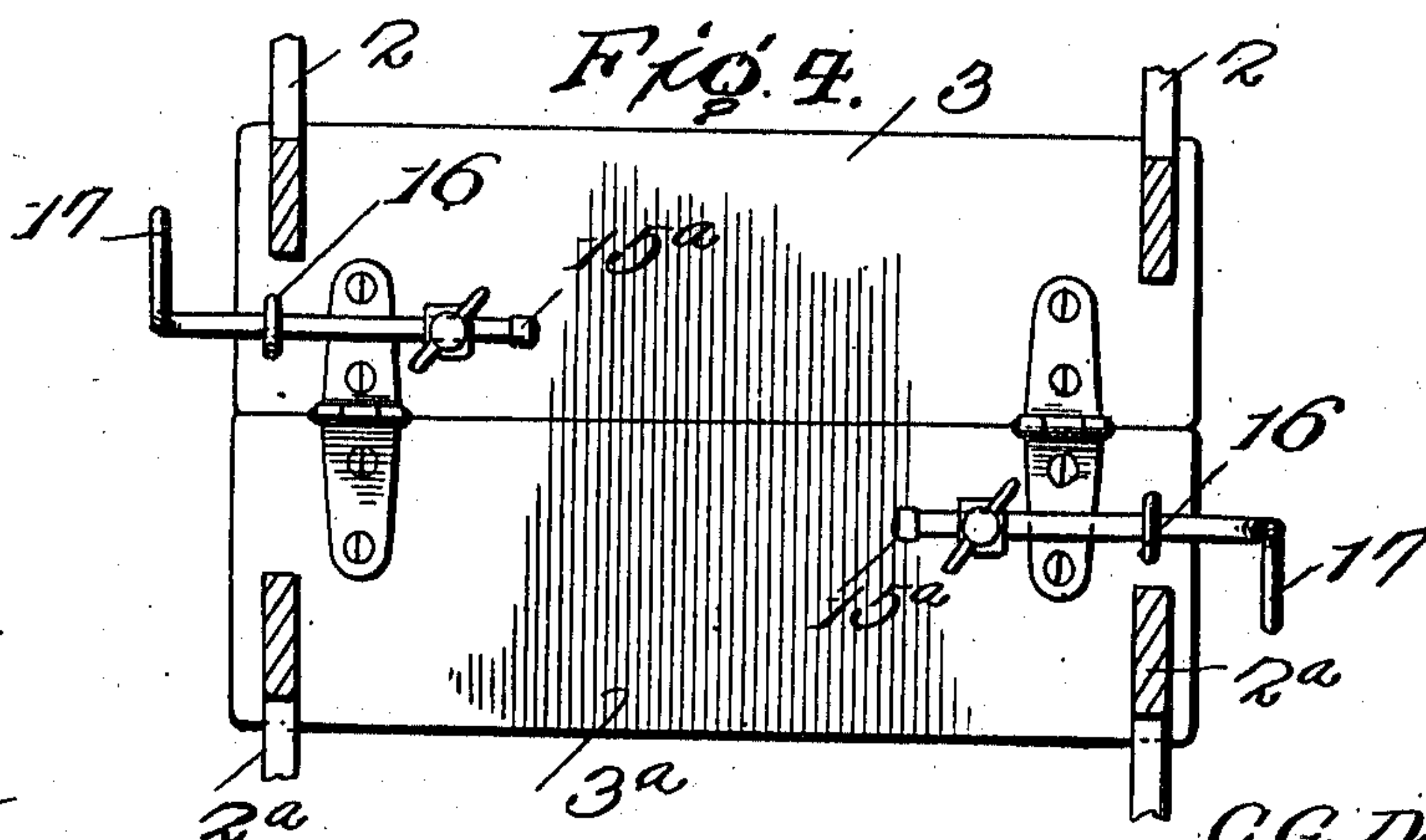


970,690.

2 SHEETS--SHEET 1.



Juana M. Fallin,

C. G. Davis

By

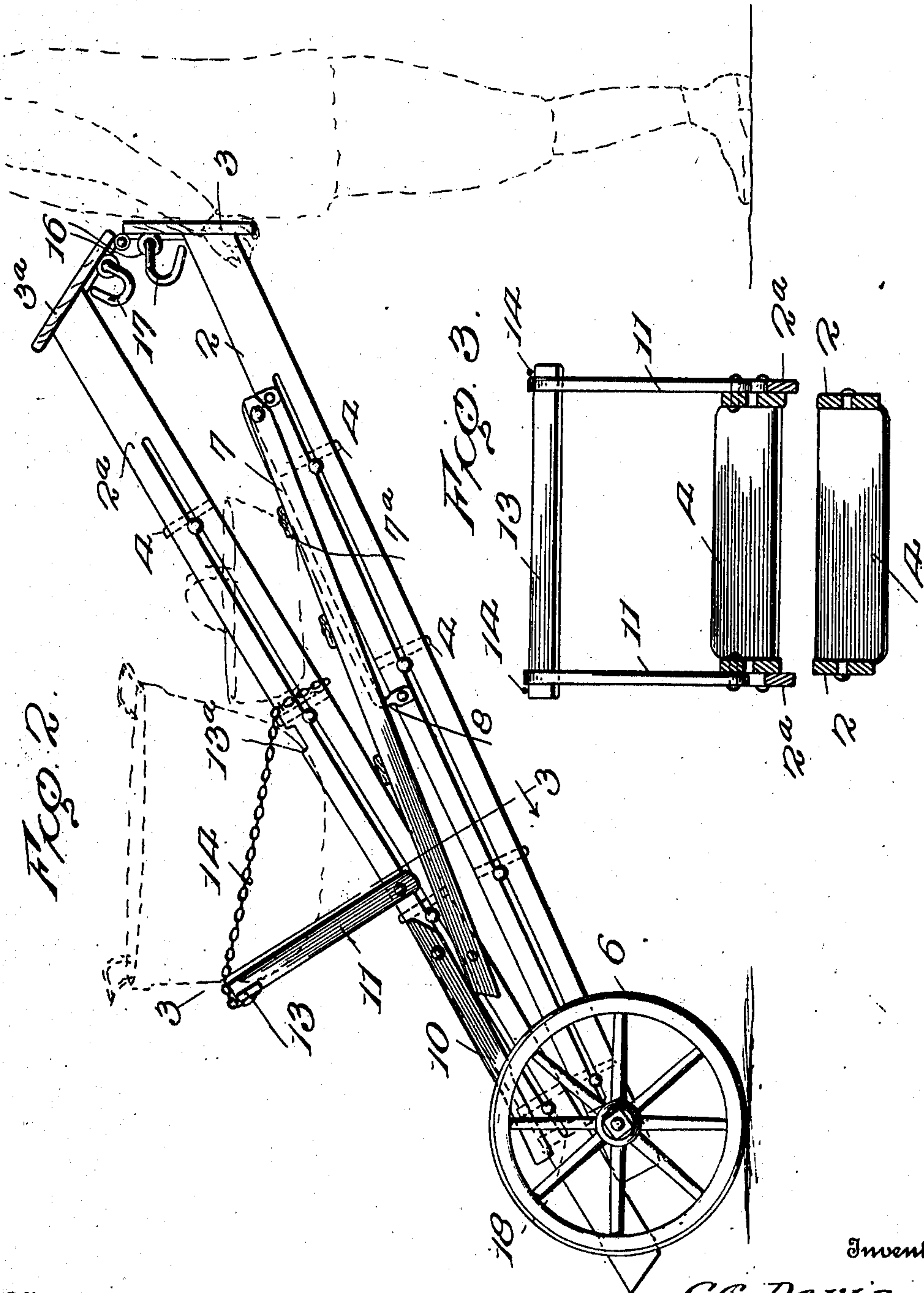
Attn: Mary Attorneys

C. G. DAVIS.
DOUBLE WHEELED STEP LADDER.
APPLICATION FILED FEB. 25, 1910.

970,690.

Patented Sept. 20, 1910.

2 SHEETS-SHEET 2.



Witnesses
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UNITED STATES PATENT OFFICE.

CLEVELAND G. DAVIS, OF MANISTEE, MICHIGAN.

DOUBLE-WHEELED STEP-LADDER.

970,690.

Specification of Letters Patent. Patented Sept. 20, 1910.

Application filed February 25, 1910. Serial No. 545,982.

To all whom it may concern:

Be it known that I, CLEVELAND G. DAVIS, citizen of the United States, residing at Manistee, in the county of Manistee and State of Michigan, have invented certain new and useful Improvements in Double-Wheeled Step-Ladders, of which the following is a specification.

My invention relates to step ladders and has for its object the provision of a ladder which shall be particularly adapted for fruit picking, this ladder being so designed that it may be transported from place to place or moved around a tree without closing the ladder or lifting it bodily from the ground.

A further object is to provide a ladder of this construction which, when closed, may be used as a truck or barrow whereby the baskets of fruit may be transported from the tree to the place of deposit.

Further objects are the provision of means for supporting baskets upon the ladder, and certain details of construction as will be hereafter stated.

For a full understanding of the invention and the invention and merits thereof, and to acquire a knowledge of the details of construction, reference is to be had to the following description and accompanying drawings, in which:

Figure 1 is a perspective view of my improved ladder in its unfolded position; Fig. 2 is a side elevation of the ladder folded and supported upon its front wheels; Fig. 3 is a section on the line 3—3 of Fig. 2; and, Fig. 4 is an under side face view of the uppermost steps or platforms 3, the supporting members or legs being shown in section.

Corresponding and like parts are referred to in the following description and indicated in all the views of the drawings by the same reference characters.

Referring to these drawings 2 2^a designate the two pairs of legs for the ladder. These pairs are inclined toward each other when the ladder is open and are provided at their upper ends with the uppermost steps or platforms 3 3^a which are hinged to each other so that the legs 2 2^a may be closed against each other or be opened out, in the positions shown respectively in Figs. 3 and 1. Each pair of legs is provided with the transversely extending steps 4 which are supported thereon in any suitable manner. The lower end of one pair of legs is

provided with the wheels 6, the wheels being placed upon an axle 6^a which extends through the legs. Pivotaly attached to the legs 2^a are the opposite braces 7 which at their other ends are shiftably connected to guide rods 8 which are attached to the outer face of each of the legs 2. In order to permit the braces 7 to be used as a support for fruit baskets, I provide the transverse slats 7^a which rest upon the braces 7, and in order to further provide supports for fruit baskets, I attach to the upper steps or platform 3^a the shiftable basket-supporting hooks 17. Each hook depends from a longitudinally sliding bar 15 which is mounted in eyes 16 depending beneath the bottom of the upper steps 3 3^a. The extremity of the bar 15 is formed with a stop lug 15^a which prevents the lock from being entirely withdrawn. It will be seen that these hooks may be drawn outward into basket-engaging position, as shown in Fig. 1, or may be moved inward beneath the upper step, as in Fig. 2. Attached to each of the legs 2^a are the pivoted handles 10. These handles are pivoted at just above the pivoted end of the adjacent brace 7 so that when the handles are turned into a position at right angles to the legs 2^a, the extremities of the handles will abut against the ends of the braces 7 and be stopped by the braces. Thus any lifting movement upon the handles will act to lift the legs 2^a so that the latter will be supported entirely upon the wheels 6. The handles may be turned down into a position in alinement with the legs 2^a when the ladder is folded.

As shown in Fig. 1, the ladder when unfolded may be lifted by means of the handles 10 and may be shifted to any desired position, the weight of the ladder being practically all supported upon the wheels 6. It will be seen that the shifting of the ladder will not disturb the baskets of fruit supported thereon, and that the ladder and the baskets of fruit may be readily moved about a tree into the most convenient position for picking. When folded, as shown in Fig. 2, the ladder is in condition for easy transportation and is also adapted to be used as a barrow for transporting the baskets of fruit, the smaller baskets being supported upon the steps 4, while the large basket which in Fig. 1 was shown as supported upon the rack formed by the braces 7, is held in an upright position upon the legs 2^a

by means of the folding arms 11 which are pivoted to the legs 2^a and at their outer ends are provided with the cross brace 13. The outer edges of the legs 2^a are notched or cut away, as at 13^a, to receive the cross bar 13 when the arms are folded into alinement with the legs 2^a. A chain 14 limits the outward movement of the arms 11 and acts as a support for the arms when they are turned into position shown in Fig. 2.

In order to hold both sides of the ladder in line when folded, I provide the metal guide pieces 18 which are attached one to each of the legs 2 and project out toward the legs 2^a so that when the legs 2^a are folded against the legs 2, they will engage the guide pieces 18 and thus the legs are held in alinement.

My ladder I have found to be very effective in practice, as it may be wheeled to any desired position, and even when unfolded, it does not require that the baskets of fruit be removed therefrom in order to allow it to be shifted. Furthermore, the double pairs of legs each provided with the steps 4, permit two persons to use the ladder at the same time. The ladder is light, and by reason of the fact that it has a wheeled support, it may be easily handled by a small boy and rolled from place to place even when being used as a truck or barrow.

Having thus described the invention, what I claim is:—

1. A step ladder having opposed pairs of supports, steps carried by each pair of supports, a step at the upper end of each pair of supports, said uppermost steps being hinged to each other, a brace pivoted to one pair of supports and having sliding engagement with the other pair, said brace being connected by cross bars to form a basket support, wheels mounted on the lower ends of one pair of supports, and handles pivoted to the other pair of supports adjacent to the

pivoted ends of the parallel bars of the brace, the ends of said bars when the ladder is open forming a stop for the inner ends of the handles.

2. A step ladder having opposed pairs of supports, steps carried by each pair of supports, a step at the upper end of each pair of supports, said uppermost steps being hinged to each other, a brace pivoted to one pair of supports and having sliding engagement with the other pair, said brace being composed of parallel bars connected by cross bars and forming a basket support, wheels mounted on the lower ends of one pair of supports, handles pivoted to the other pair of supports, and a rack comprising side bars pivoted to one of the supports adjacent to the inner ends of the handles, cross bars attached to said side bars, and a flexible connection between the extremity of the rack and the supports.

3. A step ladder having opposed pairs of supports, a step at the upper end of each pair of supports, said steps being hinged to each other, a brace pivoted to the upper end of one pair of supports and having sliding engagement with the other pair, said brace composed of parallel bars connected by cross bars and being adapted to be moved into a position approximately parallel with the supports when the supports are folded together, handles pivoted to the support with which the brace has pivoted engagement, and a rack pivoted to the last named supports adjacent to the pivoted ends of the handles and adapted to be turned outward into a position at right angles to the supports, and a flexible connection between the extremity of the hook and the supports.

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

CLEVELAND G. DAVIS. [L.S.]

Witnesses:

JAMES L. SIBBEN,
LILLIE HANSON.