No. 773,210. PATENTED OCT. 25, 1904.

W. C. MACKELLAR & T. MACKENZIE.

CONVEYER.

APPLICATION FILED MAY 21, 1903.

NO MODEL. 2 SHEETS—SHEET 1.

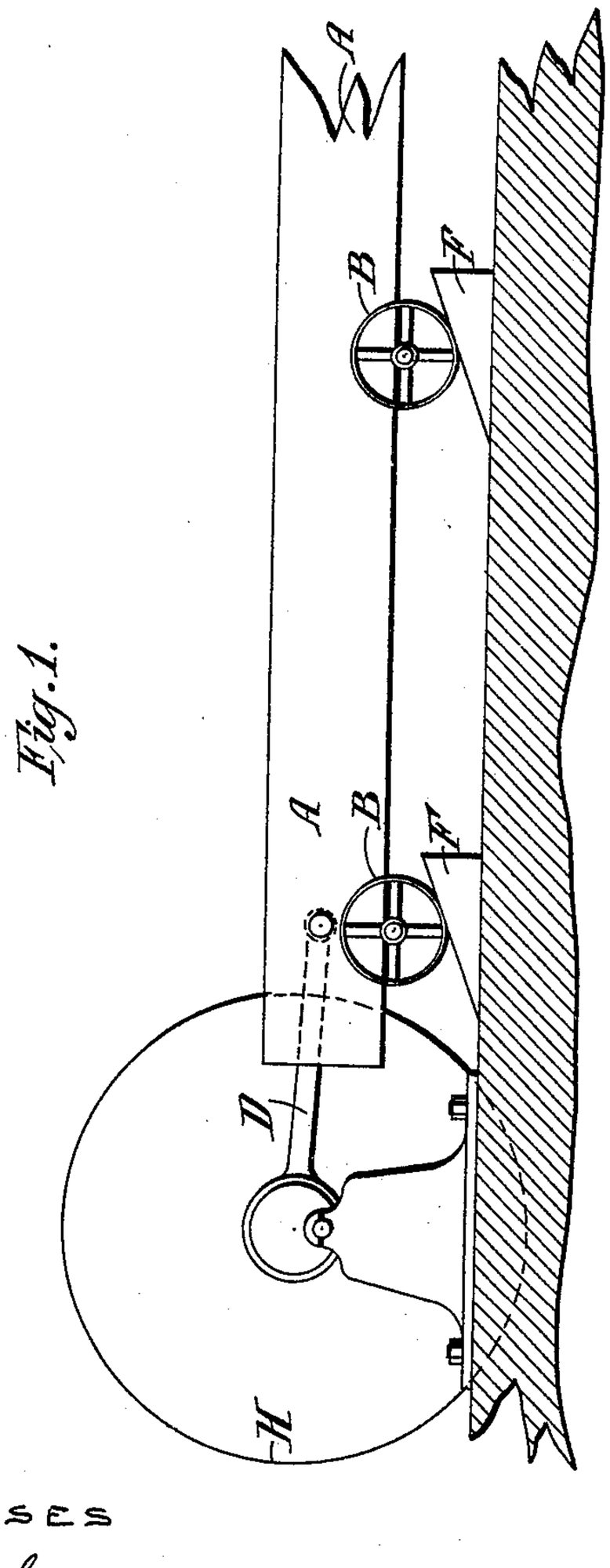

Fig. 1.

WITNESSES

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NO MODEL. 2 SHEETS—SHEET 2.

Fig. 2.

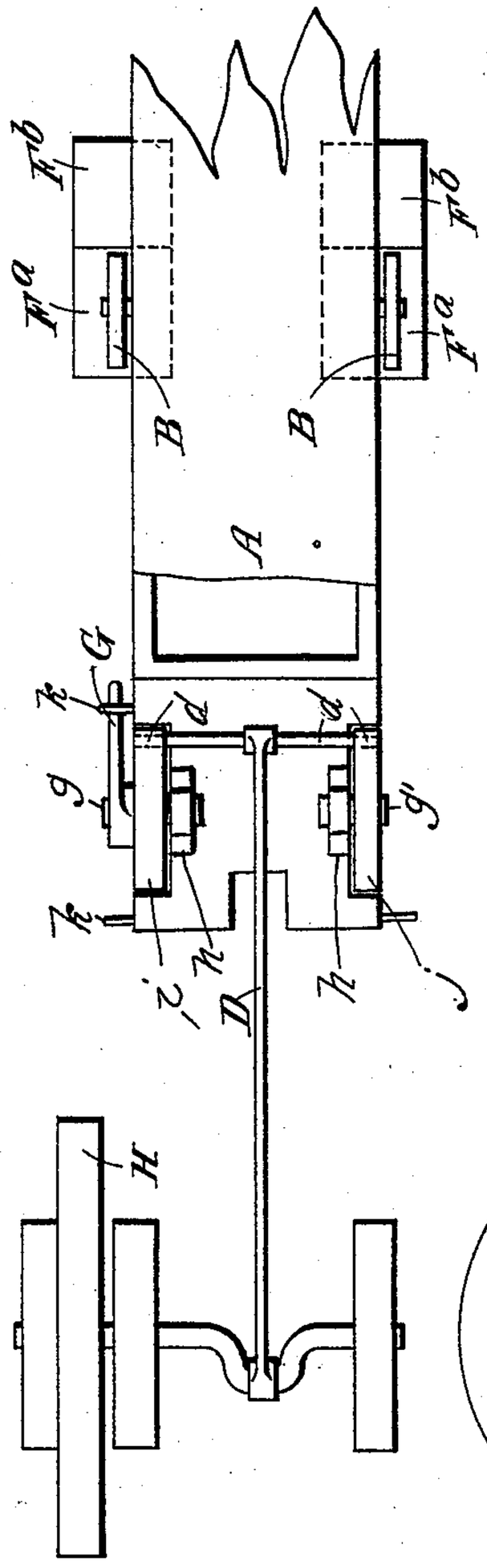

Fig. 3.

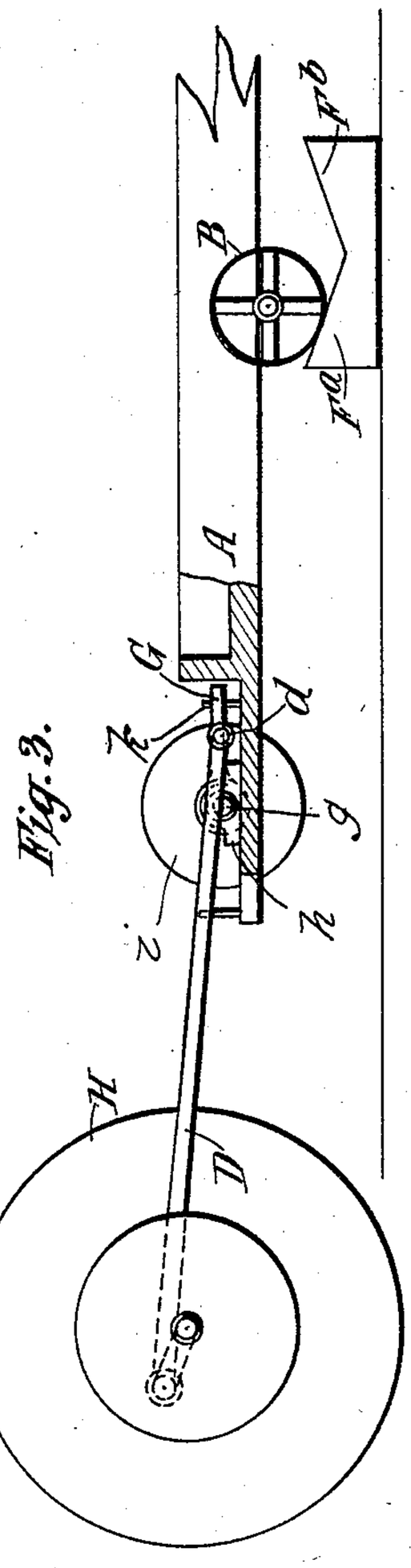

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PHOTO-LITHOGRAPHED BY SACKETT & WILHELMS LITH. CO.

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UNITED STATES PATENT OFFICE.

WILLIAM CHARLES MACKELLAR AND THOMSON MACKENZIE, OF GREENOCK, SCOTLAND.

CONVEYER.

SPECIFICATION forming part of Letters Patent No. 773,210, dated October 25, 1904.

Application filed May 21, 1903. Serial No. 158,132. (No model.)

To all whom it may concern:

Be it known that we, WILLIAM CHARLES MACKELLAR, works manager, of 29 Patrick street, and THOMSON MACKENZIE, engineer, of 59 Holmscroft street, Greenock, Scotland, subjects of the King of Great Britain, have invented certain new and useful Improvements in Conveyers, (in respect of which we applied for Letters Patent in Great Britain on the 28th day of November, 1902, under No. 26,228,) of which the following is a specification.

The improved conveyers according to our invention are best seen by reference to the accompanying two sheets of drawings, in which—

Figure 1, Sheet 1, is an elevation of our improved conveyer. Fig. 2, Sheet 2, is a plan, and Fig. 3 a further elevation, respectively, of same.

In Fig. 1 the conveyer A is mounted on wheels B, which rise and fall on the inclined blocks F, reciprocating motion being imparted to the conveyer A by an eccentric and rod D, mounted on the shaft of the driving or fly wheel H, the opposite end of the eccentric-rod D being connected to the end of the conveyer A.

An arrangement is shown in Figs. 2 and 3 to enable the conveyer to be used to carry material in a right or left direction. In this arrangement a crank with rod D is substituted for the eccentric arrangement shown in Fig. 1. Equivalent means of imparting reciprocating motion may, however, be used. The blocks F have an inclined plane right and left, as shown, respectively, at F^a and F^b. To effect the rising and falling motion of the conveyer in a right or left direction, we mount on journals $g\,g'$, carried by bracket h on the front of the conveyer, disks i and j and connect said disks together by a cross-bar d, to which centrally we connect the pitman or rod D. On the journal g we fix a lever G, so that we alter the point of attachment of the rod D at d, thus causing the wheels B to move on either of the inclined planes F^a or F^b, as the case may be, the lever G being fixed in either position by means of a hook k or other equivalent device.

It is obvious that a conveyer constructed with our improvements can be used for sorting or grading the material passing or conveyed therethrough, as with a sieve, the conveyer being conveniently perforated, slotted, or otherwise formed to sift the material and the rate of speed arranged accordingly.

The part or shaking-table A is in the form of a trough, and its peculiar rising and falling motion, combined with its longitudinal movement, causes the material to pass along the trough.

Having now particularly described and ascertained the nature of our said invention and in what manner the same is to be performed, we declare that what we claim as new, and desire to secure by Letters Patent, is—

1. In combination with a body for supporting the material, inclines upon which the body is supported and means for reciprocating the body longitudinally over the said inclines, said inclines being rigid and sloping toward opposite ends of the body, substantially as described.

2. In combination with a body for supporting the material, double inclines upon which said body is supported and means for reciprocating the said body over the said double inclines, said inclines being rigid and sloping toward opposite ends of the body, substantially as described.

3. In combination with a body for supporting the material, double inclines upon which said body is supported and means for reciprocating the said body over the said double

inclines, said reciprocating means being adjustable whereby the body may be changed in position longitudinally in respect to the double inclines, substantially as described.

4. In combination a body for supporting the material, double inclines extending upwardly from their meeting-points upon which the said body is supported, reciprocating means including means of adjustment whereby the relation between the double inclines and the said body may be changed, substantially as described.

In witness whereof we have hereunto set our hands in presence of two witnesses.

WILLIAM CHARLES MACKELLAR.
THOMSON MACKENZIE.

Witnesses:
L. SCOT KIRKPATRICK,
ADAM L. CRAWFORD.