

W. B. ALLEN
Hand-Truck.

No. 217,971.

Patented July 29, 1879.

Fig. 1.

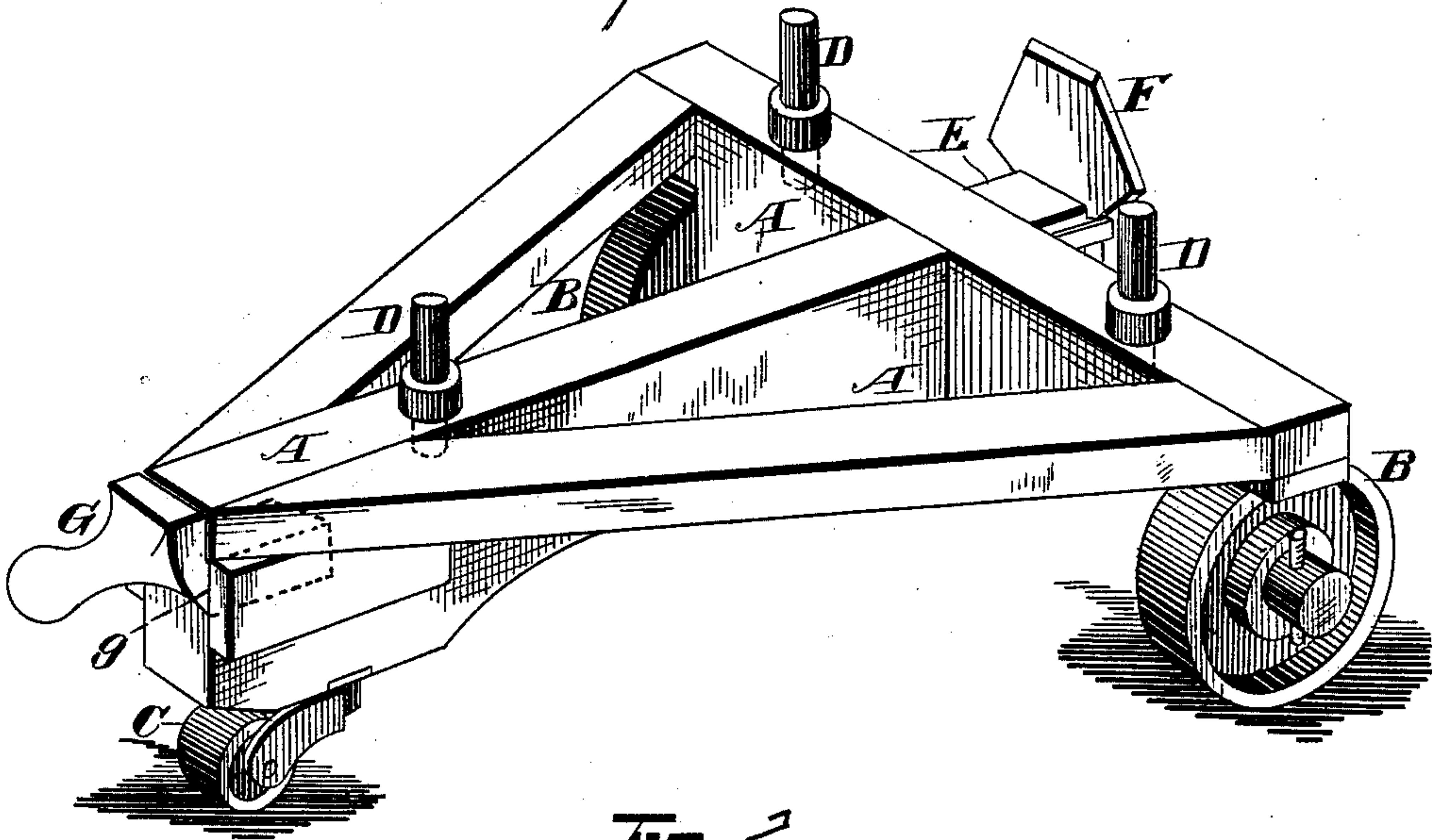
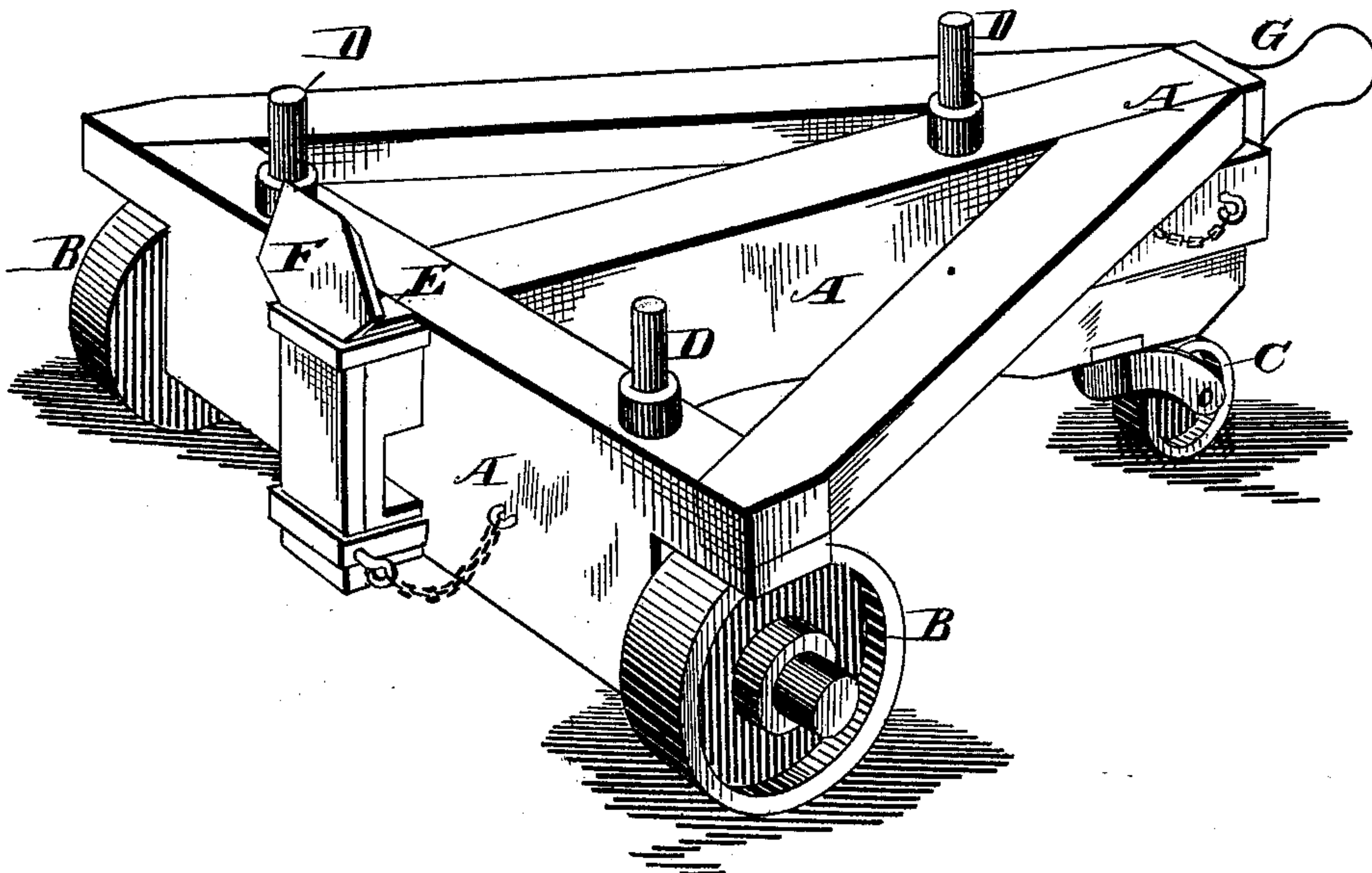


Fig. 2.



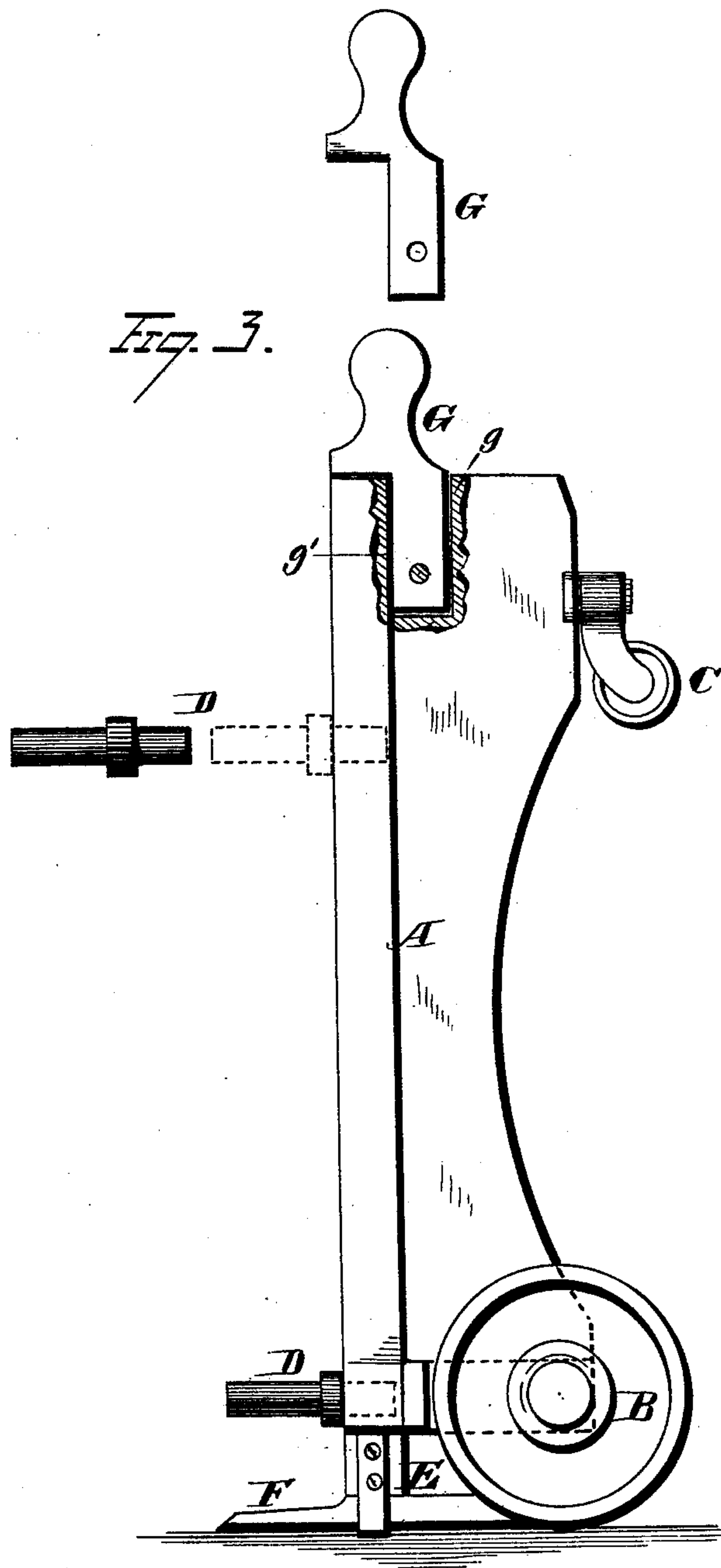
WITNESSES
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UNITED STATES PATENT OFFICE.

WILLIAM B. ALLEN, OF ORLEANS, NEW YORK.

IMPROVEMENT IN HAND-TRUCKS.

Specification forming part of Letters Patent No. **217,971**, dated July 29, 1879; application filed November 22, 1878.

To all whom it may concern:

Be it known that I, WILLIAM B. ALLEN, of Orleans, in the county of Ontario and State of New York, have invented certain new and useful Improvements in Trucks; and I do hereby 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 pertains to make and use it, reference being had to the accompanying drawings, which form part of this specification.

My invention relates more especially to trucks adapted to be used in the sale and transportation of stoves, the object being to provide means whereby stoves may be readily brought into position suitable for viewing them, and then be replaced in their former position or otherwise be disposed of.

Heretofore a difficulty has been experienced by dealers in stoves, and especially retail dealers, in moving their stoves so as to bring them in good light and position for exhibition and examination. Suitable room is required in which to view a stove on all sides, open its doors, examine the oven, and in other manner view its parts; and such room it is impracticable to obtain in a store filled as is usual with stoves, while the latter are arranged closely together and in such small compass as is in almost all instances the case.

The purpose of this invention is to remedy this difficulty by having the stoves which are on sale placed each upon a truck, such as will be hereinafter described and claimed, said trucks being adapted to support the bed of a stove, while the legs are connected in place on the stove and depend over the truck-sides without touching the floor or ground. Then, by drawing any stove out from among the other stoves into a clear space, it can be seen to its best advantage, the truck being adapted to be moved around in a space whose greatest extent need not exceed the greatest dimension of the stove.

The object of the invention is also to provide a truck upon which a stove can be easily and readily loaded or unloaded, so as to save much of the labor and strength now required for this purpose.

Further advantages result from the inven-

tion, as will appear in the body of specification.

This invention consists in certain details in construction and arrangements of parts in a truck, as will be hereinafter described, and pointed out in the claims.

Referring to the drawings, Figure 1 is a view in rear perspective of the truck. Fig. 2 is a view in front perspective thereof. Fig. 3 represents the truck in upright position and with a portion of the rear part of the body of the truck broken away.

The bed A of the truck, though preferably triangular in form, may be made otherwise and with its different parts built as desired. The front portion of the body of the bed is supported upon two truck-wheels, B, which are axled thereto, so as to cause the forward end of the truck to laterally project over said wheels and their respective axles.

The result of such overhanging of the truck-bed is to permit a stove to rest with its bed-plate or bottom upon the bed of the truck, while the legs of the stove are connected with the latter in place and depend over the sides of the truck, so that while said stove-legs are raised from the ground they are also free from lateral contact with the wheels or the axles of the same.

The opposite and rear end of the truck-bed is supported upon a caster-wheel, C, which allows the truck to be turned within small space, so as to be readily rolled into desired position. The advantage of this caster-wheel is apparent in the ability to turn the truck around in a circle or space whose diameter need not exceed the length of the truck, or the greatest horizontal measurement of the stove which is placed thereon.

Double-end or reversible pins D are fitted into sockets formed in the top of the truck, and serve to provide points of support for a stove, so that the latter may be level on its top. The good result thus obtained is observed when it is remembered that many styles of stoves, especially cook-stoves, do not have level or flat bottoms by reason of flues formed therein. A further use of these pins is to provide means whereby certain parts of a stove may be exhibited in prominent view, as it

frequently happens that different elevations are required in order to show to advantage or for other reasons. Each pin is of two working lengths, so as to be reversible, according as a high or low elevation is desired.

The front portion of the truck is formed with a longitudinal extension, E, with which the removable nose-piece F is connected. The projection of this extension is such as to cause the truck to have vertical bearing upon the flat side of the nose-piece as secured thereto when the truck is in upright position, preparatory to being loaded or unloaded in this way. When the truck is thus in upright position upon a level floor or other place, the truck rests equally upon the two forward wheels and the nose-piece; but if the truck should be tilted forwardly of this perpendicular upright position it would in such case rest solely upon the nose. While the points of support might vary for the forward wheels correspondingly with the irregularities of the surface upon which they rest, it is apparent that by means of the rear wheel the truck will be firm and secure in bearing, however the surface may vary upon which the same rests. This removable nose-piece may be of any suitable length or width, the form shown in the drawings being simply an illustration of one style of the same. Instead thereof it might be made as wide as the widest part of the truck. So, too, its stem may be changed, as desired, in size. The nose-piece may be locked in place by a pin, *f*, or other suitable device.

To the rear extremity of the truck-bed is connected the removable lever-handle G, a portion of which fits within a socket, *g*, formed longitudinally in the end of the truck, and which may be locked in place by pin *g'* or other suitable device. The upper surface of this handle is flush with that of the truck-bed, so that it may serve as a longitudinal rear extension to the truck-bed if such use is desired of it. This nose-piece and handle may be used or not, as may be suitable, when the truck is employed in moving stoves or other articles.

By removing the pins D, and having said nose-piece and handle in their respective places, the truck may be converted into an ordinary hand-truck. The rear portion of the body will be raised from the ground as the operator lifts it by means of the handle, and in this way he can roll the truck along on the two forward wheels.

The length of the lever may be longer or shorter, as most suitable for each case.

A further advantage of making the lever and nose-piece removable is, that one set of the same would answer for use with a large number of trucks; hence, when a hand-truck is desired, it would only be necessary to connect the lever and nose-piece with any one of the empty stove-trucks, and thus adapt the latter for use as an ordinary two-wheeled truck. A common-sized cook-stove turned up on one side could be readily loaded by a single man

upon one of these trucks when the latter is in upright position, as shown in Fig. 3; then by shifting the handle and nose-piece to another truck this latter could also be readily loaded in same manner.

It will be observed that, while I have hitherto spoken of the caster as being a caster-wheel, it is apparent that the same may be termed a "caster-leg" in contradistinction to the usual fixed legs now used as vertical supports for the rear portion of the body of an ordinary hand-truck when the latter is in a horizontal position.

The advantage of such a single caster-leg is well understood when it is remembered that, as at present constructed, hand-trucks are restricted in the size of the box or other package with which they may be used. Thus the size of the truck-bed is in many instances too small for the varying use to which it might otherwise well be subjected. Boxes or other parcels whose width is greater than the length of the truck cannot therefore be loaded upon the latter; but by my construction the truck may be rolled either as an ordinary hand-truck upon the two forward wheels, or as a flat or horizontal truck, whose rear as well as forward portion of the body is provided with vertical bearing upon the floor or ground.

By this means boxes or articles whose width may even be twice the length of the truck may be readily loaded on the latter and transported from place to place.

A further advantage of the same construction consists in the fact that whatever articles may be carried upon the truck when the latter is in horizontal position, the same may be so carried at a much less expenditure of strength upon the part of the operator than if the truck were rolled simply upon the two forward wheels. The adaptability of my truck to be thus used as a horizontal truck is due to the employment of said caster in substitution for the two legs commonly fixed respectively to both sides of the rear portion of the body of the truck.

This caster leg may be connected with the truck-bed at a point forward of that to which it is shown as connected in the drawings, and, provided only that it is in longitudinal central line with the truck-bed at a point to the rear of its transverse central line, said caster-leg may be connected, as desired, to the truck.

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

1. In a truck, the combination, with the truck-bed supported by a caster-wheel and two truck-wheels, of a removable nose-piece connected with the forward portion of the truck-bed and a removable lever-handle connected with the rear portion of the same, substantially as set forth.

2. A truck-bed having a socket formed in the outer side of the forward portion of the truck, in combination with a vertically-remov-

able nose-piece, the shank of which is adapted to be secured within said socket, substantially as set forth.

3. The combination, with a triangular truck-bed, of a removable handle connected with the apex or rear end of the truck, substantially as set forth.

4. The combination, with the rear portion of a truck-bed having a socket formed therein, of a lever-handle adapted to be removably secured within said socket, said handle being constructed so that its upper surface will be flush with that of the truck-bed, and thereby constitute a rear extension of the same, substantially as set forth.

5. The combination, with a truck-bed sup-

ported at one end by truck-wheels and at the opposite end by a caster-wheel, of reversible pins connected with the truck-bed, whereby one or more portions of a stove may rest thereon, as desired, substantially as set forth.

6. The combination, with the bed of a truck, of a handle removably secured to the rear portion thereof, substantially as set forth.

In testimony that I claim the foregoing I have hereunto set my hand and seal this 19th day of November, 1878.

WILLIAM B. ALLEN. [L. S.]

Witnesses:

L. R. LOMBARD,
EDWIN WARNER.