

No. 610,602.

Patented Sept. 13, 1898.

J. DOLDT.
VERTICALLY LIFTING PLATFORM.

(Application filed Apr. 18, 1898.)

(No Model.)

Fig. 1.

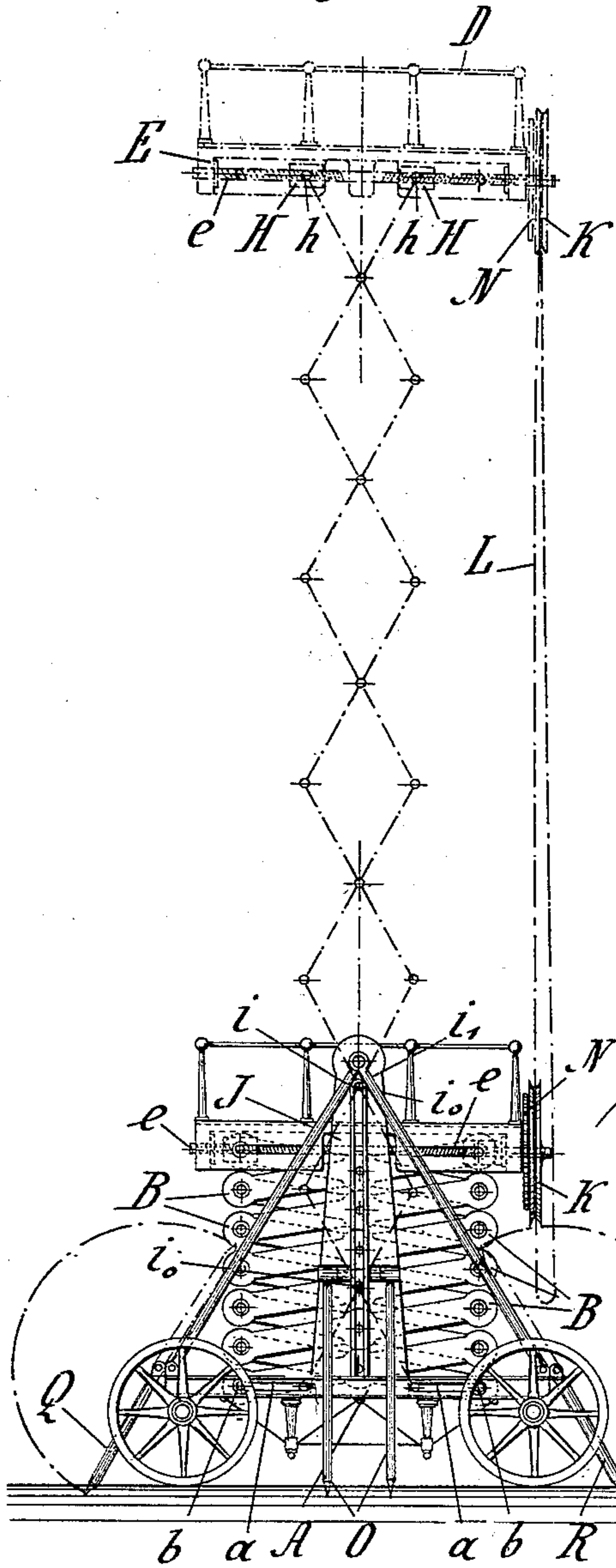
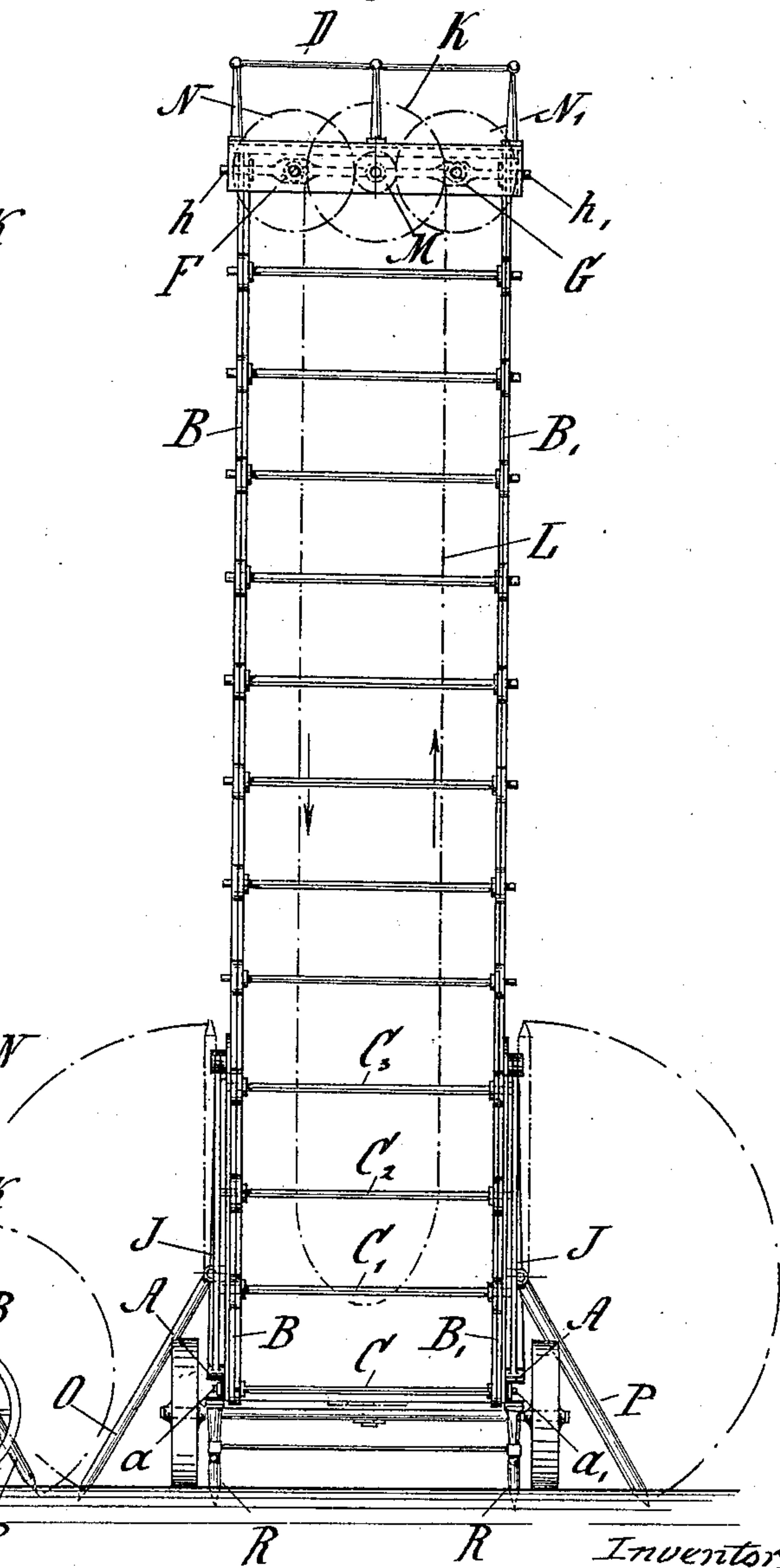


Fig. 2.



Witnesses.

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UNITED STATES PATENT OFFICE.

JOHANN DOLDT, OF ETTLINGEN, GERMANY.

VERTICALLY-LIFTING PLATFORM.

SPECIFICATION forming part of Letters Patent No. 610,602, dated September 13, 1898.

Application filed April 18, 1898. Serial No. 678,079. (No model.)

To all whom it may concern:

Be it known that I, JOHANN DOLDT, master mason, a citizen of the German Empire, residing at Ettlingen, in the Grand Duchy of Baden, Germany, have invented a new and useful Vertically-Lifting Platform, of which the following is a specification.

The invention relates to a contrivance by means of which an elevated standing-place above the ground can within certain limits be varied as may be desired. These portable contrivances for providing a variable elevated standing-place can be advantageously used as outlook towers and platforms in military and railway operations, as well as in private industrial enterprises in workshops for the fitting up of vertically-built machines and engines, for the mounting of lighting and heating plant and services and the like, for painting houses, to hang up or take down heavy sign-boards, &c., in horticultural pursuits for gathering fruit from the higher trees, and for many other purposes.

The object of my invention consists in my utilizing the principle of lazy-tongs or scissors-like joints or links repeatedly fastened together in order to be able to raise and lower a platform provided with a balustrade on which one or more persons may be taken up and which can be regulated both at top and bottom.

In the accompanying drawings, wherein like letters denote like parts, Figures 1 and 2 show a side and front view, respectively, of the contrivance of which my invention consists.

On a portable wagon-frame A, that can be shored up on all sides, there are in each of the opposite long sides two slit-shaped grooves, relatively *a* and *a'*, into which set the laterally-projecting pins *b* and *b'* of the undermost pairs of the levers B and B' of a whole series of such pairs, which are connected one with the other by rods C C' C². The uppermost pairs of levers B and B' carry a platform E, provided with a balustrade D. The raising and lowering of the platform in relation with the drawing together and pulling open of these lazy-tongs, which are joined together by hinges, is effected through the instrumentality of two spindles F and G, which are bedded in the upper platform, each furnished with a right-handed and left-handed

screw, the female screws of which, H and H', provided with pivots *h* and *h'*, are mounted in the slits *e* and *e'* in the side parts of the platform.

In order that the lazy-tongs frame may maintain a firm position, standards J and J' are attached to both sides of the wagon-frame A. These are provided with long slits, in which are fixed both the under middle hinge-pins *i*⁰ *i*⁰ of the rods C' and C³ of the opposite standing lazy-tongs.

Two props *i* and *i'* are from each side of the wagon-frame united with the standards J and J' and stiffen both the parts mentioned.

The movement of both the spindles operating the lazy-tongs is effected by means of a hand or rope wheel K, over which an endless rope L works almost to the ground. By a direct rotation of this wheel K the platform can be raised or let down from above, and by means of the rope L this can be also performed from beneath. The propelling medium is thus transmitted to the cog-wheels M, N, and N', both the last of which bear directly on the end pivots of both the spindles.

The lateral strutting of the frame is accomplished by means of the shores O and P, which can be swung upward, and the front and hinder strutting by means of the shores Q and R, which also can be swung up.

The side parts of the wagon-frame A are suitably strengthened by such construction as secures the utmost carrying capacity needed.

What I claim as my invention, and desire to secure by Letters Patent of the United States, is—

In combination, a truck, vertical slotted standards thereon, lazy-tongs mounted upon said truck and guided by said standards, a platform E, shafts having oppositely-threaded ends mounted upon said platform and engaging the uppermost links of said lazy-tongs, gear-wheels N, N, secured upon the ends of the threaded shafts, a pinion M engaging said gear-wheels, pulley K secured to said pinion, and flexible operating means depending from said pulley, as and for the purpose set forth.

In witness whereof I have hereunto set my hand in presence of two witnesses.

JOHANN DOLDT.

Witnesses:

AUGUST ENDLICH,
JACOB ADRIAN.