

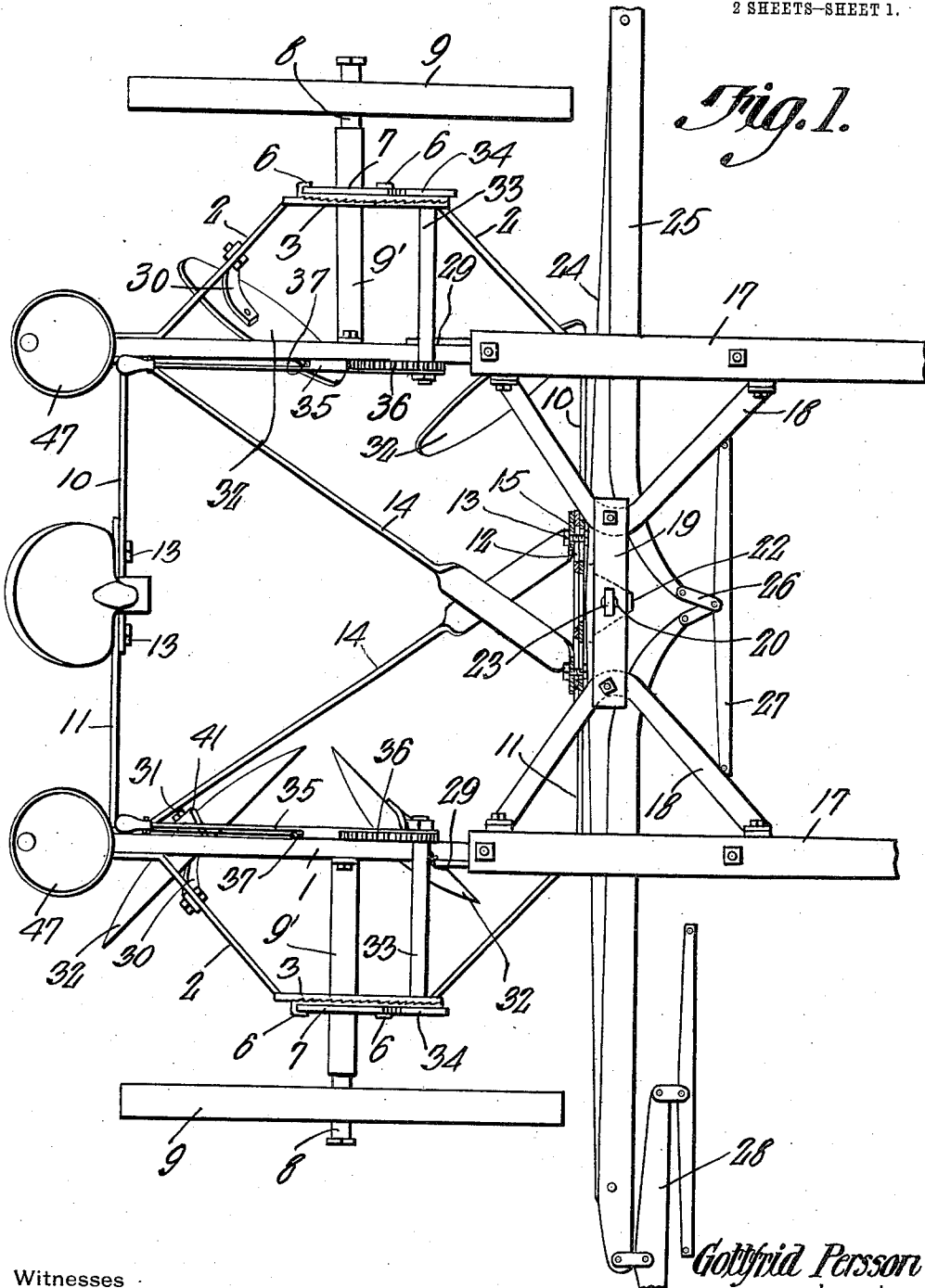
G. PERSSON.
LISTING PLOW.

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1,059,628.

Patented Apr. 22, 1913.

2 SHEETS—SHEET 1.



Witnesses

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UNITED STATES PATENT OFFICE.

GOTTFRID PERSSON, OF LUEDERS, TEXAS.

LISTING-PLOW.

1,059,628.

Specification of Letters Patent.

Patented Apr. 22, 1913.

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To all whom it may concern:

Be it known that I, GOTTFRID PERSSON, a citizen of the United States, residing at Lueders, in the county of Jones and State of Texas, have invented a new and useful Listing-Plow, of which the following is a specification.

This invention relates to listing plows and is more particularly an improvement upon the structure disclosed in Patent No. 866,679, issued to me on September 24, 1907.

One of the objects of the invention is to provide a combined listing plow and cultivator having listing disks arranged in pairs adjacent the sides of the plow, one disk of each pair being disposed in front of the other disk of the pair and the two disks of said pair being oppositely pitched.

A further object is to provide a structure of this character in which the shovel and the dropping mechanism is located directly back of the pairs of disks.

A further object is to provide improved means for raising and lowering the frame of the plow together with the disks and other parts carried thereby.

With the foregoing and other objects in view which will appear as the description proceeds, the invention resides in the combination and arrangement of parts and in the details of construction hereinafter described and claimed, it being understood that changes in the precise embodiment of the invention herein disclosed can be made within the scope of what is claimed, without departing from the spirit of the invention.

In the accompanying drawings the preferred form of the invention has been shown.

In said drawings:—Figure 1 is a plan view of the plow. Fig. 2 is a side elevation thereof, the rear supporting wheel being removed. Fig. 3 is a perspective view of the colter blade used in connection with the planting mechanism and showing the means for connecting the same to the plow structure. Fig. 4 is a view similar to Fig. 3 but showing means for connecting the plow stock to the machine in lieu of the colter blade, when the machine is not to be used for planting. Fig. 5 is a vertical transverse section through a portion of the guide plate and its extension and showing one of the braces and the rack bar. Fig. 6 is a perspective view of the lapping portions of the front cross strip and showing the bracket carried by one of said portions.

Referring to the figures by characters of reference 1 designates side beams each of which has laterally extending converging arms 2 secured to a guide plate 3. This plate has a downwardly extending portion 4 formed along its side edges with guide flanges 5. A guide ear 6 or the like extends from one end of the plate 3 adjacent the top thereof and this ear, as well as the flanges 5, is adapted to be slidably engaged by a rack bar 7. A spindle 8 extends laterally from the lower portion of the rack bar and is supported by one of the wheels 9 of the machine. A brace 9' extends from the side beam 1 downwardly to the lower end portion of the extension 4, as shown in Fig. 5, and thus it will be seen that the plate 3 and its extension 4 will be held fixed relative to the adjacent side beam 1 under all conditions.

The two side beams 1 are connected by cross strips 10 and 11 disposed in lapped relation, the lapping portions thereof being provided with longitudinal slots 12 for the reception of clamping bolts 13 or the like. Crossed braces 14 are preferably secured to the beams 1 close to the rear cross strips 10 and 11 and the front ends of these crossed braces are preferably secured to the front cross strips 10 and 11 by means of the bolts 13. Slots may be formed in the front ends of the braces 14, as shown at 15, so as to permit these braces to shift relative to the cross strips when it is desired to adjust the beams 1 toward or from each other so as to thus reduce or increase the width of the machine.

Arms 16 extend upwardly from the front end portions of the beams 1 and secured on these arms are thills or parallel draft beams 17. V-shaped extensions 18 are bolted or otherwise secured to the inner faces of these thills adjacent their inner ends and are connected by a cross bar 19 having a central opening 20. This opening registers with an opening 21 formed in a bracket 22 extending forwardly from the front cross strip 10. A fastening pin 23 is adapted to be inserted into these openings and likewise to extend through an opening formed in the center of a pivoted transverse draft beam 24 which projects between the bar 19 and the bracket 22. Equalizer levers 25 are pivotally connected to the outer ends of beam 24 and the inner ends of these levers are connected by links 26 to a whiffletree 27 located below the space between the thills 17. A whiffle-

tree 28 may be connected to the outer end of each lever 25.

Secured to each beam 1 at points in advance of the arm 9' are downwardly converging arms 29 and another pair of downwardly converging arms 30 extends from the beam 1 at points back of the brace 9'. Each pair of arms 29 and 30 has a stud 31 extending therefrom at its lower end and constituting a bearing for a lister disk 32. The studs of the two pairs are disposed at different angles so that the disks carried thereby will be held substantially at right angles to each other and one directly in front of the other.

A shaft 33 is journaled on each side beam 1 and on the adjacent guide plate 3 and is provided, at its outer end, with a segmental gear 34 which meshes with the rack bar 7 located at one side thereof. A lever 35 is secured to the inner end of each shaft 33 and a toothed segment 36 is mounted on beam 1 close to the lever and is adapted to be engaged by a pawl 37 carried by said lever so that the lever and shaft 33 can thus be secured against movement.

A hanger 38 extends from the rear end of each beam 1 and is provided, near its lower end, with a side enlargement 39 from which extends an arm 40, said arm being bolted or otherwise secured to a hanger 41 extending from the beam 1 and engaged by one end of the stud 31 of the rear disk 32.

A colter blade 42 extends across the enlargement 39 and is held thereon by a saddle 43 which straddles the blade and also the enlargement and is bolted or otherwise fastened in place as indicated at 44. The lower portion of the blade 42 is curved downwardly and rearwardly and terminates in a fork 45 adapted to receive the outlet spout or boot 46 which extends downwardly from a feed box 47 carried on the rear end portion of the beam 1. The colter blade 42 is located directly back of the centers of the disks 32 and constitutes a means for cutting into the bottom of the furrow produced by said disks so as to form a depression in which the seeds will be deposited.

It will be apparent that, by manipulating

the levers 35, the gears 34 can be rotated so as to permit the guide plates 3 and their extensions 4 to slide downwardly on the rack bars 7 thus to bring the listing disks 32 into engagement with the soil. When the machine is moved forward these disks will operate to throw the soil to opposite sides of the furrow produced by the disks and the colter blade 42 following in this furrow will produce a final cut in the soil to receive the seeds deposited from the boot 46.

Where the device is used solely for listing, shovels may be substituted for the colter blades. Each of these shovels includes a stock 48 having a blade 49 fastened to the lower end thereof, the said stock being extended between the saddle 43 and the enlargement 39, as shown in Fig. 4. This shovel will travel in the center of the furrow produced by the disks 32 and can be adjusted so as to plow to any desired depth within the furrow.

Whenever it is desired to shift the soil engaging elements upwardly so as to prevent them from tilling the soil, the segmental gears 34 are actuated so as to push the guide plates 3 and their extensions 4 downwardly along the rack bars 7, thus to bring the wheels 9 below the plane occupied by the lower edges of the soil engaging devices, 80 and as shown in Fig. 2.

What is claimed is:—

The combination with a wheel supported structure, of a pair of listing disks carried by the structure and disposed one directly in front of the other, said disks being pitched to throw the soil toward opposite sides of the path of the disks respectively, a hanger depending from the structure and back of the disks, an enlargement thereon, a saddle engaging the enlargement, and a soil engaging element detachably and adjustably held to the enlargement by the saddle.

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

GOTTFRID PERSSON.

Witnesses:

H. F. LONG,
PAUL KOCH.