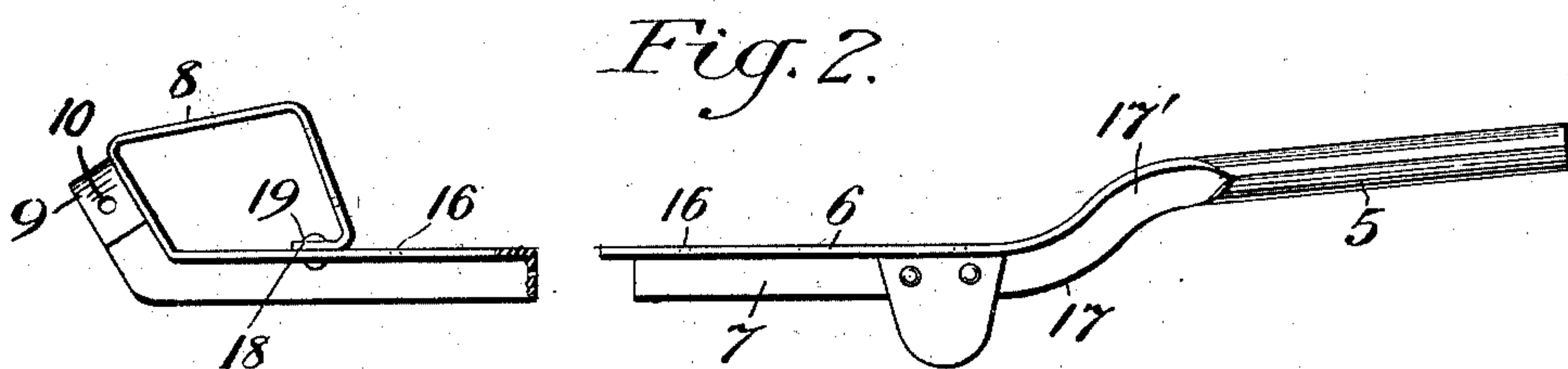
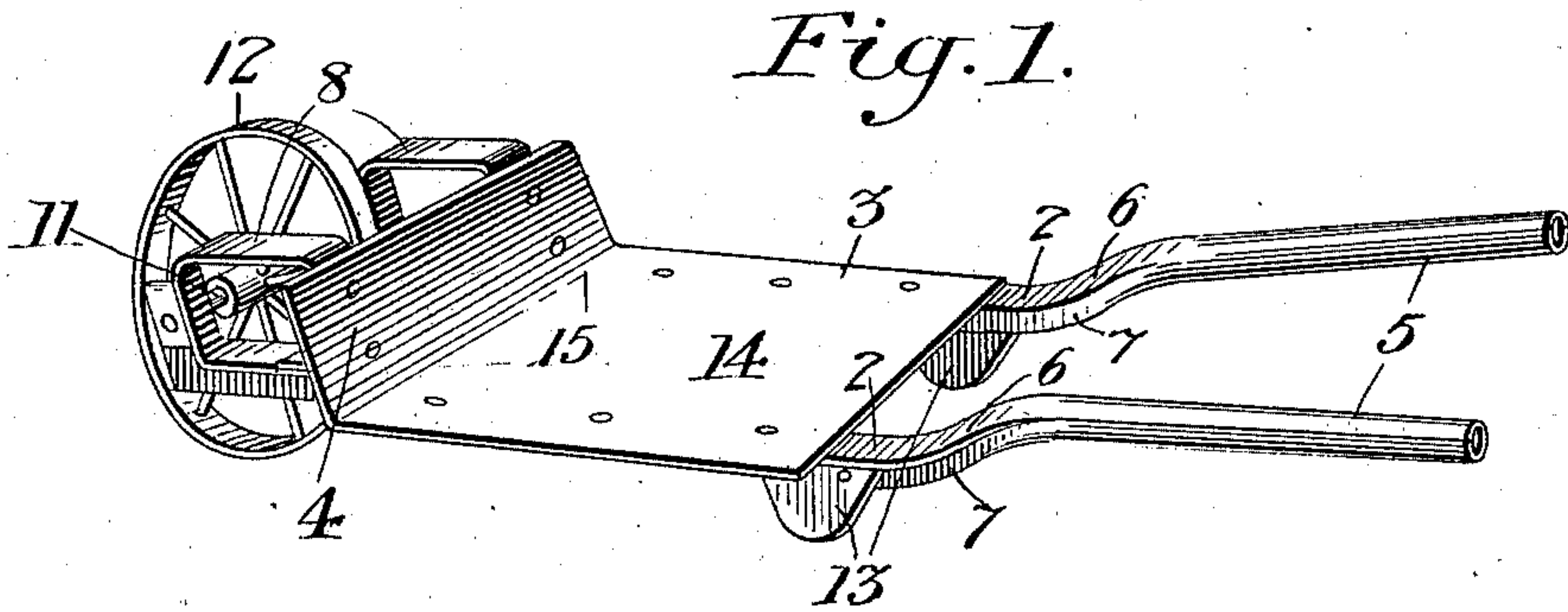


No. 752,725.

PATENTED FEB. 23, 1904.

G. G. TIEMAN.  
WHEELBARROW CONSTRUCTION.  
APPLICATION FILED OCT. 12, 1903.

NO MODEL.



Witnesses:

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W. M. Kingsley.

Inventor:

George G. Tieman

By

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# UNITED STATES PATENT OFFICE.

GEORGE GOTTFRIED TIEMAN, OF CHICAGO, ILLINOIS.

## WHEELBARROW CONSTRUCTION.

SPECIFICATION forming part of Letters Patent No. 752,725, dated February 23, 1904.

Application filed October 12, 1903. Serial No. 176,812. (No model.)

*To all whom it may concern:*

Be it known that I, GEORGE GOTTFRIED TIEMAN, a citizen of the United States, residing at Chicago, in the county of Cook and State of Illinois, have invented certain new and useful Improvements in Wheelbarrow Construction, of which the following is a specification.

This invention relates to wheelbarrows; and its object is to provide a strong, rigid, and comparatively permanent construction with a minimum of weight and the fewest possible number of parts or joints.

Another object of the invention is to construct a complete wheelbarrow-frame out of the staple product known as "angle-irons," said frame comprising shafts, handles, wheel-bearings or journal-boxes, bed-supports, and front board-braces, all from only two angle-irons; and the invention consists in the novel manner in which said angle-irons are wrought into a wheelbarrow-frame, as aforesaid, hereinafter fully described in detail, illustrated in the drawings, and incorporated in the claims.

In the drawings, Figure 1 is a perspective view of a wheelbarrow embodying my invention. Fig. 2 is a view of one of the members of the frame, part being broken away.

Referring to the drawings, 2 represents the side bars or shafts supporting the bed 3. Said shafts are arranged non-parallel in the usual manner and have their converging ends formed into journal boxes or bearings and front braces for the board 4, while the diverging ends constitute handles 5. Said shafts consist of ordinary angle-irons having the horizontal or platform-supporting wings 6 and the wings 7 at right angles to the wings 6. Said wings are curved at the handle or diverging ends into cylindrical form, as shown. The opposite ends of the angle-irons are split on the line of juncture between the wings 6 and 7, the former being bent thrice at right angles to form the front braces 8 and the latter partly shortened and its end bent upon itself, forming the journal-bearing 9. A space is preferably left between the opposite parts of the loop thus formed and concentric holes 10 bored through said loop. Only one of these holes is shown in Fig. 2, the location of the other hole being obvious

from the foregoing description. The loop or bearing portion 9 may have only its inner side drilled for the axle or spindle 11, leaving the outer side imperforate to serve as an end bearing for the axle 11 of the wheel 12.

13 represents a pair of legs, which may be formed out of sheet metal and bolted or riveted to the wings 7. If desired, the shafts themselves may also be made to serve as legs by forming them into loops corresponding to the outlines of the legs shown herein.

14 represents the bed of the barrow, secured to the wings 6 by means of screws, bolts, or rivets 15 through holes 16. (Shown by dotted lines in Fig. 2.) The shafts adjacent to the handle portions are bent twice in substantially opposite directions, as shown at 17 and 17'. The braces 8 form an abutment for the end board 4, and said braces are secured at their ends by means of apertured inturned bends, one of which is clearly shown in Fig. 2, for which registering apertures are made in the upper wings 6, and each of said braces is fastened by means of a bolt 19 or other suitable means.

When the front board is bolted to the abutment formed by the braces 8 and the bed 3 likewise bolted or fastened to the shafts, a very steady wheelbarrow is the result without joints liable to work loose. This is notably true of the spindle-bearings, which usually consist of separate parts, especially in wheelbarrows made from metal and including the braces 8, shafts, and handles all in one or two pieces of metal.

In the construction shown herein the whole frame consists of only two angle-irons, and that part of the wheelbarrow material which comprises the greatest area of structural material—namely, the bed—may be made out of such light material as wood without sacrifice in the main idea of a rigid structure with the fewest possible joints. Hence, considering its great strength, an exceedingly light wheelbarrow is the result.

It is obvious that modifications may be made in my construction without departing from the spirit of the invention, which I do not wish to confine to the specific form herein shown and described.

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

1. A wheelbarrow-frame consisting of a pair  
5 of two-web angle-irons supporting the wheel and constituting the bed-frame, each of said angle-irons being formed at one end respectively into a substantially rectangular abutment which includes braces therefor and also  
10 including wheel-bearings and the other end being formed into a substantially tubular handle.

2. A wheelbarrow-frame consisting of two  
15 angle-irons curved at one end transversely into tubular handles and having their opposite ends split, one of said split portions being bent into a front-board abutment and fastened upon the body of the angle-iron, and the other of each  
20 of said split portions being bent upon itself and apertured for the wheel-spindle.

3. A wheelbarrow-frame consisting of a pair of angle-irons, part of one web of each of said irons being formed into an integral bearing

for the wheel and part of the other web being formed into a three-sided abutment for the  
25 front board with the extreme end thereof fastened upon another portion of said web; the opposite end of each of said angle-irons having both of its webs curved toward each other into the form of a handle, and suitable legs for  
30 said frame.

4. A wheelbarrow consisting of two integral angle-irons each thereof having one end of its wings curved into tubular form and having its opposite end split at the juncture of the  
35 wings into two straps with one of the latter bent four times at substantially right angles and the other bent or folded upon itself and apertured for the wheel-spindle.

In testimony whereof I have hereunto set my  
40 hand in the presence of two witnesses.

GEORGE GOTTFRIED TIEMAN.

Witnesses:

WM. M. KINGSLEY,  
PAUL GERHARDT.