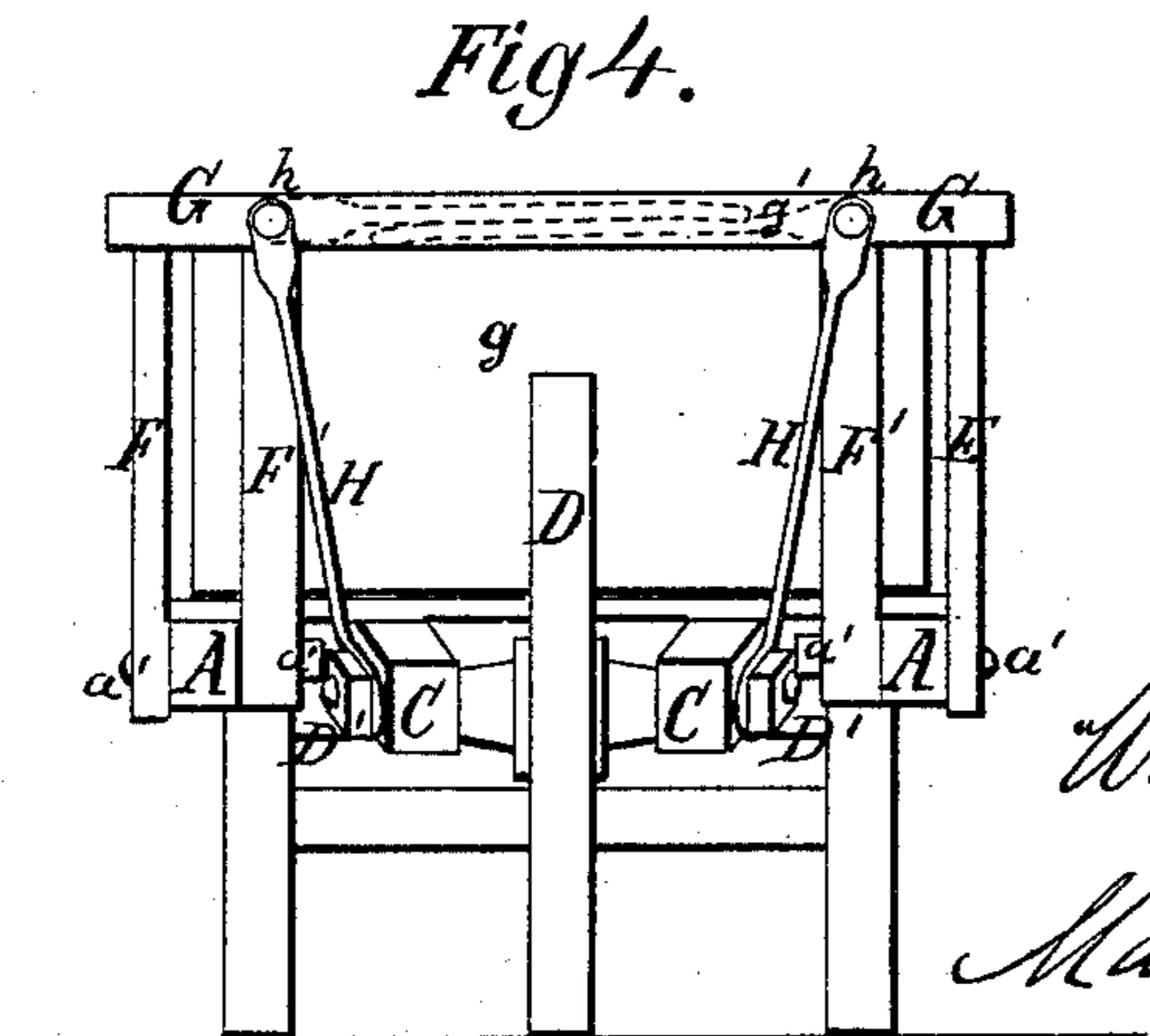
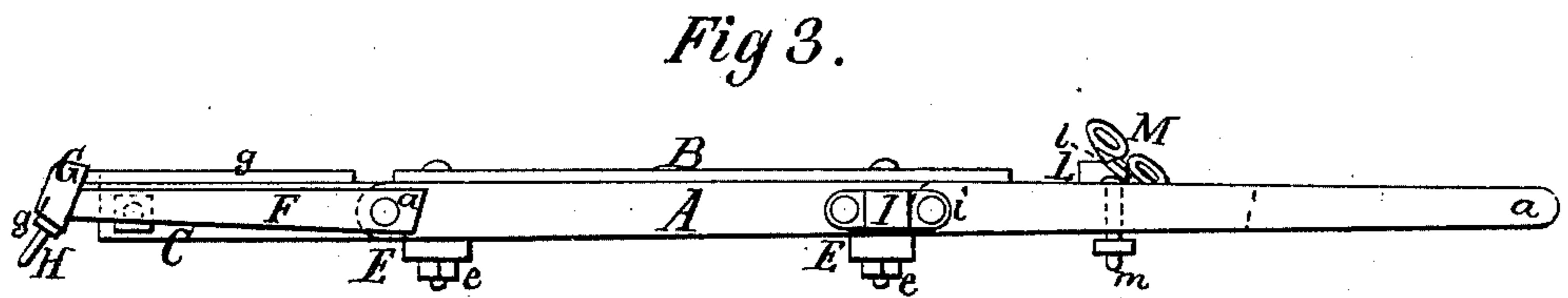
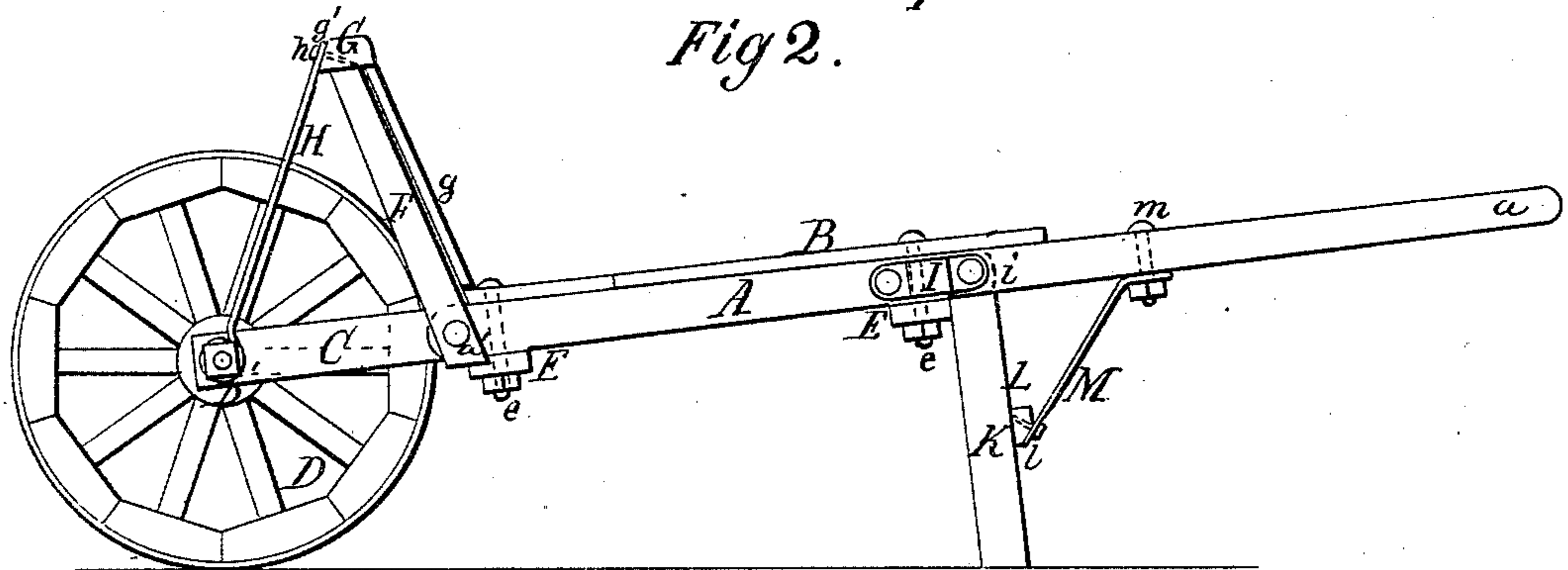
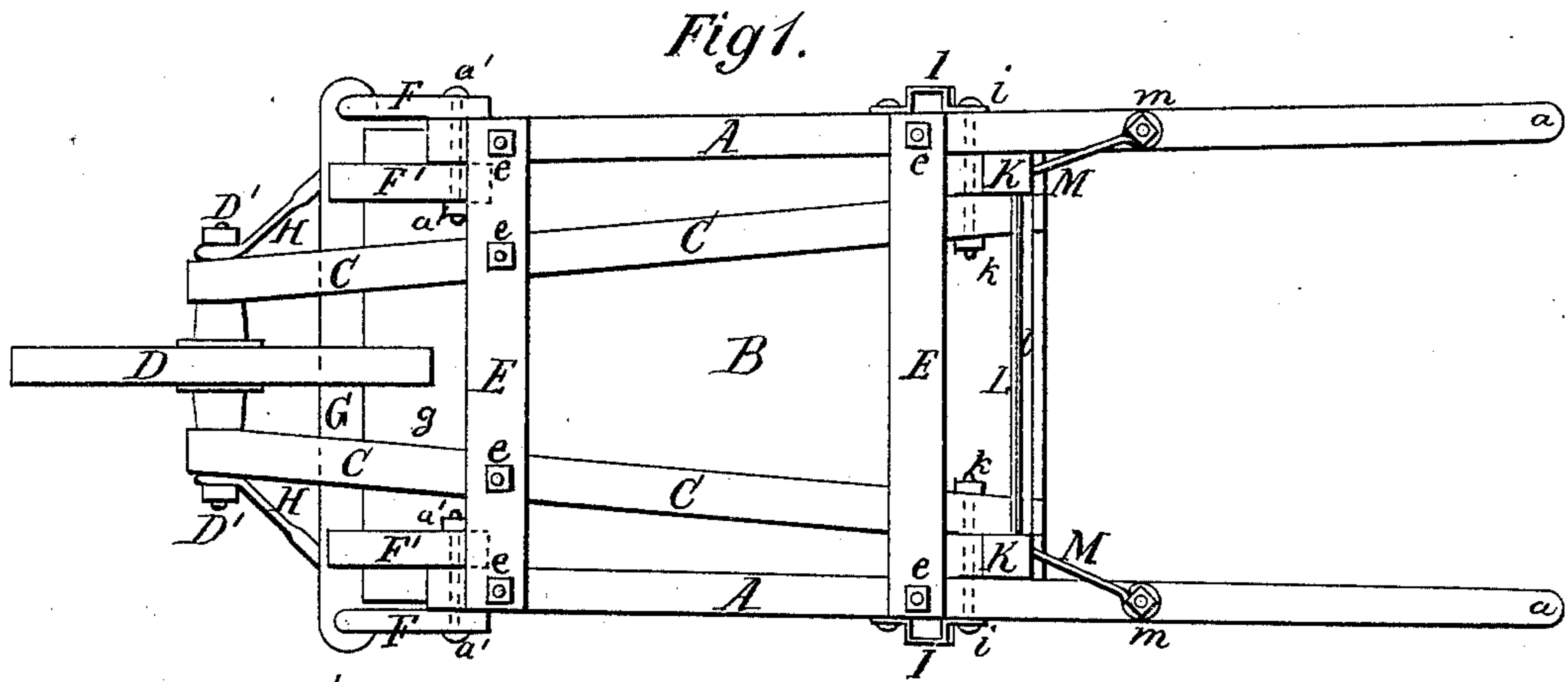


W. E. JACOBS.  
WHEELBARROWS.

No. 176,137.

Patented April 18, 1876.



Witnesses:  
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# UNITED STATES PATENT OFFICE.

WILLIAM E. JACOBS, OF COLUMBUS, OHIO.

## IMPROVEMENT IN WHEELBARROWS.

Specification forming part of Letters Patent No. **176,137**, dated April 18, 1876; application filed March 17, 1876.

*To all whom it may concern:*

Be it known that I, WILLIAM E. JACOBS, of Columbus, in the county of Franklin and State of Ohio, have invented a new and useful Improvement in Folding Wheelbarrows, which improvement is fully set forth in the following specification, reference being had to the accompanying drawings, in which—

Figure 1 is a bottom view of my improved wheelbarrow. Fig. 2 is a side elevation of the same. Fig. 3 is a side view of the same when folded up, and Fig. 4 is a back view of the wheelbarrow.

My invention relates to wheelbarrows which may be folded up for packing and shipping, or when not in use; and it consists in certain constructions, combinations, and arrangements of parts hereinafter described and specifically claimed, whereby a very strong and cheap wheelbarrow is produced, which can easily be folded up for economizing room in transportation, and thereafter put into working order in very little time.

To enable others skilled in the art to understand my invention, I will proceed to describe it with reference to the drawings, in which—

A represents the side bars terminating in handles *a* in front, and extending to the back end of the bottom B. C represents the wheel-bars, which are fastened to the bottom B between the side bars, and extend back to the wheel D. The side and wheel bars are fastened together and to the bottom B by means of cross-bars E and bolts *e*. Near the back ends of the side bars A the frame of the backboard is fastened. The said frame consists of two outside bars, F, and two inside bars, F', hinged in pairs to the side bars A by means of bolts *a'*, and united on top by a cross-bar, G. The backboard *g* proper is fastened to the inside bars F'. The said backboard frame is kept in proper position by braces H fastened outside of the wheel-bars C by means of the wheel-bolt D', the wheel used having, by preference, a hollow hub, which revolves on the said bolt.

The upper ends of the braces H are pivoted at *h* to the cross-bar G, the edge *g'* of which is inclined in the direction of the braces H, when fastened, so that they may

be with ease swung around and folded together on the said edge, when they are unfastened from the wheel-bolt D'. The side bars A are provided with sockets I, which are of the usual construction, and applied in the usual manner. One of the bolts *i*, by which the sockets I are fastened to the side bars, serve as pivots for the swinging legs K, and for that purpose pass through the said side bars, the legs, and the wheel-bars C, thus keeping the latter, by aid of the nuts *k*, from lateral movement. The legs K are connected by a cross-bar, L, with an inclined edge, *l*, to permit the easy swinging of the braces M, which are pivoted thereto, and secured by their upper ends to the under sides of the side bars A by the bolts *m*.

Operation: When the wheelbarrow is not in use, and is either to be stowed away or packed for transportation, the nuts are removed from the wheel-bolt D', the bolt removed, and the wheel D taken off. The braces H are swung up until they meet on the inclined edge *g'*, where they remain by means of friction. The back-board frame, with the backboard *g* is now turned down upon the wheel-bars C, forming thereby an extension of the bottom B. The braces M are now disengaged from the bolts *m*, and folded together on the inclined edge *l* of the cross-bar L. Finally, the legs K are swung up between the side bars A, and the folding up of the wheelbarrow is completed, as represented in Fig. 3.

To get the wheelbarrow in working condition again, the described operation is reversed. The folded wheelbarrow requires very little room for stowing away, and may be utilized for many purposes for which it is particularly adapted on account of its large platform.

The side bars, wheel-bars, and their respective cross-bars, by their peculiar construction, constitute a frame of great strength, and of easy access to its component parts in case of accidental breakage or disarrangement, and, as a whole, it is an article of small expense and great simplicity.

I do not claim, simply, hinging the legs and back-board and stays of these parts of a wheelbarrow; nor do I claim a dish-shaped wheelbarrow, having wheel-supports and handles

attached to the dishing portion; nor do I claim, broadly, clamping the parts of a wheelbarrow together by bars and bolts; but

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

1. In a wheelbarrow adapted to receive removable sides, the combination of the side bars A and wheel-bars C, forming the main frame of the wheelbarrow, substantially as and for the purpose set forth.

2. In a wheelbarrow adapted to receive removable sides, a back-board frame consisting of the swinging bars F F', the cross-bar G, and the swinging braces H, substantially as and for the purpose set forth.

3. In a wheelbarrow adapted to receive removable sides, the swinging legs K, the cross-bar L, and the swinging braces M, substantially as and for the purpose set forth.

4. In a wheelbarrow adapted to receive removable sides, the combination of the main frame of a wheelbarrow, the swinging back-board frame, having swinging braces, and the swinging legs, having swinging braces, the said braces being detachable from the main frame, whereby the back-board frame and the legs may be folded upon and into the main frame, substantially as and for the purpose set forth.

5. In a wheelbarrow-frame adapted to receive removable sides, the auxiliary or wheel-bars C, whereby the weight of the load is greatly reduced on the side bars A, thereby permitting the use of lighter material in the construc-

tion of the wheelbarrow, substantially as set forth.

6. In a wheelbarrow-frame adapted to receive removable side boards, and having its back board arranged to swing down, the cross-bars E and the bolts e, whereby the weakening of the frame with mortises and tenons is avoided and the labor of taking the frame apart is greatly simplified, substantially as set forth.

7. In a wheelbarrow with a swinging back board, the braces H, pivoted to the cross-bar G and fastened with their swinging ends by the wheel-bolt D' to the wheel-bars F', substantially as and for the purpose set forth.

8. In a wheelbarrow with a swinging back-board frame, the combination of the braces H and the inclined edge g', of the cross-bar G, to which they are pivoted, and upon which they are folded together, side by side, when the said back-board frame is folded up, substantially as hereinbefore set forth.

9. In a wheelbarrow with swinging legs, the braces M and the inclined edge l, of the cross-bar L, to which they are pivoted and upon which they are folded up, side by side, so that they may enter between the frame F, with the said cross-bar when the legs K are folded up in the said frame, substantially as hereinbefore set forth.

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Witnesses:

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