No. 710,394. Patented Sept. 30, 1902.

J. H. SMITH.

STOVE TRUCK.

(Application filed Jan. 3, 1902.)

(No Model.)

Fig. 1.

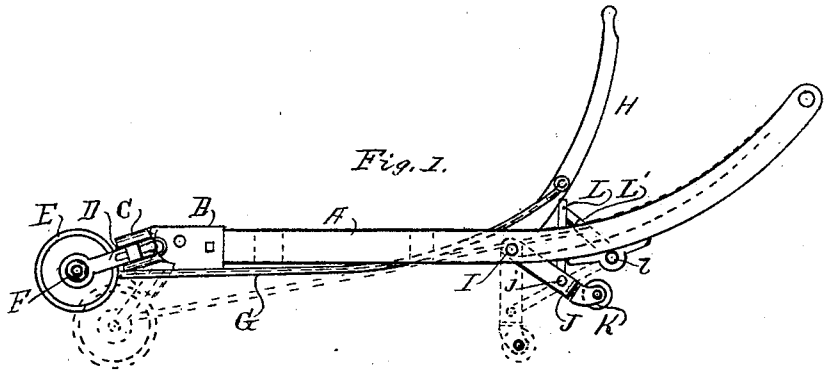


Fig. 2.

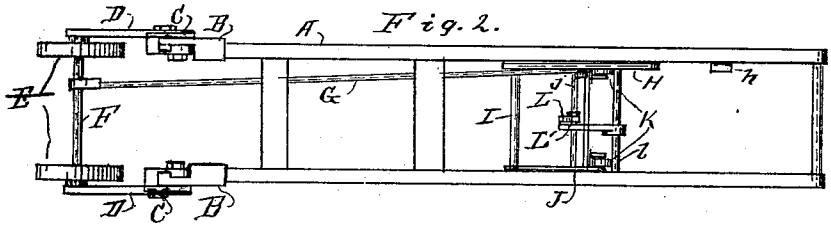


Fig. 3.

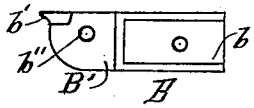


Fig. 6.

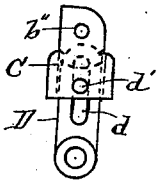


Fig. 8.

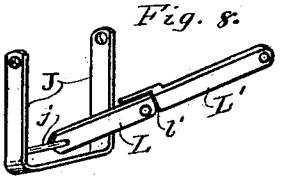


Fig. 4.

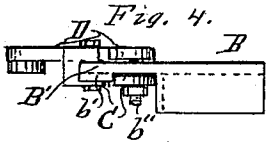


Fig. 5.

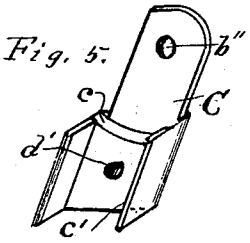


Fig. 7.

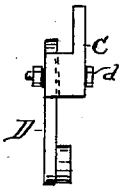
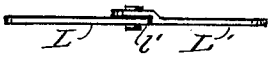


Fig. 9.



Witnesses.

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UNITED STATES PATENT OFFICE.

JAMES H. SMITH, OF BIG RAPIDS, MICHIGAN.

STOVE-TRUCK.

SPECIFICATION forming part of Letters Patent No. 710,394, dated September 30, 1902.

Application filed January 3, 1902. Serial No. 88,349. (No model.)

To all whom it may concern:

Be it known that I, JAMES H. SMITH, a citizen of the United States, residing at Big Rapids, in the county of Mecosta and State of Michigan, have invented certain new and useful Improvements in Stove-Trucks, of which the following is a specification.

My invention relates to improvements in trucks for use for transferring stoves and other heavy articles from place to place about houses and stores; and its objects are, first, to provide a truck that may be readily adjusted to be passed under a stove or other article where but little space intervenes between it and the floor and with which said article may be easily raised clear of the floor and transported to the desired place, and, second, to provide a truck that may be adjusted for use with stoves of different lengths of legs without requiring too great an exertion to raise the stove after the truck has been placed under it. I attain these objects by the mechanism illustrated in the accompanying drawings, in which—

Figure 1 is an elevation of my truck. Fig. 2 is a plan of the same. Fig. 3 is an elevation of the metal plate to which the adjustable axletree-arm is pivoted and secured to the truck. Fig. 4 is a plan of the same with the arm attached. Fig. 5 is a perspective of the adjustable arm. Fig. 6 is an elevation of the same with the axletree-bearing in place. Fig. 7 is a side elevation of the same. Fig. 8 is a perspective of the frame that carries the hind wheels or casters of the truck, and Fig. 9 is a plan of the adjusting link or brace that supports the same when in position for use.

Similar letters refer to similar parts throughout the several views.

A represents the side bars of the truck.

B represents a metal plate that is secured to the end of the side bars and is provided with a projecting bearing B′ for the reception and support of the axletree-arm C, which is pivoted thereto at *b*″.

b′ is a stop to prevent the arm from passing beyond a given position when lowering the truck to pass it under a stove.

The arm C is provided with an offset *c* the thickness of the arm B′, which is formed concave to correspond with the convex portion of the arm and form a bearing when the arm is pivoted at *b*″ for the support of the truck and its load without strain upon the pivot-bolt, and with projections C′ for the support of the axletree-bearings D, which are slotted, as at *d*, to provide for vertical adjustment independent of the pivotal adjustment of the arm B for adjusting the height of the trucks permanently to the various heights of stoves, &c.—that is to say, as it is not desirable to raise a stove farther than just sufficient to prevent the legs from touching the floor as it is being moved if a low-legged stove is to be moved it is better to raise the axletree by sliding the bearings D up on the arm, so that the truck will be about the proper height when raised, and thus avert the necessity of too great an effort upon the lever H to raise the stove, which is done as follows: The rod G is secured at one end to the axle F and at the other end to the lever H, so that the drawing of the lever back to the position of the dotted lines in Fig. 1 will draw the axletree and with it the wheels E back to the position indicated by their dotted lines, and thus raise this end of the truck and with it the corresponding side of the stove or whatever may be upon the truck. To adapt it to a higher stove-base, it is only necessary to slide the bearings down and properly secure them by the bolt at *d*′. It will be noticed that the offset *c* on the arm C is just thick enough to allow the upper end of the bearings D to pass up as a side bearing upon the arm B′, thus adding materially to the strength and working qualities of the arm C.

For supporting and operating the back end of the truck I pivot a frame J to the truck, as at I, so that it may be made to swing up and down, as indicated in Fig. 1, and pivot a link L to this frame, as at *j*. The opposite end of this link is pivoted to a second link L′, which in turn is pivoted to the frame, as at *l*, so that they may be thrown up, as indicated by the solid lines in Fig. 1, to lower the truck, or they may be thrown down, as indicated by the dotted lines, to raise the truck and support it and its load. The ends of these links are so formed as to form a rigid joint at *l*′ when in the position shown in Fig. 8 and form a satisfactory brace for the frame J.

b represents a recess in the plate B for the

reception of the end of the side bar of the truck and is very necessary to avert the danger of this point of connection becoming weak by reason of the excessive weight it is often called upon to support.

h represents a catch to hold the lever H to place when drawn back to the position indicated by the dotted lines in Fig. 1.

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

1. In combination with the side bars of a stove-truck, supporting-plates secured thereon, axle-arms pivoted thereto, longitudinally-adjustable axletree-bearings secured to said arms, an axle and wheels supported in said bearings, and a connecting-rod and lever connected therewith, substantially as and for the purpose set forth.

2. In combination with a truck-frame, plates secured to the ends thereof, axle-arms pivoted thereto and having offsets to form auxiliary bearings therewith, longitudinally-adjustable axle-bearings bolted thereto, an axle and wheels, a lever pivoted to the truck-frame, a connecting-rod connecting the lever with the axle, with a frame pivoted to the back of said truck-frame, casters on said frame, and an adjustable elbowed link-brace pivoted to said frame and the truck-frame, substantially as and for the purpose set forth.

3. In combination with a truck-frame, supporting-plates secured thereto, projections from the side of said plates for supporting the axletree-arms, when extended, a pivotal center and convex auxiliary bearings thereon, an axle-arm pivoted thereto and provided with a concave bearing-surface corresponding with the convex surface on the plates, and a longitudinally-adjustable axle-bearing bolted thereto, together with an axle, wheels, connecting-rod and lever for manipulating the same, substantially as specified.

Signed at Grand Rapids, Michigan, January 1, 1902.

JAMES H. SMITH.

In presence of—
SCHUYLER C. SMITH,
ITHIEL J. CILLEY.