

J. H. MOORE.

Truck.

No. 64,439.

Patented May 7, 1867

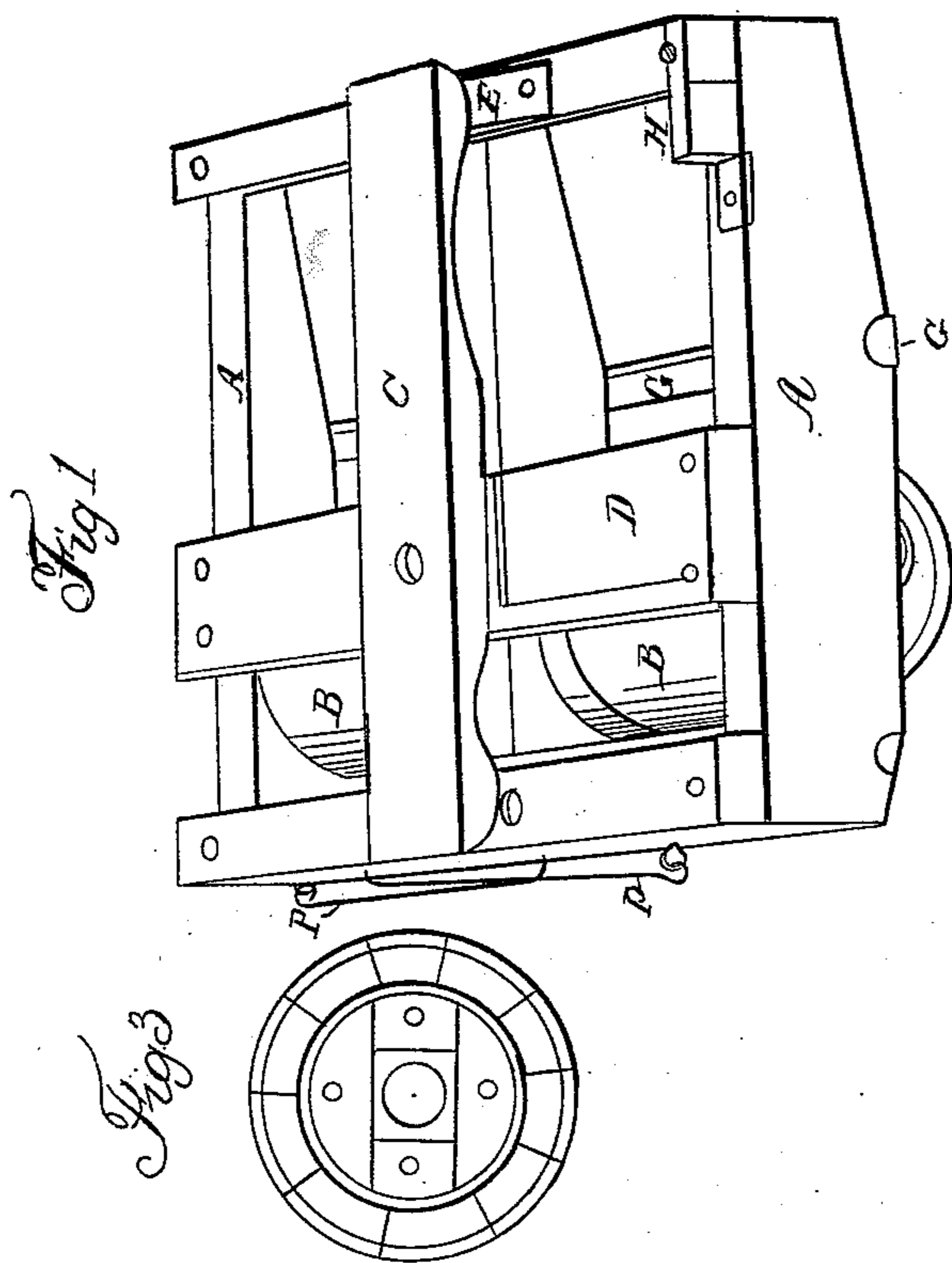


Fig 3

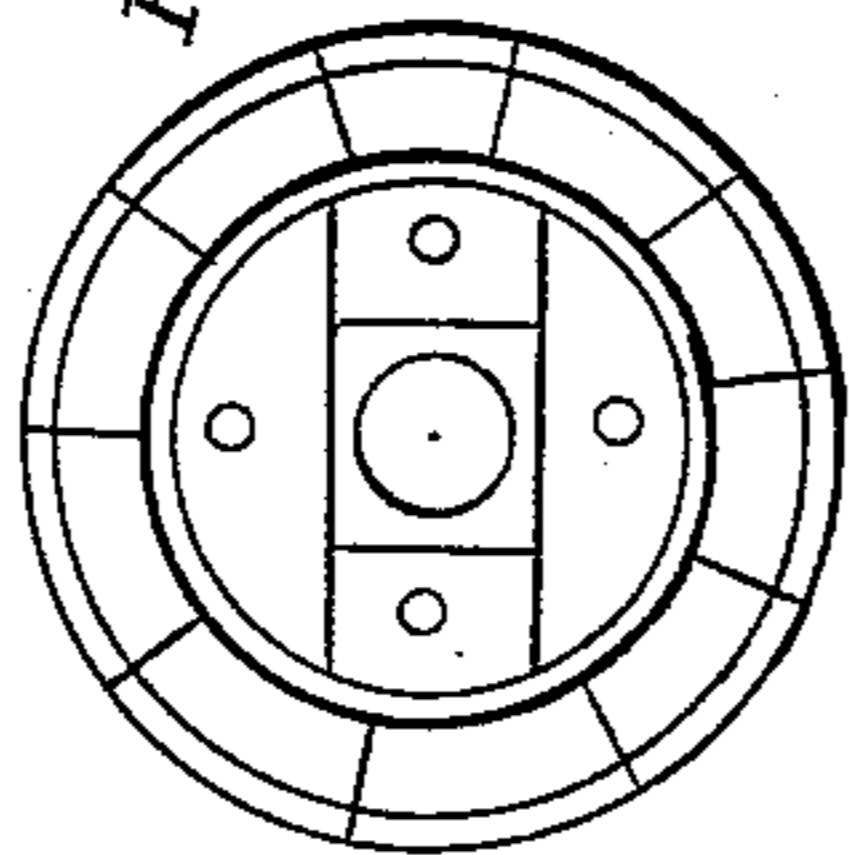
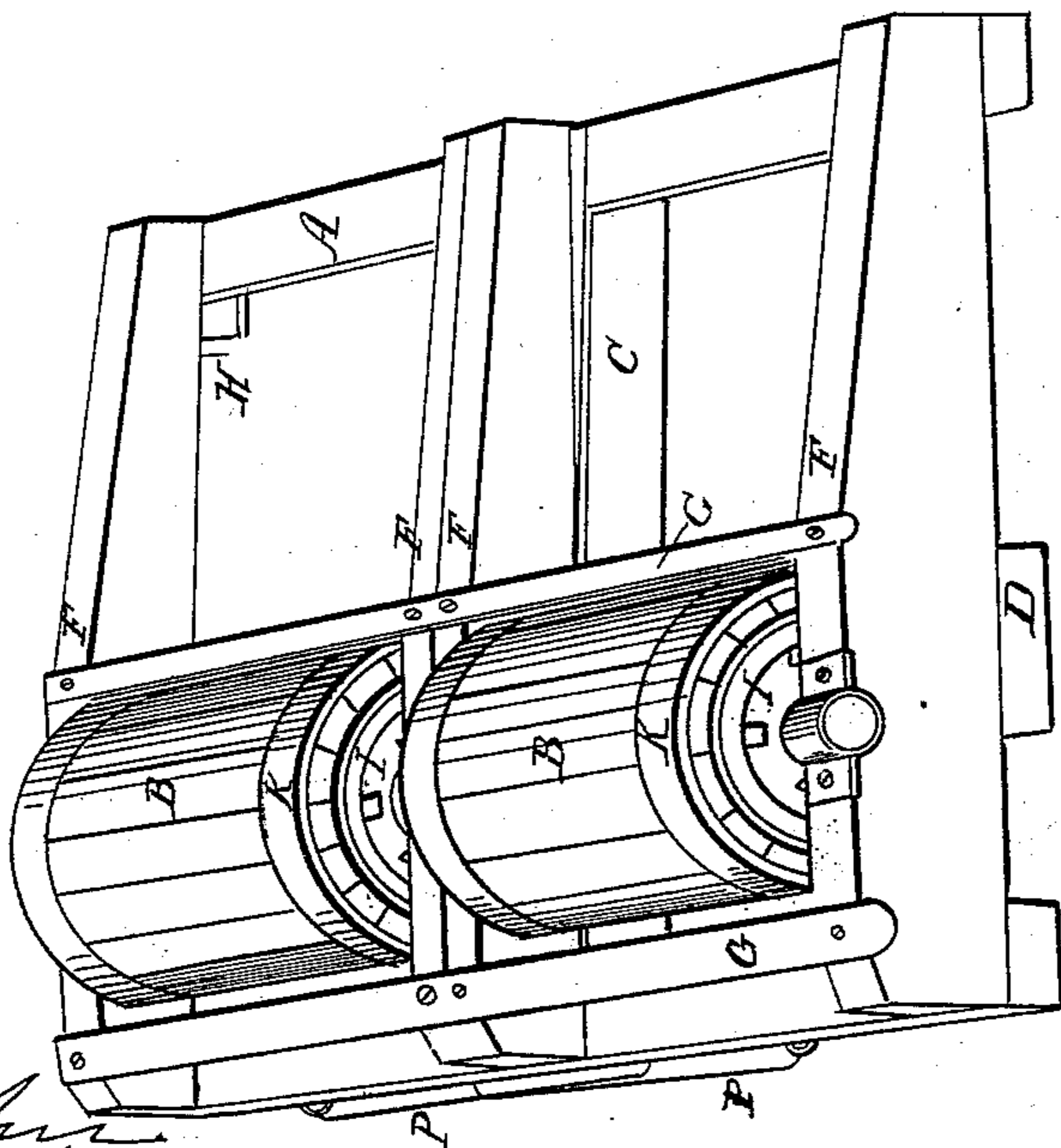


Fig 2



Witnesses:

L. C. ...
F. A. ...

Inventor:

John H. Moore

United States Patent Office.

JOHN H. MOORE, OF BINGHAMTON, NEW YORK.

Letters Patent No. 64,439, dated May 7, 1867.

IMPROVED METHOD OF MOVING BUILDINGS.

The Schedule referred to in these Letters Patent and making part of the same.

TO ALL WHOM IT MAY CONCERN:

Be it known that I, JOHN H. MOORE, of Binghamton, in the county of Broome, and State of New York, have invented a new and useful improvement on the Mode of Moving Buildings or other heavy weights; and I do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the annexed drawings, making a part of this specification, in which—

Figure 1 is a perspective view.

Figure 2, an inverted view.

Figure 3, an end view of one of the rollers, with the collar and tire detached.

Similar letters of reference indicate corresponding parts in the several figures.

The object of this invention is to provide a convenient, safe, and expeditious mode of moving buildings or other heavy substances.

My invention consists in arranging rollers in frames in such a manner that when once placed in their position they remain there until the building or weight arrives at its destination, the frame being so constructed that the rollers can be moved or "cut" to any angle required to change the direction of the load. I construct the roller-frame A of wood or cast iron, but prefer the wood on account of its lightness and flexibility. I attach to two longitudinal side-pieces, three cross-pieces. The centre-piece or "sand-board" D is made wider than the others for the purpose of giving sufficient room for the centre bearing of the bolster C. I then attach two more longitudinal pieces of the same dimensions of the others. In the centre, and upon these pieces, I place the bearings for the axles of the rollers B B. These rollers work independently of each other, their axle-bearings being placed on the line of the axis of the frame A, or roller-carriage. Said frame extends further from its axis on one side than the other for the purpose of getting more leverage to "cut" or change the direction of the rollers. Said rollers occupy in length nearly the whole width of the frame. For the purpose of keeping the rollers clear from obstructions, and giving additional strength to the frame, I attach two bars of iron, G G, running parallel with and near to the rollers. Said bars are secured to the longitudinal pieces F F F F. On the top of the roller-frame is the bolster C, on which the weight to be moved is placed. If a building, the sill is placed lengthwise upon it, the weight keeping it securely in its position. This bolster works on a bolt in the centre of the cross-piece or "sand-board D, and on the line of the axis of the frame. The bearing surfaces on the cross-pieces D and E, and also on the bolster, are faced with iron. On the corner of each frame is a lock, H, to admit and hold the lever for changing the direction by "cutting" or turning the roller-frame to a different angle. For the purpose of keeping said roller-frame in its position when the ground is uneven, I attach two hooks, p p, to the front part of the frame, and when needed drive their points into the sill of the building. I construct the rollers B B of wood and iron. That part of the shaft running through the wood-work of the rollers is made square, and the body of said wood-work is fitted to it in four sections, as shown in fig. 3. I then attach the collars I I, and secure them in their places by means of bolts running through from end to end. The holes through the wood-work are made of sufficient size for the bolts to pass through easily, and one end of the bolt is screwed into the opposite collar. The collars I I are slightly larger in diameter than the body of the wood-work. The whole surface is then "lugged" with segments of oak or other suitable timber, and notched, so as to fit in between the collars and connect with the inside pieces, and on the outside, to receive the bands or tires K K. These bands are then expanded by heat and driven on. The roller is then turned down flush with the tries, and it is ready for the frame. Unless these rollers are constructed in the most substantial manner they will constantly be making trouble in the operation of moving buildings.

When I use my improvement, I place from four to twelve of the roller-frames in their position, and if the building is to be moved some distance I set a post or anchor from twenty-five to thirty rods ahead, make the necessary connections, and apply the power. When necessary to turn a corner the rollers are "cut" to the right and left by applying the lever to the lock H. By this means the direction of the building is changed in a smaller compass and much sooner than by turning one set of rollers alone. When moving straight forward, a heavy building may be advanced from twenty-five to one hundred rods a day, with two men, a horse and driver. A smaller building, weighing from twenty to fifty tons, can be moved, on level ground, with two span of horses, from two to three miles a day. The ordinary mode of moving buildings is by means of plain disconnected rollers,

that require to be replaced at short intervals; they are liable to be constantly changing their direction, requiring more attention to prevent injury to the building, and very slow in their operation.

I am aware that there has lately been patented an alleged improvement "in apparatus for moving buildings" by Egbert H. Avery, No. 58,970, which in some respects resembles my invention, but the important and leading features are entirely different. His rollers are constructed of one piece of timber, and in a very unsubstantial manner, consequently liable to continual derangement, while my improved roller is constructed in the most substantial and durable form, as before described. These rollers work in pairs, on the same axle-line, similar to the wheels of a wagon. Each roller has two journals, and is of course independent of the other. This is of the greatest importance when the direction of the building is to be changed, which is accomplished as before described. The rollers of the aboved-named patent extend entirely across the frame, and when necessary to change the direction, both ends of said rollers bearing equally upon the ground make it impossible to accomplish the operation without undue strain, not only to the roller-frame, but to the building also, while by my arrangement it is accomplished by simply applying the end of the lever to the catch or lock H, and moving the frame to the right or left around the centre-bolt in the "sand-board" D, thereby causing the rollers to rotate in opposite directions, and obviating the necessity of driving guide-keys or wedges with the sledge. In the operation of moving, the rollers are liable to accumulate more or less sand, mud, and gravel stones, thereby impeding the movement. To obviate this I attach the bars or scrapers G G, as before described. The aboved-named patent has nothing of the kind. The entire construction of the roller-frame A in my improvement is dissimilar to any other now in use.

In my improvement the weight bears on the centre over the wheels, and between the two axles, thereby preventing the roller from turning sidewise when in motion, as represented in the above-named patent. In my arrangement I also obviate the necessity of an additional "forward guide-truck." As all the important features of my improvement are different from those of said patent, I disclaim all that he claims, and confine myself only to the novel features of my improvement.

My improvement when once in place requires no more attention than would an ordinary carriage, with the exception of changing the direction of the rollers, for the purpose of turning to the right or left. The application of the power is convenient, and not complicated.

What I claim, and desire to secure by Letters Patent, is—

The construction of the frame A and the roller B, in combination with the parallel bars or scrapers G, the lever and lock H, the hooks P, the bolster C, as represented and described.

JOHN H. MOORE.

Witnesses:

J. C. ROBIE,

F. A. DURKEE.