(No Model.)

F. DOHERTY.

SULKY.

No. 265,035. Patented Sept. 26, 1882.

Fig. 1.

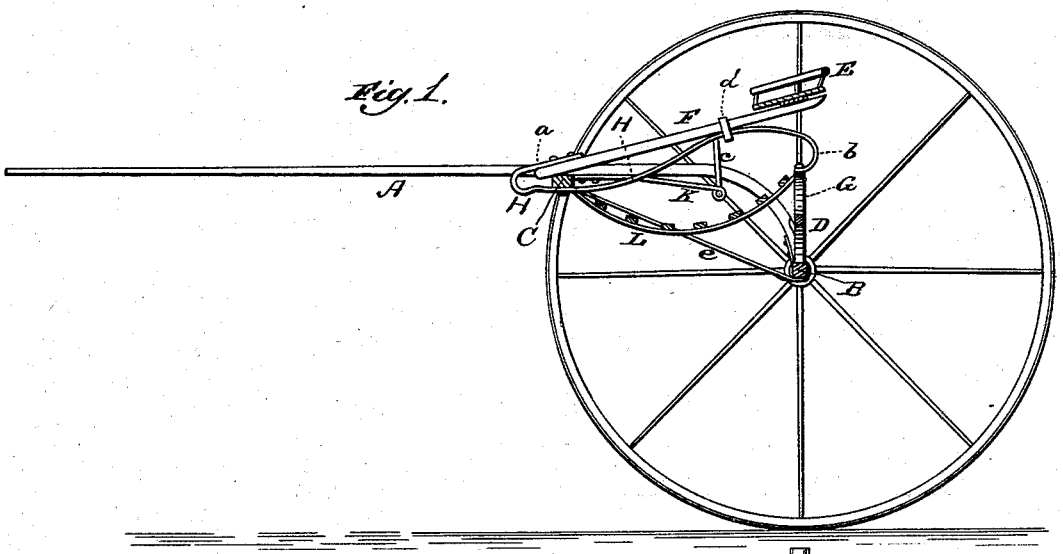


Fig. 2.

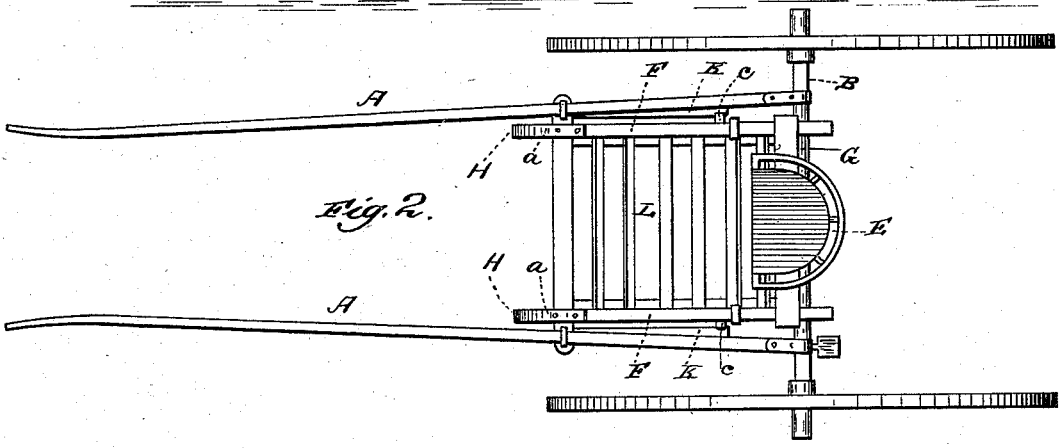
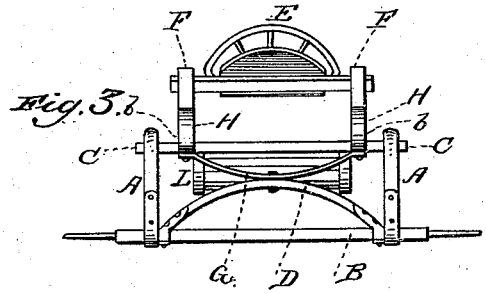


Fig. 3.



WITNESSES

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UNITED STATES PATENT OFFICE.

FISHER DOHERTY, OF CRAWFORDSVILLE, INDIANA.

SULKY.

SPECIFICATION forming part of Letters Patent No. 265,035, dated September 26, 1882.

Application filed July 18, 1882. (No model.)

To all whom it may concern:

Be it known that I, FISHER DOHERTY, a citizen of the United States, and a resident of Crawfordsville, in the county of Montgomery and State of Indiana, have invented a new and valuable Improvement in Sulkies; and I do hereby declare that the following is a full, clear, and exact description of the construction and operation of the same, reference being had to the annexed drawings, making a part of this specification, and to the letters and figures of reference marked thereon.

Figure 1 is a vertical longitudinal sectional view of my improved sulky. Fig. 2 is a top view of the same; and Fig. 3 is a rear elevation, the wheels being removed.

This invention has relation to two-wheel carts or sulkies; and it consists in the construction and novel arrangement of the self-adjusting side springs which support the seat-bars, the shaft-springs connected by arms to the seat-bars, and in the combination, with the wooden bow-support and the transverse half-elliptic spring which is attached thereto, of the self-adjusting side springs and the seat-bars, all as hereinafter set forth.

In the accompanying drawings, the letter A designates the shafts, the curved rear ends of which are fastened to the axle B.

C indicates the cross-bar between the shafts, and secured thereto by its ends.

D represents a curved bar or bow of wood, the ends of which are secured, by means of clip-bearings or fastening-plates, to the axle in such a manner that it extends transversely over the middle portion of the axle, its height being usually a little less than that of the shafts.

E is the seat, and F the seat-bars, which extend forward and downward therefrom.

G is a transverse half-elliptic spring, which is fastened to the middle or highest part of the bow-support D.

H designates the side springs, upwardly and rearwardly curved at their front ends and downwardly and forwardly curved at their rear ends. The forward parts of these springs pass under the cross-bar C, which connects the shafts, and are firmly clipped to said cross-bar, and to the reverse bends *a* of the springs in front the ends of the seat-bars F are bolted. The side springs extend from the cross-bar C upward and backward in curved form under the seat-bars, forming elastic bearings for said bars, and thence extend downward and rearward in curved form, finally terminating in the under curved ends, *b*, which are fastened to the ends of the half-elliptic spring G.

K represents a spring under each shaft. One end of this spring is firmly fastened to the shaft, and to the free end of the spring is connected an arm, *c*, which extends downward from the seat-bar. This shaft-spring and supporting-arm serve materially to strengthen the seat when made double or for two persons. For single sulkies it is not always used, as the side springs are so arranged with reference to the seat-bars that their contact-surface with said bars will be increased with the weight of the load, and as they will be thereby supported more and more as the weight is increased their self-adjusting power will enable the sulky to accommodate itself to the difference in the weight of single persons. As the side springs lengthen under the weight of the load the bow-support D will move or bend backward to accommodate the increased length of the springs. The seat-bars are designed to be connected to the side springs by leather straps, as indicated at *d*, so that the springs will have easy play.

L represents the foot basket or support which is sometimes used with vehicles of this character. Its ends may be connected to the side springs and half-elliptic spring. If braces are used, they may run from the cross-bar to the axle, as indicated at *e*.

Having described this invention, what I claim, and desire to secure by Letters Patent, is—

1. In a sulky or two-wheel cart, the self-adjusting side springs, H, upwardly and rearwardly curved at their front ends and downwardly and forwardly curved at their rear ends, in combination with the cross-bar C and seat-bars F, substantially as specified.

2. In a sulky or two-wheel cart, the shaft-springs K and the arms *c*, connecting the same to the seat-bars F, substantially as specified.

3. In a sulky or two-wheel cart, the combi-

nation, with the bow-support D and the transverse half-elliptic spring G, which is attached thereto, of the self-adjusting side springs and the seat-bars, substantially as specified.

4. The side springs, H, clipped to the cross-bar C, and having their upwardly-bent front ends, *a*, attached to the seat-bars, and their under curved rear ends, *b*, attached to the half-spring G, substantially as specified.

In testimony that I claim the above I have hereunto subscribed my name in the presence of two witnesses.

FISHER DOHERTY.

Witnesses:
JOHN E. HUMPHRIES,
EPHRAIM C. GRIFFITH.