

(No Model.)

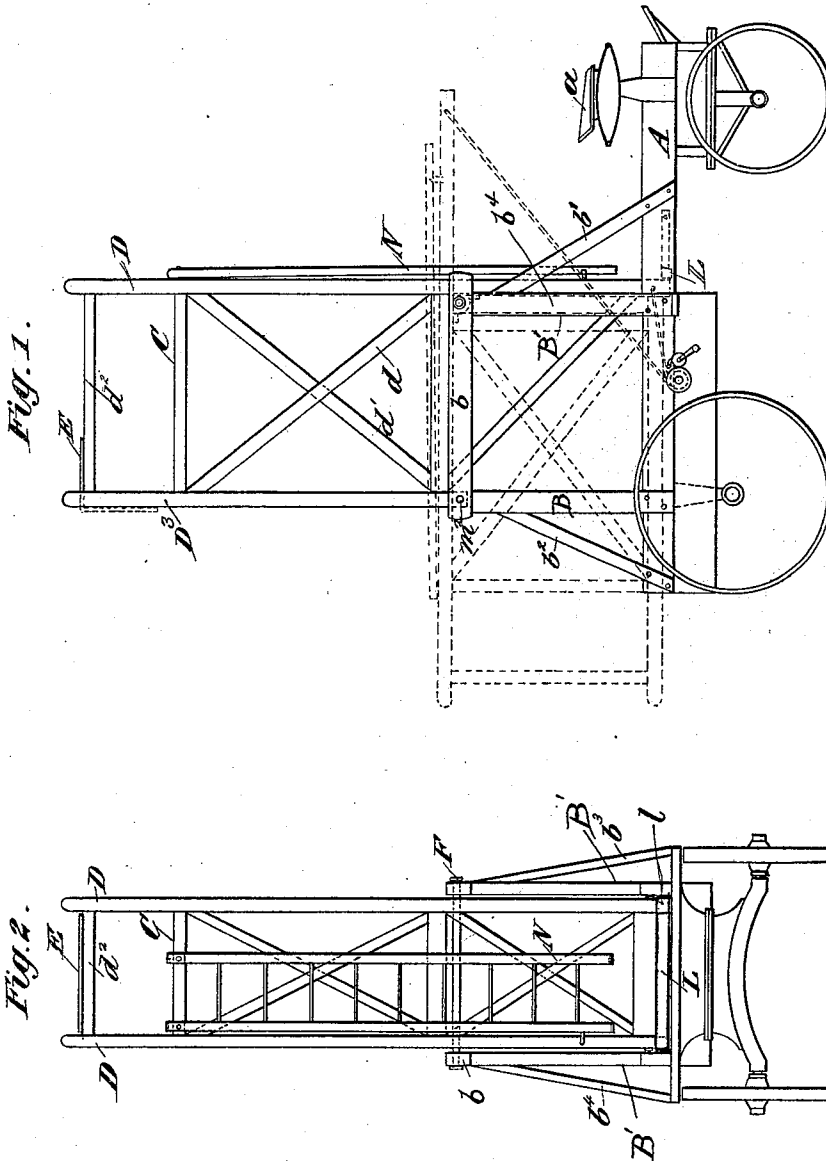
2 Sheets—Sheet 1.

E. S. BREED.

EMERGENCY WAGON FOR ELECTRIC LINE WORK.

No. 510,113.

Patented Dec. 5, 1893.



Witnesses:
George Barry.
O. Sundgren

Inventor:
Edwin S. Breed
By attorneys
Brown & Ward

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2 Sheets—Sheet 2.

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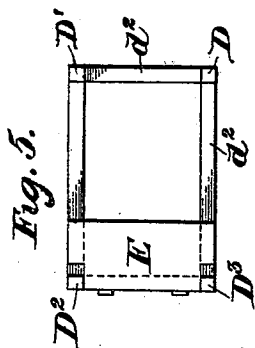


Fig. 4.

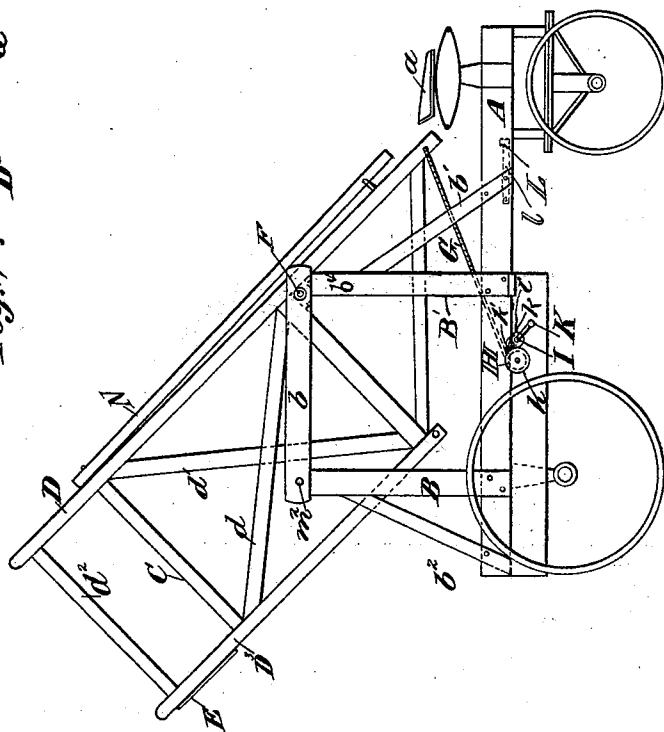
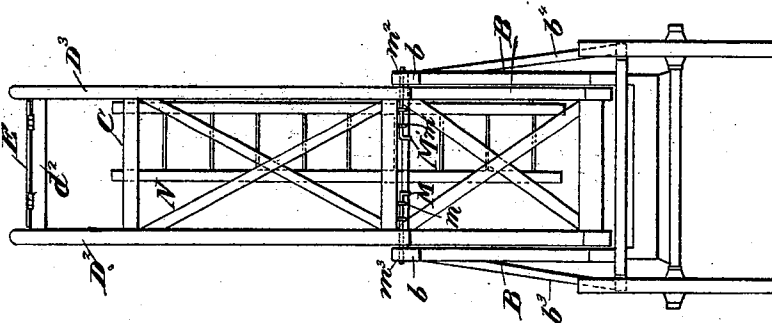


Fig. 3.



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UNITED STATES PATENT OFFICE.

EDWIN S. BREED, OF WATERBURY, CONNECTICUT.

EMERGENCY-WAGON FOR ELECTRIC-LINE WORK.

SPECIFICATION forming part of Letters Patent No. 510,113, dated December 5, 1893.

Application filed May 15, 1893. Serial No. 474,171. (No model.)

To all whom it may concern:

Be it known that I, EDWIN S. BREED, of Waterbury, in the county of New Haven and State of Connecticut, have invented a new and useful Improvement in Emergency-Wagons for Electric-Line Work, of which the following is a specification.

My invention relates to an improvement in emergency wagons for electric line work in which a platform for supporting one or more workmen is attached to a wagon body in such a manner that it may be elevated for use or lowered for transportation, as may be desired.

The object is to provide a support of the above character which may be quickly elevated for use and which shall at the same time afford a firm and stable support.

A practical embodiment of my invention is represented in the accompanying drawings in which—

Figure 1 is a view of the wagon in side elevation, representing in full lines the platform elevated and in dotted lines the platform lowered. Fig. 2 is a view in front elevation, showing the platform elevated. Fig. 3 is a rear view of the same. Fig. 4 is a view in side elevation, showing the platform about midway between its elevated and lowered positions, and Fig. 5 is a top plan view of the tower, showing the combined tool holding shelf and platform in position for use.

The wagon body is denoted by A and may be of any desired firm construction, the preferred form having a pair of heavy side rails firmly united and surmounted at the forward end by a driver's seat *a*. The body may be conveniently mounted upon four wheels, as is common, and its length may vary as circumstances may require.

Where electric line wires are placed nineteen feet above the ground, as is common, I make the wagon body about twelve feet long and provide for supporting the platform, when elevated, about twelve feet above the body of the wagon, the latter being from three to four feet above the ground when mounted on its wheels.

On each side of the wagon body there is a rigid frame work consisting, in the present instance, of a pair of uprising standards B, B' fixed at their lower ends to the side rail of the wagon body. The standards are con-

nected near their upper ends by a tie beam *b* and are firmly braced in position by a front brace *b'*, a rear brace *b²* and outwardly extending side braces *b³* and *b⁴*. The bracing and structure of the side frames is such that there is free space between them for the rocking movement of the platform tower or supporting frame.

The platform on which the workmen may stand is denoted by C. The tower or frame work in which it is supported is conveniently formed by a pair of front corner posts D, D' and a pair of rear corner posts D², D³ firmly united and braced. The two front corner posts, when the platform is elevated, extend down into proximity to the wagon body, while the two rear corner posts extend down to or a little below the top of the side frames and are connected to the front posts by diagonal beams *d, d'*, extending from the lower portions of the rear posts to the lower portions of the front posts. The several posts preferably extend above the platform a short distance and their upper ends are connected by a rail *d²* which serves as a convenient guard for the workmen. A tool holding shelf E, which may also be utilized as a platform, in case of need, is hinged at one side of the top of the platform tower, in the present instance at the rear side, and may be swung into position as shown in Fig. 1 or out of the way as shown in Fig. 4. When in position for use its ends may rest on the opposite rails *d²*, the ends of the shelf or platform near its rear edge being cut away to permit it to swing past the rear posts.

The platform supporting tower is pivoted at its front, and intermediate of its upper and lower ends to the upper ends of the front standards of the side frames, as shown at F, and on such pivotal connections it may be rocked into and out of its upright position between the side frames, the cutting away of the rear lower corner of the tower, permitting it to freely fold over to the rear.

To raise and lower the platform and its tower, I fasten one end of a chain or other flexible connection G to the lower front corner of the tower and lead the opposite end to a winding drum H, journaled in the wagon body and having fixed to rotate therewith a spur wheel *h* which gears with a drive spur

wheel *i* on a shaft I provided with a crank K. A ratchet wheel *k* on the shaft I is engaged by a pawl *k'* on the wagon body to prevent unintentional retrograde movement. The tower may be locked in its elevated position by a swinging dog L, consisting of a cross bar and a pair of arms *l* extending at right angles thereto, the arms being pivotally secured to the wagon body at such a distance in front of the side frames as to permit the cross bar of the dog to fall into position in front of the lower ends of the posts D, D' when the latter reach their upright positions. If found desirable, the tower may be further locked in upright position by sliding bolts M, M' held in eyes or sockets *m*, *m'* on the under side of the lower rear cross bar of the tower, and adapted to be slid outwardly into holes *m*², *m*³ in the rear standards of the side frame. A ladder N may be fixed to the front of the tower for gaining access to the platform.

To swing the platform and its tower from its lowered to its elevated position requires but little time, ten seconds being the time actually required in practice, and when elevated it is ready for use and is firm and reliable.

What I claim is—

1. The combination with a suitable wagon body and side supports uprising therefrom, of a platform supporting tower pivotally secured at the margins of one of its sides, between the said side supports at a point above the body of the wagon, the platform supporting tower being free to swing bodily between

the side supports into horizontal position below its pivotal connections with the supports to lower the platform and into upright position to raise the platform, substantially as set forth.

2. The combination with the wagon support, standards uprising therefrom and a swinging tower with its platform, pivotally secured to the standards, of mechanism for raising and lowering the tower and a swinging dog pivoted to the wagon support in position to engage and lock the tower in its elevated position, substantially as set forth.

3. The combination with the wagon support, standards uprising therefrom and a swinging tower with its platform, pivotally secured to the standards, of mechanism for raising and lowering the tower, means for locking the tower in elevated position and a swinging work bench and platform attached to the tower above the aforesaid platform, substantially as set forth.

4. The combination with the wagon support and the standards uprising therefrom, of the tower pivotally secured at one side intermediate of its ends between the standards, the said tower being cut away at one of its lower corners to permit it to swing freely as a whole about its pivots at one side and means for raising and lowering the tower, substantially as set forth.

EDWIN S. BREED.

Witnesses:

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