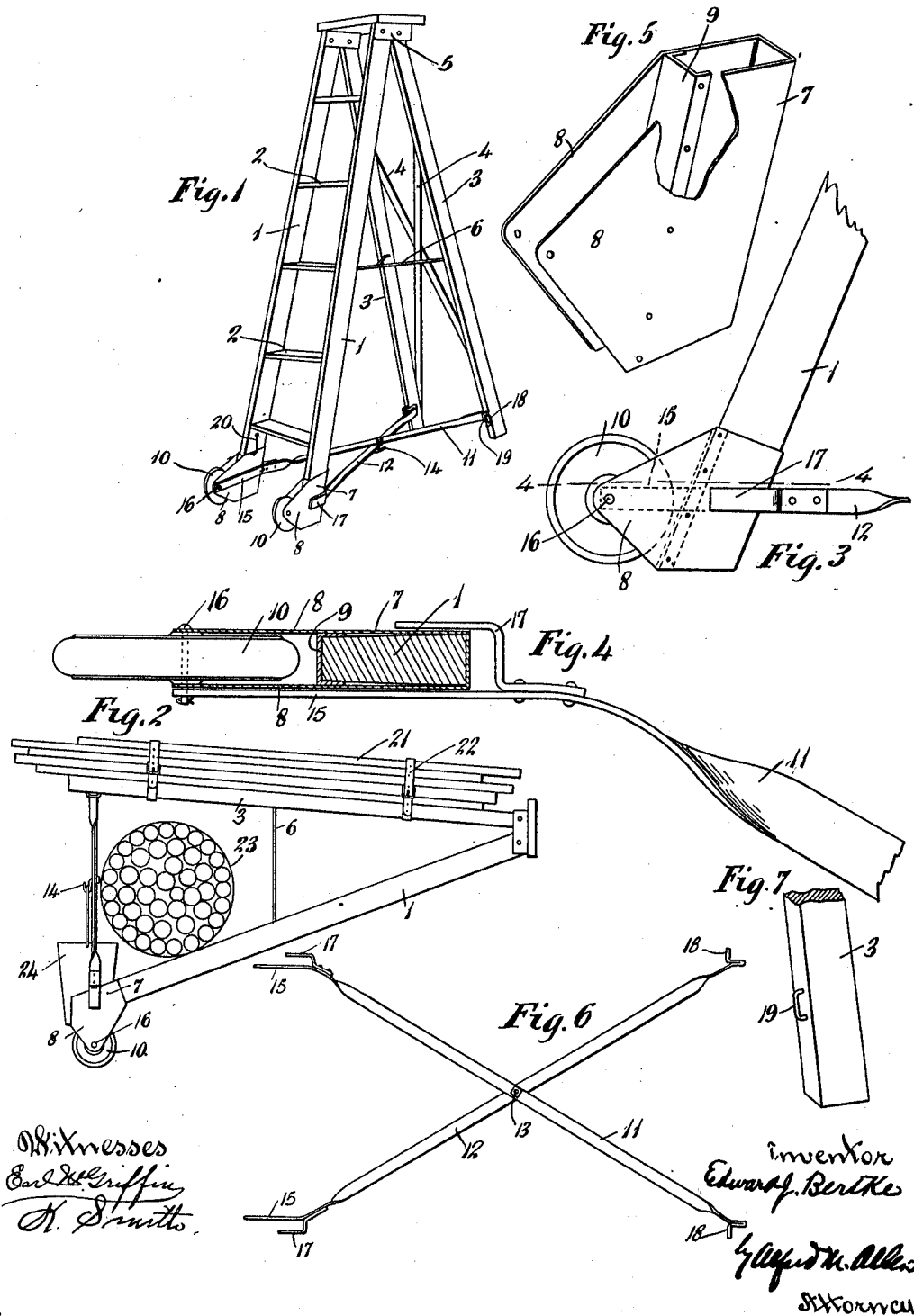


E. J. BERTKE.
STEP LADDER ATTACHMENT.
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1,004,550.

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Specification of Letters Patent.

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To all whom it may concern:

Be it known that I, EDWARD J. BERTKE, a citizen of the United States, and a resident of the city of Norwood, in the county of Hamilton and State of Ohio, have invented certain new and useful Improvements in Step-Ladder Attachments, of which the following is a full, clear, and exact description, reference being had to the accompanying drawing, forming a part of this specification.

My invention relates to attachments for step ladders, with which the step ladder may be converted into a truck or wheeled vehicle, more especially for the convenience of paper hangers for transporting their tools and material.

The object of the invention is to provide an attachment for the ordinary and standard make of step ladder which can be readily and easily attached or removed at a moment's notice, without altering or modifying in any way the construction or arrangement of the step ladder, and with which the step ladder can be converted into a vehicle for the holding and transporting of merchandise.

The invention consists of that certain novel construction of attachment to be hereinafter particularly pointed out and claimed, in which two sockets equipped with wheels are provided to slip over the lower ends of the step ladder to be hooked into staples on the supporting legs of the step ladder when open, to brace and hold the ladder in extended position, whereby the supporting legs of the ladder may be converted into a framework or platform to hold the goods to be transported, and the legs of the step ladder may be employed as a running gear.

In the drawings, Figure 1 is a perspective view showing my attachment applied to a step ladder, with the step ladder in upright position. Fig. 2 is a side elevation of the step ladder as converted into a vehicle. Fig. 3 is a detailed side elevation of the lower end of one of the step ladder legs with my attachment. Fig. 4 is a transverse section, taken on the lines 4, 4, of Fig. 3. Fig. 5 is a detailed perspective view, partly broken away, of one of the leg sockets, with the wheel removed. Fig. 6 is a plan view of the braces. Fig. 7 is a detailed perspective view of the lower end of one of the supporting legs of the ladder.

1, 1, are the side supports of an ordinary

step ladder, with the steps 2, 2, and a supporting frame made up of legs 3, 3, with the usual cross braces 4, 4, the legs being hinged at 5, to the upper end of the step ladder, and the ladder being provided with the usual jointed frame 6, to hold the ladder open.

The step ladder as described, is the ordinary step ladder of the ordinary and usual construction.

In order to convert the ladder into a wheeled vehicle, I provide sockets for the lower ends of the standards of the step ladder to be slipped on over the bottom. These sockets are preferably formed of sheet metal, as shown in Fig. 5, to form a rectangular tube closed at the bottom, of a size to fit the standard frames. The body of the socket is preferably formed of a single sheet of metal, 7, with projecting winged portions 8, 8, and 9 is a flanged plate riveted or properly secured to the side walls of the body portion to form the socket. In the outer end of the winged portions, a suitable wheel 10 is mounted in such position as to lie normally above the plane of the base of the socket.

11, 12, are two metal braces, pivotally secured together by a bolt 13, and for convenience, the outer end of this bolt is formed into a hook 14. Each of these braces is twisted at one end and bent to form an extension 15, which extends along the side wall of the socket, and is provided with an aperture at its outer end to receive an extension of the pin 16, by means of which the wheel 10 is journaled in the socket wings, and which extension is provided with an angle strip 17, which embraces the other side face of the socket.

The opposite ends of the braces 11 and 12 are provided with hooks 18, 18, each arranged to engage and be held by a corresponding staple 19, secured at the lower end of each of the back supports 3. These hooks 18, 18, are bent at right angles so as to engage the inside surface of the back support and thus brace the construction in place.

In order to prevent the sockets from dropping off the lower end of the standards of the step ladder, I prefer to provide a swinging hook 20, to hook into an eye on the socket member.

It will be obvious that with my attachment, the step ladder can be very quickly converted into a truck construction. The

sockets equipped with the wheels are slipped over the lower ends of the step ladder frame, and the outer ends of the braces 11, 12, are hooked into the staples 19, and the step ladder can then be used as shown in Fig. 2.

My construction is especially adapted for paper hangers. The boards 21 used by the paper hanger can be readily strapped by straps 22 to the back frame 3 of the step ladder, which is turned into horizontal position with the wheels 10 on the ground. The wall paper 23, or other supplies, can be placed within the ladder structure and held by the jointed frame 6, while the paste bucket 24 can be suspended from the hook 14.

As shown in Fig. 1, when the step ladder is used with the attachment still in place, the wheels are raised from the ground, so as to be out of the way. My attachment, however, can be instantly removed from the ladder, and the structure of the ladder is in no way changed or affected in order to apply the attachment.

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

1. In combination with a step ladder having front standards and rear supports, of metal sockets to fit over the lower end of the front standards, with extensions from said sockets, and wheels mounted in said extensions clear of the supporting surface of the step ladder when in upright position, and braces coupled to said sockets to engage the rear supports and hold said ladder open when the rear supports are brought into horizontal position.

2. In combination with a step ladder hav-

ing front standards and rear supports, of metal sockets to fit over the lower end of the front standards, with extensions from said sockets, and wheels mounted in said extensions clear of the supporting surface of the step ladder when in upright position, hooks on the standards to hold the sockets in place, braces mounted at one end on the wheel spindles, with staples on the rear supports, and hooks on the opposite ends of said braces to engage said staples and hold the ladder open when the rear supports are brought into horizontal position.

3. An attachment for step ladders comprising a socket to fit over the lower end of the step ladder standard, the side walls of the socket being extended to form parallel wings, a spindle transverse said wings, and a wheel mounted on the spindle, and a brace bar of a length to extend between the front and rear supports of the step ladder mounted on said spindle.

4. An attachment for step ladders comprising a pair of sockets to fit over the lower ends of the front standards of a step ladder, the side walls of each socket being extended to form parallel wings, with a spindle transverse each pair of wings, and a wheel mounted on each spindle, a pair of cross braces pivoted together at the middle, with their front ends pivotally mounted on the ends of said spindles, and the rear ends formed with hooks to engage the rear supports of the step ladder.

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Attest:

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