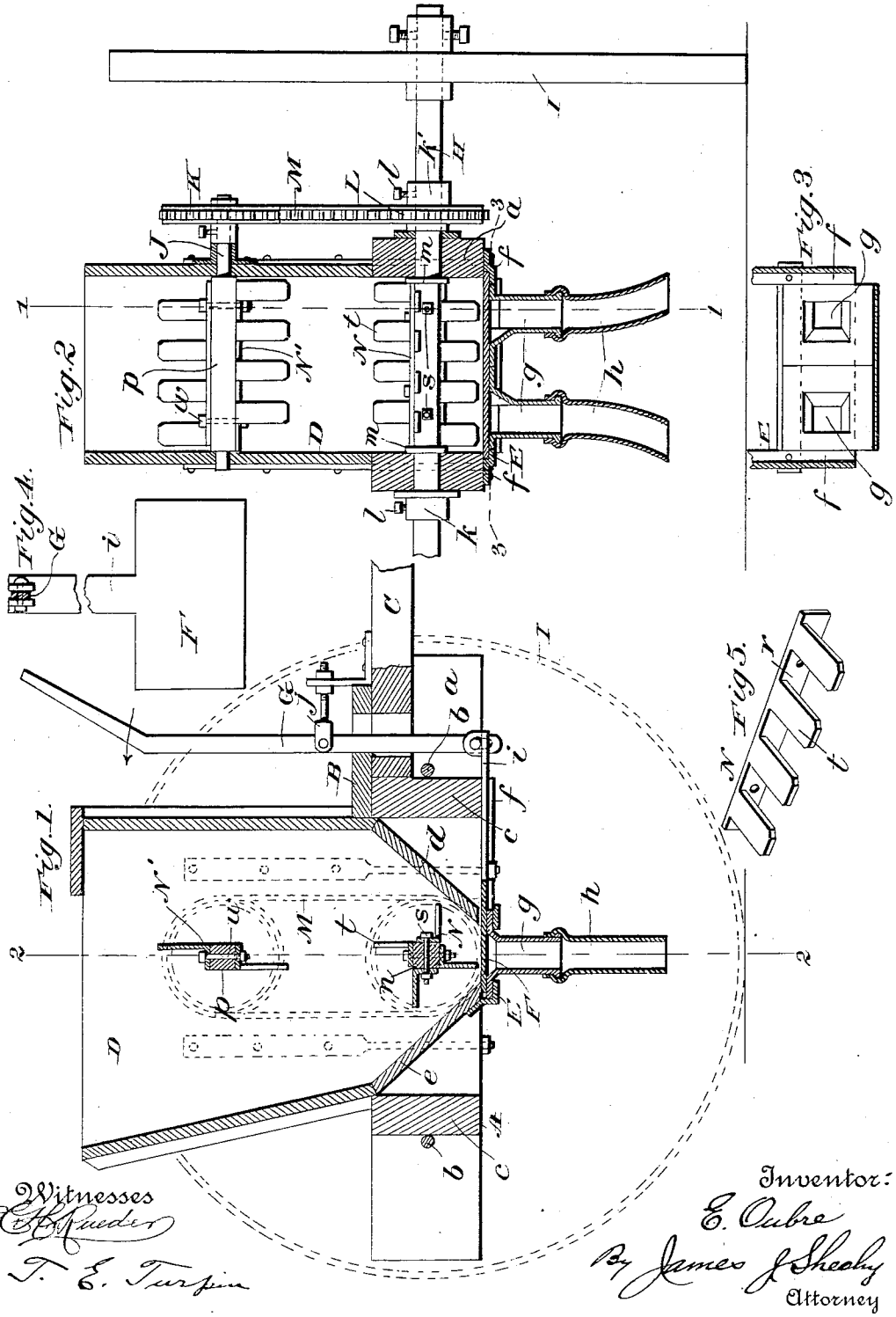
No. 655,510. Patented Aug. 7, 1900.

E. OUBRE.

FERTILIZER DISTRIBUTER.

(Application filed Apr. 5, 1900.)

(No Model.)



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EVARISTE OUBRE, OF BURNSIDE, LOUISIANA.

FERTILIZER-DISTRIBUTER.

SPECIFICATION forming part of Letters Patent No. 655,510, dated August 7, 1900.

Application filed April 5, 1900. Serial No. 11,705. (No model.)

To all whom it may concern:

Be it known that I, EVARISTE OUBRE, a citizen of the United States, residing at Burnside, in the parish of Ascension and State of Louisiana, have invented new and useful Improvements in Fertilizer-Distributers, of which the following is a specification.

My invention relates to improvements in wheel fertilizer-distributers; and it consists in the peculiar and advantageous construction hereinafter described, and particularly pointed out in the claims appended.

In the accompanying drawings, Figure 1 is a longitudinal vertical section of a fertilizer-distributer constructed in accordance with my invention, the said section being taken in the plane indicated by the broken line 1 1 of Fig. 2. Fig. 2 is a detail transverse section taken in the plane indicated by the broken line 2 2 of Fig. 1. Fig. 3 is a detail horizontal section taken in the plane indicated by the broken line 3 3 of Fig. 2. Fig. 4 is a detail view of the valve or gate of the distributer removed. Fig. 5 is a perspective view of one of the blade-sections of the agitators for accelerating the discharge of the fertilizer.

In the said drawings similar letters designate corresponding parts in all of the several views, referring to which—

A is the main frame of my improved machine, which is preferably made up of heavy side timbers *a*, connected by transverse bolts *b*, and heavy transverse timbers *c*, interposed between and connected to the side timbers.

B is a platform arranged on and connected to the forward transverse timber *c* and the forward portions of the side timbers *a*.

C is a draft pole or tongue suitably connected to the frame A.

D is a hopper arranged on and connected to the frame A and having inclined transverse walls *d e* at its lower end, and E is a casting which forms the bottom of the hopper. This casting E has longitudinal flanges *f*, connected to the frame-timbers *a*, and is also provided with two (more or less) depending tubes *g*, to which flexible discharge-spouts *h* are connected after the manner shown.

F is a slide valve or gate which is interposed between the casting E and the timbers *a* and walls *d e* and is provided with a forwardly-extending stem *i*, and G is a vertically-disposed hand-lever which is fulcrumed on a support *j*, connected to tongue C, and extends downwardly through slots in the platform B and said tongue, as shown. The lower end of the lever is connected with the forward end of the stem *i* of the gate F after the manner best shown in Fig. 1, whereby it will be seen that when the lever is rocked in the direction indicated by arrow in Fig. 1 the gate or valve F will be opened and fertilizer will be permitted to drop from the hopper D through the tubes *g* and spouts *h*, while when the lever is rocked in the direction opposite to that indicated by the arrow and returned to the position shown in Fig. 1 the valve or gate will be closed, as illustrated.

H is an axle journaled in the frame-timbers *a* and extending transversely through the lower portion of the hopper D. This axle is equipped at its outer ends with traveling wheels I and is also provided with collars *k k'*, which are fixed on it by set-screws *l* or other suitable means and are arranged to bear against the outer sides of the timbers *a*. At the inner side of the timbers *a* the axle is provided with collars *m*, and between said collars *m* it is of rectangular form in cross-section, as indicated by *n* and best shown in Fig. 1.

J is a transverse shaft journaled in the side walls of the hopper above the axle H and having its portion *p* between said walls of rectangular form in cross-section.

K is a sprocket-wheel fixed on the end of the shaft J.

L is a sprocket-wheel formed integral with or connected to the collar *k'* on axle H, and M is a sprocket-chain which connects the wheels K and L, whereby it will be seen that when the axle H is rotated the shaft J will also be rotated.

The axle H is equipped within the hopper D with four (more or less) blade-sections N. These blade-sections are by preference respectively formed in one piece of wrought-iron or other suitable metal and comprise a body *r*, designed to lie flat against one side of the rectangular portion of the axle H and be connected thereto by transverse bolts *s*, as shown in Fig. 1, and blades *t*, extending laterally from one edge of the body *r*, as shown. The blades of the several sections N are pref-

erably arranged out of alinement, as best shown in Fig. 2, which materially improves the efficiency of the agitator formed by the sections in conjunction with the axle and enables said agitator to thoroughly loosen the fertilizer in the lower portion of the hopper and accelerate the discharge of fertilizer from the same.

N′ designates blade-sections similar to the sections N, which are connected by transverse bolts *w* to opposite sides of the rectangular portion *p* of the shaft J and in conjunction with the same form a stirrer for loosening the fertilizer in the upper portion of the hoppers.

As will be readily observed from the foregoing, the blade-sections N may be quickly and easily connected by bolts *s* to the rectangular portion of the axle H and that in conjunction with the axle they form an extremely strong and durable and highly-efficient agitator and one calculated to effectually prevent choking of the discharge of the hopper. It will also be observed that when for any reason it is desirable to remove one of the blade-sections N and replace it with a new section the same may be readily accomplished.

The blade-sections N′, in conjunction with the shaft J, form a strong and highly-efficient stirrer, and like the sections N they are adapted to be readily removed and replaced by new sections when desired.

In practice when fertilizer is placed in the hopper D and the machine is drawn forwardly by draft-animals hitched thereto the agitator and stirrer will be rotated and the fertilizer in the lower portion of the hopper will be thoroughly loosened, so that when the valve or gate F is opened the fertilizer will flow in continuous streams through the tubes *g* and spouts *h*. When the valve or gate F is closed, it rests snugly between the side timbers *a* and casting E, and hence is enabled to effectually prevent leakage of fertilizer from the hopper.

It will be appreciated from the foregoing that my improved fertilizer-distributer as a whole is simple and inexpensive in construction and yet is extremely strong and durable, and therefore well adapted to withstand the rough usage to which such machines are ordinarily subjected.

Having thus described my invention, what I claim is—

1. In a fertilizer-distributer, the combination of the main frame, the hopper arranged on and connected to the main frame and having a discharge-opening at its lower end, means for controlling the discharge of fertilizer from the hopper, an axle disposed transversely in the main frame and hopper and having its portion within the latter provided with flat sides, wheels on the axle, blade-sections respectively formed in one piece and comprising body portions arranged against the flat ends of the axle within the body, and blades extending laterally from said body portions, and transverse bolts extending through the axle and body portions of the blade-sections, substantially as specified.

2. In a fertilizer-distributer, the combination of the main frame, the hopper arranged on and connected to the main frame and having a discharge-opening at its lower end, means for controlling the discharge of fertilizer from the hopper, an axle disposed transversely in the main frame and hopper and having its portion within the latter provided with flat sides, wheels on the axle, blade-sections respectively formed in one piece and comprising body portions arranged against the flat sides of the axle within the body, transverse bolts extending through the axle and body portions of the blade-sections, a shaft journaled in the hopper above the axle and having its portion within the hopper provided with flat sides, blade-sections each formed in one piece and respectively comprising a flat body portion arranged against one flat side of the shaft in the hopper and blades extending laterally from said body portion, bolts extending through the shaft and body portions of the blade-sections and connecting the same, and gearing interposed between the axle and shaft, substantially as specified.

In testimony whereof I have hereunto set my hand in presence of two subscribing witnesses.

EVARISTE OUBRE.

Witnesses:
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