist this tendency, and the practical effect is to largely dissipate the shaft motion and prevent its being felt by the occupants of the cart.

One or more of the joints I can be used at the forward end of the cart-body.

We claim—

1. A road-cart or other two-wheeled vehicle the body of which, at or toward its rear end, is connected with its support to swing laterally thereupon, and at or toward its forward end is supported by a connection which tends to lift when the cart-body is swung laterally, for the purpose described.

2. A road-cart, A, the body of which is supported by the fifth-wheel and the joint I, substantially as and for the purpose described.

F. J. SPRINGER.

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Witnesses:

WM. H. HALL,

EDWARD C. SPRINGER.