

No. 836,387.

PATENTED NOV. 20, 1906.

O. F. KIME.
RIDDLE.

APPLICATION FILED MAR. 12, 1906.

2 SHEETS—SHEET 1.

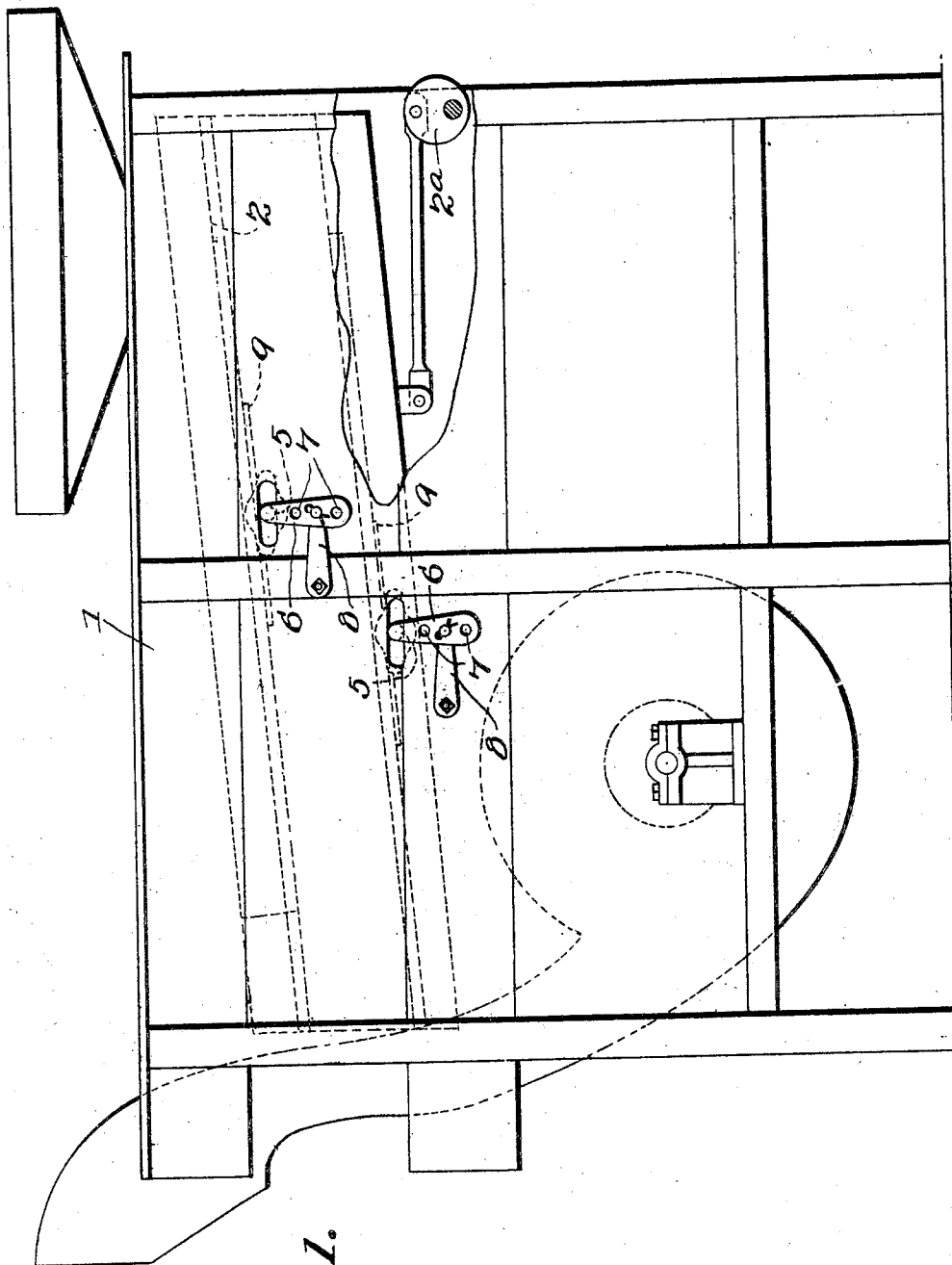


Fig. 1.

WITNESSES:

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Herbert D. Lawson

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ATTORNEYS

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2 SHEETS—SHEET 2.

Fig. 2.

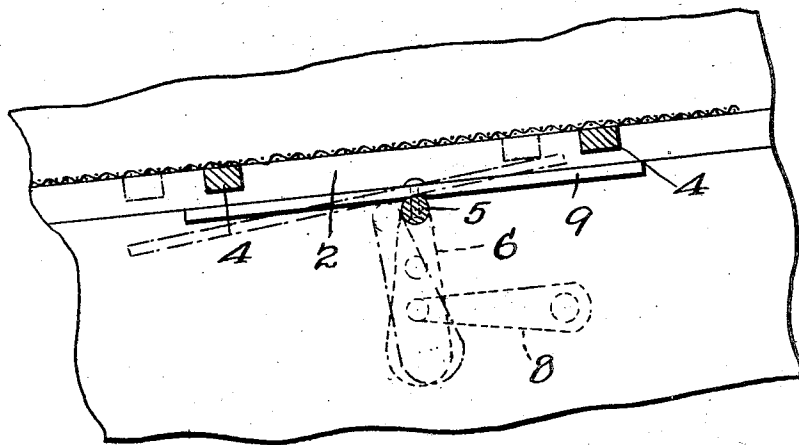
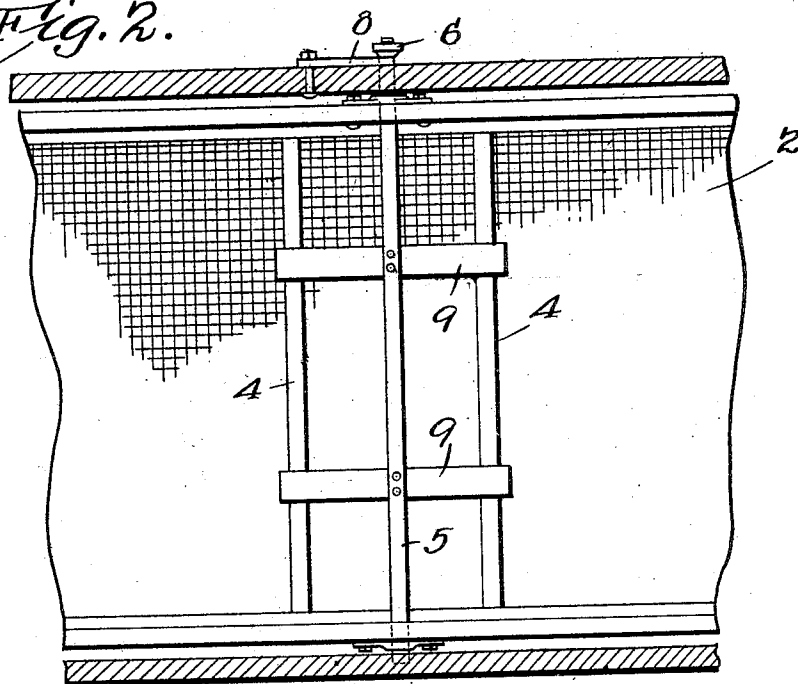


Fig. 3.

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UNITED STATES PATENT OFFICE.

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RIDDLE.

No. 836,387.

Specification of Letters Patent.

Patented Nov. 20, 1906.

Application filed March 12, 1906. Serial No. 305,663.

To all whom it may concern:

Be it known that I, ORVILLE F. KIME, a citizen of the United States, residing at Galion, in the county of Crawford and State of Ohio, have invented a new and useful Riddle, of which the following is a specification.

This invention relates to riddles such as ordinarily employed for cleaning or separating grain; and the object of the invention is to provide a vibratory attachment for use upon the riddles, so as to prevent the openings therein from becoming clogged, thereby increasing the capacity of the riddle.

With the above and other objects in view the invention consists of a rock-shaft mounted upon the frame of the riddle and having an arm at one end to which is adjustably connected a holding-link fastened to said frame. This rock-shaft has paddles extending from it which are adapted when the shaft is rocked to beat upon the center rails of the riddle-frame, so as to vibrate the riddle and dislodge any particles which may clog the openings within the riddle. The rock-shaft is connected to the riddle-frame and is oscillated therewith, and as the arm of the shaft is connected to the supporting-frame of the riddle it is of course obvious that as said riddle oscillates the shaft will be rocked, so as to cause the paddles to strike the center bars of the riddle.

The invention also consists of certain other novel features of construction and combination of parts, which will be hereinafter fully described, and pointed out in the claims.

In the accompanying drawings is shown the preferred form of the invention.

In said drawings, Figure 1 is a side elevation of a grain-separator having the agitating device connected with it, a portion of the frame or-ody of the separator being broken away. Fig. 2 is a bottom plan view of a portion of a riddle and showing the paddles in position thereunder, the supporting-frame being shown in sections; and Fig. 3 is a longitudinal section through the parts shown in Fig. 2.

Referring to the figures by numerals of reference, 1 is a supporting-frame in which is hung one or more riddle-frames 2, adapted to be reciprocated by any suitable mechanism, such as an eccentric 2^a. Extending under the riddles 3 are cross-rails 4, and journaled

upon the bottom of each riddle-frame is a rock-shaft 5, having an arm 6 extending at right angles from one end thereof, said arm being provided with a series of openings 7. A link 8 is pivotally connected to the supporting-frame 1 and is adapted to be secured within one of the openings 7 in the arm 6. Paddles 9, formed of any suitable material, are secured to and extend in opposite directions from the shaft 5 and are adapted to extend under the cross-rails 4, though normally out of contact therewith.

It is obvious that in view of this construction and arrangement of parts the reciprocation or oscillation of the riddle-frame in the usual manner will cause the shaft 5 to be carried therewith; but as the arm 6 of the shaft is connected to a link 8 having a fixed pivot said shaft will be caused to rock during the movement of the riddle and the paddles will be swung with considerable force against the cross-rails 4. The riddle will therefore be vibrated vertically, and the stock acted upon by it will be prevented from clogging the openings in the riddle, and therefore the capacity of the riddle will be maintained uniform. One of the great disadvantages heretofore experienced in the use of reciprocating riddles has been the fact that the grain, &c., soon clogs the openings, and thereby reduces the efficiency of the machine. By the use of this improved vibrating attachment, however, this disadvantage will be overcome. By placing the links 8 in engagement with different openings 7 in the arms 6 the stroke of the paddles can be increased or diminished, as desired, thereby regulating the force of their contact with the cross-rails.

I claim—

1. The combination with a slotted support, a frame mounted within the support, and means for reciprocating the frame; of a rock-shaft journaled upon the frame and projecting through and slidably mounted within the slot, said shaft constituting a support for the frame, a paddle upon the shaft, an arm extending from the shaft, and a link pivoted at one end to the support and adjustably pivoted at its other end to the arm.

2. The combination with a support having a plurality of slots therein, a frame mounted within the support, and means for reciprocating

ing the frame; of a plurality of shafts jour-
naled upon the frame and projecting through
the slots, said shafts constituting supporting
devices for the frame, paddles connected to
5 each shaft, arms extending at angles from the
shafts, and links pivoted to the support and
adjustably connected to the arms.

In testimony that I claim the foregoing as
my own I have hereto affixed my signature in
the presence of two witnesses.

ORVILLE F. KIME.

Witnesses:

J. W. McCARRON,
D. E. ZIMMERMAN.