

(Model.)

2 Sheets—Sheet 1.

J. BEAN.
WHEELBARROW.

No. 262,171.

Patented Aug. 1, 1882.

Fig. 1.

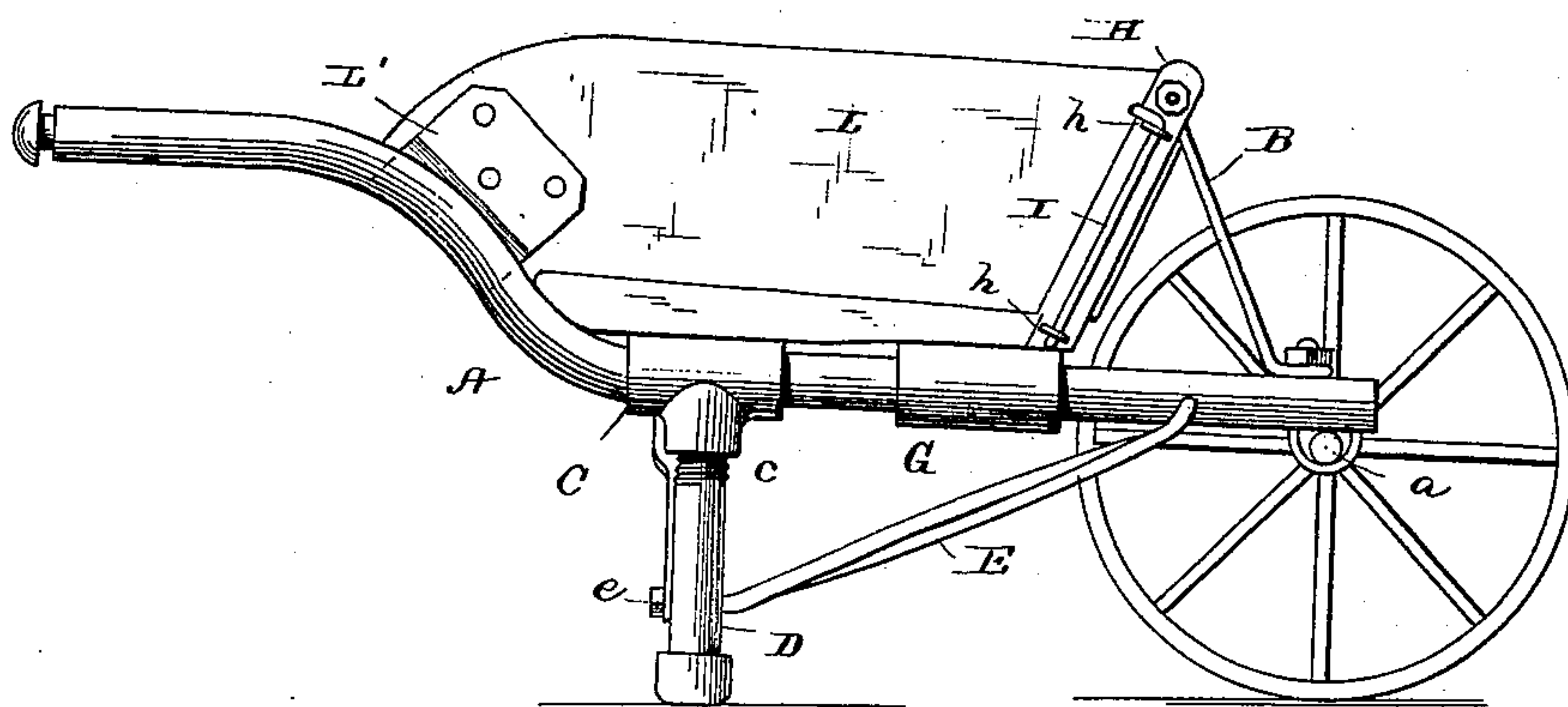
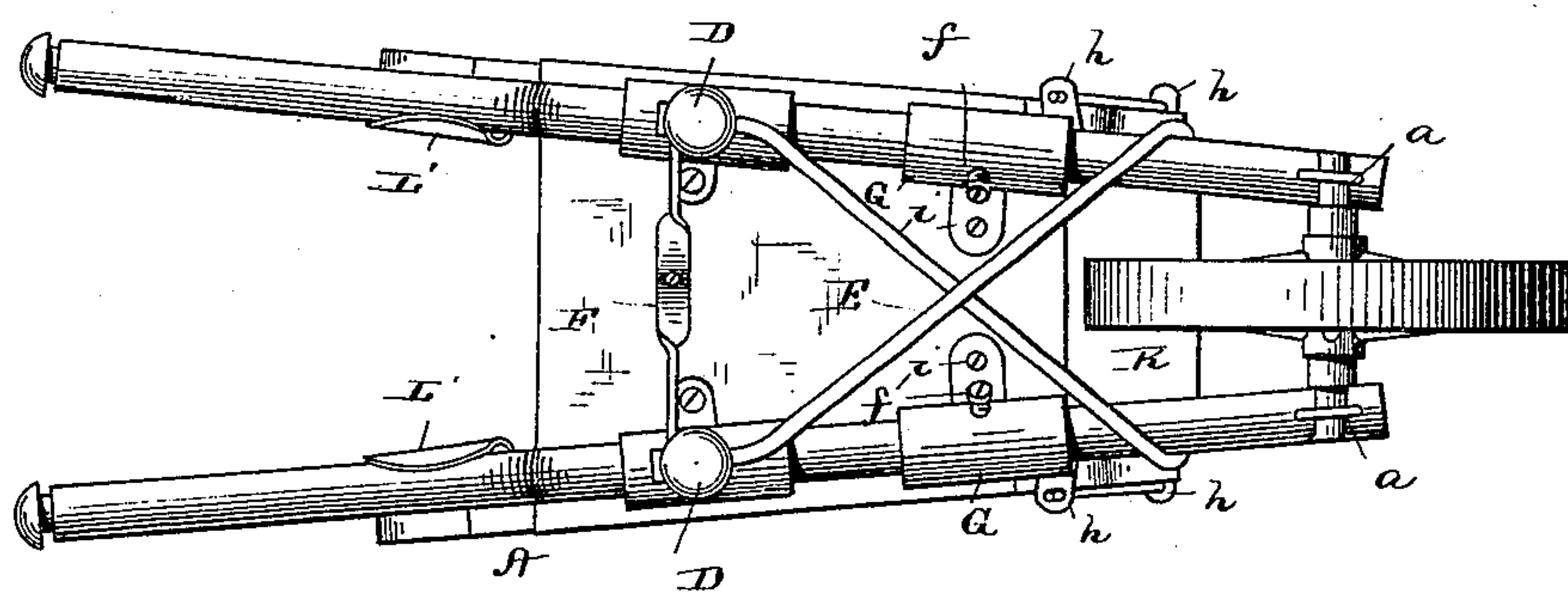


Fig. 2.



Witnesses.

Edwin L. Jewell.

H. Aubrey Toulmin.

Inventor.

J. Bean.
By C. M. Alexander
Attorney.

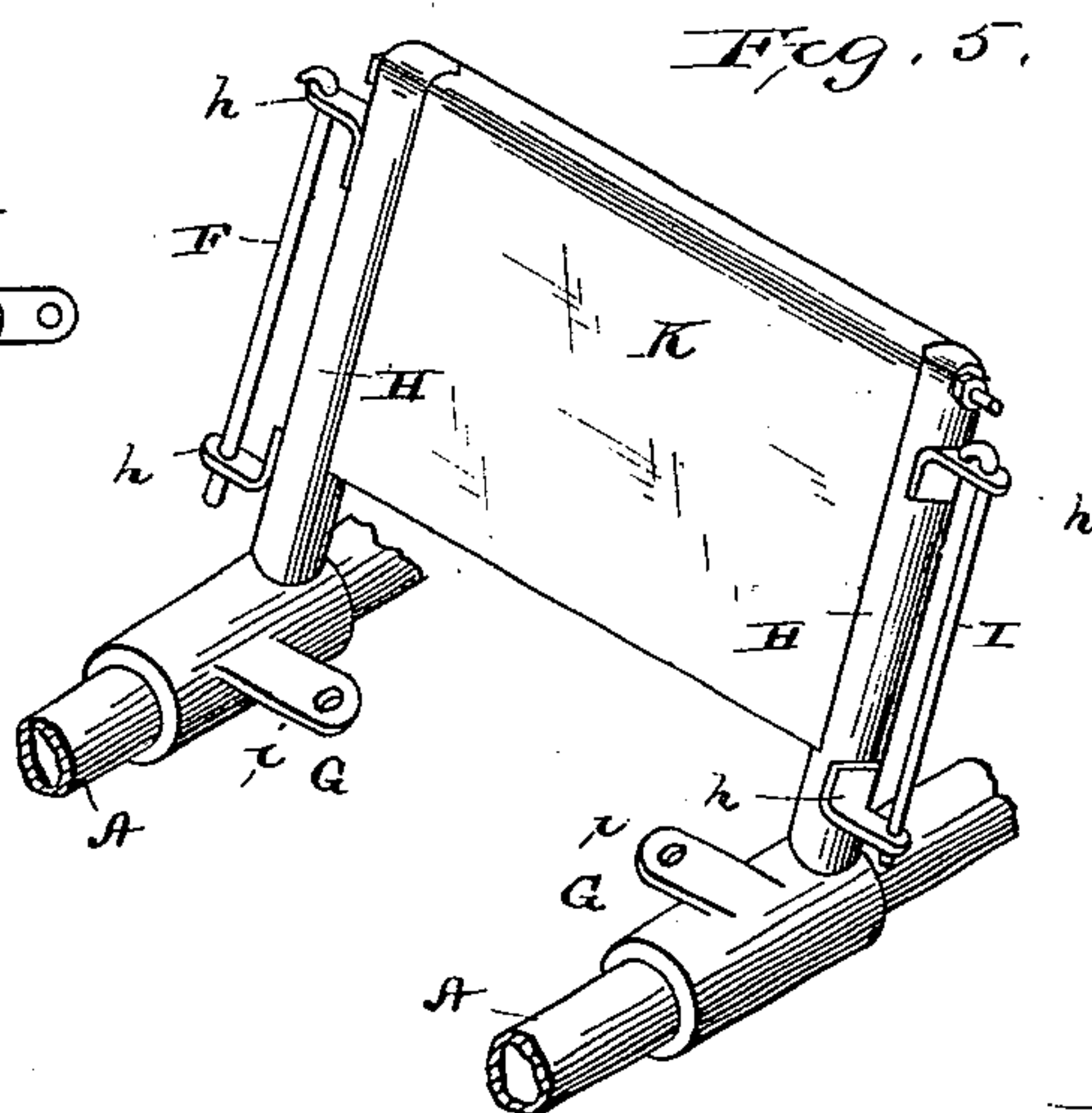
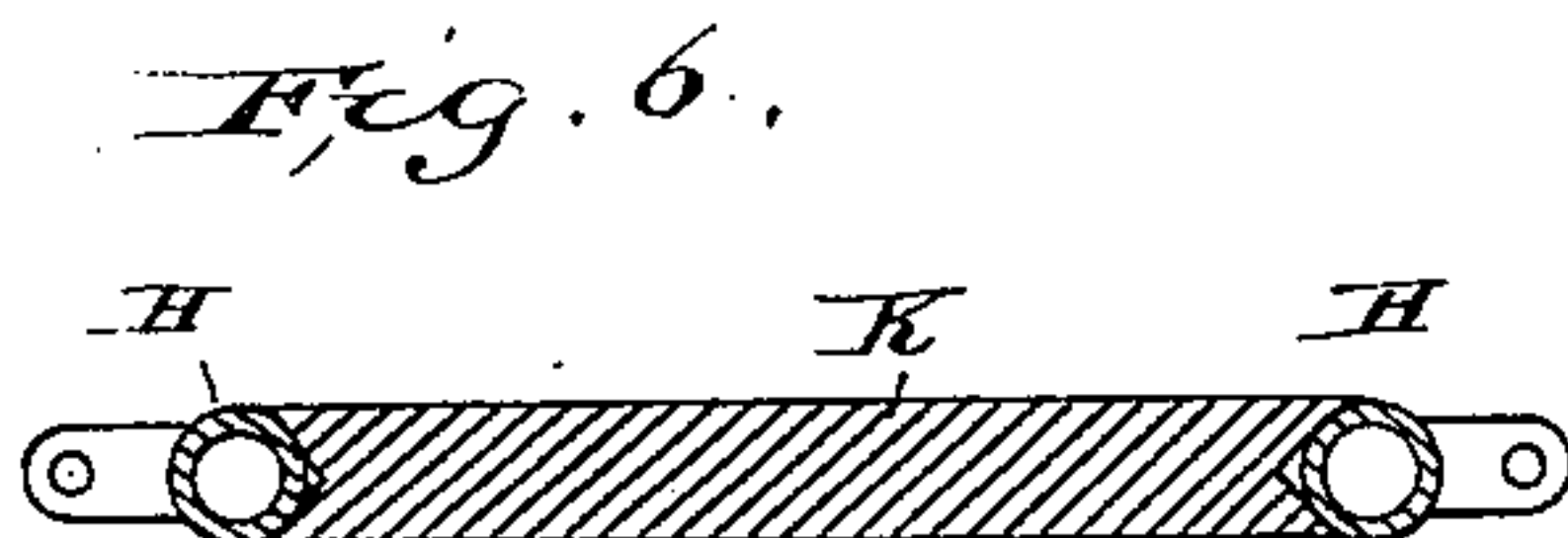
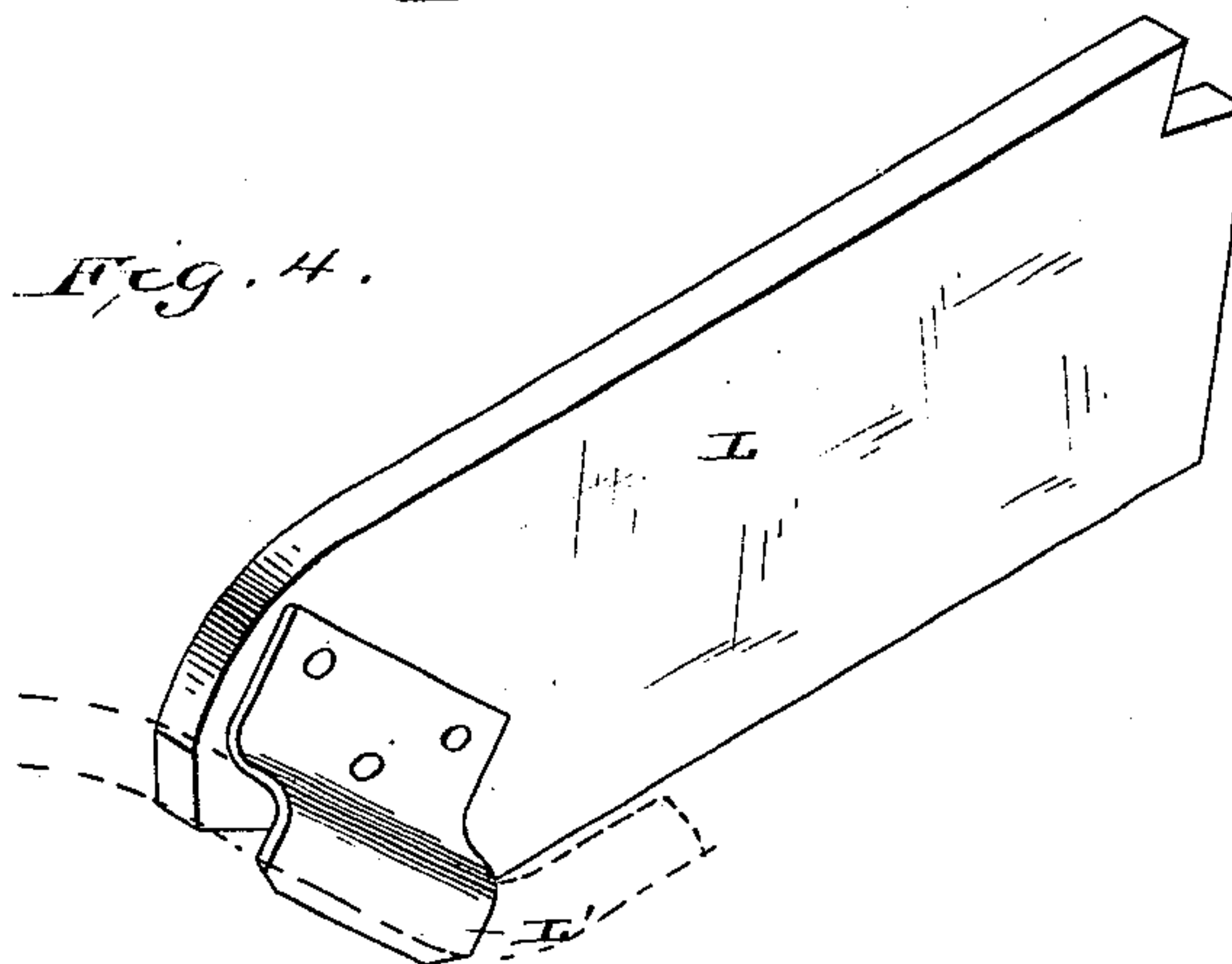
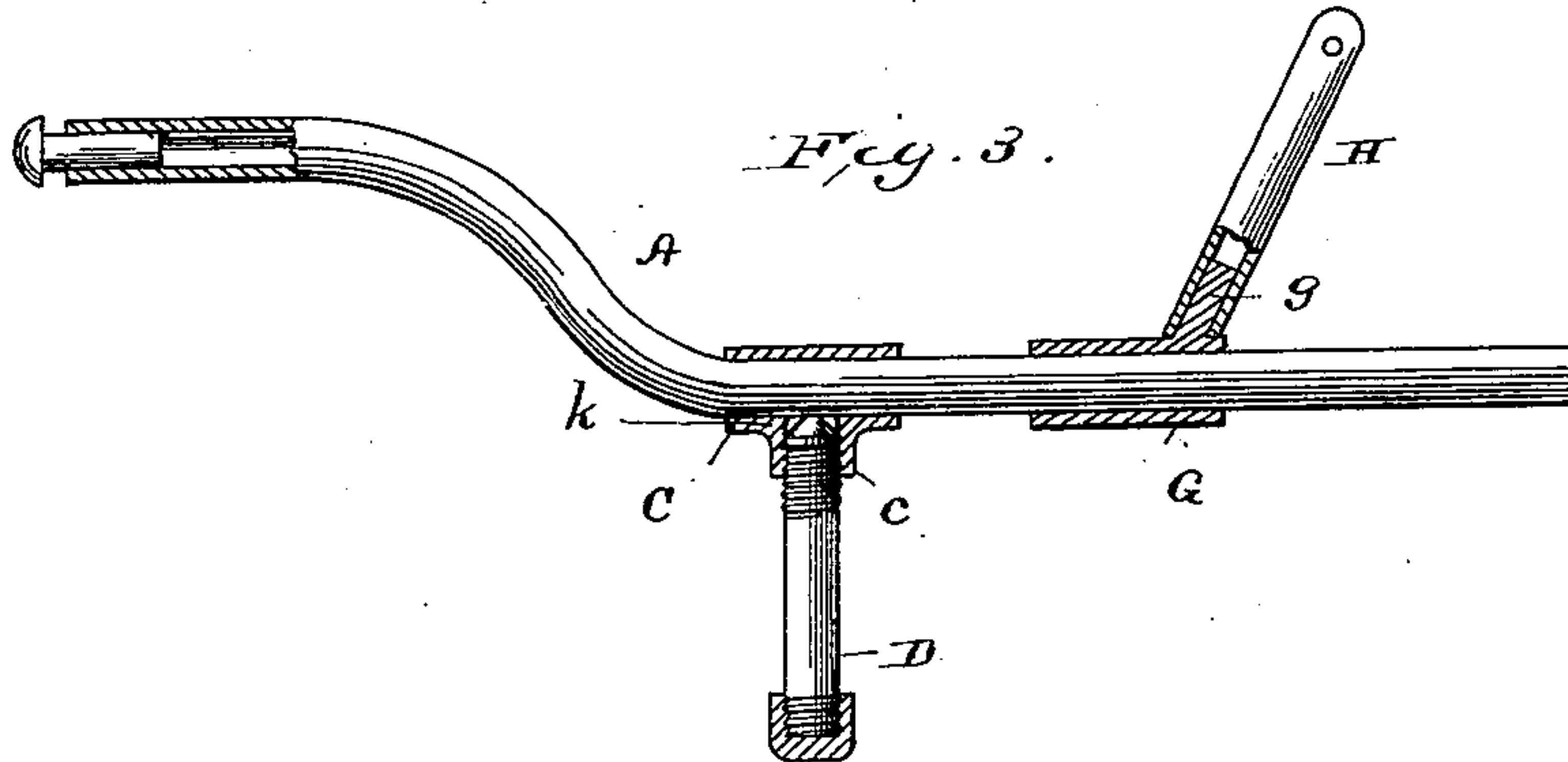
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Witnesses,
Edwin L. Jewell
H. Aubrey Toulmin

Inventor,
J. Bean
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Attorney

UNITED STATES PATENT OFFICE.

JOHN BEAN, OF SPRINGFIELD, OHIO, ASSIGNOR TO THE TRICYCLE
MANUFACTURING COMPANY, OF SAME PLACE.

WHEELBARROW.

SPECIFICATION forming part of Letters Patent No. 262,171, dated August 1, 1882.

Application filed May 4, 1882. (Model.)

To all whom it may concern:

Be it known that I, JOHN BEAN, of Springfield, in the county of Clarke and in the State of Ohio, have invented certain new and useful
5 Improvements in Wheelbarrows; and I do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawings, and to the letters of reference marked thereon,
10 making a part of this specification.

My invention relates to certain new and useful improvements in wheelbarrows, and has special reference to that class wherein the frame is principally constructed of metal; and
15 my object is to provide a wheelbarrow embracing the least possible number of parts, and to so construct and combine these several parts as to readily admit of their being disconnected, and the whole device taken apart and separately packed and shipped.

In the accompanying drawings, making part of this specification, and in which like letters of reference indicate like parts, Figure 1 is a side elevation of my improved wheelbarrow; Fig. 2,
25 a view of the bottom thereof; Fig. 3, a view of one of the handles detached, showing the same partly in side elevation and partly in section, together with the head-board standard, supporting-leg, and their respective couplings; Fig. 4, a
30 detail perspective view of one of the side boards, looking toward the inner side thereof, for the purpose of illustrating the clip; Fig. 5, a perspective view of a portion or section of a frame and of the head-board, &c., and Fig. 6 a horizontal cross-sectional view of the head-board
35 and its supporting-standards.

The letter A designates two metallic tubular side beams, each being constructed of one piece of pipe, to which are given a compound
40 bend or curve, as indicated in the drawings, for the purpose of elevating that portion of each which is designed to form the handle proper of the wheelbarrow. Their rear and forward ends may be closed with a suitable
45 plug or stopper. Near the forward ends of these beams are secured U-shaped journal-bearings *a*, one arm of each of which extends through the beam, and serves to connect the latter to the braces B B, (for a purpose herein-
50 after named,) a screw-thread and nut being supplied to each of said arms for this purpose.

A suitable wheel is carried by these journals, one of the form shown being preferred.

The letter C indicates two short tubes or couplings adapted to fit snugly around the beams, having internally screw-threaded extensions *c* for the reception of the supporting-legs D, the latter being correspondingly threaded. I sometimes desire to make a firm connection
60 between the beams and these couplings C, in which instances a button or washer, *k*, having a pointed boss, *l*, is interposed within the extension *c*, between the beams and the leg, which indents the side of the former when the leg is screwed well into the extension.

Projecting inwardly from each of the said couplings is a perforated lug, *c'*, by which a connection is made between the coupling and the bottom of the body. Extending through the lower ends of the legs D are braces E, crossing
70 each other about midway their length, and secured at their forward extremities, respectively, to the beams A, a suitable aperture being formed therein for their reception. It may here be observed that I sometimes connect the
75 forward ends of these braces to the lugs *l* on the couplings C, an eye being formed on the braces for this purpose, through which the bolts or screws used in fastening the bottom and coupling together pass. This effects a saving
80 in the material of which these braces are made, and at the same time permits of the adjustment of the journals in order to bring the wheel in a vertical position, should it become untrue from usage or other cause, by screwing or un-
85 screwing the nuts *e*, as the case may be, just as would be done when the braces are secured to the forward ends of the beams, as illustrated in the drawings.

Secured to the bottom of the body is an angular brace, F, the extremities whereof are
90 perforated to fit upon the projecting ends of the braces E, (before mentioned,) to which they are secured by nuts *e*.

Upon each of the beams I place a coupling, 95 G, similar to the ones indicated by the letter C. Projecting upwardly from the said couplings G are lugs or extensions *g*, upon which are fitted the tubular standards H, the latter having ears or lips *h*, which receive the rods I, 100 for the purpose of securing the forward ends of the side boards. These couplings are fur-

ther provided with inwardly-projecting lugs *i* and set-screws *f*, the former being secured to the bottom of the body, and the latter being adapted to effect a rigid connection of the coupling and beam. In some instances, however, I do not use the set-screws, but allow the couplings *G* to move on the beams and accommodate themselves to the expansion and contraction of the material of which the bottom of the body is constructed, which are due to the changes in the atmosphere and the different uses to which the wheelbarrow may be put, thus preventing any splitting or cracking of the bottom.

The standards *H* are braced by means of the braces *B*, which are suitably connected to them near their upper ends. Between these standards is secured the head-board *K*, which is suitably grooved or channeled on its ends to fit the same and prevent its displacement, a rod or bolt being passed laterally through the parts to further aid in forming a joint, the said bolt being provided with a thread and nut for this purpose.

The letter *L* indicates the side boards of the body, which are constructed of any suitable material, and arranged to fit against the outside of the beams, and provided with metallic clips *L'* at their rear ends, which are adapted to embrace and fit upon the beams and secure the said boards against lateral displacement, the clips having sufficient elasticity to maintain their shape and prevent rattling of the boards.

It is observable that by the construction and manner of attachment of the several parts or features on my wheelbarrow, as herein described, it may be readily and easily taken apart, and the different portions packed or crated and shipped in small and separate packages; and, further, should any of the pieces be destroyed or broken they may be readily supplied, and the new ones adjusted in place without inconvenience.

It is furthermore to be observed that as constructed the bottom of the body, the tubular beams, the legs, and lower braces combined form, essentially, the frame of my wheelbarrow, exclusive of the head-board, its standards, and their braces, thus permitting me to substitute for the body herein shown and de-

scribed what is called a "tray"—that is, a body whose bottom, sides, and ends are permanently connected together. When this style of body is used I dispense with the upward extensions *g* on the couplings *G*.

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

1. In a wheelbarrow, the combination of a beam with a coupling, a supporting-leg, and an interposed pointed disk or bottom adapted to indent the beam when the leg is screwed well into the coupling, substantially as set forth.

2. In a wheelbarrow, a coupling provided with an upwardly-extending projection adapted to receive the head-board standard, and an inwardly-projecting lug adapted to be connected with the bottom board, said lug being integral therewith, as shown and set forth.

3. In a wheelbarrow, the side boards of the body adapted to extend down against the outside of the beams, and provided with elastic clips adapted to embrace the inner sides of the beams, whereby the boards are secured in position against lateral displacement, substantially as set forth.

4. In a wheelbarrow, the combination, with the beams and supporting-legs, of the *V*-shaped brace secured to the latter and adapted to prevent lateral shift, and the diagonal braces secured to the forward ends of the beams and passing through the legs, said diagonal braces being adapted to adjust the journals by means of tightening-nuts, substantially as set forth.

5. In a wheelbarrow, the combination of the beam, the head-board brace, and *U*-shaped journal, having arm adapted to extend through the beam and brace, and provided with nut, substantially as shown.

6. In a wheelbarrow, the combination of the couplings, the head-board standards, suitably braced with the grooved head-board, and lateral binding-rod, substantially as described.

In testimony whereof I affix my signature, in presence of two witnesses, this 24th day of April, 1882.

JOHN BEAN.

Witnesses:

F. W. WILLISS,

CHAS. R. WHITE.