

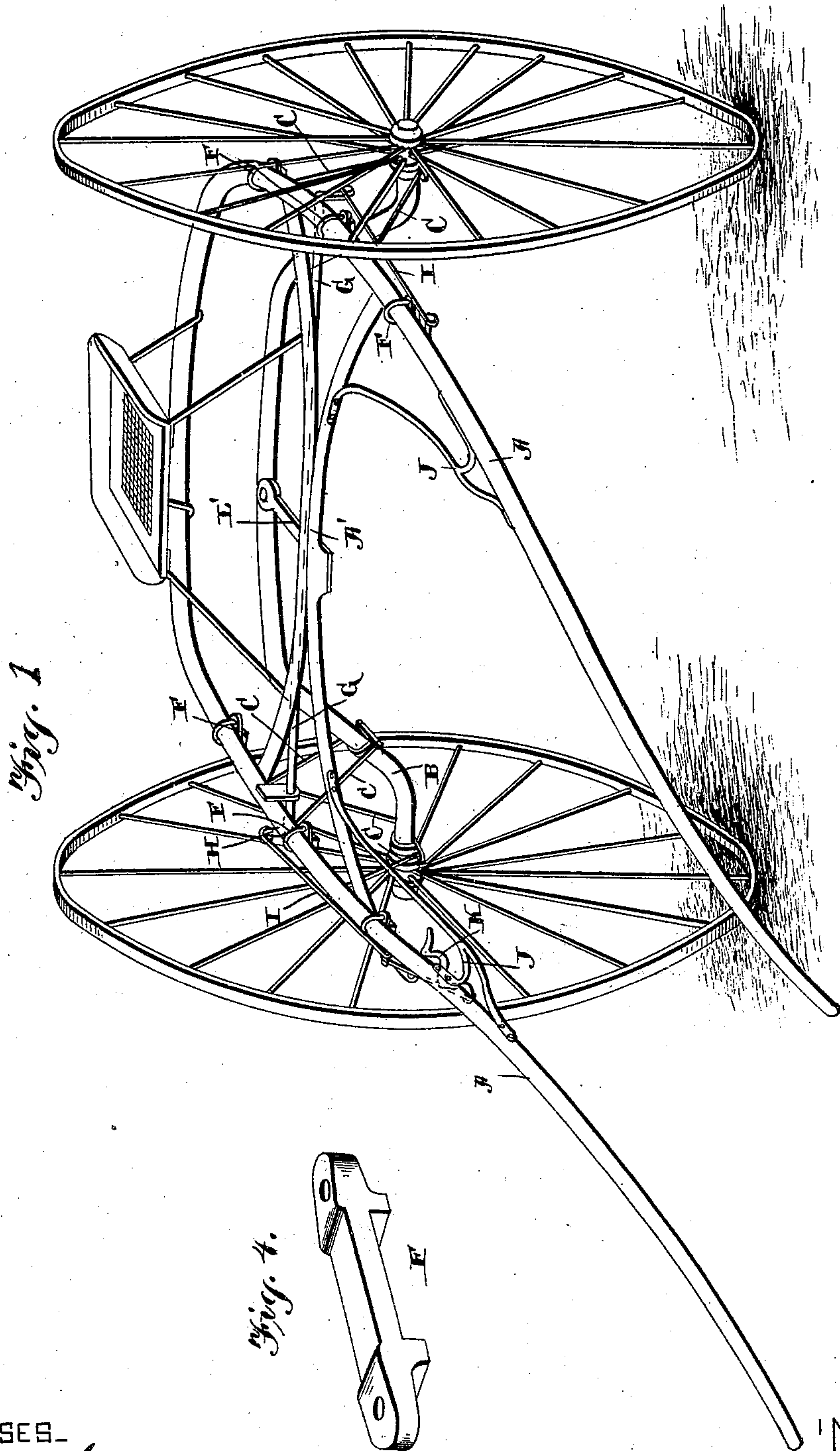
(No Model.)

2 Sheets—Sheet 1.

H. A. & T. W. McINTOSH.  
TRACK SULKY.

No. 502,984.

Patented Aug. 8, 1893.



WITNESSES.

*Geo. E. French.*

*Roland A. Fitzgerald*

INVENTORS

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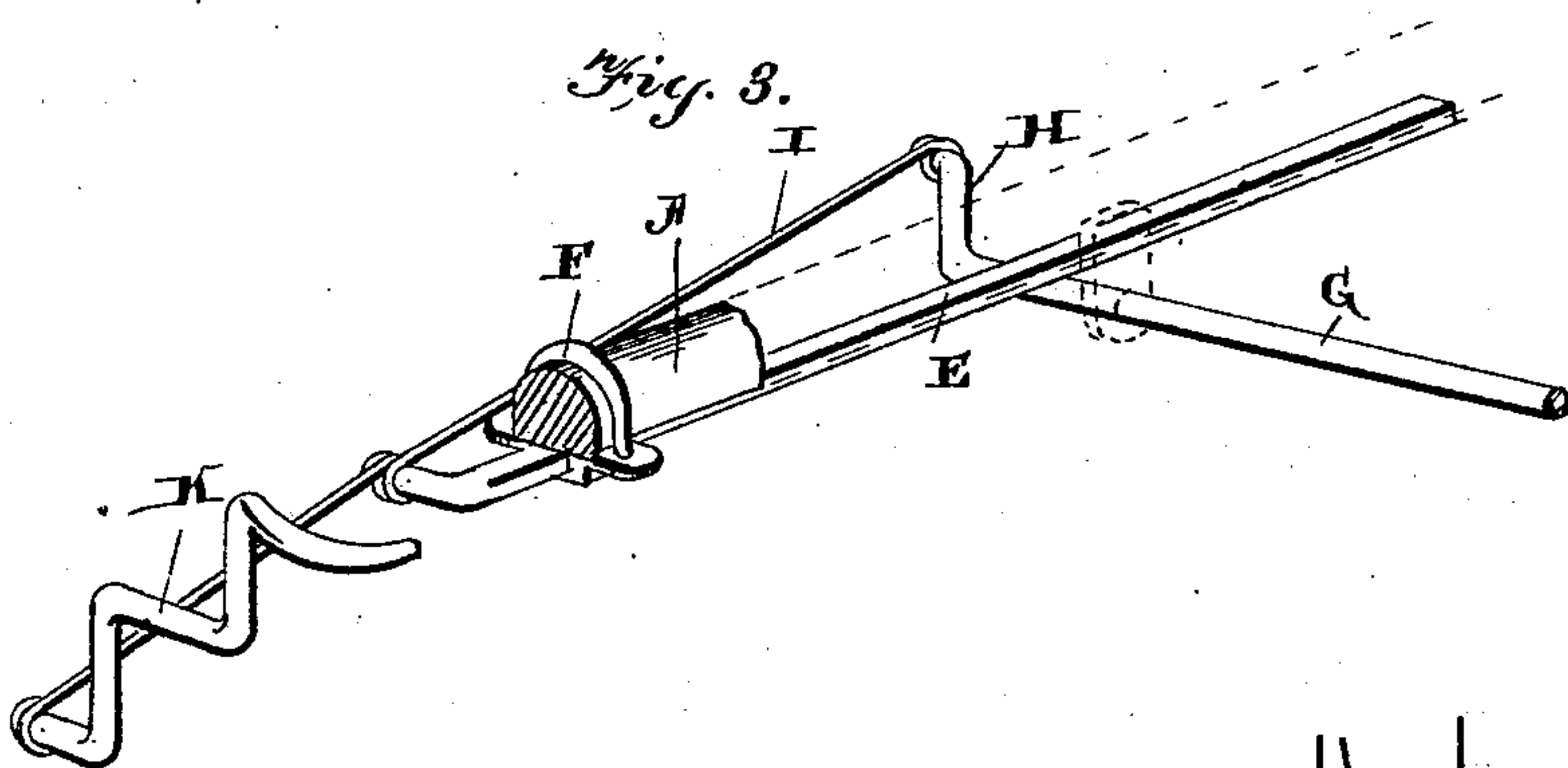
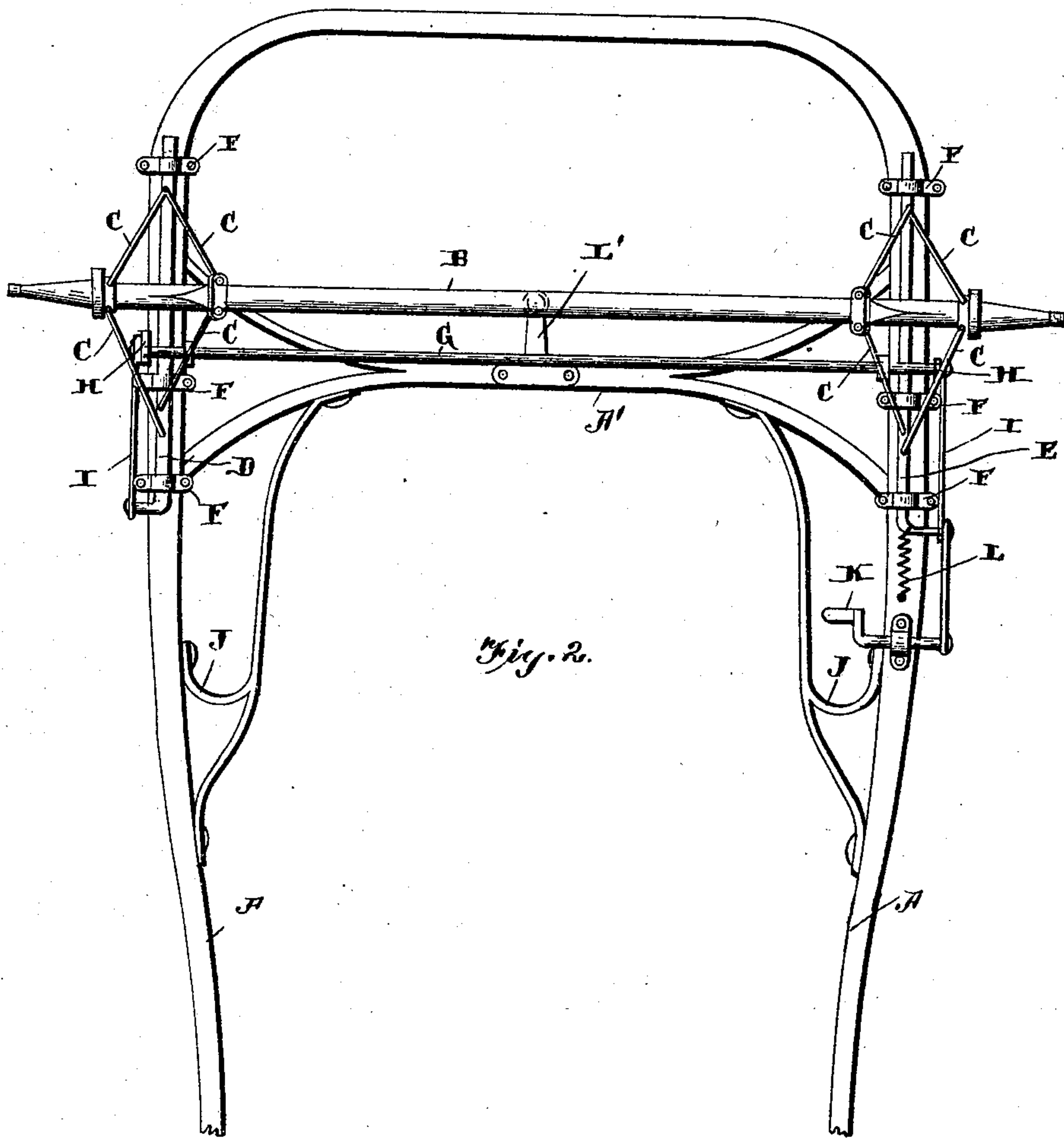
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# UNITED STATES PATENT OFFICE.

HARRY A. McINTOSH AND THEODORE W. McINTOSH, OF BROWNSVILLE,  
INDIANA.

## TRACK-SULKY.

SPECIFICATION forming part of Letters Patent No. 502,984, dated August 8, 1893.

Application filed March 7, 1893. Serial No. 464,960. (No model.)

*To all whom it may concern:*

Be it known that we, HARRY A. McINTOSH and THEODORE W. McINTOSH, of Browns-  
ville, in the county of Union and State of Indiana,  
5 have invented certain new and useful Im-  
provements in Track-Sulkies; and we do here-  
by 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  
10 it pertains to make and use it, reference being  
had to the accompanying drawings, which  
form part of this specification.

Our invention relates to an improvement in  
track sulkies and it consists in the novel fea-  
15 tures of construction and in the novel com-  
bination and arrangement of parts and will  
be fully described hereinafter, and especially  
referred to in the claims.

The track sulkies now in general use are  
20 open to the objection that upon passing around  
curves incident to most race tracks their shafts  
impinge the horse on one side at the stifle  
joint and at the opposite side upon his shoul-  
der in his endeavor to make the sulky follow  
25 the line of draft. A much desired free and  
easy movement of the body and limbs of the  
animal is thus defeated in passing these por-  
tions of the track. Another objection to the  
sulkies now in general use is that their wheels  
30 slip laterally upon the track when these steep  
curves are reached, thus dragging upon the  
horse and retarding a much desired high rate  
of speed.

Our present invention is directed toward  
35 obviating these difficulties by giving the run-  
ning gear or wheels of the sulky a pivotal  
movement in relation with the shafts, which  
movement is under perfect control of the oc-  
cupant, whereby he is enabled to change the  
40 angle of the wheels at the point upon the track  
where it is desirable, so that the rear end of  
the sulky may be in direct line with the cen-  
ter of draft and all impinging of the horse  
and slipping of the wheel upon the curves are  
45 thereby effectually prevented.

Figure 1, is a perspective view of our im-  
proved sulky. Fig. 2, is an inverted plan view  
of the same the seat and wheels being re-  
moved. Fig. 3 is a detached view of a por-

tion of the axle turning mechanism. Fig. 4 50  
is a detached view of clip plate F.

A designates the shafts which are of the  
usual construction and B the upwardly curved  
axle. For supporting the vehicle frame upon  
the axle we provide the several rods C which 55  
are secured at their lower ends to the axle  
and at their upper ends to the respectively  
longitudinal movable bars D and E. These  
bars are located on the under side of the shaft  
and are held in place by the clips F through 60  
which they move longitudinally.

G is a shaft extending across the under side  
of the shafts A and upon its respective ends  
are the oppositely directed cranks H, which  
are connected to the forward ends of the re- 65  
spective bars D and E by the rods I.

J are the footholds for the occupant and ar-  
ranged immediately beneath one of these on  
the under side of the shaft A is a double  
crank K, which at one end is connected to the 70  
forward end of the bar E, while its opposite  
crank is in a convenient position to be de-  
pressed by the occupant's foot. A normally  
contracted coiled spring L is secured at one  
end to the shaft and at its opposite end to the 75  
bar D and in this manner the bar is held nor-  
mally in a fixed position with relation to the  
shaft. As this bar D and the transverse crank  
shaft are connected, it will be readily under-  
stood that the opposite bar E will also be con- 80  
trolled by the said spring. A bracket L' con-  
nects the shaft brace A' with the center of  
the axle and thus a positive turning point for  
the latter is provided.

In operation when a left hand curve is 85  
reached by the sulky the operator may by de-  
pressing the foot shaft or treadle throw back-  
ward the right wheel of the sulky and forward  
the left wheel a corresponding distance, the  
amount of the said movement depending upon 90  
the curvature in the track. Thus the sulky  
frame is kept in line with the center of draft  
and the horse is entirely free from the objec-  
tionable binding of the shafts before referred  
to and also by this adjustment of the wheels 95  
and axle it is impossible for the former to slip  
on the track.

It is apparent that in turning right hand



curves a reverse of the described operation will secure the desired beneficial results.

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

1. An improved sulky comprising an axle a frame pivotally supported thereon, and a mechanism for turning the axle beneath said frame and at any desired angle to the line of draft, substantially as shown and described.

2. An improved sulky comprising the shafts, bars movable longitudinally thereon, an axle and rod connecting the opposite ends of the axle with the respective bars, substantially as shown and described.

3. An improved sulky consisting of the shafts, an axle, longitudinally movable bars on the shaft which are connected to the opposite ends of the axle, and a means for moving the said bars simultaneously in opposite directions, substantially as shown and described.

4. An improved sulky consisting of the shafts, an axle, bars movable longitudinally on the under side of the shaft, rods connecting the opposite ends of the axle with the said bars, a revoluble shaft extending across the under side of the vehicle shafts, oppositely projecting cranks at the ends of the said revoluble shaft, a connection between the said cranks and the forward ends of the said bars, and a means for rotating the said revoluble shaft, substantially as shown and described.

5. An improved sulky consisting of the shaft, an axle, longitudinally movable bars on the shaft rods connecting the said bars with the axle, and a spring for holding the said

bars normally in a given position with relation to the said shaft, substantially as shown and described.

6. The combination of the vehicle shafts, bars movable longitudinally thereon, an axle, rods connecting the said bars with the axle, a revoluble shaft extending across the said vehicle shafts, oppositely extending cranks on the respective ends of the said revoluble shaft, rods connecting the said cranks with the forward ends of the said bars, a foot crank or treadle, and a connection between the same and one of the bars, substantially as shown and described.

7. An improved sulky consisting of the shafts, bars movable longitudinally on the under side thereof, an axle, rods connecting the opposite ends of the axle with the respective bars, a revoluble shaft extending across the vehicle shafts, oppositely extending cranks at the respective ends of the said shaft, rods connecting the said crank with the forward ends of the bars, a double foot crank or treadle secured to the shaft to which one of the said bars is connected, and a spring for holding the said bars normally in a given position, substantially as shown and described.

In testimony whereof we affix our signatures in presence of three witnesses.

HARRY A. McINTOSH.  
THEODORE W. McINTOSH.

Witnesses:  
F. P. DYE,  
S. WINTERS,  
MARIE McINTOSH.