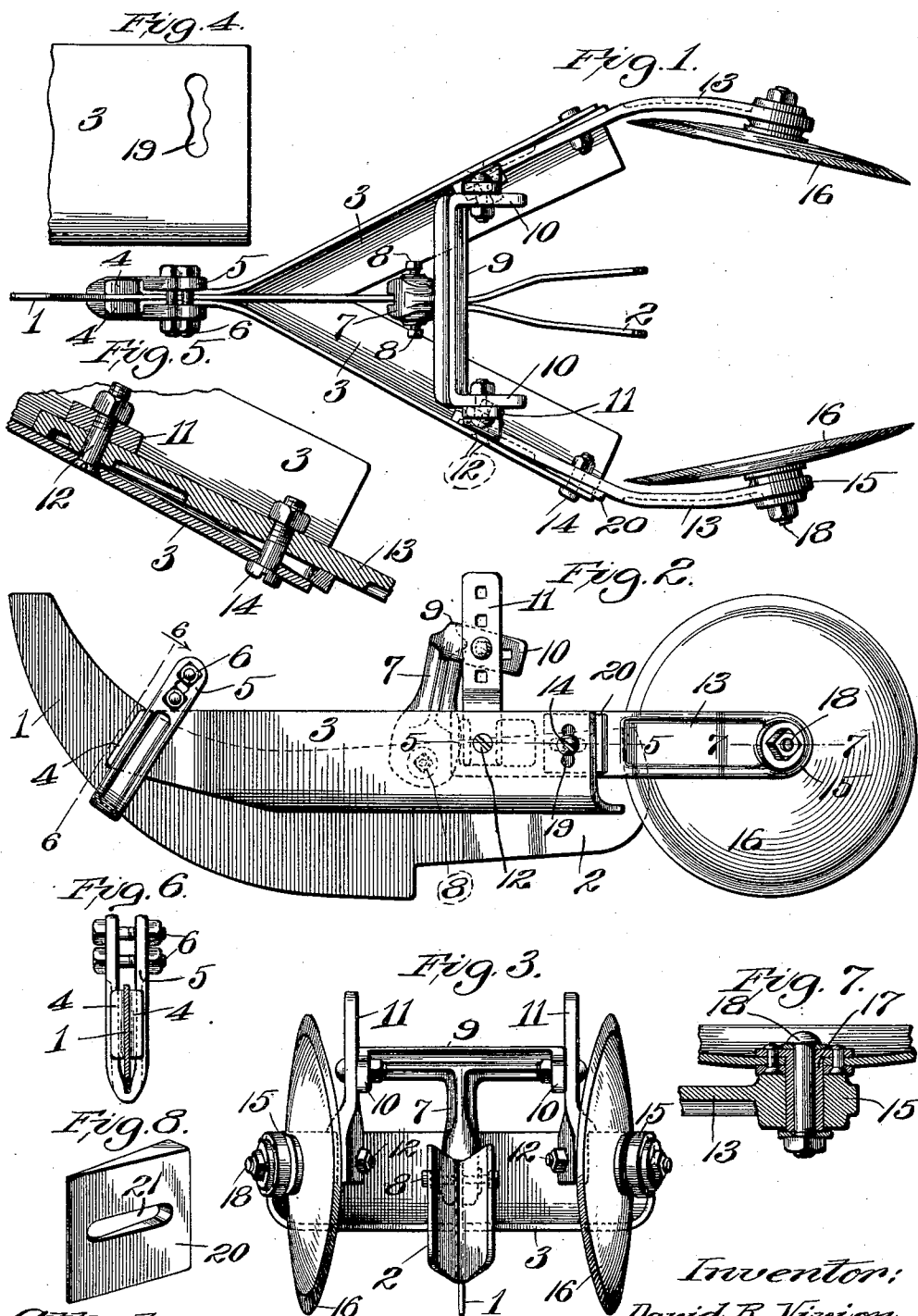


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PLANTING DEPTH GAGE AND COVERING ATTACHMENT FOR PLANTERS.
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1,007,256.

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UNITED STATES PATENT OFFICE.

DAVID R. VIVION, OF COLUMBIA, MISSOURI.

PLANTING DEPTH-GAGE AND COVERING ATTACHMENT FOR PLANTERS.

1,007,256.

Specification of Letters Patent.

Patented Oct. 31, 1911.

Application filed December 12, 1910. Serial No. 596,882.

To all whom it may concern:

Be it known that I, DAVID R. VIVION, a citizen of the United States, and resident of Columbia, Boone county, Missouri, have invented certain new and useful Improvements in Planting Depth-Gage and Covering Attachments for Planters, of which the following is a specification, containing a full, clear, and exact description, reference being had to the accompanying drawings, forming a part hereof.

My invention relates to improvements in planting depth-gage and covering attachments for planters, and relates particularly to the improvement of a like attachment for planters for which Letters Patent #770,878 were issued to me September 27, 1904.

The object of my present invention is to improve and generally simplify the construction of the depth-gage attachment and to employ covering devices which may be laterally adjusted as different soil conditions may require.

With the above purposes in view, my invention consists in certain novel features of construction and arrangement of parts as will be hereinafter more fully described, pointed out in the claim and illustrated by the accompanying drawings; in which—

Figure 1 is a plan of the complete attachment illustrating the runner and furrow opener of an ordinary corn planter; Fig. 2 is an elevation of the complete attachment; Fig. 3 is a rear end view of the complete attachment; Fig. 4 is a detail, side elevation of a portion of the depth-gage illustrating the peculiar shape of the perforation to receive the retaining bolt; Fig. 5 is an enlarged, sectional plan taken on the line 5—5 of Fig. 2; Fig. 6 is a section taken through the runner on the line 6—6 of Fig. 2, and illustrates my improved clevis for clamping the gage-plates to the runner; Fig. 7 is an enlarged, detail, sectional plan taken on the line 7—7 of Fig. 2 illustrating the bearing for the disk and Fig. 8 is a detail perspective of the wedge block for effecting a lateral adjustment of the disk.

Referring by numerals to the accompanying drawings: 1 designates a runner, 2 a furrow opener of common construction.

3—3 designate the depth-gage plates, the body portions of which are substantially L-shape in cross section, the horizontal portions being tapered at their forward ends and the vertical portions terminating in

right angled, inclined flanges 4, the vertical portions, at the forward ends, lie against the runner 1 and are secured to the runner by means of the clevis 5, which clevis, as shown in Fig. 6, is substantially U-shape and is secured to the runner over the gage plate by means of bolts such as 6. For holding the rear ends of the plates 3 spaced apart I employ a cast metallic member having a substantially vertical portion 7 bifurcated at its lower end to straddle the runner through which bifurcated end are the set screws 8 for securing the member to the runner and, cast integrally with the member 7 is a cross bar 9 having the right angled end portions 10.

11—11 designate metallic uprights which are bolted to the parts 10 and at their lower ends are secured to the gage plates by means of the screw bolts 12.

13—13 designate arms which are secured to the gage plates and standards 11 by means of the said bolts 12 and the bolts 14 which are at the rear ends of the plates 3. The rear end of each arm 13 has an enlarged hub section 15.

16 designates the disks. Secured to each disk is a tubular journal 17 rotatably mounted in the hub sections 15 and which is secured to the hub by means of the bolt 18, the disks being free to rotate in the bearings 15.

As shown in Fig. 4 of the drawing, the rear vertical portion of each gage plate 3 has a perforation such as 19 extending approximately vertical and through which the bolts 14 pass.

20 designates wedge-shape blocks, each of which has a longitudinal slot 21 through which the bolts 14 are passed, and which blocks are designed for the purpose of laterally adjusting the disks.

It will be obvious that if the bolts 12 and 14 are each loosened, thereby permitting a movement of the forward ends of the arms 13 laterally relative the vertical portions of the gage plates, the wedge-shape blocks may be moved lengthwise relative the arms 13 and gage plate, and, for the reason of the taper of said blocks and the fulcruming of the forward end of the arms 13 upon the inner faces of the upright portions of the gage plates, the rear end of the arms will be moved laterally either with the disks closer together or farther apart, as required. To adjust the gage plates vertically, the bolts, holding the clevis, are loosened and the bolts 14 are loosened and the plates are

raised or lowered relative the runner and furrow opener as desired, and, by reason of the arc-shape of the runner, the clevis is moved forwardly or rearwardly to the desired point and then clamped by the bolts 6.

In my former patent, to which I have referred, the covering devices were in the nature of hoes or scrapers and were not laterally adjustable. I have found by the employment of disks that the draft of the machine is much lighter and, for the reason that I have a lateral adjustment of the disks, the machine may be set as required in different depths of planting desired and in different soil conditions to give the proper amount of soil over the planted seed.

I claim:

In an attachment for planters of the class

described, the combination with an imperforate runner and a furrow opener, of a depth gage comprising two members forming a V, their forward ends being provided with inclined right angled flanges, a clevis arranged to embrace the runner and engage said flanges, means for adjustably securing said clevis in position over the runner, vertically and laterally adjustable arms secured to the depth gage members and disks carried by said arms.

In testimony whereof, I have signed my name to this specification, in presence of two subscribing witnesses.

DAVID R. VIVION.

Witnesses:

N. G. BUTLER,

E. L. WALLACE.

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