

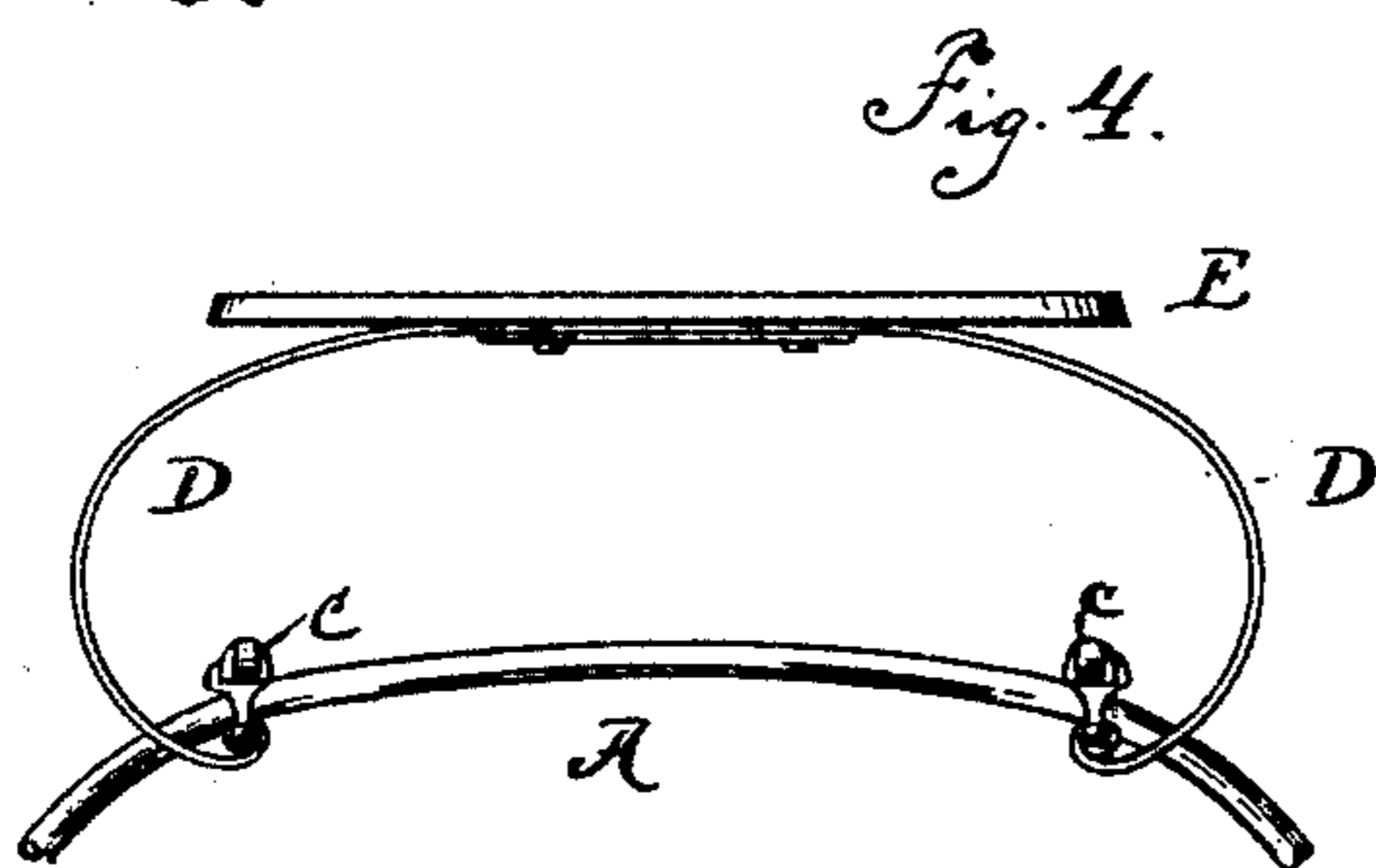
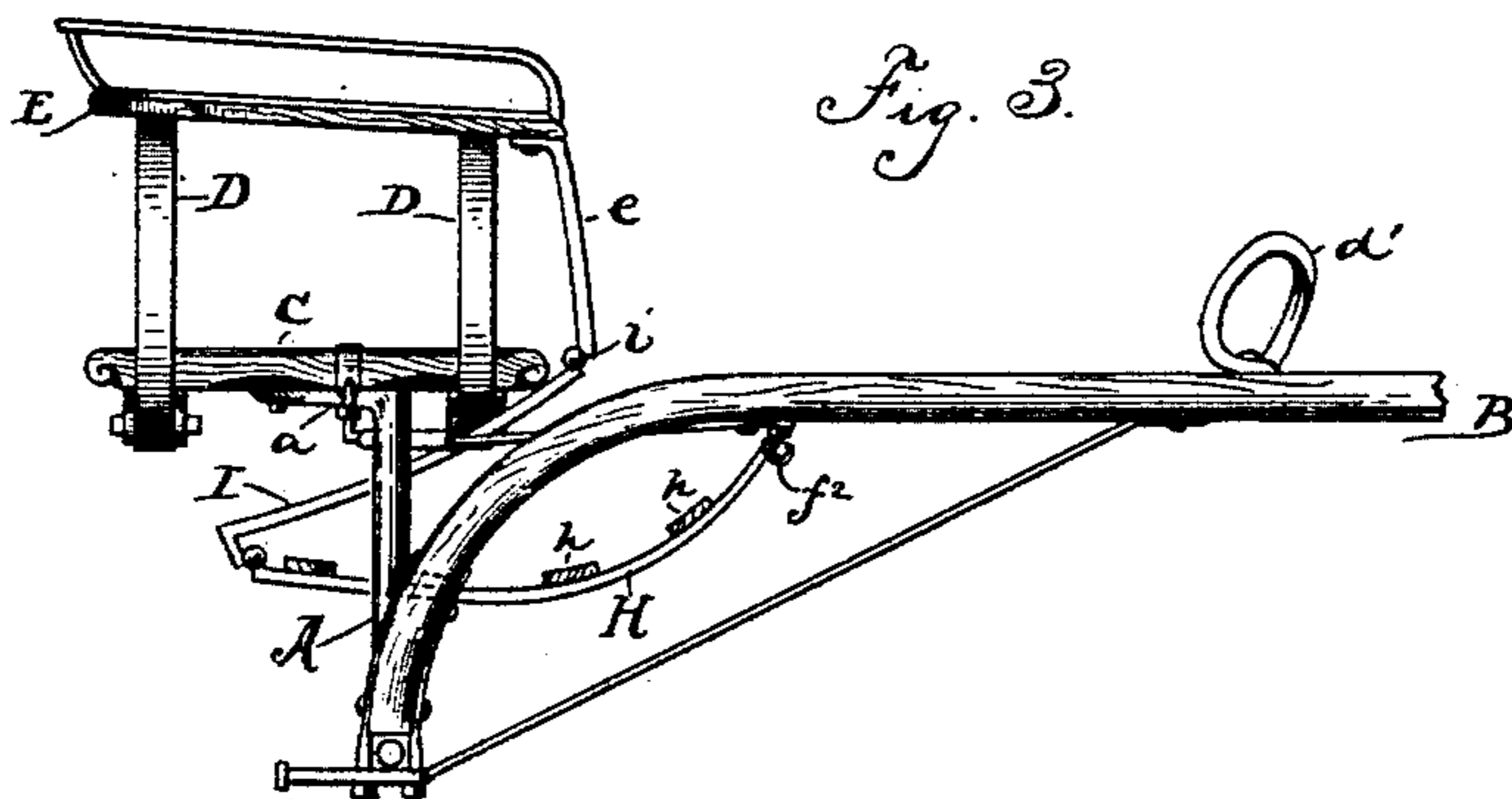
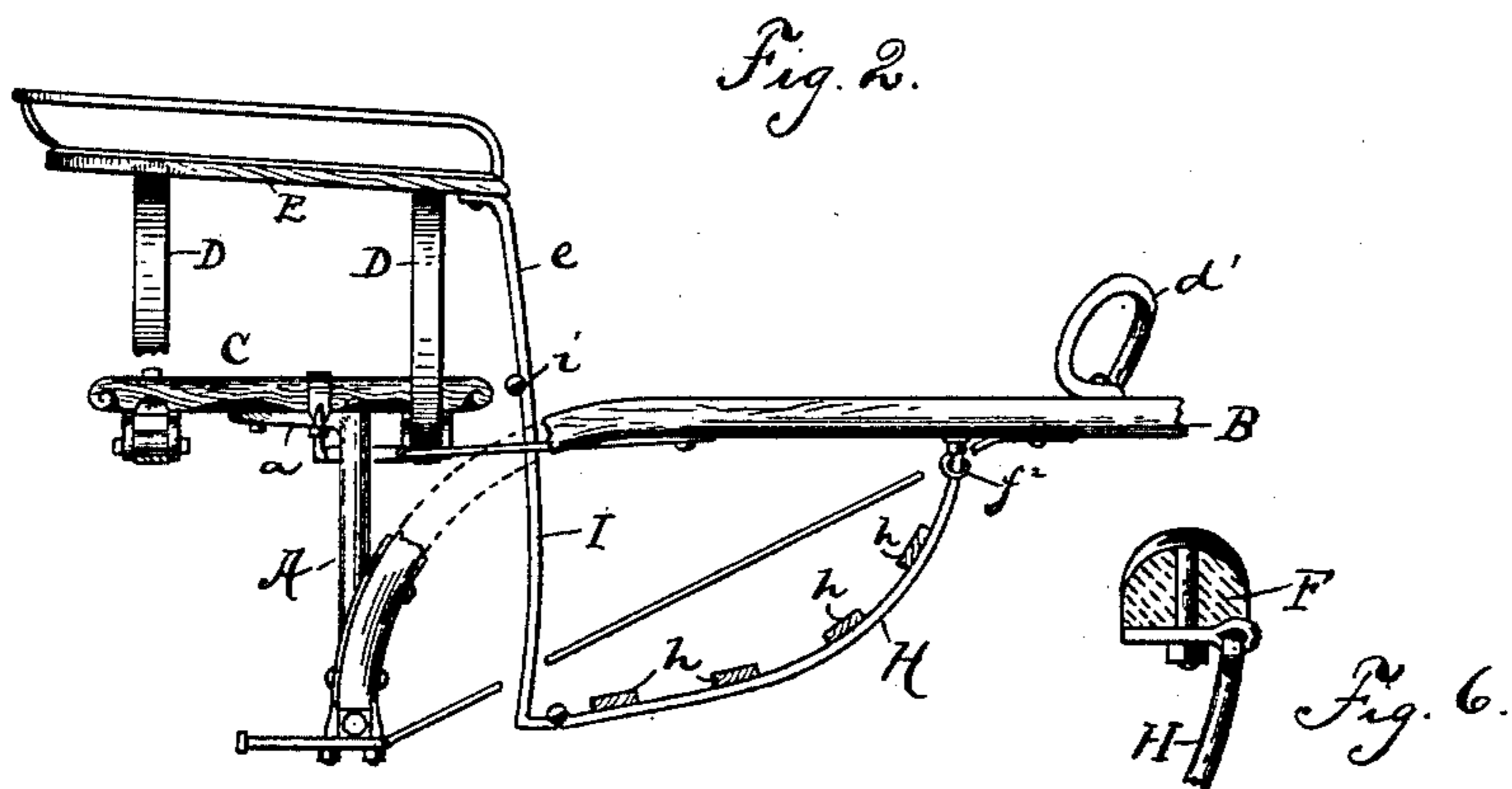
(No Model.)

2 Sheets—Sheet 2.

W. CLUCAS.
ROAD CART.

No. 460,949.

Patented Oct. 13, 1891.



Witnesses.

E. Byron Gilchrist
Attorney

Inventor:
William Clucas
By Lyndon Leggett
Attorney

UNITED STATES PATENT OFFICE.

WILLIAM CLUCAS, OF CLEVELAND, OHIO.

ROAD-CART.

SPECIFICATION forming part of Letters Patent No. 460,949, dated October 13, 1891.

Application filed March 11, 1891. Serial No. 384,588. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM CLUCAS, of Cleveland, in the county of Cuyahoga and State of Ohio, have invented certain new and useful Improvements in a Combined Trotting-Sulky and Road-Cart; 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 a combined trotting-sulky and road-cart; and it consists in certain features of construction and in combination of parts hereinafter described, and pointed out in the claims.

In the accompanying drawings, Figure 1 is a plan. Figs. 2 and 3 are side elevations showing different working positions. Fig. 4 is a rear elevation. Fig. 5 is an elevation, partly in section in detail, of the movable cross-bar and attached whiffletree. Fig. 6 is an enlarged elevation in section on line *x x*, Fig. 1, showing the manner of attaching the folding foot-rest to the cross-bar.

A represents the axle, and B B the thills, the latter being rigidly secured to the axle in the usual manner. The axle is provided with a pair of rearwardly-projecting arms *a a*, these arms being usually welded to or forged with the axle, and to these arms are secured short bars C, extending lengthwise the vehicle, these bars usually being constructed of wood, and to these bars are attached the outer or free ends of springs D D. These springs are of the variety known as "C" springs, and the other or butt-end of the springs are fastened to the under side of the seat E. With such construction is avoided the swaying of the seat forward and back usually had with seats of this class of vehicles. The springs may be adjusted lengthwise of bar C to balance the vehicle and load, as required.

F is a movable cross-bar mounted on ways *b b*, the latter being an attachment of the thills. The cross-bar is provided at the end sections thereof with metal straps *f* and bolts *f'* and thumb-nuts *f''* (see Fig. 5) for clamping the cross-bar to ways *b*. The whiffletree F' is attached to the cross-bar in the usual manner. When the vehicle is to be used for a trotting-sulky, the cross-bar and attached whiffletree are moved back near the

axle to bring the horse as far back between the thills as practicable, and in such case loops *d'*, connected with the thills, are used for foot-rests for the driver. The position that the driver would thus assume with his legs spread apart does very well for trotting a horse for a few minutes, but would not be a comfortable position for a ride of some hours on the road. I therefore provide a folding foot-rest that folds back out of the way when the vehicle is used for a trotting-sulky and unfolds in position to be used in moving the cross-bar and whiffletree forward when the vehicle is to be used for a road-cart. The construction of the folding foot-rest is as follows:

H H are light metal bars bent in suitable form—for instance, as shown in Figs. 2 and 3—these bars being hinged or pivoted to the cross-bar F, for instance, as shown in Fig. 6. To bars H H are fastened a series of strips *h*, on which the feet of the operator rest when the device is distended. The rear ends of bars H are pivoted to link I, the latter in turn being pivoted at *i* to arm *e*, these arms being attachments of the seat. When the cross-bar and whiffletree are moved forward for converting the vehicle into a road-cart, the foot-rest unfolds or distends to approximately the position shown in Fig. 2. When the cross-bar is moved back for trotting purposes, the foot-rest folds backward and upward to approximately the position shown in Fig. 3, where it is out of the way in trotting. In attaching the horse the side straps, or "holdback-straps," as they are sometimes called, are lengthened or shortened, according as the cross-bar is in its rearward position for trotting or is in its forward position for road purposes.

What I claim is—

1. A combined trotting-sulky and road-cart, the same having a cross-bar and attached whiffletree, the cross-bar being adjustable lengthwise the thills, substantially as set forth.

2. A two-wheeled vehicle having thills and a cross-bar connecting the thills, such cross-bar bearing the whiffletree and being movable lengthwise the thills on ways connected with the thills, substantially as set forth.

3. The combination, with thills, ways con-

10 nected with the thills, and cross-bar bearing
a whiffletree and mounted on such ways and
adjustable lengthwise the latter, of clamps
for securing the cross-bar to the ways to hold
5 the cross-bar in the desired adjustment, sub-
stantially as set forth.

10 4. In a two-wheeled vehicle, the combina-
tion, with a seat, thills, and movable cross-
bar bearing a whiffletree, substantially as in-
dicated, of a folding foot-rest operatively
connected with the cross-bar and seat, so as
to fold and distend in moving the cross-bar
rearward and forward, substantially as set
forth.

15 5. In a two-wheeled vehicle, the combina-
tion, with the axle having integral arms ex-
tending lengthwise the vehicle, of bars secured

to such arms and C-springs arranged in pairs
and connecting with the bars and with the
seat, substantially as set forth. 20

6. In a two-wheeled vehicle, the combina-
tion, with axle bearing integral arms project-
ing rearward therefrom and bars fastened to
such arms, such bars extending lengthwise
the vehicle, of C-springs arranged in pairs 25
and connecting such bars with the seat of
the vehicle, substantially as set forth.

In testimony whereof I sign this specifica-
tion, in the presence of two witnesses, this 31st
day of January, 1891.

WILLIAM CLUCAS.

Witnesses:

C. H. DORER,

WARD HOOVER.