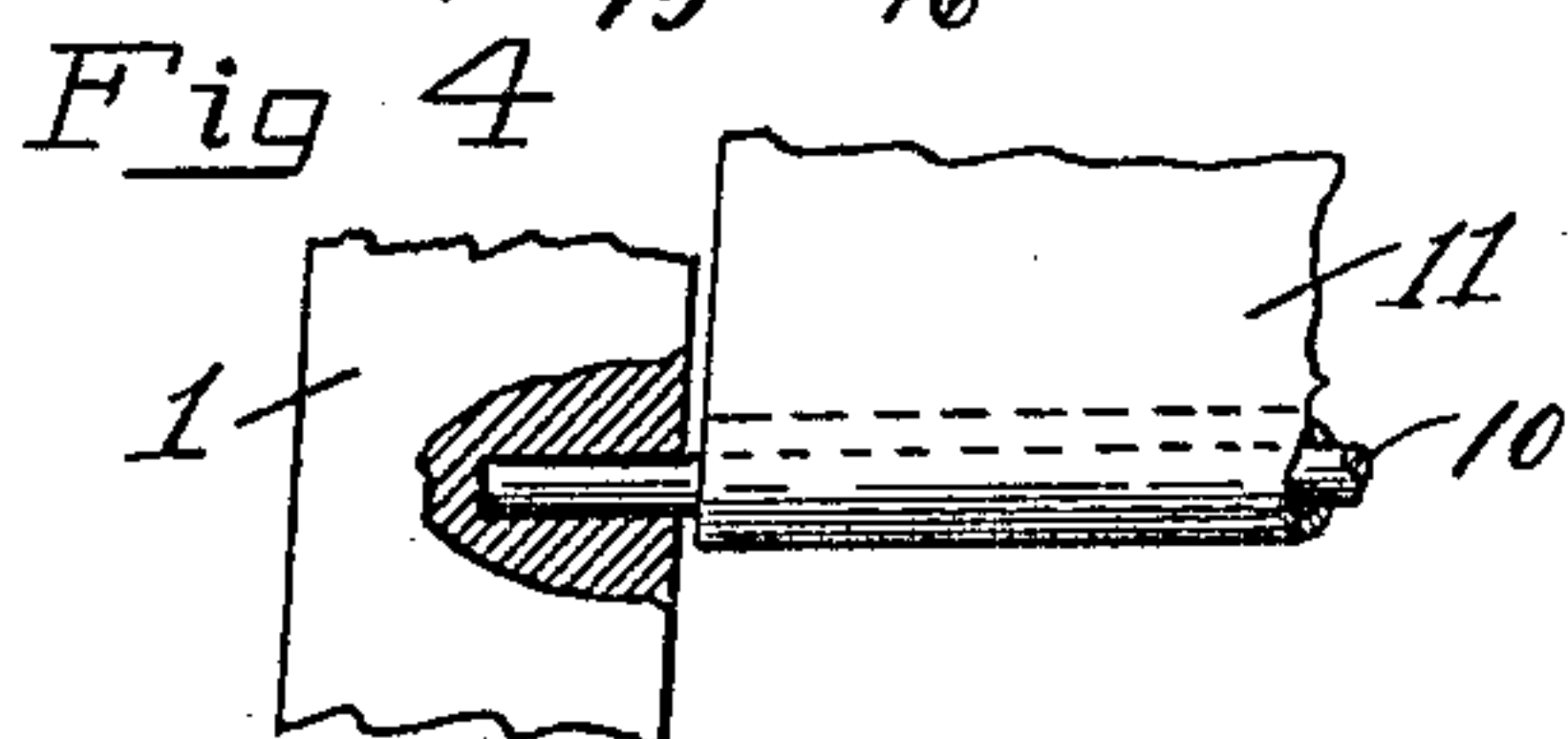
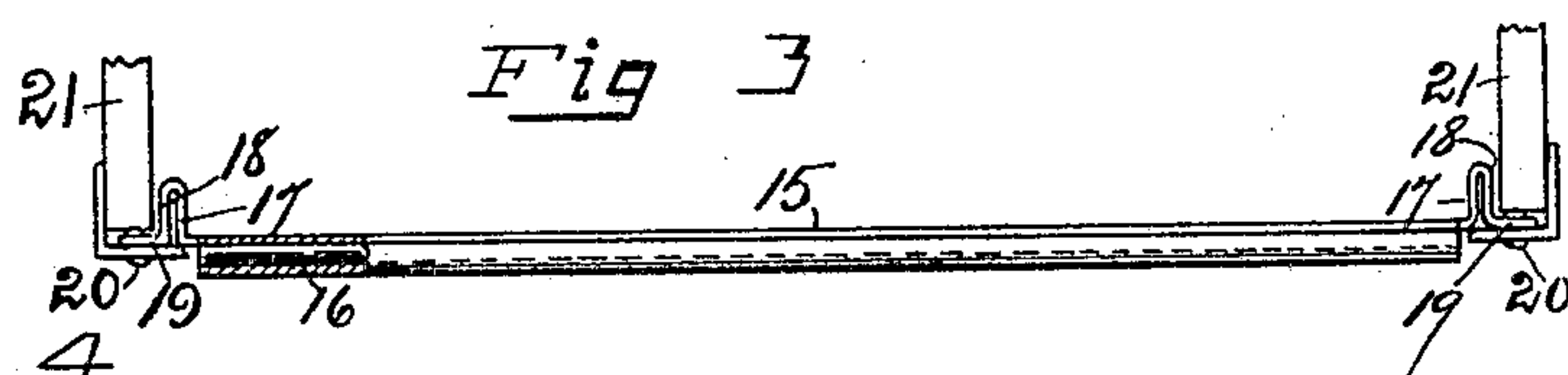
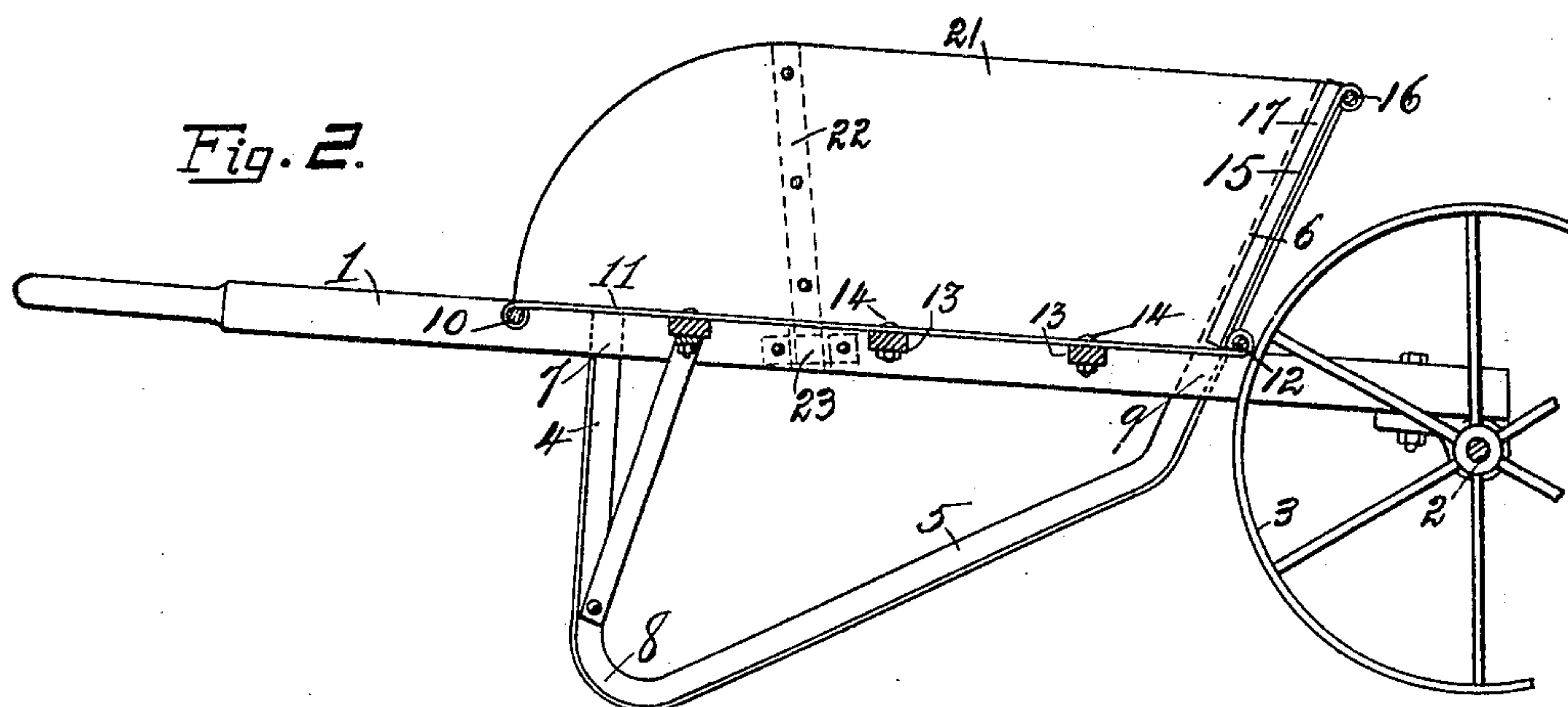
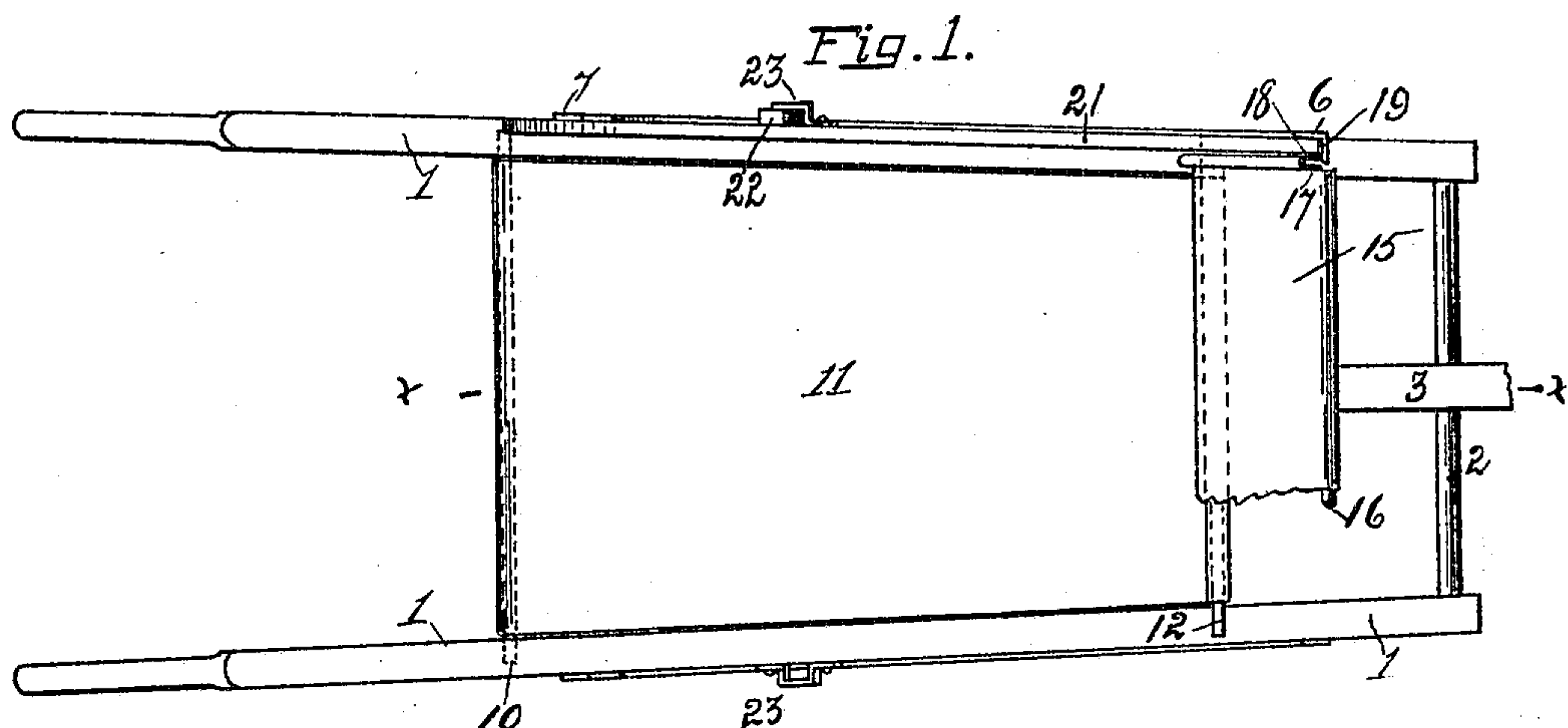


No. 819,856.

PATENTED MAY 8, 1906.

F. J. COOPER.
WHEELBARROW.

APPLICATION FILED OCT. 18, 1905.



WITNESSES:

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UNITED STATES PATENT OFFICE.

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WHEELBARROW.

No. 819,856.

Specification of Letters Patent.

Patented May 8, 1906.

Application filed October 18, 1905. Serial No. 283,201.

To all whom it may concern:

Be it known that I, FRANK J. COOPER, a citizen of the United States, residing at Toledo, in the county of Lucas and State of Ohio, have invented certain new and useful Improvements in Wheelbarrows; and I do 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 it appertains to make and use the same, reference being had to the accompanying drawings, and to the figures of reference marked thereon, which form a part of this specification.

My invention relates to that class of wheelbarrows known as "garden" barrows. These barrows are usually constructed entirely of wood and for that reason are heavy and cumbersome.

My invention relates to a construction in which the barrow is composed partly of sheet metal and angle-iron as well as wood, arranged in such fashion that the barrow shall be strong, durable, light, simple of construction, and cheap. I attain these results by means of the devices and arrangement of parts hereinafter described and shown, and illustrated in the accompanying drawings, in which—

Figure 1 is a top plan view of my barrow with a portion of the back broken away; Fig. 2, a longitudinal sectional elevation taken on line *x x*, Fig. 1; Fig. 3, an enlarged top plan view of the back of the barrow, showing in detail the manner of crimping the sheet metal and the arrangement of the angle-iron, leg, and brace, hereinafter referred to in relation to the removable side-boards; and Fig. 4, a top plan view of a portion of one of the handles, part of which is broken away to disclose the arrangement of one of the cross-rods and the manner for securing the front of the metal bottom to such cross-rod.

Like numerals of reference indicate like parts throughout the drawings.

In the drawings, 1 1 are the handles or side bars of my barrow, supported at one end upon shaft 2 of wheel 3 in the usual manner. The legs 4, side braces 5, and back braces 6 are composed of a single piece of angle-iron L-shaped in cross-section. One end of this piece is secured to the side bar or handle on its outer side, as at 7, and projects downwardly far enough to form a leg for the barrow. Here the angle-iron is bent, as at 8,

and is inclined backwardly and upwardly and secured, as at 9, to the handle or side bar, the part between the bend 8 and the handle or side bar forming a leg-brace. From the point 9 the angle-iron is extended upwardly and backwardly over the wheel to form the back brace 6. At the points 7 and 9 it will be understood that one web of the angle-iron is cut away, leaving a flat surface upon the other web to permit the convenient attachment of the angle-iron to the handle or side bar, and that the web from which a portion is cut away, as just described, projects inwardly.

10 is a rod the ends of which are let into the side bars near the front end of the barrow—that is, the end at which the barrow is operated.

11 is a sheet of metal which forms the bottom of the barrow, one end of the sheet being curled around the cross-rod 10, the opposite end being coiled around a cross-rod 12, the ends of which rest upon the top of the side bars 1 back near the wheel. The remaining two edges of this sheet are secured to cross-pieces 13 by means of bolts or rivets 14, passing through the sheet metal and said pieces.

The end 15 of the body of the barrow opposite the operator, which I shall term the "back," consists of a sheet of metal the upper margin of which is curled around cross-rod 16, the lower margin resting against the inner side of the rod 12 and its wrapping. At its side margins the piece 15 is bent inwardly at a right angle, as at 17, and is then folded back upon itself, as at 18, and is then bent outwardly, as at 19, the outwardly-folded portion being riveted, as at 20, to the inwardly-turned flange of the back brace 6. Between the crimps formed by the folds 17 and 18 in the sheet-metal backs and the outer flanges of the angle-iron back braces 6 are now formed recesses or sockets for the reception of one end of the side-boards 21, which are formed in the usual manner and which have cleats 22, the lower projecting ends of which enter sockets 23, secured to the outer sides of the handles or side bars.

It will be observed that the bottom and back of my barrow are tight, that they are composed of two sheets of metal secured to three cross-rods, and that the legs, leg-braces, and back braces are formed of single pieces

of angle-iron, which also serve in connection with the crimped back to form sockets or recesses for the reception and retention of the ends of the removable side-boards.

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

10 1. In a wheelbarrow, a pair of side bars, a pair of rods extending between said side bars, and a sheet-metal bottom having its opposite ends wrapped around said two cross-rods, substantially as and for the purpose specified.

15 2. In a wheelbarrow, a pair of side bars, a pair of back braces springing from the side bars, a rod connecting the side bars near the bottom of the back braces, a rod extending between the top of said back braces, and a sheet of metal forming the back of the barrow, said sheet being coiled at top around 20 the upper of said rods, and resting at bottom against the lower of said rods, substantially as and for the purpose specified.

25 3. In a wheelbarrow, a pair of back braces disposed at opposite sides of the barrow and composed of angle-iron, a sheet-metal back for the barrow, the side margins of which are secured to the inwardly-projecting members of the back braces, said sheet of metal having, adjacent to its margin, inwardly-bent

portions which coöperate with the members 30 of the back braces to form sockets for the reception of the ends of the side-boards.

4. In a wheelbarrow, a pair of side bars, a pair of rods extending between said side bars, a sheet-metal bottom coiled at its front 35 around one of said rods and at its rear around the other of said rods, a pair of back braces, a cross-rod extending between the tops of said back braces, a sheet-metal back coiled at its upper margin around said latter cross-rod and resting at its lower margin against 40 said rear coil of the sheet-metal bottom.

5. In a wheelbarrow, a pair of side bars, a pair of angle-irons bent as described to form a pair of legs, leg-braces and back braces, 45 and a sheet-metal back having its side margins secured to the transverse members of said angle-irons, said sheet-metal back having near its side margins crimps which coöperate with the other members of the angle- 50 irons to form sockets for the reception of side-boards.

In testimony whereof I affix my signature in presence of two witnesses.

FRANK J. COOPER.

Witnesses:

CLEM V. WAGNER.

ADA LAW.