

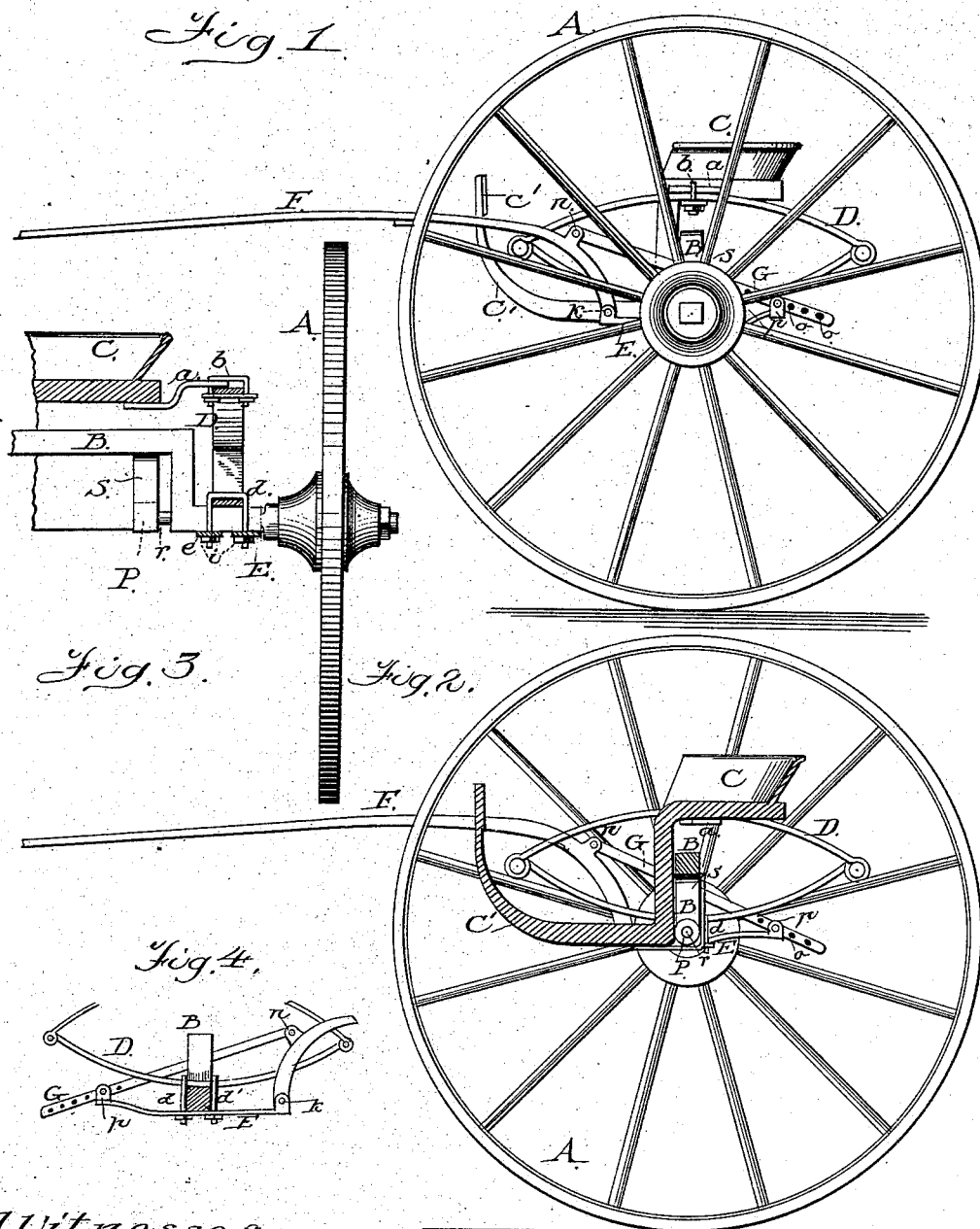
(No Model.)

M. J. REED & S. SHILLIAM.

SULKY.

No. 263,810.

Patented Sept. 5, 1882.



Witnesses

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UNITED STATES PATENT OFFICE.

MILO J. REED AND SAMUEL SHILLIAM, OF WATERLOO, IOWA.

SULKY.

SPECIFICATION forming part of Letters Patent No. 263,810, dated September 5, 1882.

Application filed July 20, 1882. (No model.)

To all whom it may concern:

Be it known that we, MILO J. REED and SAMUEL SHILLIAM, of Waterloo, in the county of Blackhawk and State of Iowa, have invented certain Improvements in Sulkies; and we hereby declare the following to be a full, clear, and exact description of the same, reference being had to the accompanying drawings, making part of this specification, in which—

Figure 1 is a side elevation of a sulky with our improvements attached. Fig. 2 is a vertical sectional view of the same. Fig. 3 is a rear elevation, partially in section. Fig. 4 is a detail view.

Our invention relates to that class of sulkies wherein the construction is designed to relieve the seat from the jog of the shafts communicated by the animal in moving.

Our invention consists of sundry details of construction and combinations of devices, as will be hereinafter fully described, and specifically pointed out in the claims.

In order that those skilled in the art may make and use our invention, we will proceed to describe the manner in which we have carried it out.

In the said drawings, A A are the wheels of the vehicle, and B is the axle, which in this instance is shown bent at right angles at two points. The seat C and foot-rest C' are made integral, the seat being supported or suspended from the tops of the elliptical springs D D by means of projecting ears or bars a a, rigidly secured to said springs by the clips b b. The bottoms of the springs, by double clips d d, are secured rigidly to the axle just inside the journals in the following manner: Beneath the axle, at right angles to it and between the journals, are two straight bars, E. Clips d are passed over the lower side of the spring on each side of the axle, one end of each clip passing through bars E and the other ends passing through clip-plates e, both ends of said clips being secured in the usual manner by nuts i i'. The clips d' are secured in like manner on the opposite side of the axle from clips d, and there-

by the springs D and the bars E are rigidly held to the axle.

To the forward ends of bars E E at k k are coupled the thills F, which bend or curve upward and forward in the usual fashion. Near the top of the curve on each thill is placed a pair of ears, n n, in which is pivoted one end of a thill-adjusting bar, G, the other end of which is pierced with a number of holes, o o, and is flattened to rest between two ears, p p, on the rear ends of bars E, and a bolt made removable passes through ears n n and one of the holes o, thus fixing the height of the thills in relation to the shaft. This height of thill may be varied in proportion to the number of holes o and the length of bar G, and for the purpose of adjusting the thills to suit height of horse and keeping the seat and body level.

In traveling over the inequalities of the ground the body has a constant vertical vibration, and though the tortional strain through the springs would sustain the seat, yet it is desirable to place friction-wheels P on spindles r, set into the axle, and have said wheels bear in stirrups S S, secured to the outside and rear of the foot-rest, whereby the movement of the body is steadied and its proper horizontal position absolutely secured.

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

1. The thills F, provided with ears n n, in combination with the adjustable bars G and bars E E, provided with ears at each end and rigidly secured to the axle, substantially as and for the purpose described.

2. The foot-rest C', provided with the stirrups S S, in combination with the axle B, carrying spindles r, and friction-rollers P P, as and for the purpose specified.

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Witnesses:

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