

(No Model.)

J. G. PARSONS.
TWO WHEELED VEHICLE.

No. 362,777.

Patented May 10, 1887.

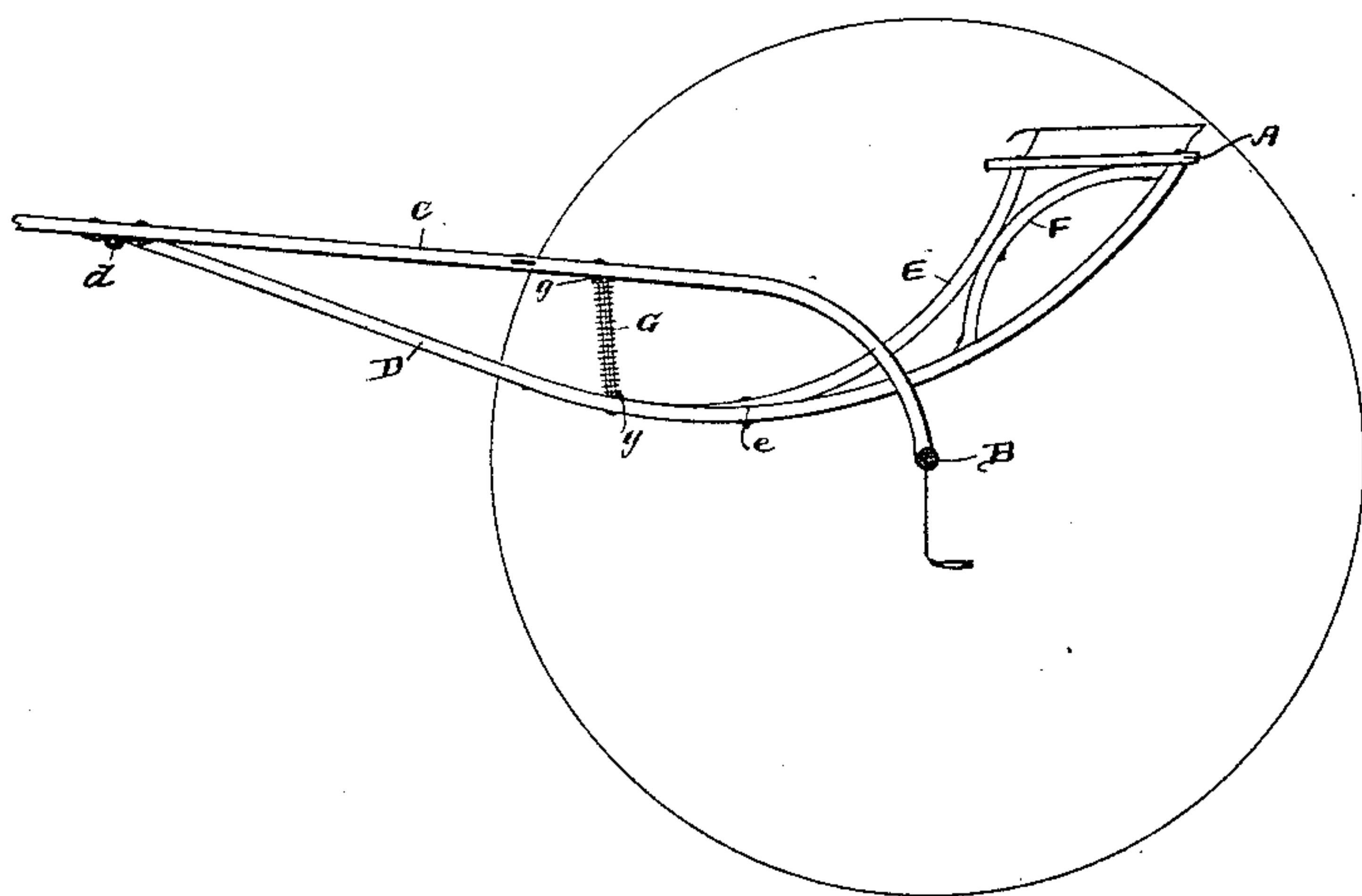


Fig. 1.

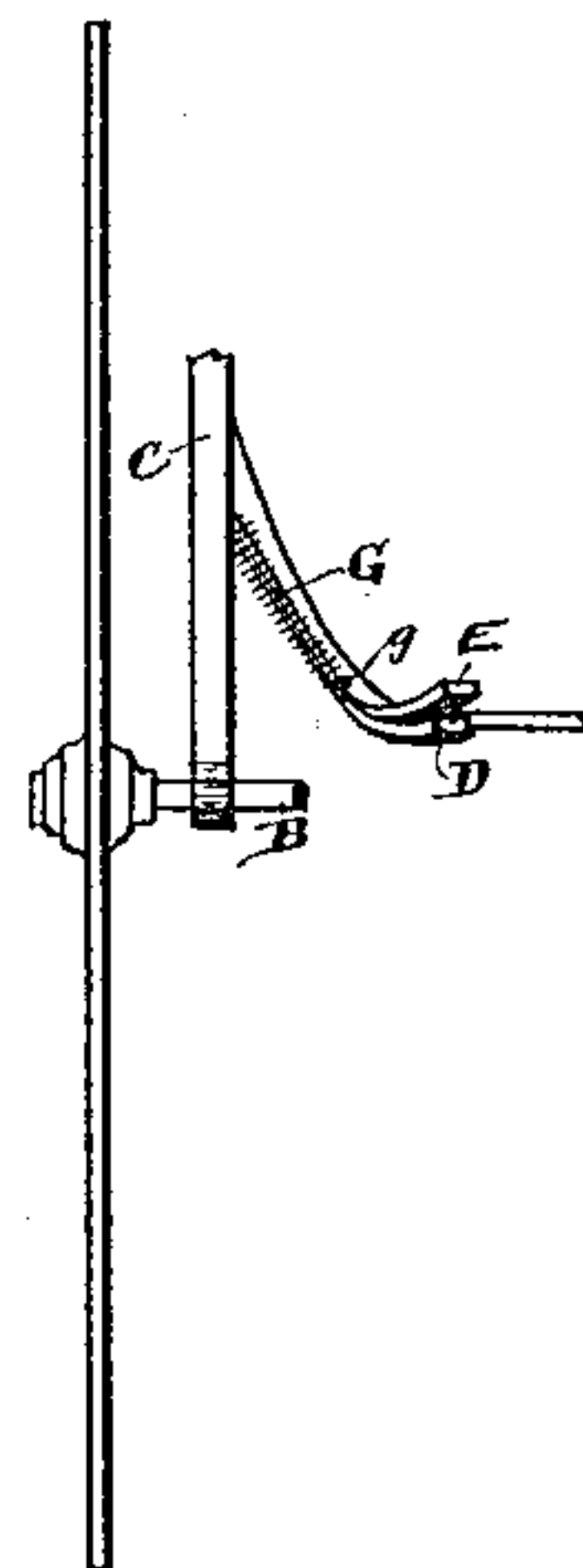


Fig. 2.

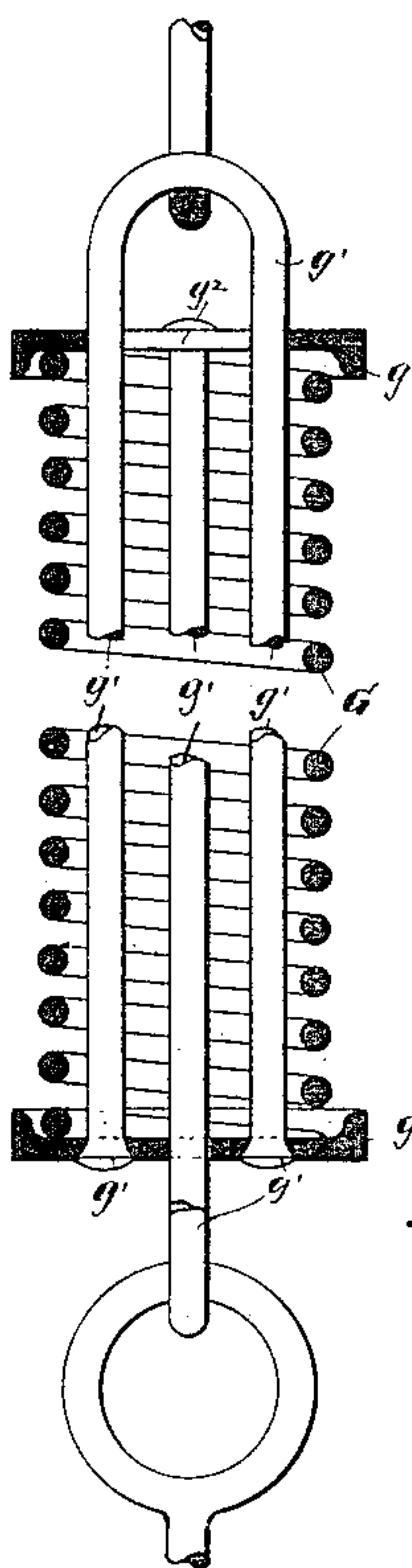


Fig. 3.

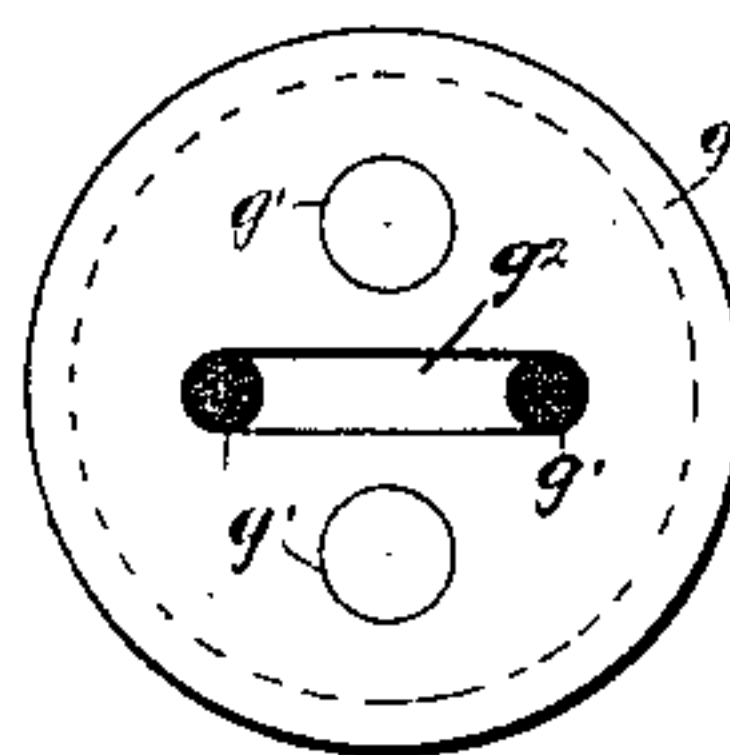


Fig. 4.

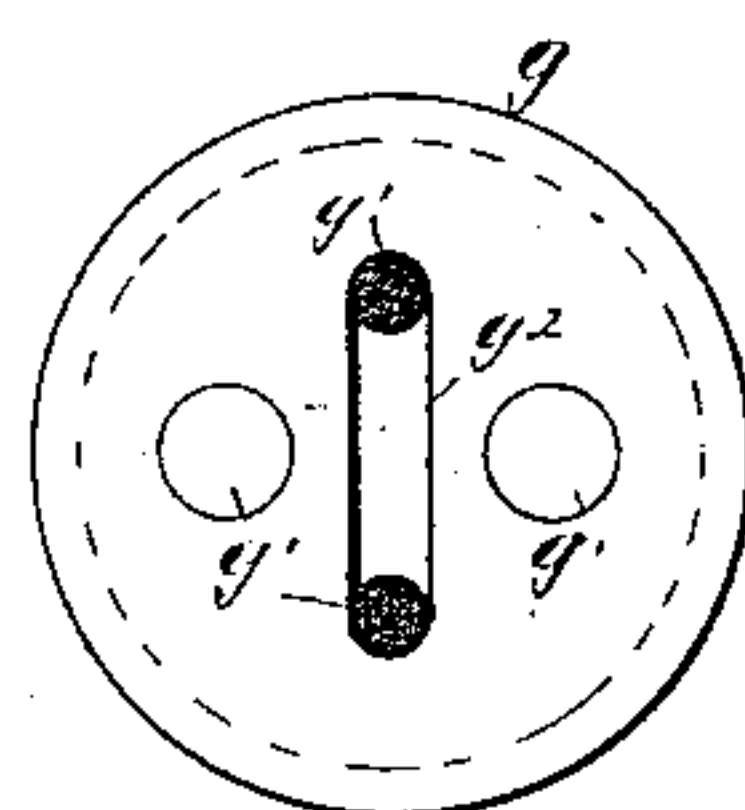


Fig. 5.

WITNESSES

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JOHN G. PARSONS, OF CLEVELAND, OHIO.

TWO-WHEELED VEHICLE.

SPECIFICATION forming part of Letters Patent No. 362,777, dated May 10, 1887.

Application filed November 12, 1886. Serial No. 218,712. (No model.)

To all whom it may concern:

Be it known that I, JOHN G. PARSONS, of Cleveland, in the county of Cuyahoga and State of Ohio, have invented certain new and useful Improvements in 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 pertains to make and use the same.

My invention relates to improvements in sulkies in which is employed a frame-work of peculiar construction for supporting the seat, with a novel arrangement of springs for suspending the seat-frame from the thills, to the end that the vehicle is rendered more safe, rides easier, and is constructed with less weight of material than the devices of this class heretofore in use.

In the accompanying drawings, Figure 1 is a side elevation of a sulky-frame embodying my invention. Fig. 2 is a rear elevation of the one side of the sulky. Figs. 3, 4, and 5 are enlarged detail views of one of the springs, the former being an elevation in section and the two latter being, respectively, top and bottom plans.

A represents the seat of the sulky, and B the axle, to which latter are secured the thills C, together with suitable braces, these parts being all of the ordinary construction. Curved bars D, usually of wood, are hinged, respectively, to the under side of the thills—for instance at *d*. These bars pass some little distance above the axle and converge rearward, so as to engage, respectively, the rear corners of the seat, to which latter they are rigidly attached.

E are curved bars secured, respectively, on top the bars D—for instance at *e*. The bars E extend up under the forward corners of the seat, and are secured thereto.

F are light curved bars that serve as braces, and are secured, respectively, at the lower ends to the bars D, and are secured midway to the bars E, as shown, and at the upper ends are secured to the upper ends of the bars D, or to the adjacent part of the seat, or to both, if so preferred.

The bars F brace the frame and render the latter sufficiently stiff without making the frame absolutely rigid; and by means of these braces the bars D and E may be made com-

paratively light, so that the weight of the entire frame is considerably reduced.

G are spiral springs for suspending the seat-frame from the thills, and are located, usually, about as shown in Figs. 1 and 2. Caps *g* are arranged on the ends of the springs. Each cap has a bail, *g'*, attached, the bails extending through inside the springs and passing loosely out through slots *g''* in the opposite cap, the two bails being set in planes at right angles to each other, so that they do not conflict. The one bail is connected with a suitable clip or other suitable thill attachment, and the other bail is connected with the curved bar D, or with a suitable attachment of the latter. With the construction shown tension is given to the spring by compressing the latter, and if extra strain be brought to bear on the spring—such, for instance, as an overload, or by sudden movement of the vehicle, incident to rough roads—the coils of the spring would be only brought together, without doing any damage or endangering the occupant. It is well known that comparatively heavy springs make a hard-riding vehicle. It is therefore desirable that the springs be as light as may be with safety. Where spiral springs for this purpose are distended by the load they must be made extra heavy to avoid breakdowns, and consequently the vehicle rides hard. With my improvement of the springs the latter may be made quite light, only just stiff enough to carry the desired load, thus insuring an easy-riding sulky without incurring any risk of breakage. When the springs hang about vertical, as has usually been the arrangement of this class of sulkies, the seat-frame has a tendency to vibrate laterally. I therefore arrange the springs as shown in Fig. 2, the two springs converging sharply downward, by means of which the seat-frame gravitates to a central position between the thills, and the gait of the horse is hardly perceptible by the occupant of the seat, so far as any lateral movement of the seat is had.

What I claim is—

1. In a sulky, a frame-work for supporting the seat, and consisting, essentially, of two sets of curved bars engaging the seat respectively at the front and rear of the latter, said curved bars being secured together in pairs and hinged to the thills, and supported from

the thills by spiral springs, and curved braces arranged respectively between each set of curved bars and secured to each member of a pair, the parts being arranged substantially as
5 set forth.

2. In a sulky, the combination, with an axle, thills rigidly secured thereto, and a seat-supporting frame consisting, essentially, of bars engaging the seat respectively at the front and
10 rear ends of the latter, and connected to the thills, of depending and inwardly-projecting

compression-springs secured to the thills and supporting the seat-frame, substantially as set forth.

In testimony whereof I sign this specification, in the presence of two witnesses, this 13th
day of October, 1886. 15

JOHN G. PARSONS.

Witnesses:

CHAS. H. DORER,
ALBERT E. LYNCH.