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PATENTED AUG. 1, 1905.

E. RING.
MANURE LOADER.
APPLICATION FILED MAR. 9, 1906.

2 SHEETS—SHEET 1.

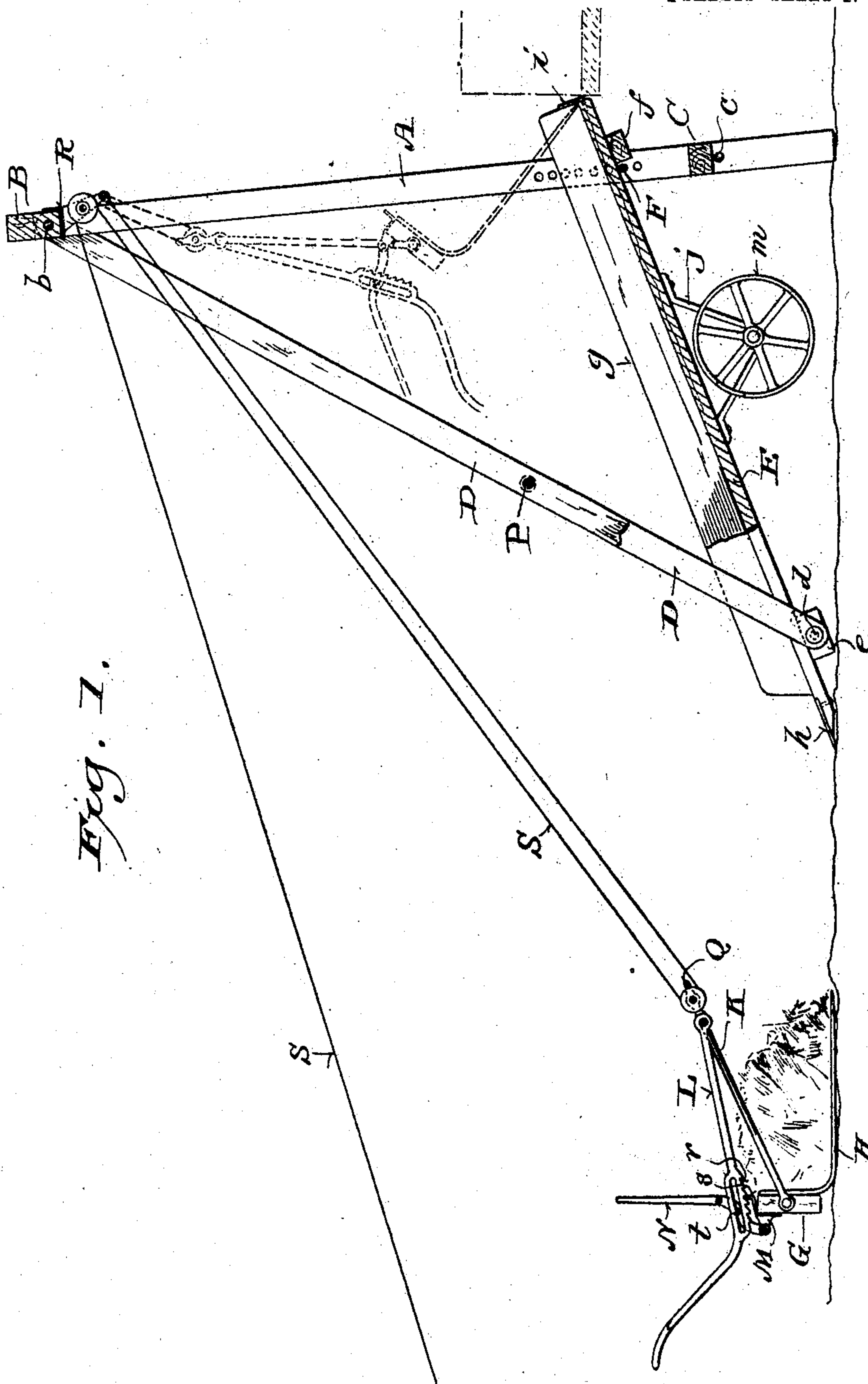


Fig. 1.

Witnesses
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EDMUND RING, OF KINGSTON, WISCONSIN.

MANURE-LOADER.

No. 795,859.

Specification of Letters Patent.

Patented Aug. 1, 1905.

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To all whom it may concern:

Be it known that I, EDMUND RING, a citizen of the United States, and a resident of Kingston, in the county of Green Lake and State of Wisconsin, have invented certain new and useful Improvements in Manure-Loaders; and I do hereby declare that the following is a full, clear, and exact description thereof.

My invention has for its object to provide simple economical portable manure-loaders; and it consists in certain peculiarities of construction and combination of parts hereinafter particularly set forth, with reference to the accompanying drawings, and subsequently claimed.

Figure 1 of the drawings represents a side elevation of a portable manure-loader in accordance with my invention, partly broken away and in section; Fig. 2, a front elevation of the same; Fig. 3, a vertical longitudinal section view of one form of a carrier constituting part of the loader; Fig. 4, a front elevation of said carrier having parts thereof broken away and in section; Fig. 5, a plan view of the aforesaid carrier, partly in horizontal section; and Fig. 6, a perspective view of a scraper that may constitute part of the carrier element of the loader, said scraper being partly broken away.

Referring by letter to the drawings, A indicates each of a pair of standards; B, a head-block; C, a lower beam, and D each of a pair of rearwardly-inclined pivotal braces included in the frame of the herein-described manure-loader. Extending through the standards and head-block of the frame is a tie-rod *b*, that also serves as a pivot for the upper ends of the braces of said frame, and another tie-rod *c* is shown connecting the standards below the intervening lower frame-beam. A pivot-rod *d* for the lower ends of the frame-braces extends through a rear under-cleat *e* of a normally inclined wooden platform *E* between said braces and the frame-standards. The platform is provided with a forward under-cleat *f*, side guards *g*, and a rear wear-plate *h* and forward upwardly-projecting pins *i*, for which a cleat may be substituted. Fast on the under side of the platform are hangers *j* for the axle *k* of wheels *m*, and when said platform is dropped to rest forward of its cleat *f* on the frame-beam *C*, its plate-shod rear end is elevated and the loader as a whole may be moved about on said wheels. When the platform is in the position just described, the standards *A* are lifted off the ground and

pushed upon from the front to propel the loader on its wheels *m*, the platform being held by its own weight on the frame-beam *C*, or, if more desirable, the rod *F*, hereinafter specified, may be positioned in apertures of said standards immediately above the front end of said platform. The cleat *f* being forward of the frame-beam *C* and abutting the same, the platform has the least inclination to which it is adjustable, its front end being high enough to permit of delivery therefrom into the box of a sled or low wagon; but for greater variable degree of inclination of said platform and corresponding elevation of its front end a supporting-rod *F* is adjustable in apertures vertically of the frame-standards above said beam, said platform-cleat being set forward of the rod in its vertical adjusted position.

Designed to slide on the platform and have tilt discharge from the front end of same is a carrier comprising a rear bar *G* and suitably-bent forwardly-extending tines *H*, hooked at their rear ends on the upper edge and stapled thereto. A shield *I* is shown in Figs. 3, 4, and 5 in connection with the tines and bolted to the back bar of the carrier, and the scraper *J* (shown by Fig. 6) may be substituted for the shield. Fast on the under side of the shield *I* is a front under strap *n*, having bends *p*, that slip back on the carrier-tines, and the scraper *J* is provided with a front under-pocket *q* for the points of said tines.

Connected to the ends of the back bar of the carrier is a triangular bail *K*, and connected to the apex of the bail is the forward end of a longitudinally-slotted hand-lever *L*, having a rack portion *r* engageable with an upper flange *s* of a bracket *M*, fast to said bar. Engaging the slot in the lever *L* is a pin *t* in connection with another lever *N*, fulcrumed on the bracket *M*, and a rod *P* is extended through the frame-braces *D* to be in the path of the pin-carrying lever. A sheave-block *Q* is connected to the apex of the bail *K*, and a similar block *R* is attached to the head-block *B* of the frame. A drag-rope *S* is fastened at one end to the sheave-block *R* and rove through both of said blocks.

Manure from a pile is caught on the carrier, and if straw or cornstalks be mixed with said manure the load is bound by a depression of the lever-controlled bail *K* thereon, said bail being locked by the engagement of its rack portion *r* with the flange or stop *s* for same. The drag-rope is now operated to elevate the

carrier and its load on the inclined platform, during which time the lever N comes into contact with the rod P to automatically unlatch the lever L, and thus free the bail K in connection therewith, after which there is compression of said load against front upper obstruction, such as the pins *i* of said platform, the result being tilt of said carrier to discharge the elevated manure onto a sled or wagon arranged to receive the same. When the manure is mixed with short vegetable stuff, the shield I is employed as part of the carrier to prevent the material therein from slipping through the underlying tines, and if the manure be soft the scraper J will be employed as a part of said carrier. If the shield or scraper be employed, its contact with the forward obstruction on the platform will cause dumping-tilt of the carrier elevated on said platform by draw of the drag-rope.

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

1. A manure-loader comprising a frame having rearwardly-extending pivotal side braces, a platform in pivotal connection with said braces and adjustable to various degrees of inclination between the same and frame-standards, a carrier having a bail in tackle connection with a head-block of the frame, means for locking the bail forward over the carrier, means for automatically unlocking the bail at a time in the ascent of said carrier, and means in connection with the forward end of said platform for insuring tilt of said carrier to discharge its load.

2. A manure-loader comprising a frame

having rearwardly-extending pivotal side braces, a platform in pivotal connection with said braces and adjustable to various degrees of inclination between the same and frame-standards, a carrier having a bail in tackle connection with a head-block of the frame, a bail-controlling rack-lever, a catch on the carrier for the lever, another lever in connection with the one aforesaid to trip the same clear of said catch, a rod between the aforesaid braces in the path of the trip-lever, and means in connection with the forward end of said platform for insuring tilt of said carrier to discharge its load.

3. A portable manure-loader comprising a frame having rearwardly-extending pivotal side braces, a platform in pivotal connection with said braces and adjustable to various degrees of inclination between the same and frame-standards, an axle and wheels hung underneath the platform, a carrier having a bail in tackle connection with a head-block of the frame, means for locking the bail forward over the carrier, means for automatically unlocking the bail at a time in the ascent of said carrier and means in connection with the forward end of said platform for insuring tilt of said carrier to discharge its load.

In testimony that I claim the foregoing I have hereunto set my hand, at Milwaukee, in the county of Milwaukee and State of Wisconsin, in the presence of two witnesses.

EDMUND RING.

Witnesses:

H. G. UNDERWOOD,
GEORGE FELBER.