

(No Model.)

2 Sheets—Sheet 1.

E. J. COLER.
UNLOADING PLATFORM.

No. 493,980.

Patented Mar. 21, 1893.

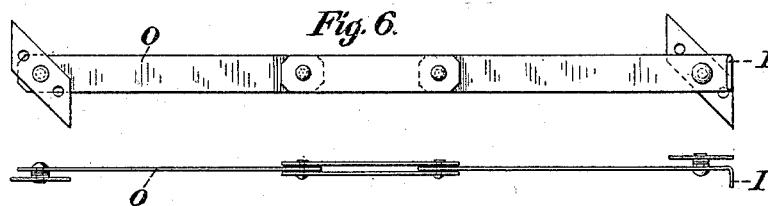
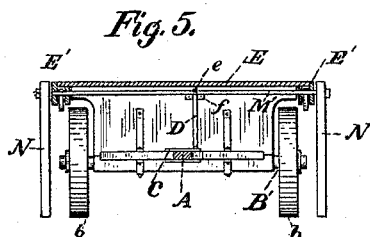
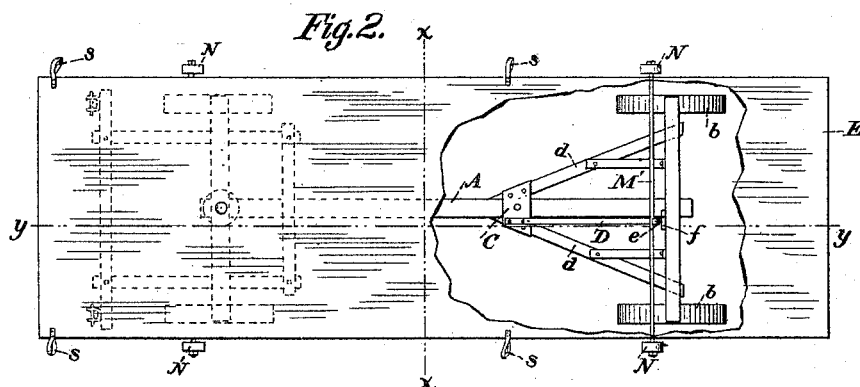
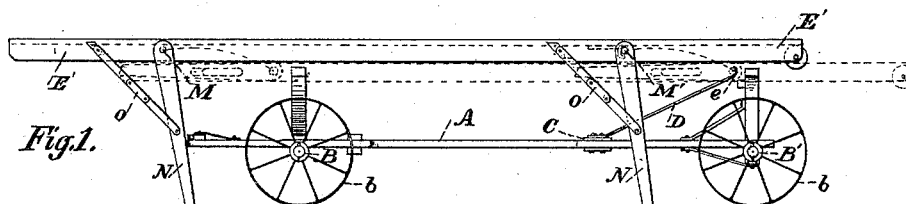


Fig. 7.

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UNITED STATES PATENT OFFICE.

ELIJAH J. COLER, OF LIBERTY, OHIO.

UNLOADING-PLATFORM.

SPECIFICATION forming part of Letters Patent No. 493,980, dated March 21, 1893.

Application filed July 30, 1892. Serial No. 441,759. (No model.)

To all whom it may concern:

Be it known that I, ELIJAH J. COLER, a citizen of the United States, residing at Liberty, in the county of Montgomery and State of Ohio, have invented certain new and useful Improvements in Unloading-Platforms, of which the following is a specification, reference being had therein to the accompanying drawings.

My invention relates to new and useful improvements in portable or unloading platforms of the class especially adapted to use in loading and hauling tobacco and like products from the field, in which leisurely and careful unloading by the hand is necessary to preserve the same in the best condition possible.

The object of my invention is to provide a portable platform and wagon bed combined that may be connected with and released from the truck of a wagon without effort on the part of the driver and requiring no manual labor; to be left in a suitable place for convenient unloading. It will be seen a number of these platforms may be worked by a single team. This object, I accomplish by providing a platform with legs pivoted to the sides thereof by means of which the said platform may be lowered or mounted on the truck of a wagon, and automatically coupled thereto, or allowed to stand on its legs independently of the wagon.

In the accompanying drawings my invention is fully illustrated, and reference is now made to Figure 1, which is a side elevation, showing the platform standing independently of, and the broken lines showing its position when resting on the running gear of a wagon. Fig. 2, a plan view of the same with the rear portion of the platform broken out, to exhibit the rear portion of the running gear, the front portion of the same being shown in dotted lines. Fig. 3, a horizontal sectional view on the line $y-y$ of Fig. 2, enlarged. Fig. 4, a plan view with a portion broken away, enlarged. Fig. 5, a sectional view on the line $x-x$ of Fig. 2. Fig. 6, a longitudinal detached side view of one of the folding joints. Fig. 7, a longitudinal detached edge view of one of the folding joints.

The letters of reference indicate corresponding parts in the views above referred to.

A denotes a coupling pole by which the front and rear axles B and B' with wheels b and b' are coupled. Hounds d , are bolted to the rear axle B' and to the coupling pole by bolts on the side thereof, passing through the hounds, and the metal plate C; these with minor braces or supporting adjuncts comprise the well known running gear of a vehicle. To this plate C, is also rigidly secured an upwardly and rearwardly inclined spring metal coupling rod D, having a hook or curve e , at its free end; beneath this rod in a vertical line, is a block, f , extending outwardly from the front side of the rear axle B', of which, together with the rod D, and the hook e , at the end thereof, further reference will be hereinafter made.

The portable platform is indicated by E, and consists of side pieces or longitudinal rails E' E' connected by cross-pieces to which the flooring is attached. At both ends rods M and M' extend across the platform, the outer ends of which are journaled in the legs N, which are securely held on these rods by well known means. They are movably attached thereto in order to allow their being raised from a vertical position to a position parallel to the sides of the platform, as shown in Fig. 3, by the position of the leg itself, and the position indicated by broken lines, forming a segment from the end of said legs to the side of the platform—, where they may be secured and held in that position by means of supports s . The length of these legs is greater than the distance from the top of the axle bolster to the ground; consequently when they are released from their supports s , they engage with the ground and as the wagon is drawn forward, they assume an erect position, thereby elevating the platform from the position shown in broken lines as in Fig. 1.

As a means of preventing the legs from passing too far rearwardly and beyond the pivoting rod M' and thus interfere with the practical working of my invention, I employ a folding-joint O, bolted or otherwise suitably attached to the legs and sides of the platform, adapted to break and fold as when the legs, are raised, as shown in Fig. 4. Fig. 1 shows them lengthened out to a position assumed when the platform is elevated on its legs and in a position to be unloaded.

The letter I indicates a bend extending outwardly from the lower end of the link that is attached to the leg; the object of this is to prevent the upper link, or that link which is attached to the side of the platform and the lower link or that link which is attached to the leg, from slipping past each other when the folding-joint is doubled upon itself by the upward movement of the leg.

On the under face of the platform E, and riveted or otherwise suitably attached thereto, is a metal plate P, having its rear end extending downwardly and terminating in a hook and adapted to afford a support in the center of rod M', as shown in section in Fig. 3. The object of this plate is to prevent the rod M' from being sprung forward to a degree that would interfere with the effective operation of the coupling rod D. This plate may also take the place of the rod M' as a means of coupling the rod D to the platform, and the rod M', dispensed with. This rod D is an essential means of preventing the platform from slipping too far to the rear, and to retain the said platform in a position from which it may be elevated to rest upon its legs by the running gear being pulled forward. This operation is accomplished by the legs being released from the supports s, and placed against the ground, the forward movement of the truck will impart a leverage to the legs N, which in turn will impart a forward and elevated movement to the platform, and lift the same to the position shown in Figs. 1 and 4. I wish to call attention to the effect this upward and forward movement of the platform has upon the coupling rod D. In Figs. 2, 3, 4 and 5 it will be observed the hook e. of the coupling rod D is engaged with the rod M' by partly encircling said rod. This is the position the rod is in when the platform is being hauled or when the team is stopped, but the legs of the platform have not been released from supports (s); when this is done, they assume an inclined position against the ground;—the pulling forward of the running gear, and the action of the folding joints, bring the legs to, and maintain them in a vertical position, and thereby the platform is raised from the truck, and the rod M' withdrawn from the hook e. In this upward movement the coupling rod D with hook e, is carried with the rod M' until the latter gets entirely out of contact with the said coupling rod D, and is automatically released therefrom. When the coupling rod D springs back, (the

natural spring of the metal permitting this operation in a way that will be readily understood.) The block f, is arranged to prevent it from springing too far in a lower direction.

In Fig. 1, the coupling rod D, is shown in its normal position, the broken lines extending in a circle from the hook thereof, shows the extent of travel it makes when the platform has been elevated and the rod M' freed from the hook. It will be observed that in this operation the coupling rod D is automatically released from engagement with the rod M', that is to say, no attention need be given this means of coupling beyond seeing that the truck has been placed under the platform a necessary distance before the latter is lowered thereon.

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

1. In combination with the running gear of a wagon, a spring coupling rod, rigidly attached thereto, having a hook e, at one end, a platform with rods extending across the front and rear ends thereof, the rear one of said rods adapted to become automatically in and out of contact with the hook e, substantially as herein described.

2. In combination with the running gear of a wagon, a portable platform with legs pivoted to the sides thereof by transverse rods M, and M' the herein described folding joints by means of which the legs are maintained in a vertical position, and the spring coupling rod with hook e, by means of which the said platform and the running gear are automatically united, substantially as herein described.

3. In a portable platform adapted to use in connection with the running gear of a wagon, the combination with the platform having transverse rods M and M' and legs pivoted to said rods, and the folding joints O, having the projecting part I, of the spring coupling rod D, with hook e, substantially as herein described.

4. In a portable platform, the combination with the herein described platform with cross rod M', the plate P, and the coupling rod D, as herein set forth.

In testimony whereof I affix my signature in presence of two witnesses.

ELIJAH J. COLER.

Witnesses:

R. J. MCCARTY,
EWING FRENCH.