

(No Model.)

J. A. ODELL.
TWO WHEELED VEHICLE.

No. 386,893.

Patented July 31, 1888.

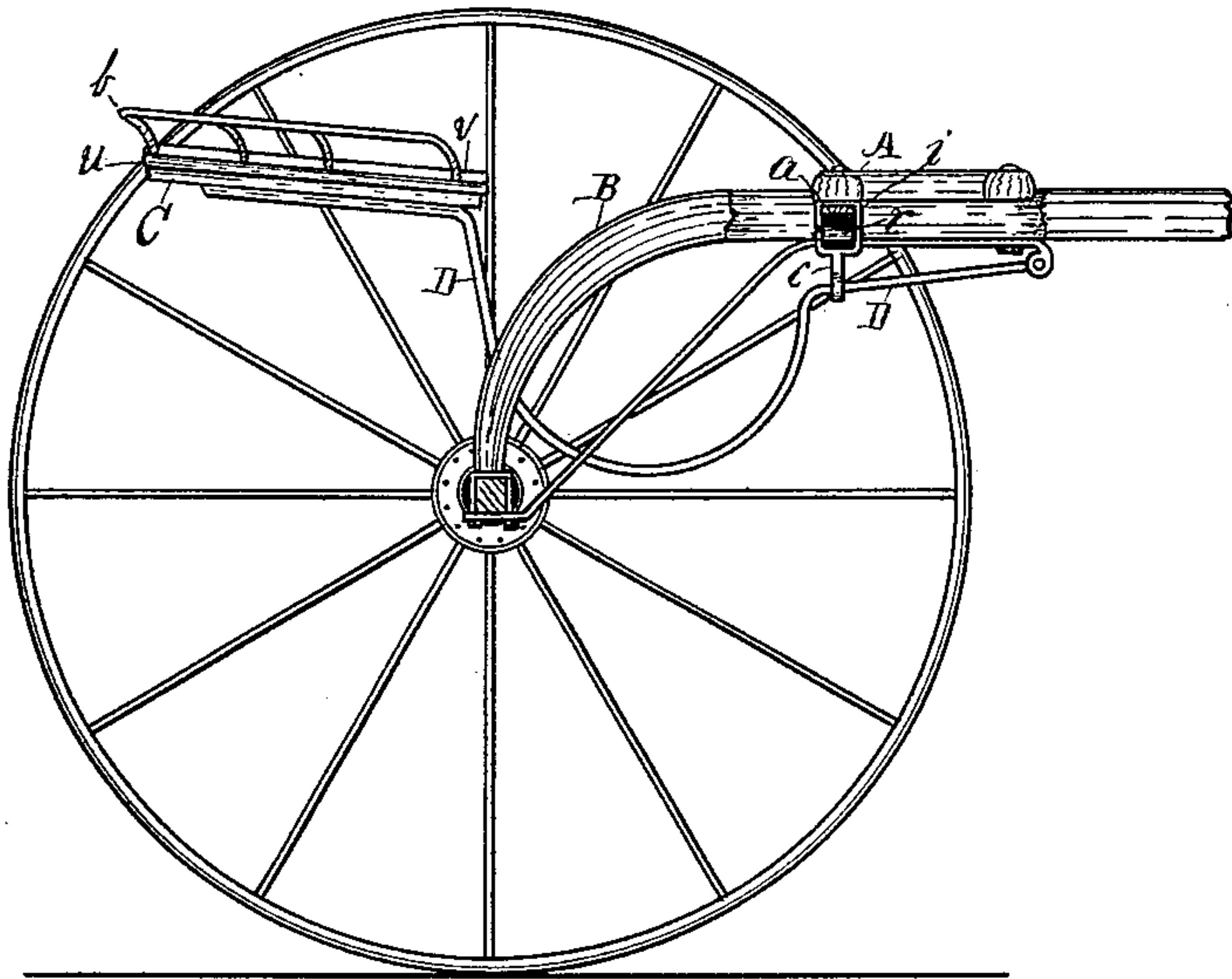


Fig. 1

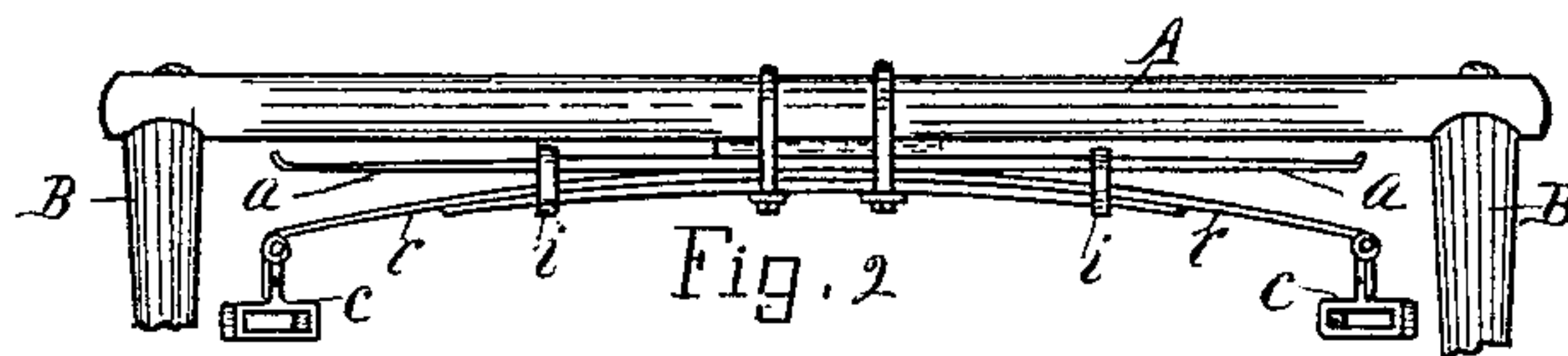


Fig. 2

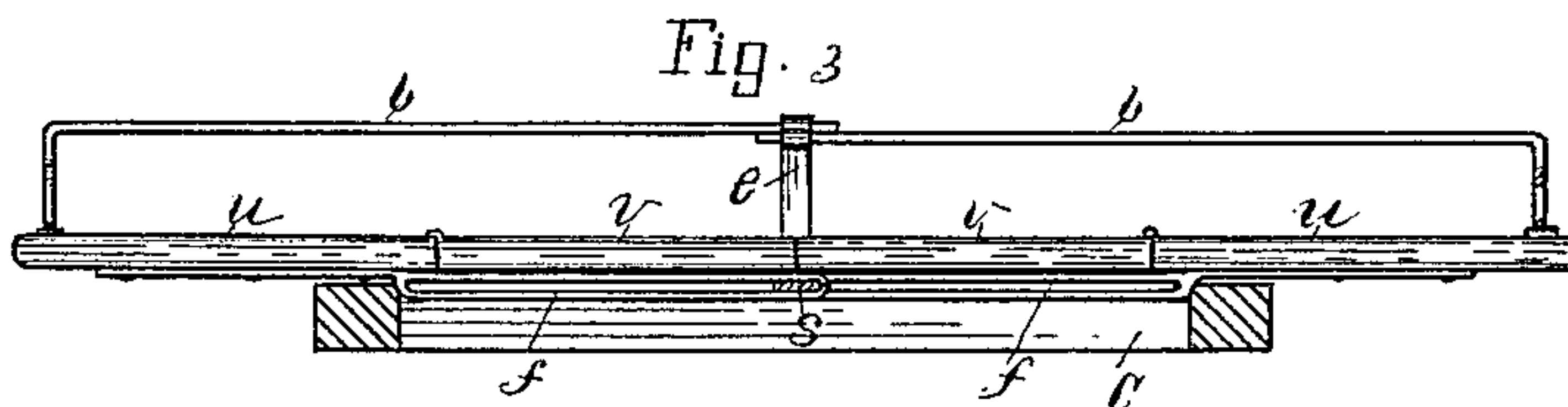


Fig. 4

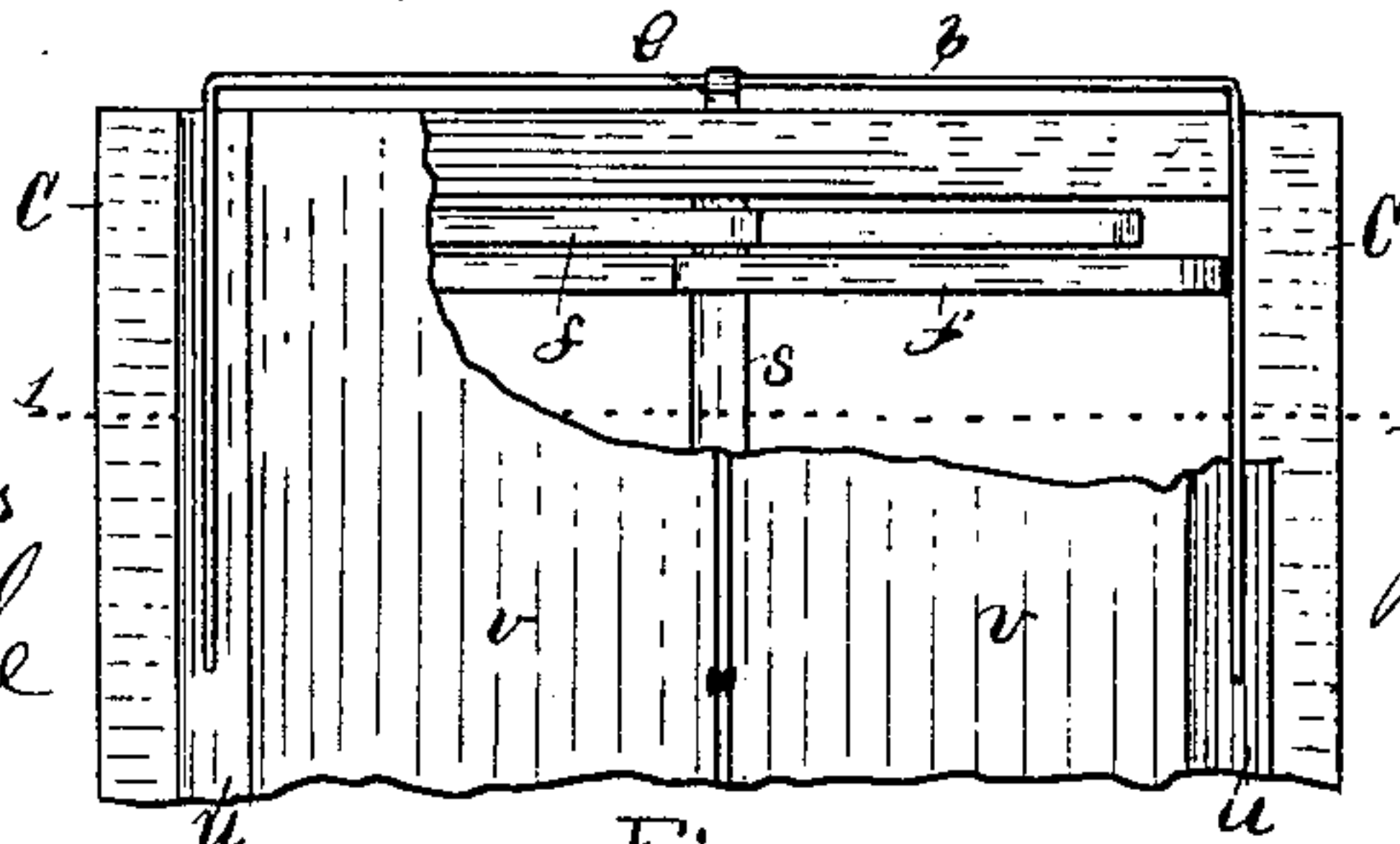
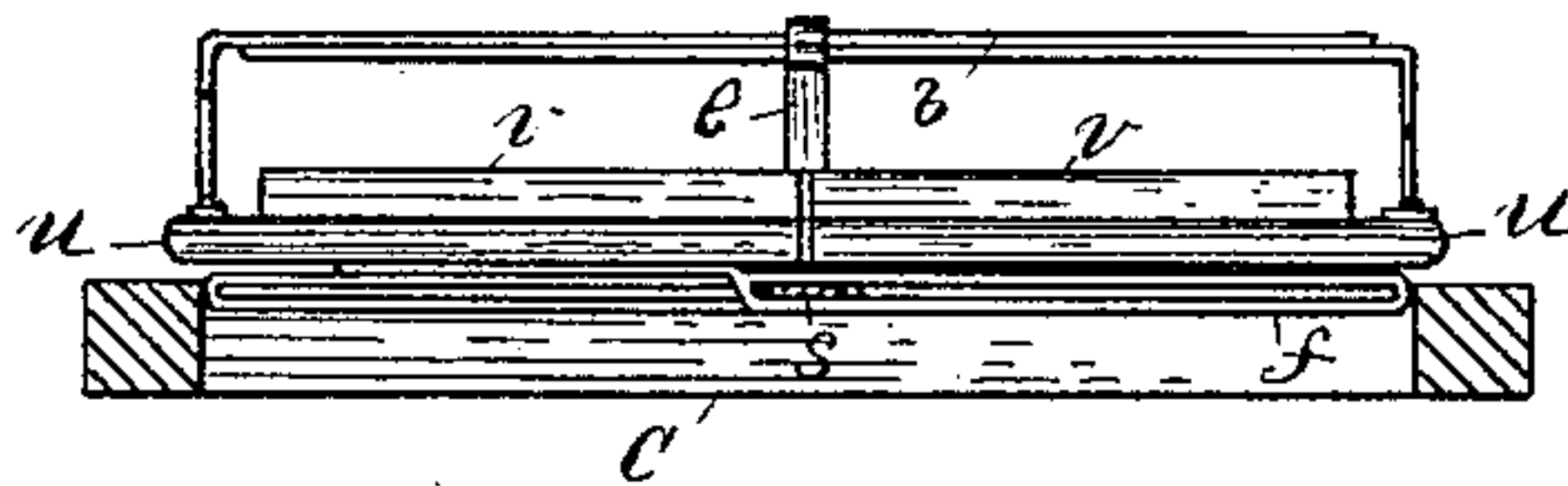


Fig. 5

Witnesses.
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UNITED STATES PATENT OFFICE.

JAMES A. ODELL, OF KALAMAZOO, MICHIGAN.

TWO-WHEELED VEHICLE.

SPECIFICATION forming part of Letters Patent No. 386,893, dated July 31, 1888.

Application filed April 16, 1888. Serial No. 270,789. (No model.)

To all whom it may concern:

Be it known that I, JAMES A. ODELL, a citizen of the United States, residing at Kalamazoo, county of Kalamazoo, State of Michigan, have invented a new and useful Two-Wheeled Vehicle, of which the following is a specification.

This invention relates to that class of road-carts in which a body or seat-bar is hinged at the forward end and the rear end is elastically suspended over the axle; and it has for objects a novel construction of the elastic support or springs and the construction of an extensible seat, all substantially as below described and claimed.

In the drawings forming part of this specification, Figure 1 is a side elevation with one wheel removed and a portion of one thill broken away. Fig. 2 is a rear elevation of lettered details in Fig. 1; Fig. 3, a rear elevation of the seat extended in width, with parts in section on line 1 1 in Fig. 5; Fig. 4, the same, showing the seat contracted or adjusted to a narrower width; and Fig. 5 is a plan view of the seat as in Fig. 4, with parts broken away.

Referring to the letters marked on the drawings, B are the thills attached to a wheeled axle, A the thill cross-bar, and D the body or seat-bar, substantially in general as heretofore.

A semi elliptical spring, *r*, is centrally attached to the cross-bar A and beneath and parallel with the same. This spring, however, may be straight in its normal condition, as when not in operation, if preferred.

A re-enforcing spring, *a*, is attached between the spring *r* and the cross-bar A, and from thence it extends laterally in both directions over the spring *r*.

At *c c* are loops which loosely receive the seat-bars D, Fig. 1, and these loops are hinged to the ends of the spring *r*, Fig. 2. Both ends of the springs are brought closer together or allowed to separate farther by means of the adjustable bands *i*, movable thereon. By sliding or moving these bands outward the upper spring, *a*, re-enforces the lower spring, thus adapting the elastic support to sustain two persons when riding. With the bands *i* moved inward, the spring *r* is sufficient to support one person. By locating the bands *i* at different points between the two extremes, the springs can be nicely adjusted to sustain persons of variable weights.

The seat is composed of a frame, C, having a central cross-piece, *s*, two bottom boards, *u*, to which are hinged the lids *v v*, a back standard, *e*, having a loop at the upper end, the seat-rails *b*, lapping each other at the back of the seat and loosely passed through the loop of the standard *e*, so as to slide therein when the seat is widened or narrowed, and slotted stay-bars *f*, one attached to each part *u* of the seat, and the cross-bar *s* being passed through the slot of each bar *f*.

Fig. 3 shows the seat wide for two men to ride, the lids *v* being shut or closed and supported by the stay-bars *f*. Fig. 4 shows the seat for one person, the lids having been raised and folded down onto the parts *u* and the two parts of the seat slid together. In this use of the seat the person sits on the lids *v* only.

Having thus described the invention, what I claim is—

1. The combination of the thills, wheeled axle, seat-bars or body hinged at the forward end, the spring sustaining said seat-bars from the ends of said spring, and the re-enforcing spring and adjustable bands, substantially as set forth.

2. The seat comprising the frame, the cross-bar, the standard having the loop at the end, the side bottom boards and lids hinged thereto, the stay-bars slotted and having the cross-bar of the frame loosely in said slots, and the two-part rail lapped and loosely passed through the loop of said seat-standard, substantially as set forth.

3. The combination of a vehicle body with a seat having the sliding side parts to the bottom and lids hinged thereto, substantially as set forth.

4. The combination of the thills, seat-bars, the two springs separated at the end, and the bands thereon for re-enforcing the spring by adjusting them, the extensible seat having the side bottom boards adapted to slide, and the hinged lids, whereby the spring may be made stiffer when the seat is widened for two persons, substantially as set forth.

In testimony of the foregoing I have hereunto subscribed my name in presence of two witnesses.

JAMES A. ODELL.

Witnesses:

HERBERT WILSON,
BENJAMIN O. BUSH.