

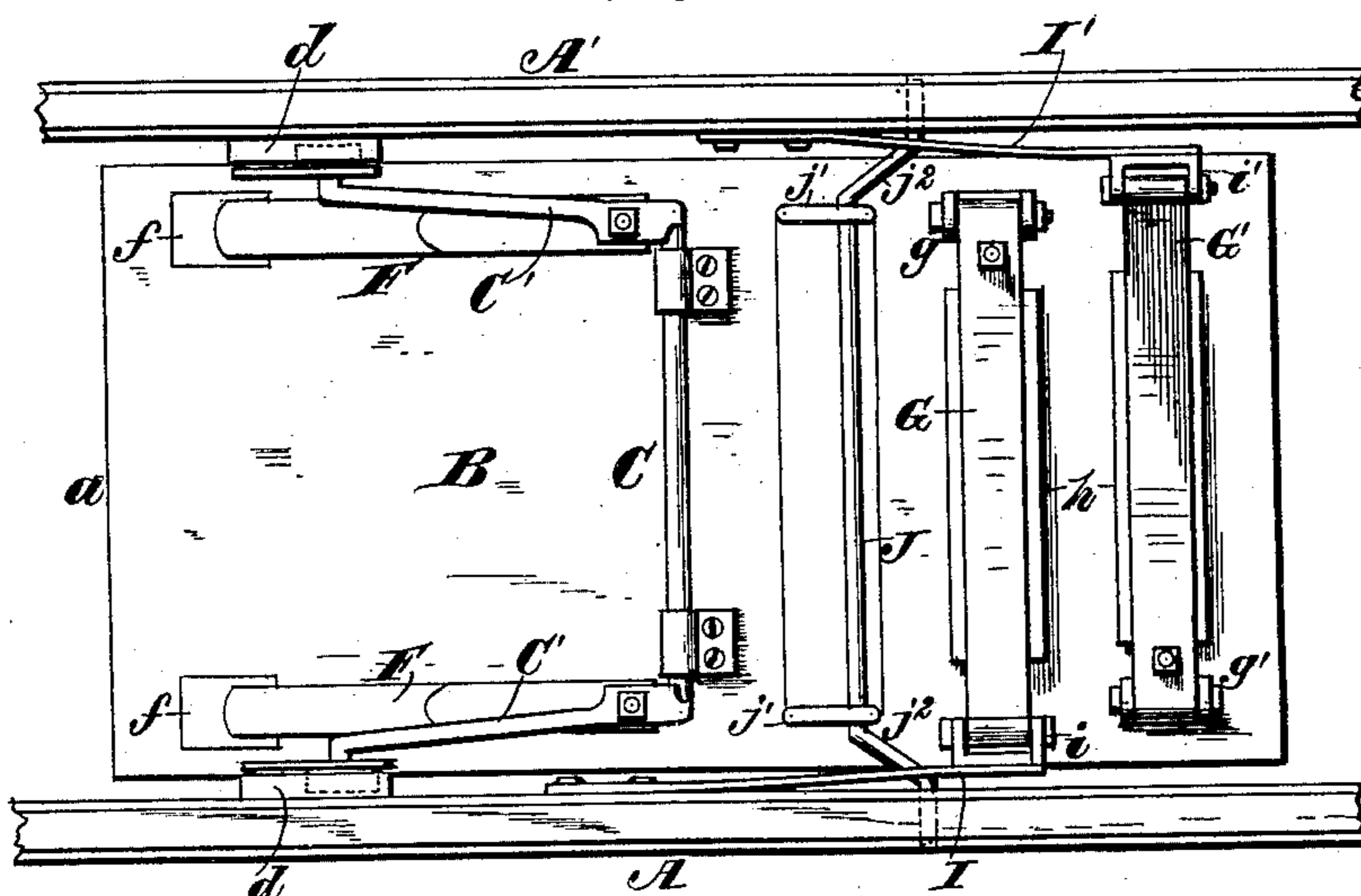
(No Model.)

D. J. OWEN.  
SIDE BAR BUGGY.

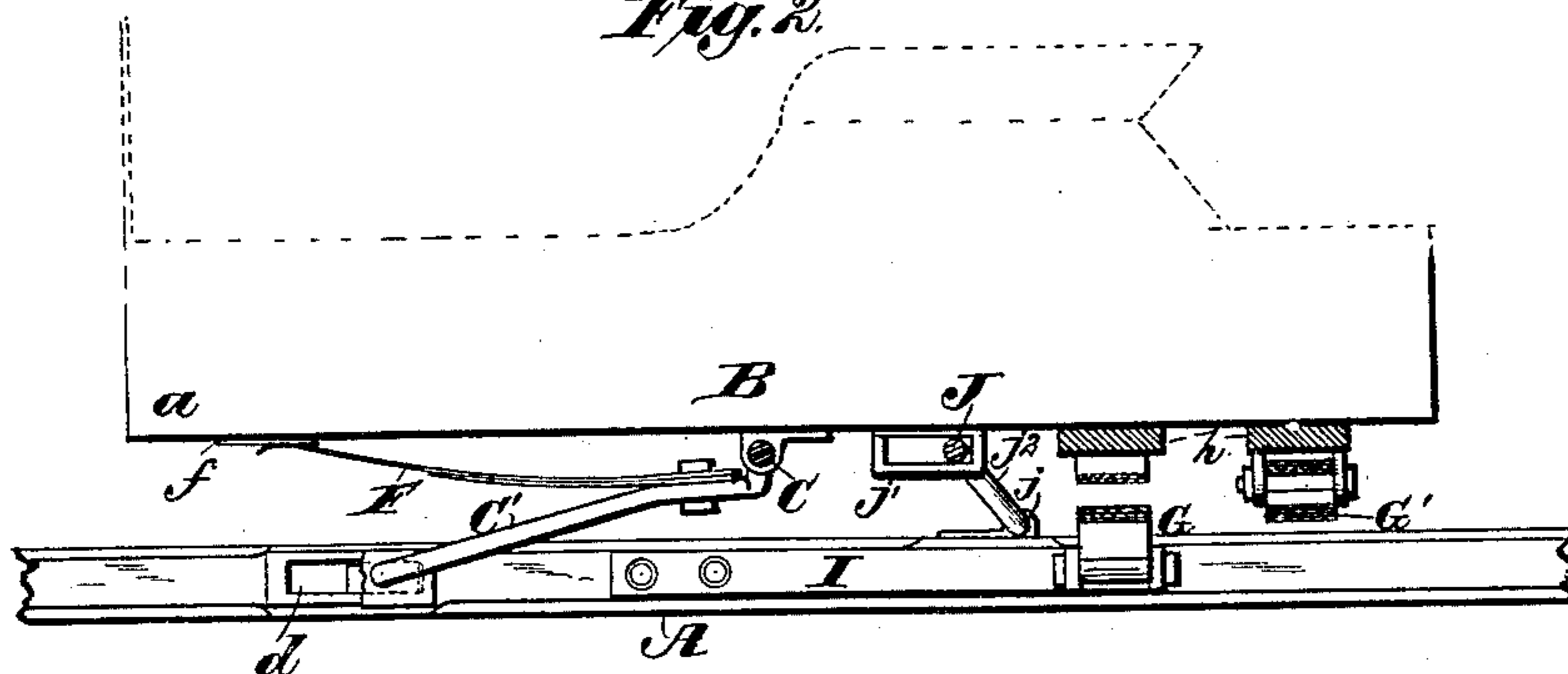
No. 318,017.

Patented May 19, 1885.

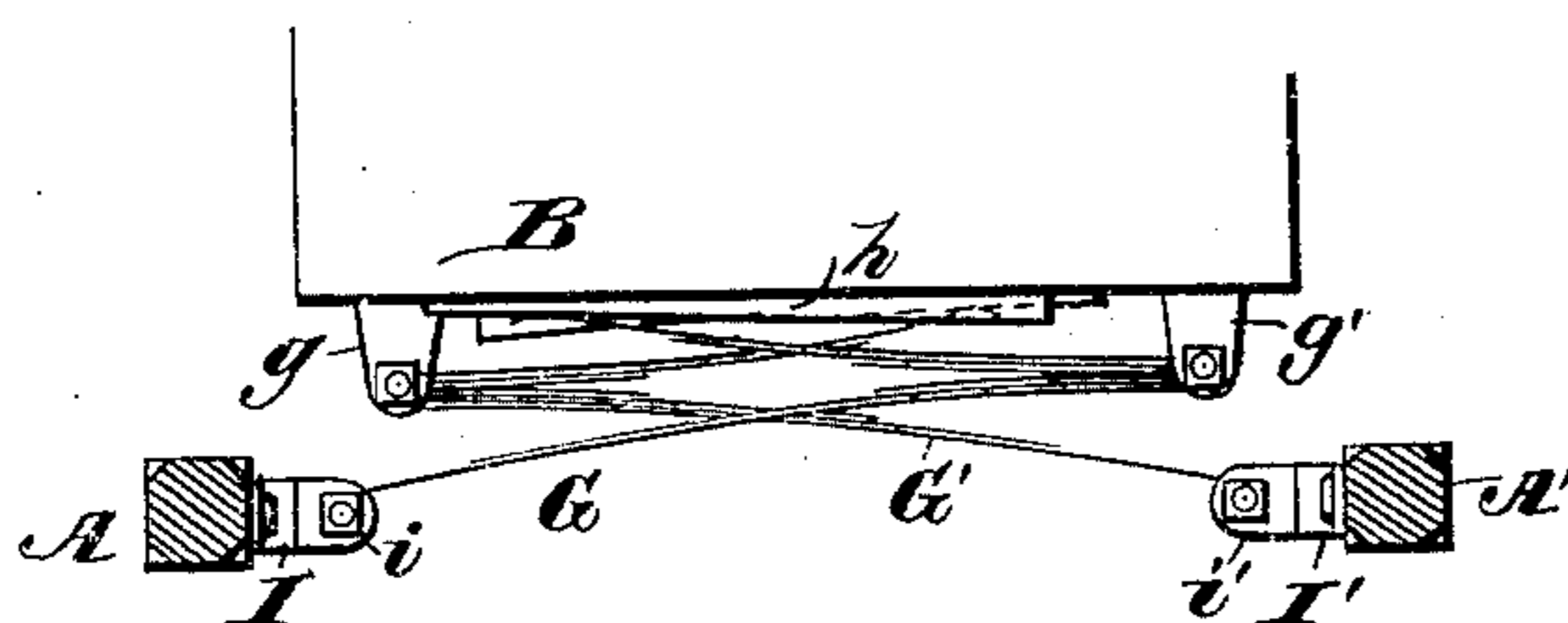
*Fig. 1.*



*Fig. 2.*



*Fig. 3.*



*Witnesses.*

Robert Everett,  
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Demus J. Owen

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Atty.

# UNITED STATES PATENT OFFICE.

DEMUS J. OWEN, OF LYNN, PENNSYLVANIA.

## SIDE-BAR BUGGY.

SPECIFICATION forming part of Letters Patent No. 318,017, dated May 19, 1885.

Application filed April 4, 1885. (No model.)

*To all whom it may concern:*

Be it known that I, DEMUS J. OWEN, of Lynn, in the State of Pennsylvania, have invented certain new and useful Improvements in Side-Bar-Buggy Springs; and I do hereby declare that the following is a full, clear, and exact description of the invention, which will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to the letters of reference marked thereon, which form a part of this specification.

My invention relates to side-bar buggies or other vehicles; and the novelty consists in the construction, arrangement, and the adaptation of peculiar springs, as will be more fully hereinafter set forth, and specifically pointed out in the claims.

The invention is illustrated in the accompanying drawings, which form a part of this specification, and in which—

Figure 1 is a bottom plan view; Fig. 2, a vertical central section, and Fig. 3 a transverse section with parts in elevation.

Referring to the drawings, A A' designate the side bars, and B the body, of an ordinary buggy.

I will describe the portion of the body marked *a* as the front of the vehicle, in order to locate the forward and back springs.

Journaled at *c c* upon the bottom of the body is a rock-shaft, C, having at either end an arm, C', projecting forward and outward, its free end being received and having free motion within guide-sockets *d*, formed in the inner sides of the side bars A and A'.

Secured to the arms C', upon either side, is a plate or leaf spring, F. These springs project forward and serve to hold the body elevated, with the arms C' against the rear wall of the guide-sockets *d*, their free ends bearing upon metal plates *f*, secured upon the bottom of the body near the front.

This construction is important. Weight upon the body serves to overcome the spring-force, and as the body is depressed the shaft C rocks and the free ends of the arms C' pass forward in the guide-sockets *d*. While the body has free motion, the frame C C' insures that the motion shall be vertical.

The rear springs are made duplex in a di-

rection at right angles to the forward spring, and as they project in opposite directions I will designate each set by separate letters.

*g* designates a bracket, in which is pivoted the bight of a double-leaf spring, G, and to a similar bracket, *g'*, is similarly pivoted the bight of the spring G'. The upper arm of each of these springs is properly supported by inclined blocks *h*, and their free ends project in opposite direction into proximity to the side bars.

The spring G is loosely secured by a clip, *i*, to a spring-arm, I, secured upon the inner side of the side bar A, while the spring G', by clip *i'*, is similarly secured, through spring-arm I', to said bar A'.

The parts are so conditioned that when the body is depressed to its fullest extent and the springs G G' closed, or nearly closed, the arms I I' will lie close to the side bars. The springs serve to hold the body to an elevated position, and when in that position the arms I I' are forced away from the side bars.

To not only limit the vertical motion of the body, but also to prevent lateral movement of the same, I provide a very simple and efficient device. J represents a crank-rod, having either end journaled at *j* to the side bars, and the body secured within guides *j'* upon the bottom of the body. The crank portion, which is marked *j''*, is inclined, and when the body is forced down, lies at an angle to prevent the body from passing lower than the journals *j*.

Modifications may be made without sacrificing the advantages of the invention. The spring shown upon the forward portion of the buggy may be duplicated in reversed direction, or it may be dispensed with.

Having described my invention, what I desire to claim is—

1. The combination, with the side bars, A A', having recesses *d*, of the springs F, secured to the arms C', the rock-shaft C, journaled upon the bottom of the body, and the friction-plates *f*, as set forth.

2. The combination, with the body and side bars, of the double springs G G', the spring-arms I I', clips *i i'*, brackets *g g'*, and blocks *h*, as and for the purpose set forth.

3. In a side-bar buggy or other vehicle, the

combination, with the springs G G' and spring-  
arms I I', arranged as shown relatively to  
the body and side bars, of the crank-rod J j<sup>2</sup>,  
journaled in the side bars and having free  
5 movement in the guides j' upon the body, as  
set forth.

In testimony that I claim the foregoing as

my own I have hereto affixed my signature in  
presence of two witnesses.

DEMUS J. OWEN.

Witnesses:

A. B. SHELDON,  
J. O. LYMAN.