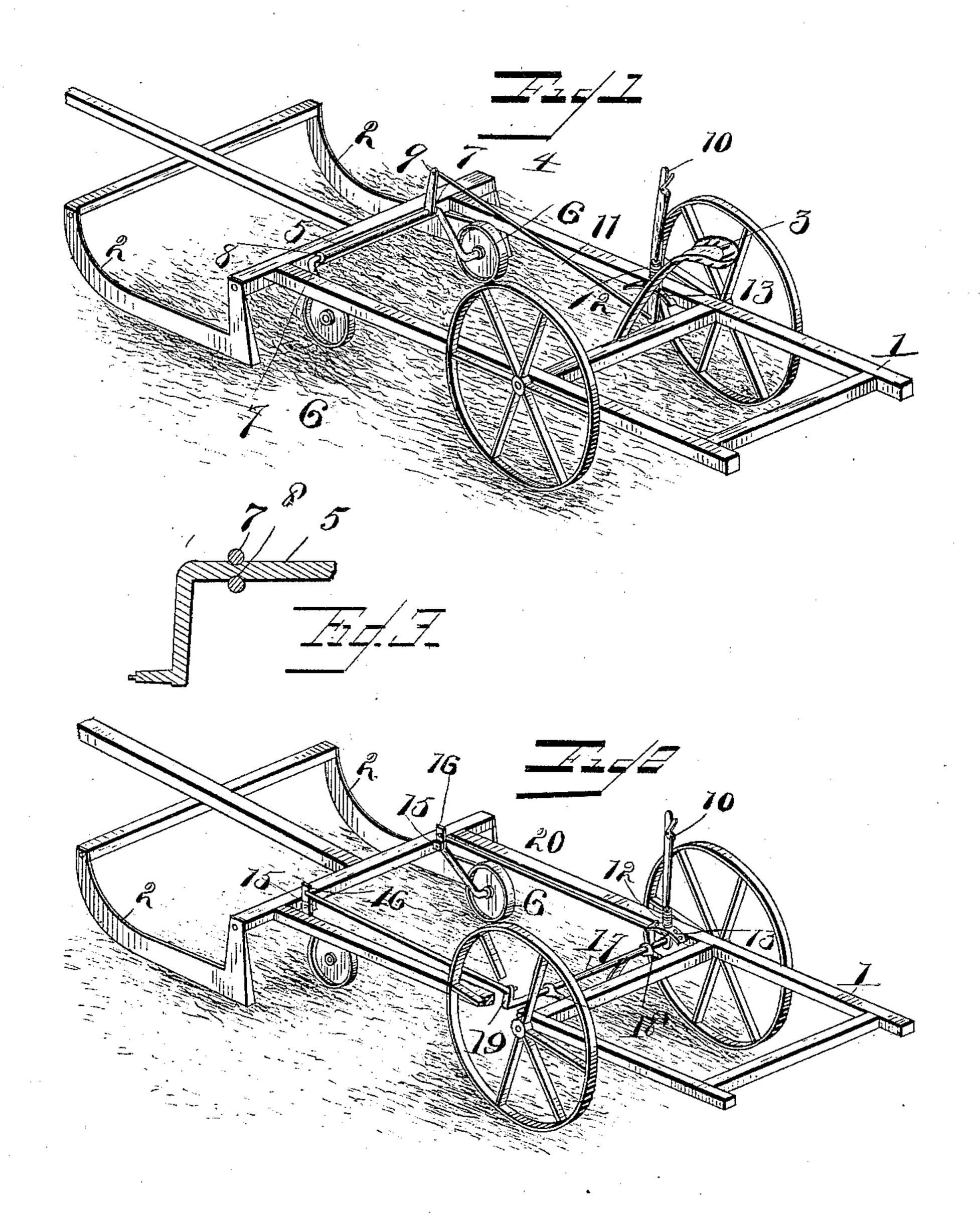
(No Model.)

## W. M. ROBINSON.

REGULATING ATTACHMENT FOR CORN PLANTERS.

No. 378,724.

Patented Feb. 28, 1888.



WITNESSES. F. L. Orwand. 'H. Coiv

INVENTOR,

Attorney

## UNITED STATES PATENT OFFICE.

WELLER M. ROBINSON, OF MONTPELIER, IOWA.

## REGULATING ATTACHMENT FOR CORN-PLANTERS.

SPECIFICATION forming part of Letters Patent No. 378,724, dated February 28, 1888.

Application filed September 17, 1887. Serial No. 249,935. (No model.)

To all whom it may concern:

Be it known that I, Weller M. Robinson, a citizen of the United States, and a resident of Montpelier, in the county of Muscatine and 5 State of Iowa, have invented certain new and useful Improvements in Regulating Attachments for Corn-Planters; and I do hereby declare that the following is a full, clear, and exact description of the invention, which will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, which form a part of this specification, and in which—

Figure 1 is a perspective view of my new and improved regulating attachment for cornplanters, showing the same secured in operative position to a corn-planter of the ordinary construction, only so much of the frame of the planter being shown as is necessary to illustrate the position in which the device is to be attached. Fig. 2 is a perspective view of a somewhat different form of my invention embodying the same principles, and Fig. 3 is a detail view of a portion of the crank-shaft shown in Fig. 1.

The same numerals of reference indicate corresponding parts in all the figures.

My invention consists in a new and improved regulating attachment for corn-planters, which

30 will be hereinafter fully described.

Referring to the several parts by their designating numerals, 1 indicates the frame of a corn-planter of the usual construction, of which 22 indicate the runners, 3 the driver's seat, and 4 the transverse beam on which the seedboxes (not shown in the drawings) are secured.

5 indicates the crank-shaft of my attachment, on the downwardly-bent cranked ends of which are mounted the broad supporting-wheels 6 6.

40 This crank-shaft 5 is made fast to the planter by means of the eyebolts 7 7, which are arranged on the shaft near its cranked ends, and the stems of the eyebolts are secured in the transverse beam 4 of the planter-frame, so that the supporting-wheels 6 6 are a little back of and between the runners 22. The crank-shaft may be prevented from slipping in the eyes of the bolts by forming it with two annular grooves, 8 8, in which the said eyes can fit, so that while the shaft will turn freely in the eyes

it cannot slide laterally. These annular grooves can of course be dispensed with, if preferred. Upon the crank-shaft is rigidly attached the arm 9, which is attached so that when in its normal position it will stand up in 55 a nearly-vertical position. This arm is secured to the crank-shaft at such a point as to correspond with the longitudinal beam of the planter-frame, to which the operating-lever is secured, so that the lever will be directly behind 60 the said arm. On different forms of planters the arm can be put on the crank-shaft in different places, being attached in the middle or near either end, according to where the lever must be placed to be convenient to the driver. 65

10 indicates the operating or adjusting lever, which is pivoted near its lower end to the planter-frame, so as to be within convenient reach of the driver when sitting in his seat. The lower end of this lever below its pivotal 70 point is pivotally connected by a rod, 11, with the upper free end of the arm 9, as shown. This rod 10 can be made longer or shorter to suit the different styles of planters. To the side of the lever is secured the spring catch or 75 detent 12, of the usual construction, which is adapted to engage with the perforations of a curved rack, 13, by which arrangement the lever is secured in its adjusted position.

The planter will drop the corn and cover it 80 in low places and dead-furrows as well and precisely the same as it will on level ground, and it will do the same on ridges and back furrows, &c. When the wheels of the attachment strike higher ground, they raise the run- 85 ners automatically, and when they come to a low place or ditch the runners drop down, thereby putting the corn always at the same level, where it should go, no matter what the character of the ground may be. The depth 90 to which the corn is to be planted can be readily regulated by means of the lever, as by pressing forward the upper or handle end of the lever the wheels of the crank-shaft will be lowered and the front end of the planter and 95 runners will be raised, while by drawing back the lever the said wheels will be raised and the runners lowered, as will be readily seen by reference to the accompanying drawings.

The attachment takes all or nearly all the 100

weight off the horses' necks, which without the attachment would be very heavy, especially if a heavy person were driving the planter. The attachment will work as well 5 with check-rowers as without. As the wheels of the attachment carry the weight of the droppers and the runners, or, in fact, the whole front part of the planter, the draft is a great number of pounds lighter, as this weight rolls in-10 stead of dragging. The wheels of the attachment cover a great deal of corn that would not be covered if the attachment were not used.

When this attachment is applied to a planter, any other device which may have been used 15 on the planter to regulate the depth should of

course be removed.

In Fig. 2 I have shown a slightly-different form of my invention, embodying, however, the same principle. In this form slotted bearing-20 blocks 15 15 are secured to the beam 4 in the same position as the eyebolts 7 7 of the first form, and in these bearings are centrally pivoted the bent standards 16 16, on pins on the lowerends of which the wheels 6 6 are mounted. 25 A rod, 17, is supported in eyebolts 18 18 transversely just in front of the driver's seat, and to one end of this rod the lower end of the lever 10 is rigidly secured, while the other end of this rod is bent up at right angles, and 30 the upper end of this bent end 19 of the rod, and also the lever itself above its pivotal point, are both connected to the upper ends of the standards 16 16 by the rods 20 20, as shown. It will be seen that this form of the 35 attachment will operate in precisely the same l

manner as that shown in Fig. 1, the supporting-wheels 66 being raised or lowered by moving the lever, which is provided with the same spring catch and perforated rack.

From the foregoing description, taken in 40 connection with the accompanying drawings, the construction, operation, and advantages of my invention will be readily understood.

It will be seen that my new and improved attachment is simple and strong in construc- 45 tion and exceedingly efficient in its operation. It can be readily applied to any form of planter, and will give entire satisfaction in all cases.

Having thus described my invention, what I claim, and desire to secure by Letters Patent 50

of the United States, is—

A regulating attachment for corn planters, consisting of a crank rock-shaft secured to the rear cross-beam of the planter-frame by eyebolts, connecting-rods pivoted to the crank 55 ends of said shaft, slotted bearing-blocks secured to the forward cross-beam of the planter, standards pivoted to said bearing-blocks and pivoted at their upper ends to the ends of the connecting-rods, the lower ends of said stand- 60 ards formed with stub-axles, wheels mounted on said axles, and a pivoted lever having the spring-catch and the curved rack.

In testimony that I claim the foregoing as my own I have hereunto affixed my signature in 65

presence of two witnesses.

WELLER M. ROBINSON.

Witnesses:

JAS. G. CRANE, AUGUST ROLFF.