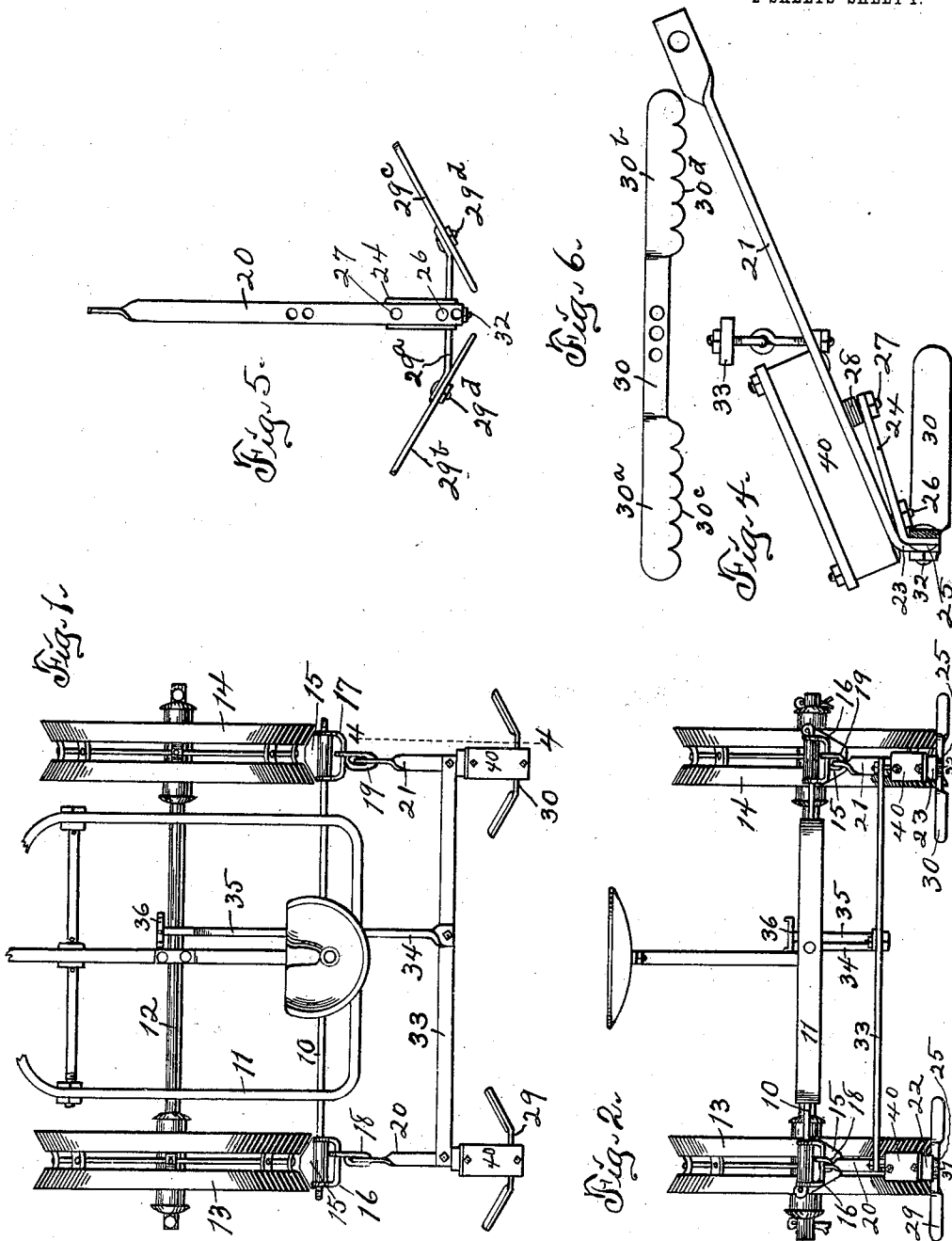


J. B. ALBEE.
COVERING ATTACHMENT FOR PLANTERS AND DISKS.
APPLICATION FILED JUNE 21, 1910.

979,817.

Patented Dec. 27, 1910.

2 SHEETS—SHEET 1.



Attest:
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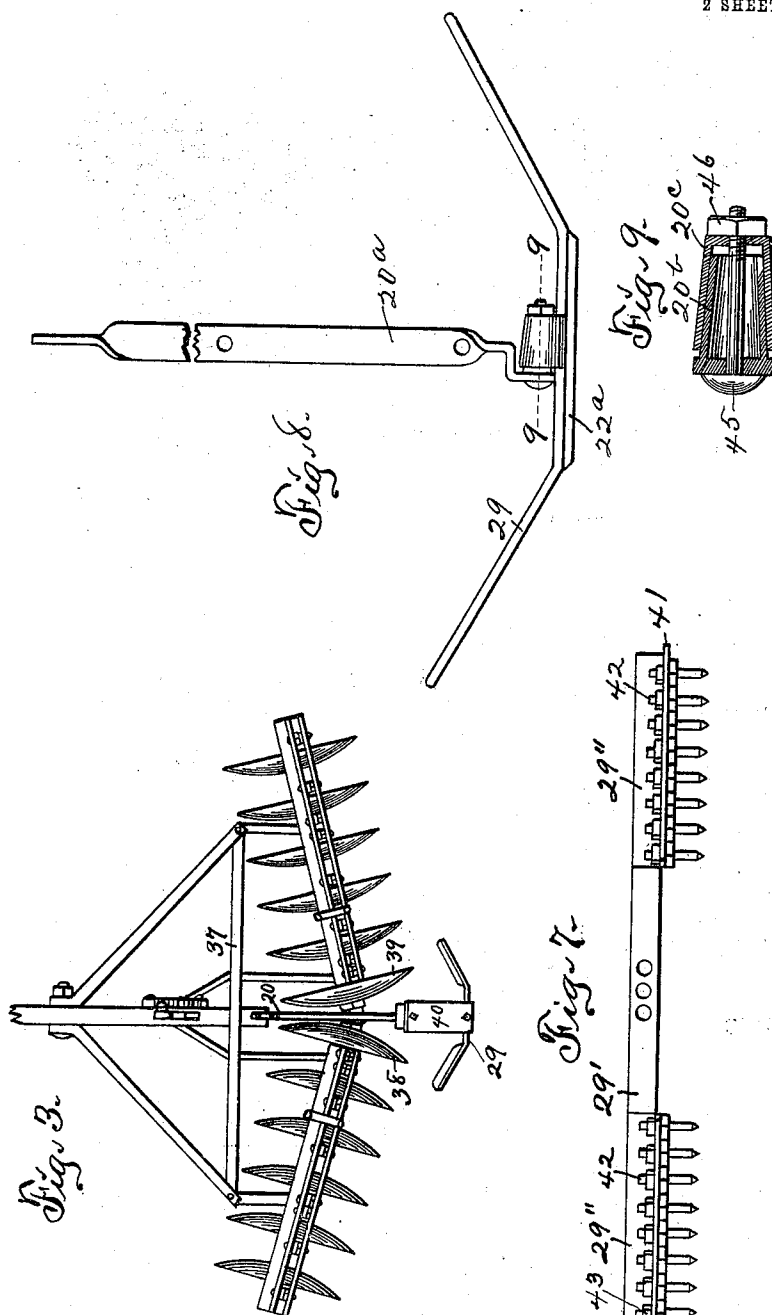
Inventor:
John B. Albee
By H. G. Sweet Att.

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UNITED STATES PATENT OFFICE.

JOHN B. ALBEE, OF ROLFE, IOWA, ASSIGNOR OF ONE-HALF TO J. S. SMITH, OF PLOVER, IOWA.

COVERING ATTACHMENT FOR PLANTERS AND DISKS.

979,817.

Specification of Letters Patent.

Patented Dec. 27, 1910.

Application filed June 21, 1910. Serial No. 568,574.

To all whom it may concern:

Be it known that I, JOHN B. ALBEE, a citizen of the United States of America, and resident of Rolfe, Pocahontas county, Iowa, have invented a new and useful Covering Attachment for Planters and Disks, of which the following is a specification.

The object of this invention is to provide improved means for covering the wheel tracks of corn planters and also for covering the space between sections of a disk harrow.

My invention consists in the construction, arrangement and combination of elements hereinafter set forth, pointed out in my claims and illustrated by the accompanying drawing, in which—

Figure 1 is a plan of the truck frame of a corn planter showing my improved device applied thereto as required for practical use. Fig. 2 is an elevation of the same. Fig. 3 is a plan of a disk harrow showing my improvement applied thereto. Fig. 4 is an elevation, partly in section, on the indicated line 4—4 of Fig. 1. Fig. 5 is a plan illustrating a modified construction of some of the parts. Fig. 6 is a rear elevation illustrating a modified construction of scraper blade employed in the device. Fig. 7 is a rear elevation illustrating a further modified form of scraper blade employed in the device. Fig. 8 is a plan illustrating a further modified construction of some of the elements employed in the device. Fig. 9 is a cross-section on the indicated line 9—9 of Fig. 8.

In the construction of the device as shown in Figs. 1, 2 and 4 the numeral 10 designates a rod mounted transversely of and extending at its ends beyond the frame 11 of a planter. The frame 11 is carried by an axle 12 and the axle is supported in and by wheels 13, 14. Clevises 16, 17 are mounted on and depend from end portions of the rod 10. Wheel scrapers 15 of common form are mounted on end portions of the rod 10 within the clevises 16, 17 and are adapted to depend from the rod and scrape the wheels 13, 14. Hooks 18, 19 are mounted on and depend from the clevises 16, 17. Tongues 20, 21 are pivoted at their forward ends to and adapted to be drawn by the

hooks 18, 19, and said tongues are bent downward at their rear ends to form ears 22, 23. Angle plates 24 are mounted beneath the rear end portions of the tongues 20, 21 and one arm of each angle plate is apertured in registration with an aperture in an ear 22 or 23. The angle plates are further connected to the tongues by bolts 26, 27 and washers 28 may be mounted on the bolts 27 to space apart the forward ends of the angle plates from the tongues.

Scraper blades 29, 30 are mounted at their centers on the short arms of the angle plates 24 and are secured thereto rigidly as by rivets 25. Apertures are formed in the centers of the scraper blades 29, 30 registering with the apertures in the short arms of the angle plates and in the ears 22, 23 and bolts 31, 32 are mounted through said registering apertures and connect the scraper blades, angle plates and ears. The central portions of the scraper blades 29, 30 are straight and extend transversely of the angle plates and tongues, and end portions of said blades extend forwardly in diverging planes and are beveled or swaged out to edges on their lower margins. Thus the swaged margins project below the central straight portion and draw loose soil to a central path passed over freely by said central portion. The use of washers 28 provides for adjusting the scraper blades so as to determine the cut, pitch or inclination thereof relative to the surface of the ground on which they are used. A rod 33 is pivoted at its ends to and connects the tongues 20, 21. A lever 34 is fulcrumed on the frame 11 and is connected at one end to the central portion of the rod 33. A lever 35 is fulcrumed on the axle 12 and is connected at one end to the lever 34 and is formed with a pedal 36 on its opposite end. The lever 35 may be attached to the usual hand lever employed to raise and lower the planting mechanism so as to be operated conjunctively therewith. When this device is attached to a disk harrow as shown in Fig. 3 the tongue 20 is attached to and trails from the frame 37 between adjacent disks 38, 39 in such manner that the scraper blade 29 bridges the space between and crosses the paths of travel of said disks. A weighted box 40 is mounted on each tongue 20, 21 and

is adapted to receive weighting substance, such as sand or rock, to the amount required to hold the scraper blades 29, 30 in proper engagement with the soil on which they are used.

In practical use of the device on a corn planter the scraper blades trail behind the wheels 13, 14 and scrape or drag soil from either side of the wheel tracks into said tracks, the central portions of said blades passing over the wheel tracks and covering soil without disturbing the planted seed corn. Inasmuch as in ordinary use the planter wheels sink approximately one inch into the ground it is desirable that the scraper blades should cut approximately the same distance into the ground and draw a sufficient quantity of soil to fill the tracks. When it is desired to change the direction of travel of the planter the lever 35 is operated to actuate the lever 34 and raise the rod 33, tongues and scraper blades. The flexible connections between the several parts permit the machine to be turned without raising the tongues and scraper blade if necessary, but it is better to raise them and thus avoid unnecessary scraping of the soil surface. In the use of the device on a disk harrow as shown in Fig. 3 a single tongue, angle plate and weight box are employed and the scraper blade extends across the space between sections of the disk harrow and scrapes and drags loosened soil upon such space.

In the construction of the device as shown in Fig. 5 the scraper is formed of separate members rigidly connected as follows: A central member or bar 29^a is secured to the angle plate 24 in like manner as the central portion of the blade 29 is secured. End portions of the bar 29^a are inclined forwardly and scrapers 29^b, 29^c are arranged at oblique planes on said end portions and secured thereto by bolts or rivets 29^d. The blades 29^b and 29^c are wider than the bar 29^a and project below said bar by means of beveled edges. The operation of the scraper constructed according to Fig. 5 is the same as that constructed according to Fig. 1.

In the construction of the scraper 30 as shown in Fig. 6 the diverging end portions 30^a, 30^b thereof are formed with scalloped lower margins 30^c, 30^d and this construction has been found to work more satisfactorily in some kinds of soils than the construction having plane lower margins.

In the construction of the device as shown in Fig. 7 the scraper blade 29' is formed with a straight central portion adapted to be attached to an angle plate 24 and tongue and also is formed with diverging arms 29'' having outstanding rearwardly projecting flanges 40, 41 on their lower margins. Harrow teeth 42 are mounted through vertical holes in the flanges 40, 41 and are secured

thereto by nuts 43, 44 above and below the flanges. When the device is constructed according to Fig. 7 there is a tendency on the part of the teeth 42 to break up and pulverize clods engaged thereby preliminary to scraping the substance thereof into the wheel tracks or into the spaces between sections of a disk harrow.

In the construction of the device as shown in Figs. 8 and 9 the tongue 20^a is formed with a tapering sleeve 20^b at right angles to its rear end portion, which sleeve is fitted to a tapering socket 20^c carried by a plate 22^a. The plate 22^a is adapted to be riveted to the scraper blade 29. A bolt 45 is mounted through the tapering sleeve 20^b and through the smaller end portion of the tapering socket 20^c and is held by a nut 46. This construction eliminates the angle plate 24, bolts 26, 27 and washers 28 and permits of an adjustment of the scraper blade 29 relative to the tongue by adjusting the socket 20^c rotatively of the sleeve 20^b. Rigid connection between the socket and sleeve is effected by the bolt 45 and nut 46 and may be made very effective because of the tapering construction of the contacting faces of said sleeve and socket.

I claim as my invention—

1. In a scraping attachment, a tongue, an angle plate mounted beneath and longitudinally of said tongue and adapted for vertical adjustment relative thereto, a scraper blade fixed to one arm and extending transversely of said angle plate, means for connecting the scraper blade, angle plate and tongue, and means for attaching said tongue to an implement.

2. In a scraping attachment, a tongue, an angle plate mounted beneath said tongue and adapted for vertical adjustment relative thereto, a scraper blade fixed to one arm of said angle plate, means for connecting the scraper blade, angle plate and tongue, means for attaching said tongue to an implement, and means for raising and lowering said tongue and scraper blade conjunctively.

3. A scraping attachment comprising tongues, angle plates mounted beneath said tongues and adapted for vertical adjustment relative thereto, scraper blades fixed to one arm each of said angle plates, means for connecting the scraper blades, angle plates and tongues, means for attaching said tongues flexibly to an implement, a cross-bar flexibly connected at its ends to said tongues, and manually operated lever mechanism attached to the central portion of said cross-bar, whereby said tongues, angle plates and scraper blades may be conjunctively raised and lowered.

4. In a scraping attachment, a tongue, and a scraper blade mounted transversely of one end portion of said tongue and ar-

ranged for rotative adjustment relative thereto, end portions of said scraper blade being of greater width than the central portion of said blade and extending forwardly therefrom on diverging planes.

5 5. In a scraping attachment, a tongue formed with an ear, an angle plate mounted beneath and longitudinally of said tongue and adapted for vertical adjustment relative thereto, a scraper blade fixed to one arm and extending transversely of said angle plate, means for connecting the scraper blade, angle plate and ear, and means for attaching said tongue to an implement.

10 6. In a scraping attachment, a tongue formed with an ear, an angle plate mounted beneath said tongue and adapted for vertical adjustment relative thereto, a scraper blade fixed to one arm of said angle plate, said scraper blade formed with a straight central portion and diverging end portions, the diverging end portions sharpened on their

lower margins, means for connecting the scraper blade, angle plate and ear, and means for attaching said tongue to an implement. 25

7. In a scraping attachment, a tongue formed with an ear, an angle plate mounted beneath said tongue and adapted for vertical adjustment relative thereto, a scraper blade fixed to one arm of said angle plate, said scraper blade formed with a straight central portion and diverging end portions, the diverging end portions sharpened on their lower margins, a weight on said tongue, means for connecting the scraper blade, angle plate and ear, and means for attaching said tongue to an implement. 30 35

Signed by me at Rolfe, Iowa, this 2nd day of May, 1910.

JOHN B. ALLBEE.

Witnesses:

C. D. HOBBS,

L. E. THOMPSON.