T. G. WRIGHTSON & J. M. RINGQUIST.

MEANS FOR MANIPULATING SKIPS OR BUCKETS.

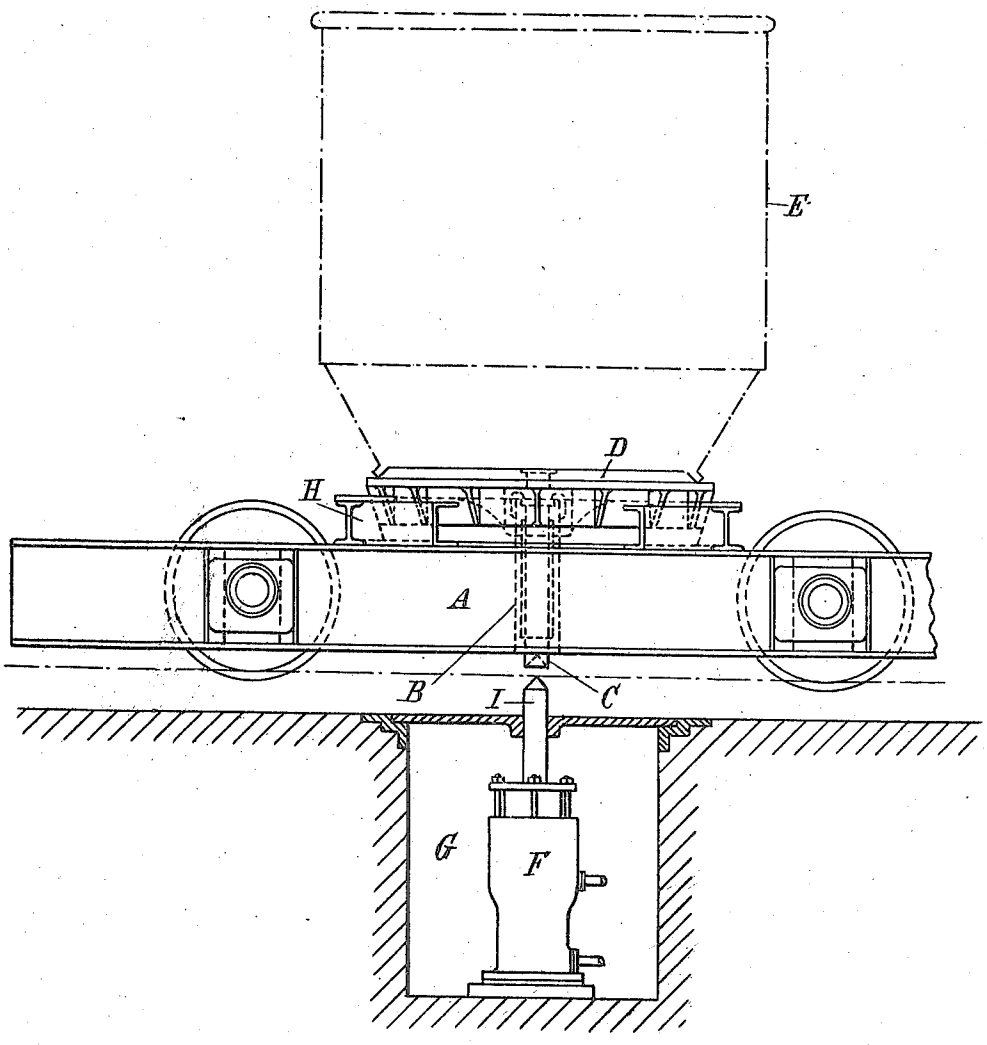
APPLICATION FILED SEPT. 24, 1917.

1,264,739.

Patented Apr. 30, 1918.

2 SHEETS—SHEET 1.

Fig. 1.



Inventors:
Thomas Garmondsway Wrightson
Justus Magnus Ringquist
By their attorneys
Baldwin & Wright

SACKETT & WILHELMS CORP. N.Y.

T. G. WRIGHTSON & J. M. RINGQUIST.

MEANS FOR MANIPULATING SKIPS OR BUCKETS.

APPLICATION FILED SEPT. 24, 1917.

1,264,739.

Patented Apr. 30, 1918.

2 SHEETS—SHEET 2.

Fig. 2.

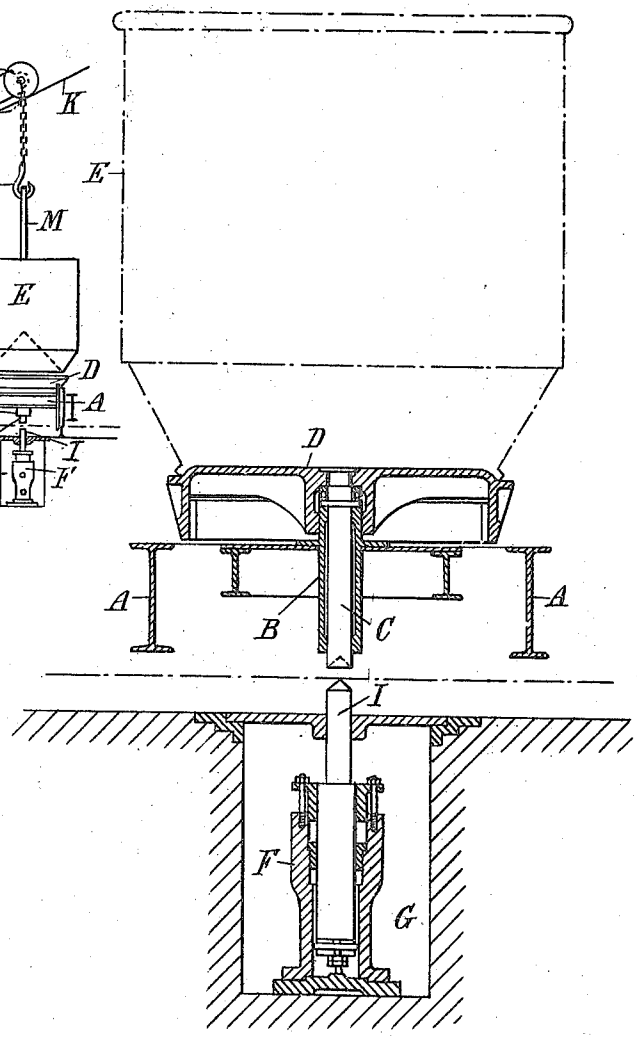
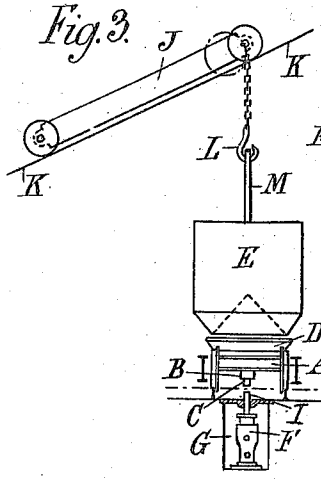


Fig. 3.



Inventors:
Thomas Garmondsway Wrightson
Justus Magnus Ringquist
By their attorneys,
Baldwin & Wright.

UNITED STATES PATENT OFFICE.

THOMAS GARMONDSWAY WRIGHTSON AND JUSTUS MAGNUS RINGQUIST, OF THORNABY-ON-TEES, ENGLAND, ASSIGNORS TO HEAD, WRIGHTSON AND COMPANY, LIMITED, OF THORNABY-ON-TEES, ENGLAND.

MEANS FOR MANIPULATING SKIPS OR BUCKETS.

1,264,739. Specification of Letters Patent. Patented Apr. 30, 1918.

Application filed September 24, 1917. Serial No. 192,972.

To all whom it may concern:

Be it known that we, THOMAS GARMONDSWAY WRIGHTSON and JUSTUS MAGNUS RINGQUIST, subjects of the King of Great Britain, residing at Teesdale Iron Works, Thornaby-on-Tees, England, have invented new and useful Improved Means for Manipulating Skips or Buckets, of which the following is a specification.

This invention relates to improved means for manipulating skips or buckets, and is especially adapted for use with a hoist or furnace charging mechanism by which a skip or bucket is raised by means of a bogie running upon a frame.

The present method of working a truck running upon rails brings the skip into such a position beneath the hoist or charger that a hook carried by the charger bogie can hook into the stalk of the skip.

According to this invention we provide upon the truck a table which is adapted to support the skip and to be raised and lowered relatively to the truck, and we provide means capable, when the truck has been brought into its correct position, of lifting the table and skip so as to bring the latter into such a position that its stalk is caught by the hook of the charger bogie.

The invention is illustrated by the accompanying drawings, Figure 1 of which is a side elevation showing a truck in position over the lifting apparatus, while Fig. 2 is a transverse section. Fig. 3 is a view to a smaller scale showing the stalk of the skip engaged by the hook of the charger bogie.

A is a truck running upon rails and provided with a long vertical bearing B for a stem C, on which is rotatably mounted a table D adapted to support a skip E. F is a hydraulic cylinder sunk in a pit G beneath the level of the rails. H are flanges forming a socket for the table when it is in position on the truck.

Referring to Fig. 3, J is a charger bogie upon an inclined hoist K, and from the bogie J depends a hook L engaging with a stalk M on the skip E.

The method of working is as follows:—

The truck A carrying the skip E is run into the position shown with the stem C vertically above the ram I of the hydraulic cylinder F. Pressure is now admitted to the cylinder to raise the ram which lifts the stem C and therefore the table D and skip E sufficiently high for the stalk M of the skip E to be engaged by the hook L of the charger bogie J; the latter is then moved up so that the hook L engages the stalk M. The ram is now allowed to descend so that the table and stem move down, leaving the skip suspended from the hook entirely clear of the truck and table, the bogie thus being free to take the skip up the incline of the charger. Since the ram has moved down to its normal position the truck can be moved away.

What we claim is:—

1. The combination of an inclined hoist, a charging bogie thereon, a hook carried by the bogie, a truck, a track on which it travels, a skip-supporting table carried by the truck, a stem depending from the table, and a ram beneath the track having a part adapted to move upwardly into engagement with the stem and downwardly out of engagement therewith.

2. The combination of a truck, a track on which it travels, a skip-supporting table carried by the truck, a stem projecting downwardly from the table, a tubular bearing depending from the truck through which the stem extends, and a table lifting device beneath the track adapted to engage the stem.

3. The combination of a truck, a track on which it travels, a skip-supporting table carried by the truck, a stem projecting downwardly from the table, a tubular bearing depending from the truck through which the stem extends and about the axis of which the table turns, and a table lifting device beneath the track adapted to engage the stem.

In testimony that we claim the foregoing as our invention, we have signed our names this 6th day of September 1917.

THOMAS GARMONDSWAY WRIGHTSON.
JUSTUS MAGNUS RINGQUIST,

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."