

(No Model.)

R. A. KNEELAND.  
WHEELBARROW.

No. 605,316.

Patented June 7, 1898.

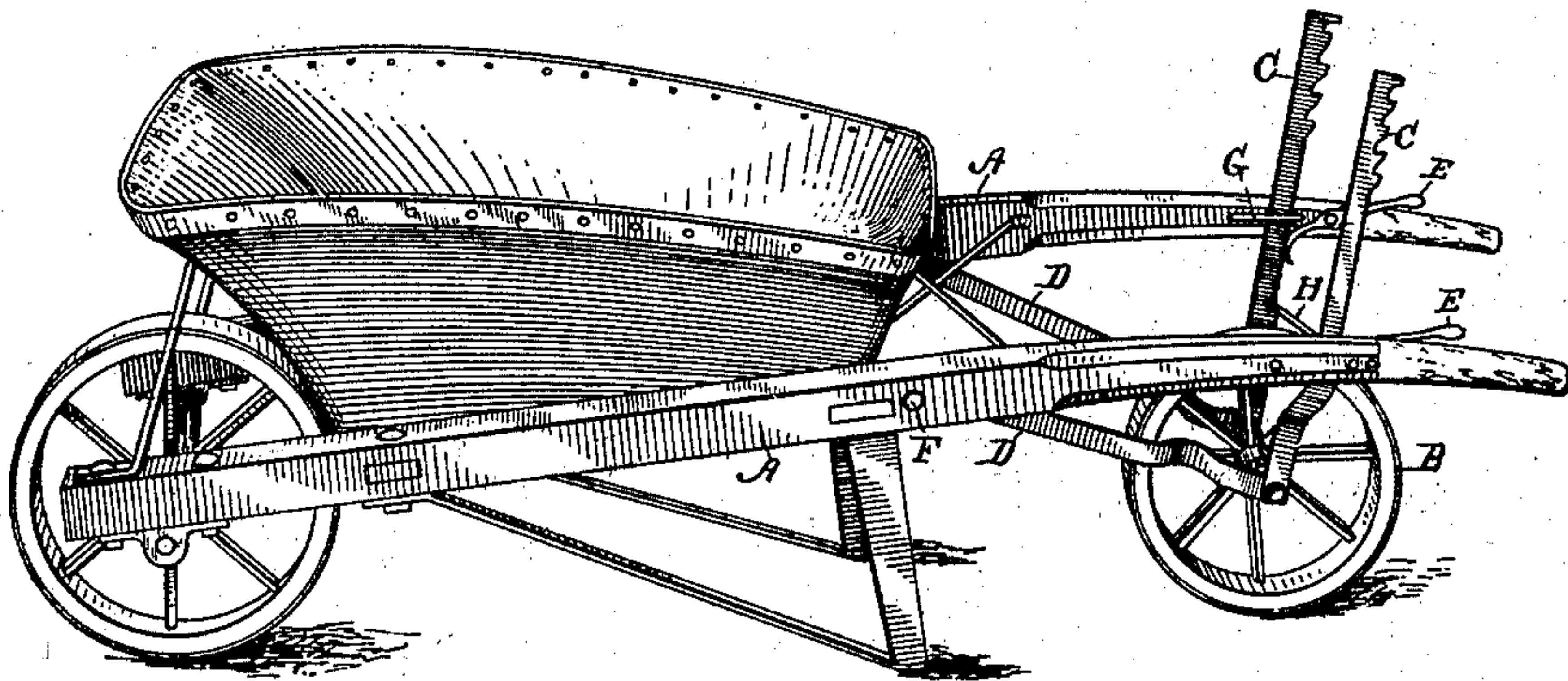


Fig. 1

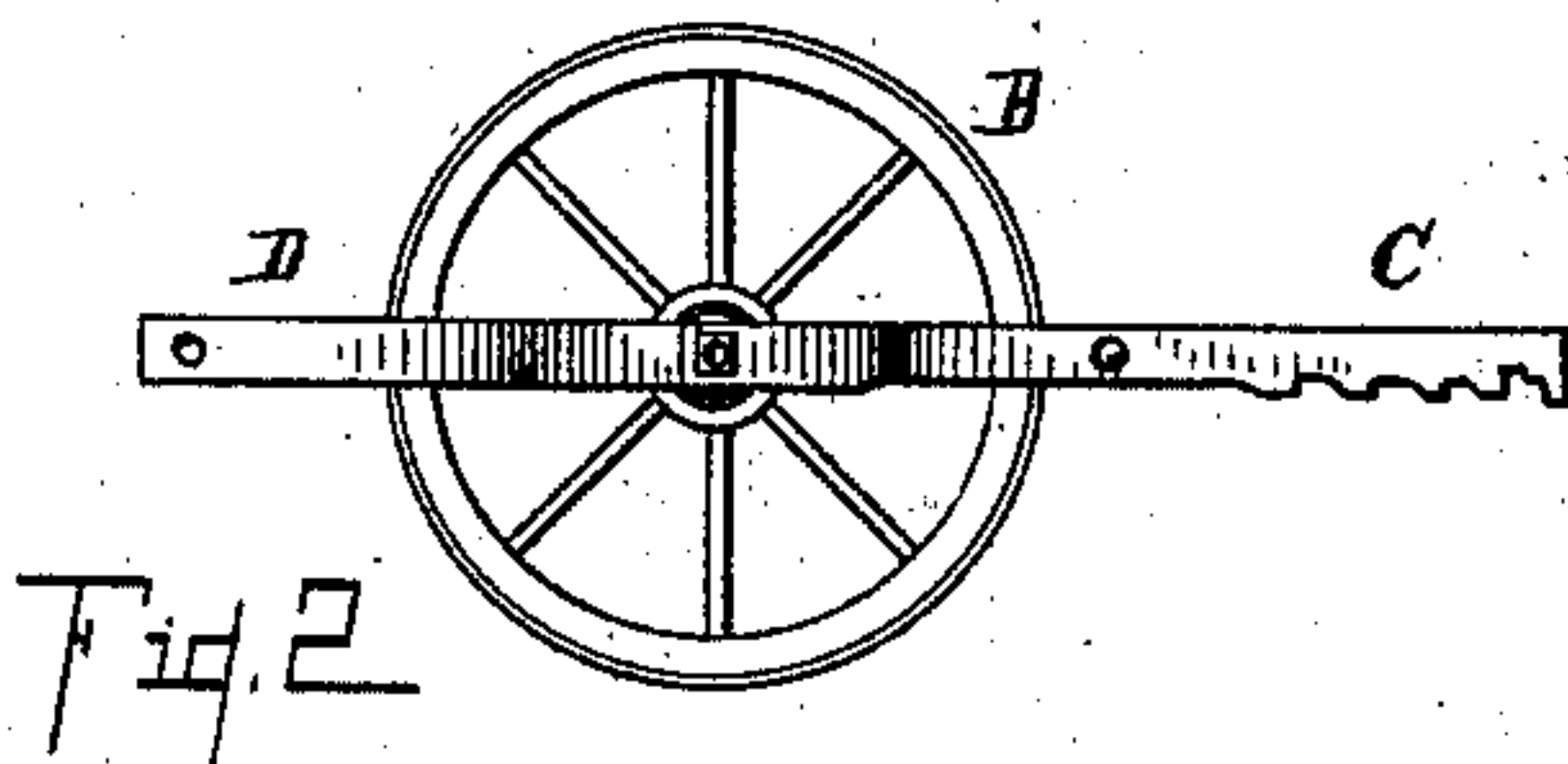


Fig. 2

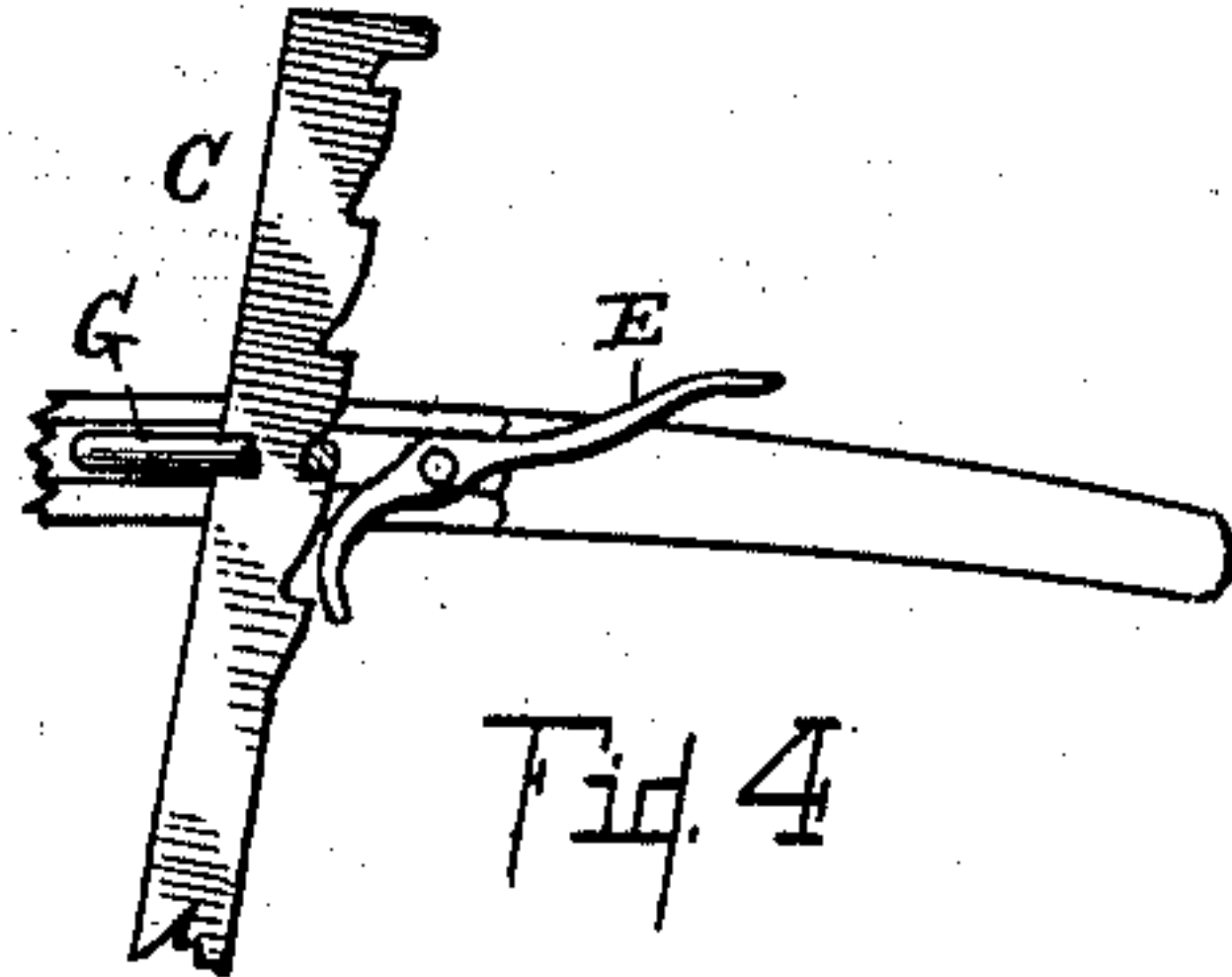


Fig. 4

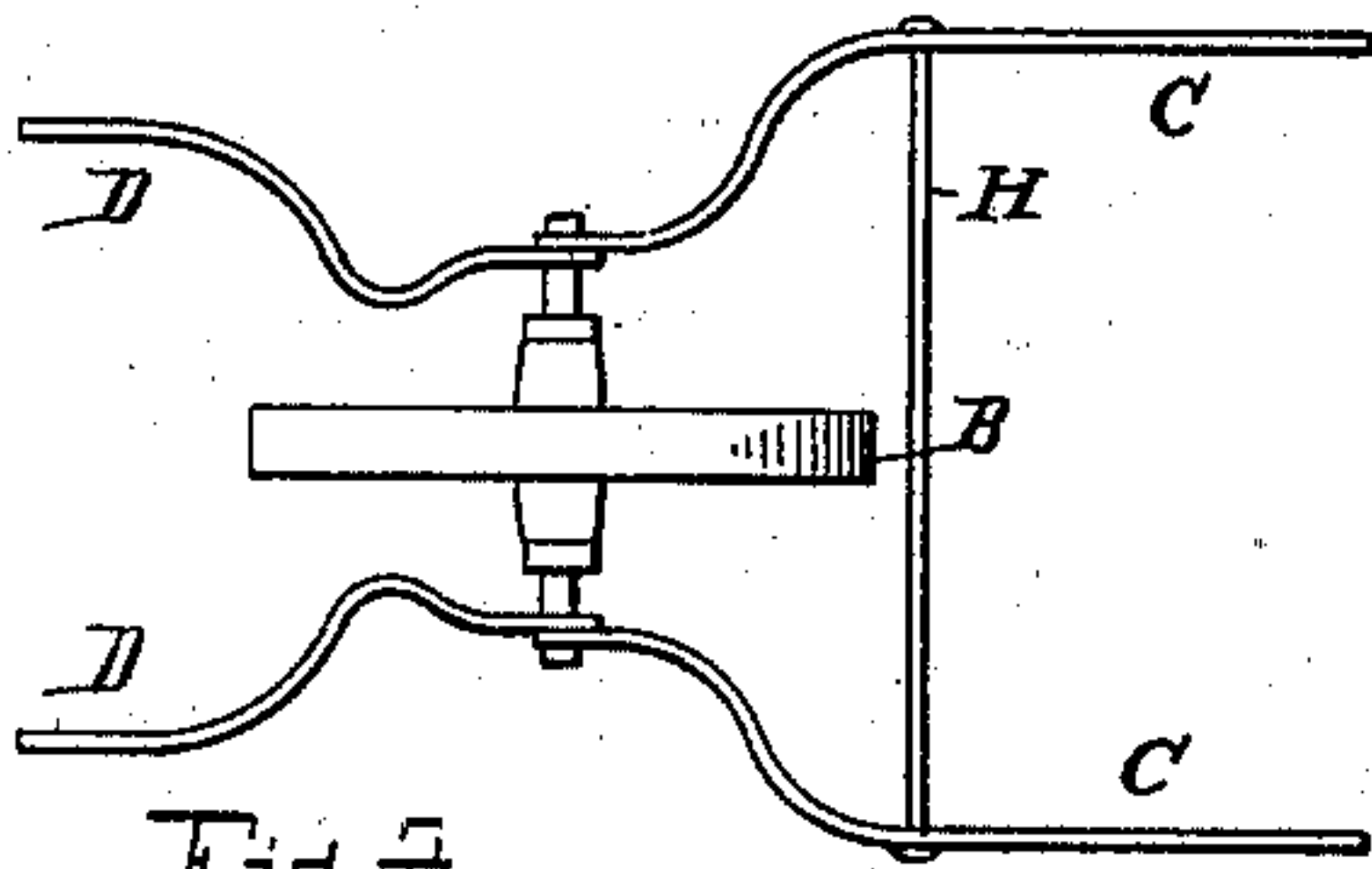


Fig. 3

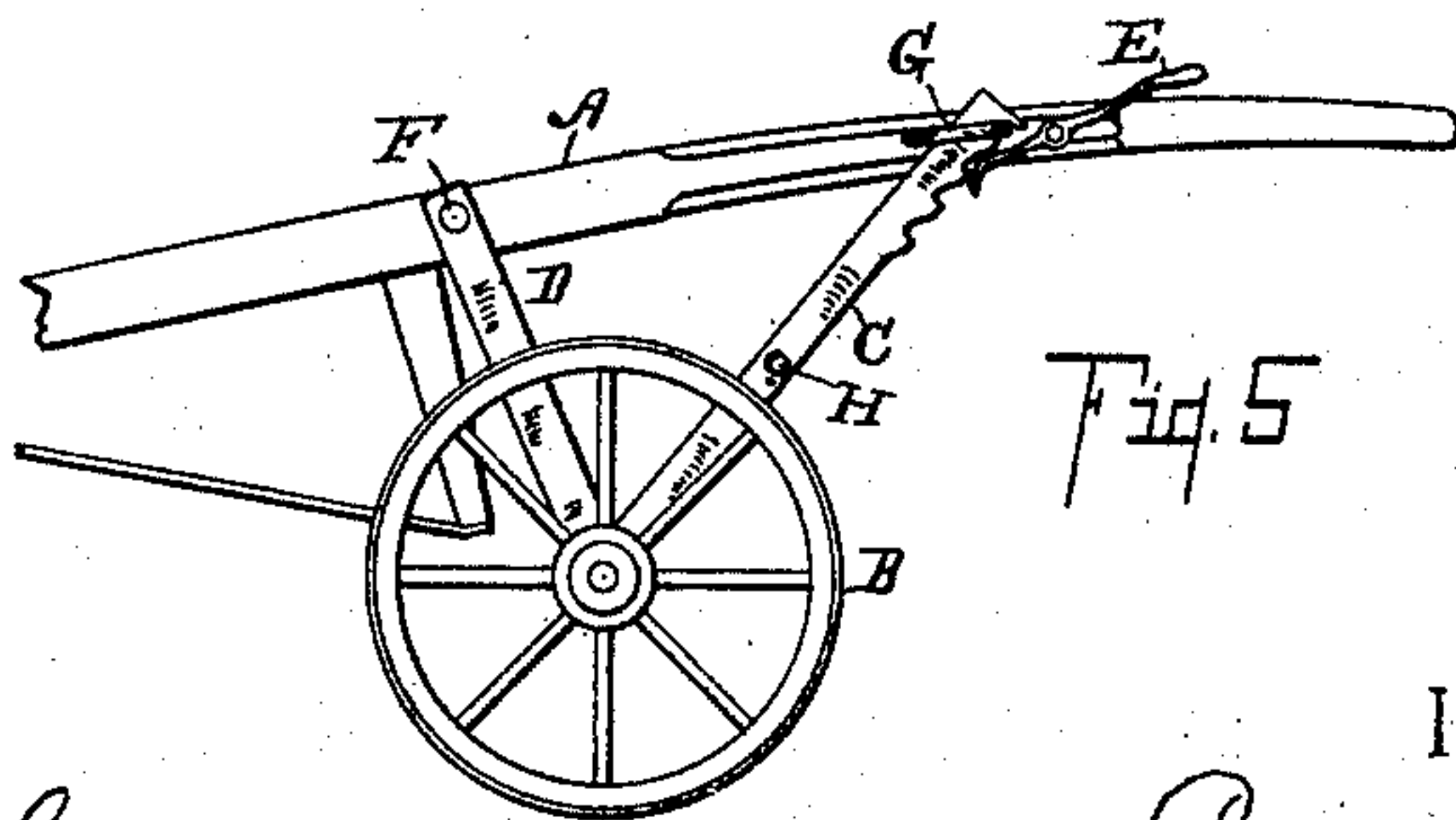


Fig. 5

Witnesses:

*Walter S. Wood*  
*Ernest C. Fulford*

Inventor,

*Russell A. Kneeland*  
By *Fred L. Chappell*  
Att'y.



# UNITED STATES PATENT OFFICE.

REMUS A. KNEELAND, OF BENTON HARBOR, MICHIGAN.

## WHEELBARROW.

SPECIFICATION forming part of Letters Patent No. 605,316, dated June 7, 1898.

Application filed April 3, 1896. Serial No. 586,094. (No model.)

*To all whom it may concern:*

Be it known that I, REMUS A. KNEELAND, a citizen of the United States, residing at the city of Benton Harbor, in the county of Berrien and State of Michigan, have invented a certain new and useful Improvement in Wheelbarrows, of which the following is a specification.

My invention relates to improvements in wheelbarrows, although the improvement is adapted to other styles of similar vehicles. It is capable of use as an attachment to wheelbarrows now in use.

The immediate objects of my invention are, first, to provide a wheelbarrow in which the handles shall be automatically supported and relieve the user from heavy loads upon the same; second, to provide a wheelbarrow with an adjustable auxiliary rear wheel so arranged that the operative can manipulate the barrow in such a manner that he can pass it easily over obstructions in the path, and other objects appearing definitely in the detailed description. I accomplish these objects of my invention by the devices and means described in the following specification and illustrated in the accompanying drawings, in which—

Figure 1 is a perspective view of a wheelbarrow embodying all of the features of my invention. Fig. 2 is a detail side elevation of the frame and bars carrying the rear wheel. Fig. 3 is a top plan view of the parts shown in Fig. 2. Fig. 4 is an enlarged detail view of the adjusting mechanism. Fig. 5 is a detail sectional view of the rear portion of the wheelbarrow, showing the position of the parts when the handles are elevated and also the operation of the adjusting means.

Similar letters of reference refer to similar parts throughout the several views.

The main body of the wheelbarrow is as ordinarily constructed and is indicated by the reference - letter A'. A A are the handles, which extend to the rear in the usual manner. Between these handles is a frame made up of side pieces C C, which carry the axle of the auxiliary wheel B below. Arms D D are pivoted to each end of the axle and extend upwardly and forwardly and are pivoted to the handles at F. The sides of the frame C extend up through suitable loop-guides G on

the handles A. Ratchet-teeth are formed at the rear of the same for engaging the loop G to automatically adjust the parts. Little levers E E are provided for throwing the side pieces forward to disengage the teeth thereon from the guides G. These are so situated that they can be readily operated by the user of the wheelbarrow without releasing his hold upon the handles. A cross-piece H is provided between the side pieces C C, just above the wheel B, against which the operator can place his foot or knee to operate the ratchet to permit of the lowering of the handles.

Having thus described the parts of my improved wheelbarrow and their relations, an inspection of the same will readily indicate the uses and results accomplished by the various parts. The user of this wheelbarrow grasps the handles in the ordinary way and straightens up with them until the handles come to the right point, corresponding to the height of the person. The ratchet-teeth on the side pieces C engage the guide G at that height and relieve the weight from the hands and arms of the user. The wheel B drops down to the position corresponding to that indicated in Fig. 5. All that the user is then obliged to do is to retain sufficient hold upon the handle to keep the wheelbarrow from tipping over and push it forward, which requires very little effort compared with the old style wheelbarrow, and the weight is distributed on both of the wheels. In passing an obstruction the user bears down heavily upon the handles, which lightens the load upon the front wheel, so that it can pass obstructions of considerable size without difficulty. When it is desired to set the barrow down, the little levers E are pressed, which throws the side pieces C out of engagement, and the barrow is set down in the usual way, or, as I indicated above, the user can press his foot or knee against the rod H and disengage the parts in like manner.

Having thus described my improved wheelbarrow and its functions in detail, I will state that the details of construction can be considerably varied without departing from my invention, and the adjustable auxiliary supporting and carrying wheel can be made use of in various styles of push-carts and vehicles of like character.



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

1. The combination with a wheelbarrow;  
5 of an auxiliary wheel B; a frame composed of side pieces C, secured to the axle of said wheel; and having notches at their upper ends; cross-bar H, between the side pieces C, above the said wheel B; arms D, D, pivoted to the axle  
10 at each side of the wheel extending upwardly and forwardly and pivotally connected to the handles of the wheelbarrow; loop-guides G, G, on the handles of the wheelbarrow for receiving the side pieces C, C, and engaging  
15 the ratchet-notches thereon; levers E, E, pivoted to the handles of the wheelbarrow positioned to act upon the side pieces C, C, and throw them out of engagement with the guides G, all coacting together substantially as de-  
20 scribed for the purpose specified.
2. The combination with a wheelbarrow; of an auxiliary wheel B; a frame composed of side pieces C, secured to the axle of said wheel; and having notches in their upper  
25 ends; arms D, D, pivoted to the axle at each side of the wheel extending upwardly and forwardly and pivotally connected to the handles of the wheelbarrow; loop-guides G, G, on the handles of the wheelbarrow for receiv-  
30 ing the side pieces C, C, and engaging the ratchet-notches therein; levers E, E, pivoted to the handles of the wheelbarrow positioned to act upon the side pieces C, C, and throw them out of engagement with the guides G, all  
35 coacting together substantially as described for the purpose specified.
3. The combination in a wheelbarrow of an auxiliary rear wheel; bars D, D, pivoted to  
40 said wheelbarrow and extending downwardly and rearwardly and connecting to the said

auxiliary wheel and arms C, C, extending upwardly said wheel; and suitable means of adjustably connecting the same to the handle of the wheelbarrow to adjust the same to any height desired as specified.

4. The combination of a wheelbarrow of an auxiliary wheel downwardly and rearwardly extending bars pivotally connecting said wheel and wheelbarrow together; loop-guides on the handle of said wheelbarrow; upwardly-  
50 extending bars from said wheel having ratchet-notches to engage the loop-notches on the handles; and levers E, pivoted to the handles to throw said ratchet-bars out of engagement for the purpose specified.

5. In an attachment for a wheelbarrow, a wheel B, with side pieces D, D, and C, C, pivotally secured to the axle thereof; and suitable means of securing the opposite ends of said sides to the barrow as specified.

6. The combination of a wheelbarrow; an auxiliary wheel to the rear of said wheelbarrow; a frame for carrying said rear wheel freely movable vertically in relation to the handles of said wheelbarrow, a suitable ratchet  
65 connection for securing said rear wheel automatically to the handles of the wheelbarrow to control the height of the handles as they are raised, and means of releasing the ratchet  
70 connection to permit the handles to be lowered with relation to the rear wheel for the purpose specified.

In witness whereof I have hereunto set my hand and affixed my seal in the presence of two witnesses.

REMUS A. KNEELAND. [L. S.]

Witnesses:

J. N. REED,  
ALBERT SYKES.