

Instructions for Setting Up and Operating

DEMPSTER

Cultivators and Listers



MANUFACTURED BY

Dempster Mill Mfg. Co., Beatrice, Nebr.

KANSAS CITY, OMAHA, DENVER, SIOUX FALLS, OKLAHOMA CITY, AMARILLO

Instructions for Setting Up Two-Row Cultivator

1. First set the main frame, Bdl. No. 1, on supports, top side up and remove all wires from the bundle keeping the parts separated. Also remove the wires from the other bundle.

2. Put pivot post into casting No. C704, turning post until the pin can be inserted through the small hole in C704 into the pivot post thus locking it on. Be sure to put the steel washer on the pivot post between the two castings. (Illustration No. 1.)

3. Remove the hub caps from the wheels and the short axles from the pivot castings and put the wheels on with the washer on the outside of the boxing. Tighten the set screw onto the short axle. Now support the main frame until it is about level. (Illustration No. 1.)

4. Bolt seat bar to main frame, putting the foot lever pull rods over the top of the main frame and leaving the bolts loose. (Illustration No. 2.)

5. Bolt bent angle braces to the main frame and seat bar, leaving the bolts loose. The long end of the angle goes to the rear. Bolt on the round brace rods to the bent angle braces. Now tighten all the bolts on seat bar and angle braces. (Illustration No. 2.)

6. Slip the tongue truck standard through the casting on the end of the seat bar, leaving out the cotter pin. (Illustration No. 2.)

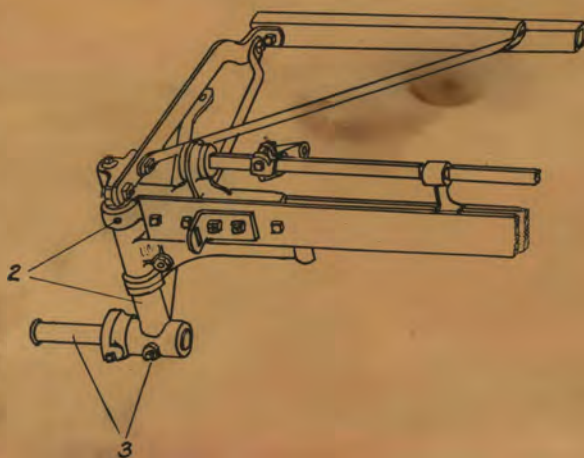


ILLUSTRATION NO. 1

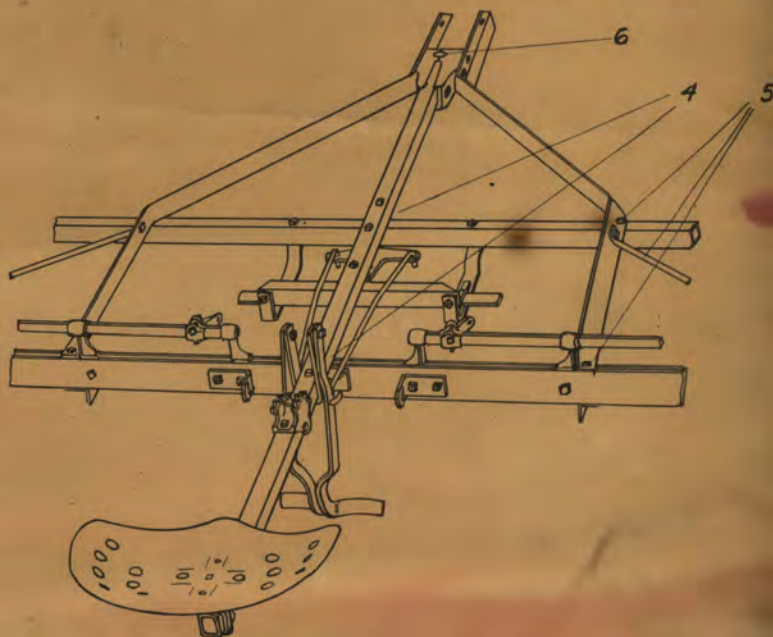


ILLUSTRATION NO. 2

7. Attach main levers and then fasten main ratchets to bent angle braces and to small angle piece on bottom of the frame, placing the flat brace across the ends of the ratchet. Now put on individual lifting levers. (Illustration No. 3.)

8. Bolt center levers in place and hook connecting rods from center levers into ends of the malleable bell cranks. (Illustration No. 4.)

9. Hook angle oscillating bar (flat side of angle to rear) into place on the guide arms extending out from the pivot castings. The short rod on left side of oscillating bar hooks into rear hole of the malleable "T" casting. (Illustration No. 4.)

10. Fasten tool box on the right bent angle brace in front of main ratchet. (Illustration No. 4.)

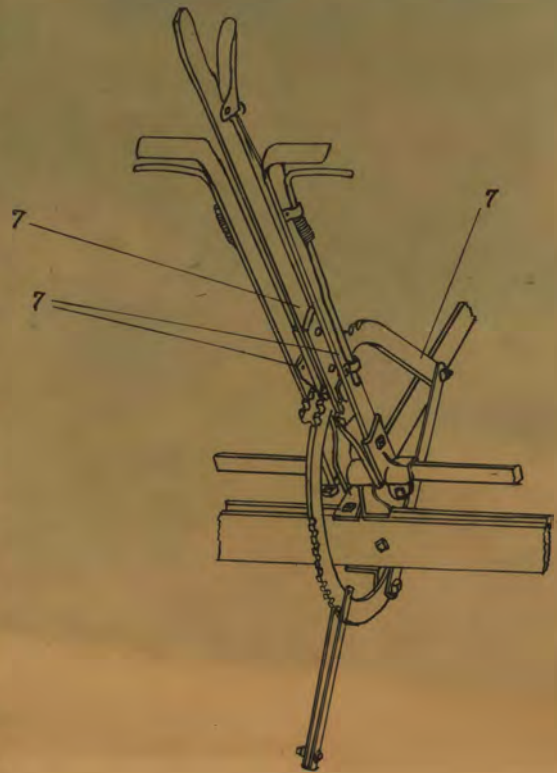


ILLUSTRATION NO. 3

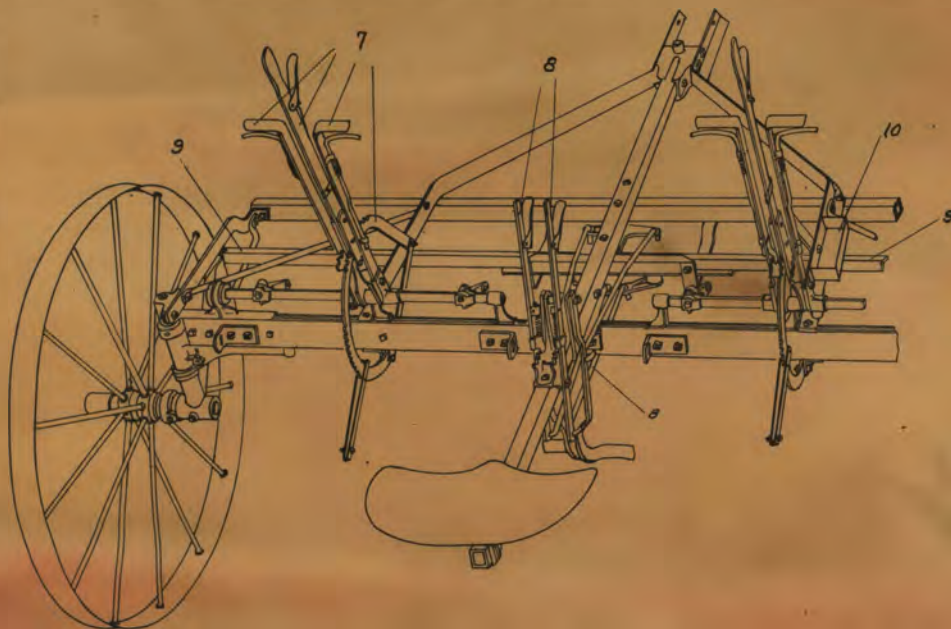


ILLUSTRATION NO. 4

11. The next thing to do is to put the arches and gangs together and on the main frame. First remove the C993 castings from the arches. Then lay the gangs down with shanks up and slip the arches into the ends of the gangs with the C993 castings in place. The side of the arch having the connecting rod on it goes to the inside of each set of gangs. Turn the arch and gang assembly over and slip in place under the main frame. Hook the arch over the hook on front cross bar of frame. Hook supporting rods into front cross bar of frame. Attach the spring pressure bars to the gangs. Next put on the down bars and sliding bars at the rear of the frame. Then hook up the push rods from front of gangs to brackets on rear cross bar of main frame. The shovels can now be put on. (Illustration No. 5.)

12. The main evener is next bolted to casting No. 554 $\frac{1}{2}$ and the stay chains fastened to the eye bolts on the front of the main frame. Bolt the iron straps to main evener and fasten on doubletrees and singletrees. The cotter pin should now be placed in the tongue truck stem to keep it from dropping out of the casting. (Illustration No. 6 and No. 7.)

13. Bolt the tongue truck braces in place. (Illustration No. 6 and No. 7.)

14. The tongue and neckyoke should be put together and then fasten tongue on between the bent angle braces. (Illustration No. 6 and No. 7.)

15. If the fenders are needed they should be fastened to the brackets at the front of the gangs and suspended at the rear by the fender chains which hook on the main ratchets. Slip the fender guide bars on the gang down bars to hold the fenders correctly spaced. Moving the chain fender support and the brackets at the front changes the position of the fenders.

Oil all parts with kerosene to cut the paint and work them as you put them on to be sure they work freely. When assembled oil all moving parts with machine oil. Fill the wheel boxings with axle grease by using the hub caps as grease cups.

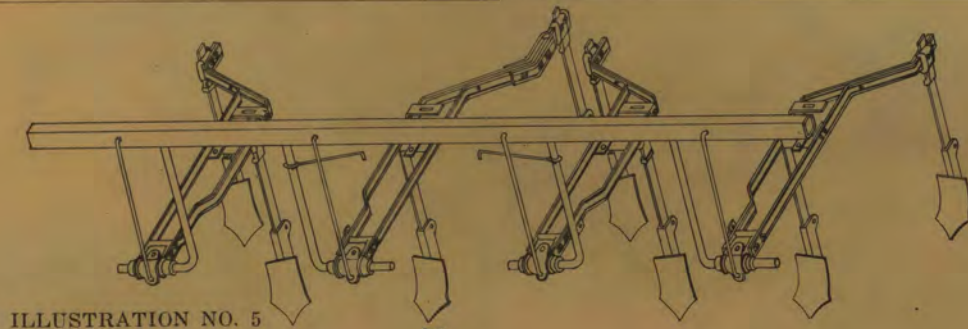


ILLUSTRATION NO. 5

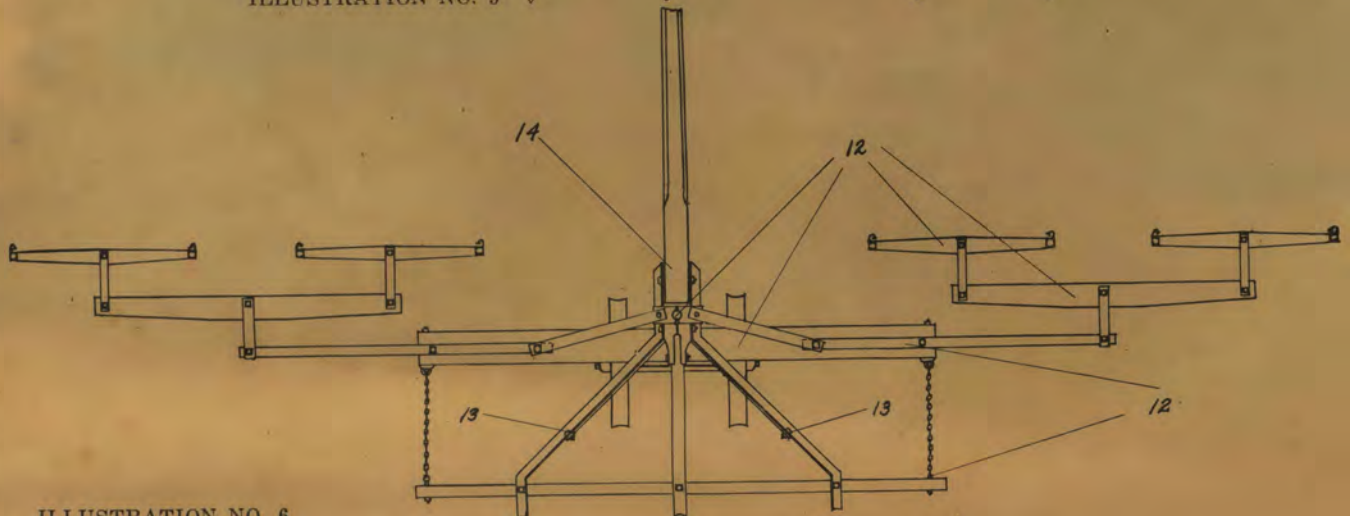


ILLUSTRATION NO. 6

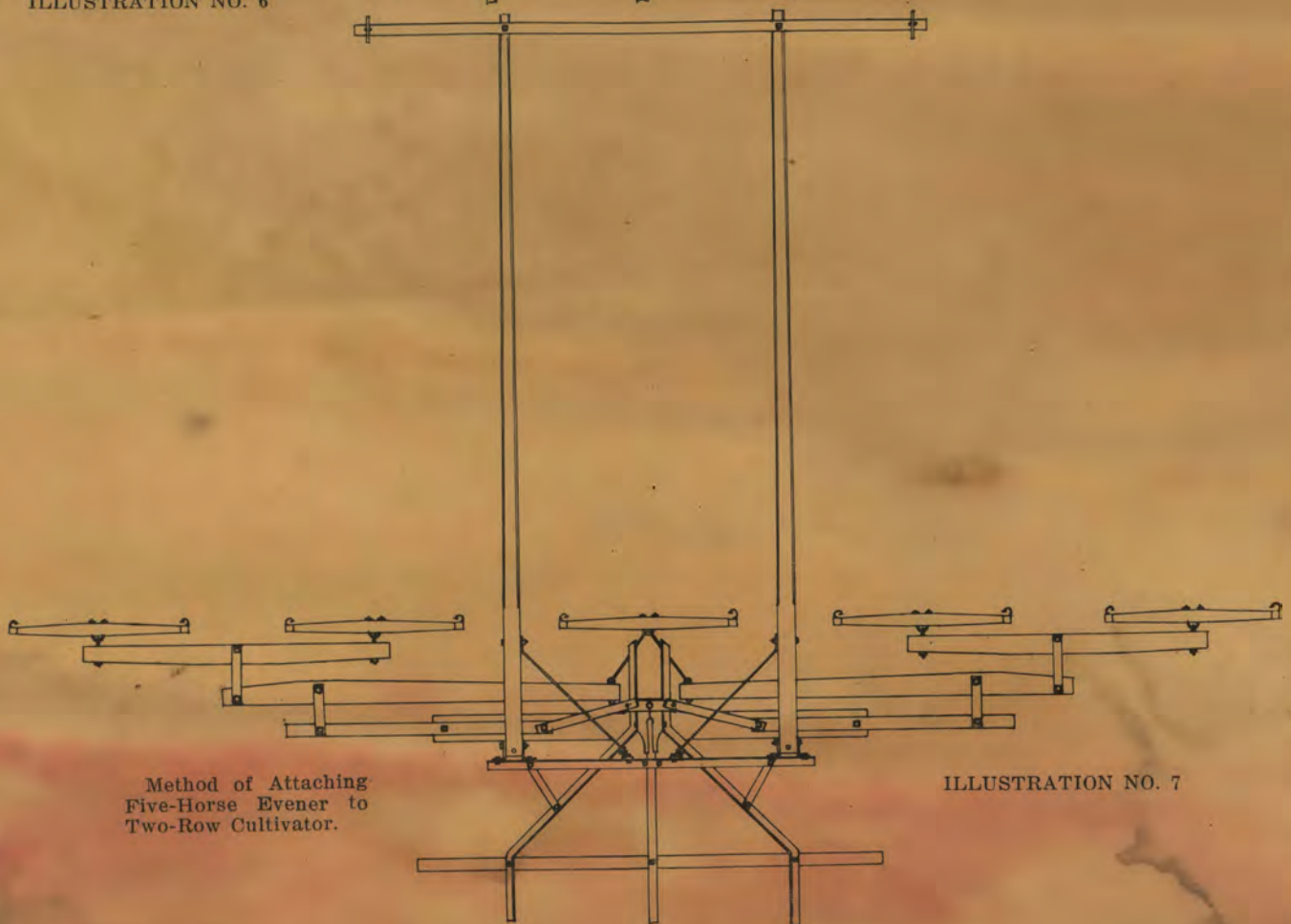


ILLUSTRATION NO. 7

Method of Attaching
Five-Horse Evener to
Two-Row Cultivator.

Instructions for Setting Up Lister

First place the main frame bundle on supports and remove the wires, laying out the parts separately. Also remove the wires from the other bundles and arrange the parts conveniently. This will facilitate the assembling of the lister. (Illustration No. 8.)

1. Bolt rear axle bearings and frame extension bars to main frame, leaving the rear bolts in the bearing castings loose. (Illustration No. 8.)

2. Put rear axle assembly on, holding it in place with the set collars and the drive sprocket. (Illustration No. 8.)

3. Slip the packer wheels on the rear axle, bolting the right one to the axle through the square hole in the wheel boxing. The left wheel is held on with a set collar and should be adjusted to line up with the bottom after it is put on. (Illustration No. 8.)

4. Next put on the front truck wheels. Adjust the set collars on the stems so the distance from the ground to the top of the front frame bar is 19 inches. (Illustration No. 8.)

5. Fasten stub tongue to the front bar of the main frame. (Illustration No. 8.)

6. Attach the steering arms to the front wheel axle castings. Bolt tie bars to steering arms and stub tongue. (Illustration No. 8.)

7. Attach seat bar and seat bar braces. Put on seat and adjust to suit the height of the operator. (Illustration No. 8.)

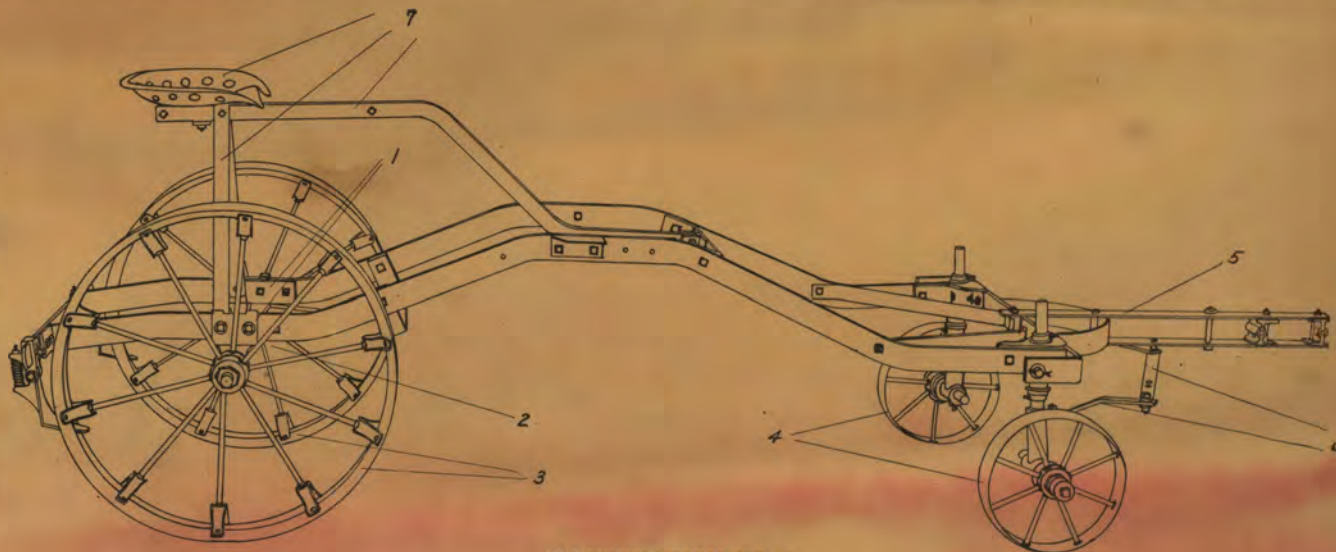


ILLUSTRATION NO. 8

8. Bolt side ratchets and square bar assembly to the main frame. Bolt center bearing to seat bars. (Illustration No. 9.)

9. Bolt on main ratchet and main lever. Put on the side levers. (Illustration No. 9.)

10. Bolt dropper shaft assembly to the angle brackets on the main frame. Connect throwout clutch lever with throwout crank on the square bar. (Illustration No. 10.)

11. Fasten on seed cans and put seed tubes on the spouts on the spiders. (Illustration No. 10.)

12. Bolt on the chain guard and put the chain on the sprockets. Attach spring chain tightener, putting roller on top of chain. (Illustration No. 10.)

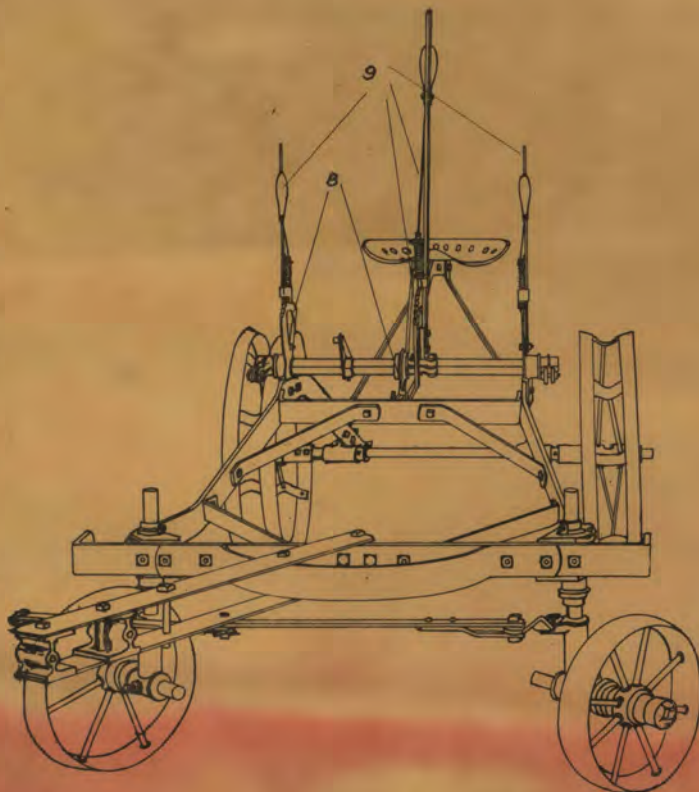
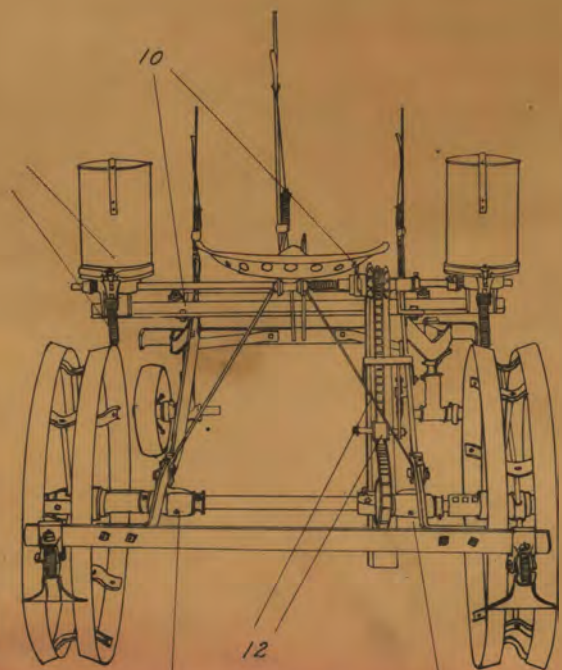


ILLUSTRATION NO. 9



PUT ALEMITE CONNECTIONS
ON REAR AXLE BEARINGS
ILLUSTRATION NO. 10

13. Slip the beam support shaft under the frame and bolt the lifting links to the lifting arms. (Illustration No. 11.)

14. Slip the beam and bottom assembly on the beam support shaft. Adjust the set collars until the bottoms are 40 inches apart. (Illustration No. 11.)

15. Bolt front end of beams to beam end irons. Bolt connecting bars to side levers and to adjusting cranks on front end of beams. (Illustration No. 11.)

16. Fasten Disc Covers to beams and adjust spring tension bars until the desired tension is secured. (Illustration No. 11.)

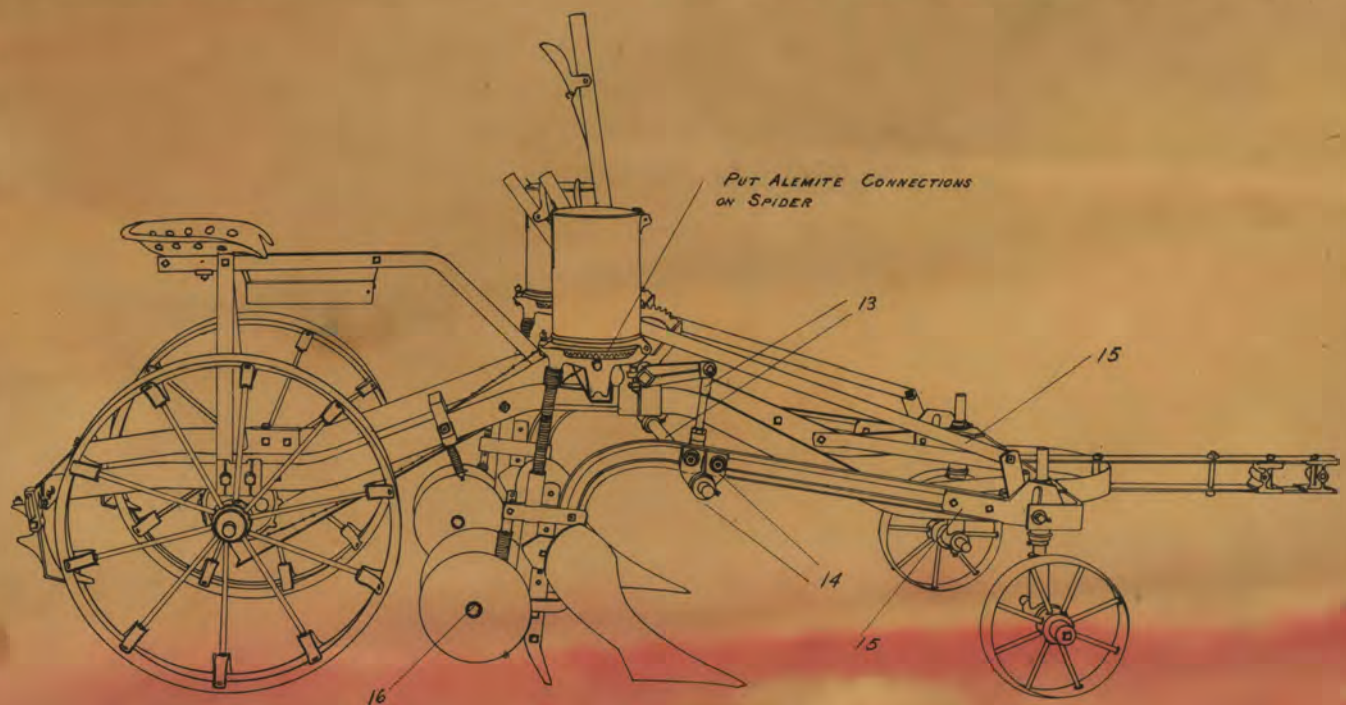
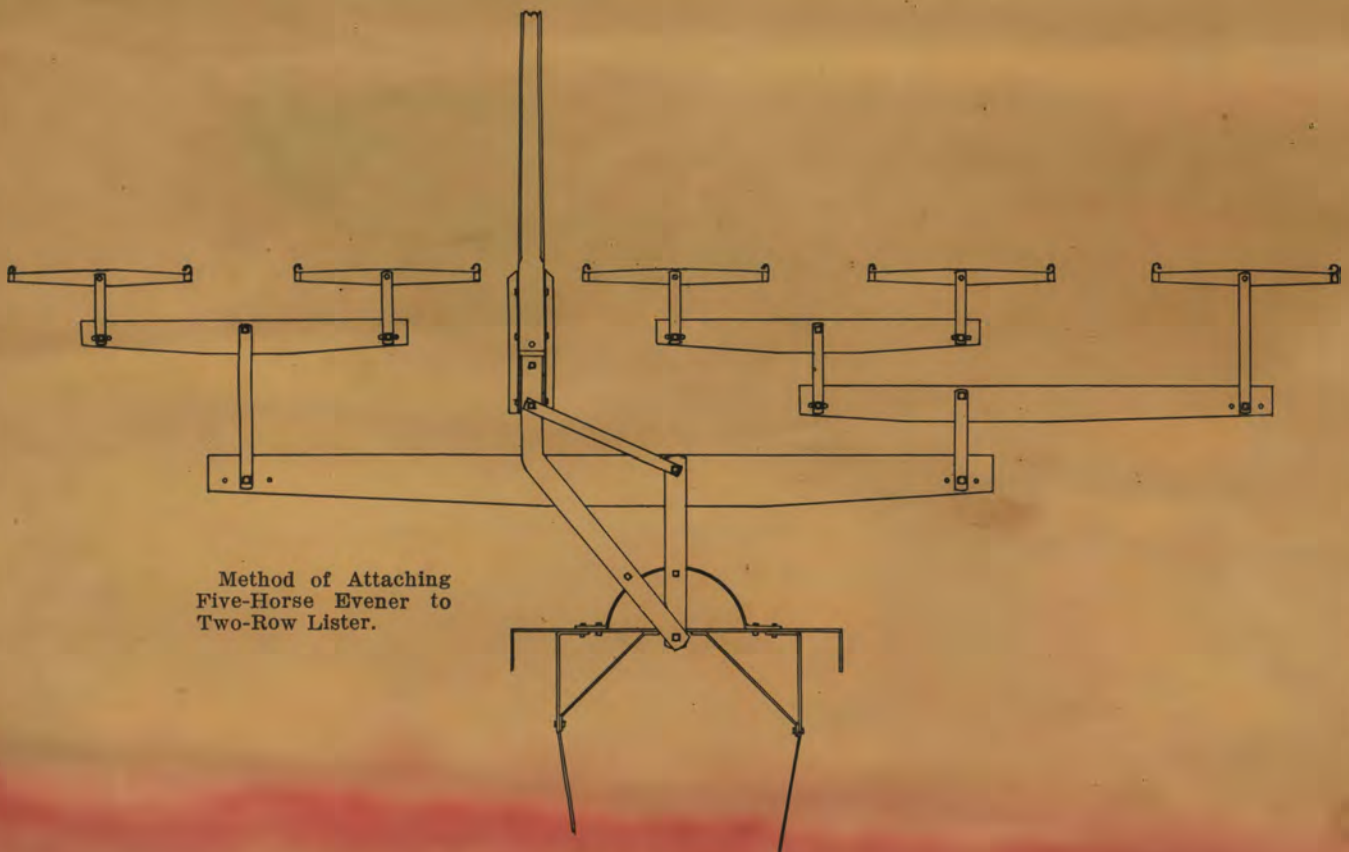


ILLUSTRATION NO. 11

17. If horse hitch is to be used, bolt tongue to stub tongue and put on eveners and doubletrees. If tractor hitch is used, bolt drawbar to front cross bar of lister and fasten on drawbar guide to front of the stub tongue. (Illustration No. 12.)

Oil the moving parts with kerosene to cut the paint as you put them on and work them to make sure they work freely. Then oil them with machine oil after the lister is assembled. Fill the wheel boxings with axle grease and grease the places fitted with Alemite connections with the Alemite gun.

The Lister comes set for 40-inch rows. It can be changed for 38 inch and 42 inch rows by changing the spacing of the rear wheels, moving the seed cans in or out, moving the beams in or out on the draft pins by moving the bushings on the pins, and by moving the beams in or out on the beam support shaft.



Method of Attaching
Five-Horse Evener to
Two-Row Lister.

Instructions for Attaching Power Lift to Two-Row Lister

1. Bolt power lift to left main frame bar back of seed can using the holes in the frame for that purpose. Bolt on the outboard braces as shown in the cut. (Illustration No. 13.)

2. Remove left planter wheel and slip power lift sprocket over wheel hub with set screw on outside. (Illustration No. 13.)

3. Put on the drive chain. (Illustration No. 13.)

4. Put on trip lever assembly. (Illustration No. 13.)

5. Put power lift ratchet on square bar of lister with ratchet hub to outside. (Illustration No. 13.)

6. Put lifting arm on power case pin and fasten to power lift ratchet. (Illustration No. 13.)

7. Turn main lever around in its socket and engage it on power lift ratchet. The main ratchet need not be taken off. The depth of the bottoms can be regulated by changing the lever position on the power lift ratchet. If machine is used with a tractor attach a rope or wire to trip lever and run it up to tractor. (Illustration No. 13.)

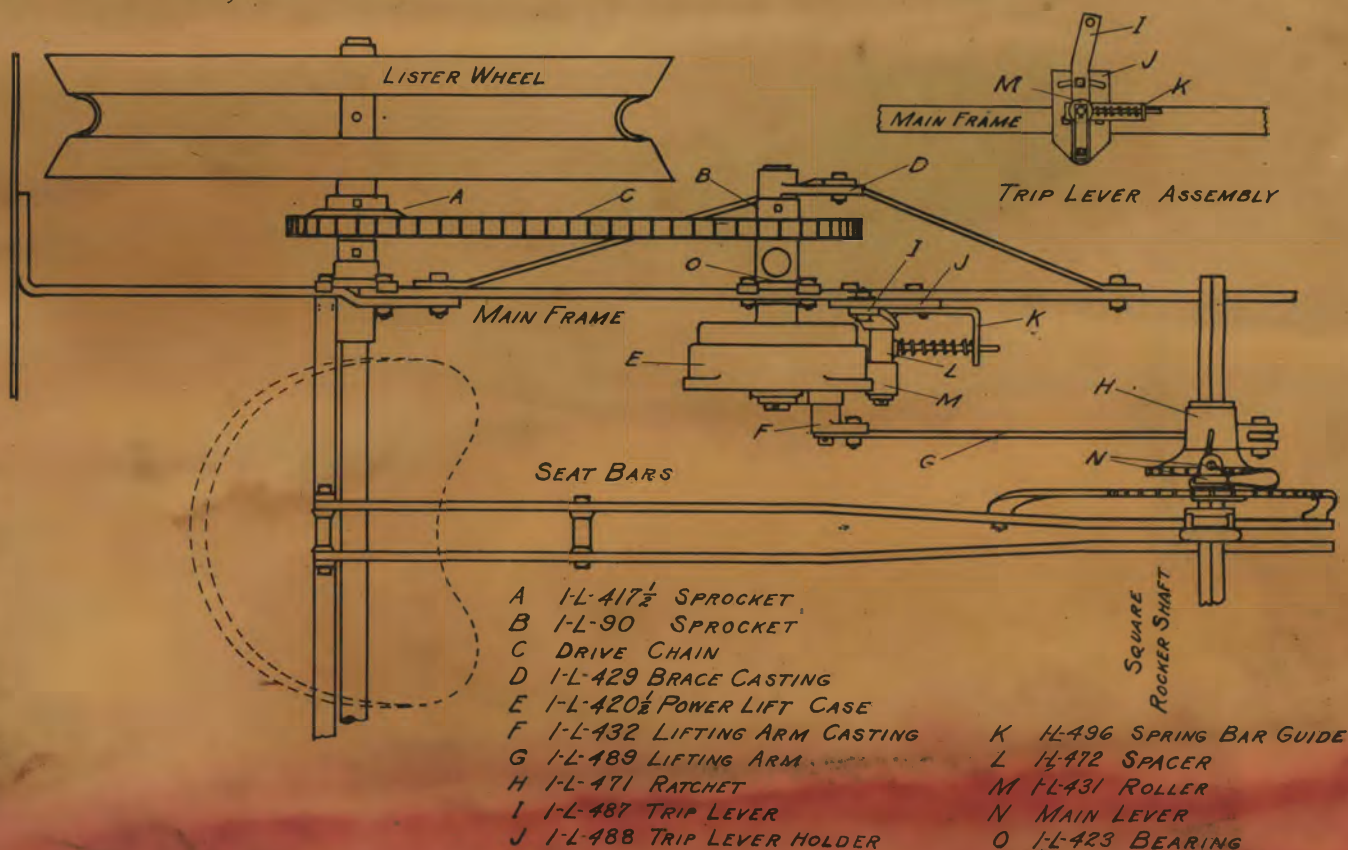
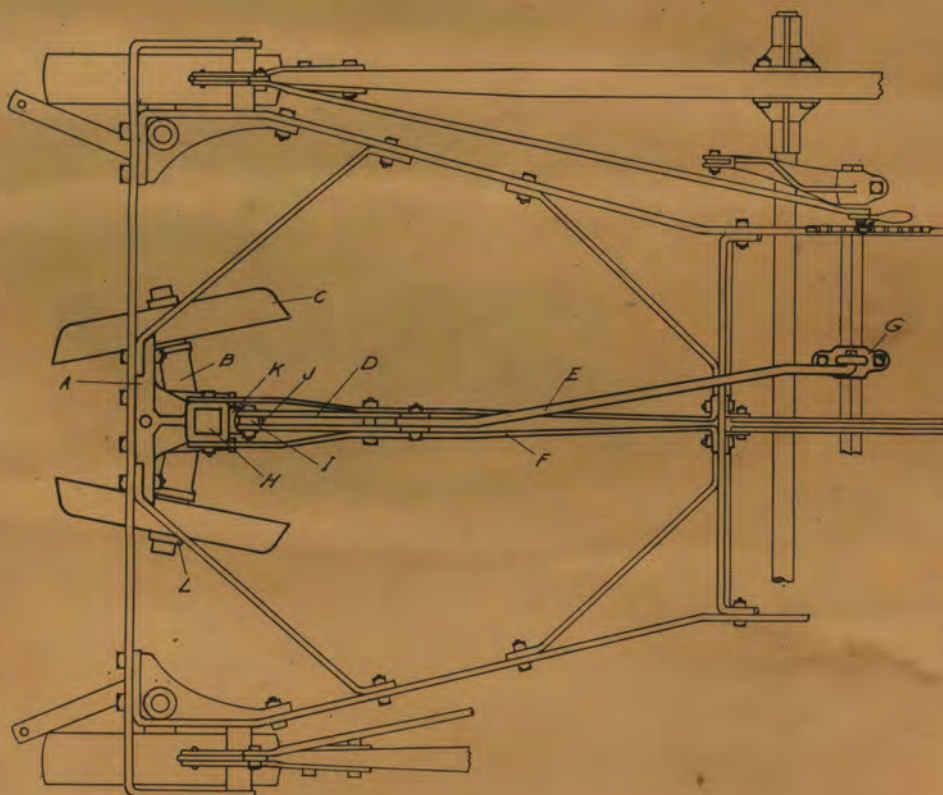


ILLUSTRATION NO. 13

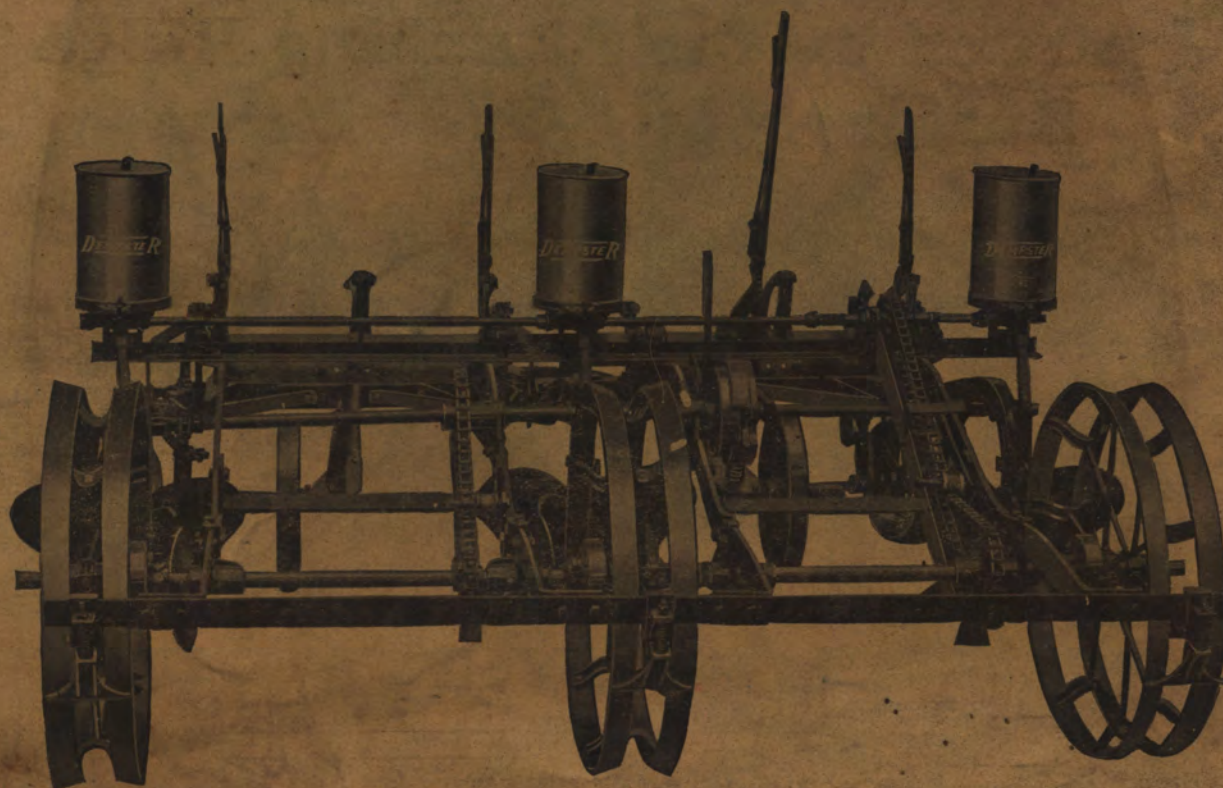
Instructions for Attaching Ridge Buster to Two-Row Lister

1. Slip IL536 pipe support casting over square pipe standard and then bolt IL536 casting in place on front cross bar of lister. (Illustration No. 14.)
2. Bolt bell crank support bars to IL536 support casting and to middle brace on main frame. (Illustration No. 14.)
3. Fasten spring bar into spring bar guide on pipe standard. (Illustration No. 14.)
4. Bolt lifting arm on square bar and fasten lifting link rod in place on lifting arm. (Illustration No. 14.)
5. Adjust spring by moving set collar up or down until proper tension is secured. (Illustration No. 14.)

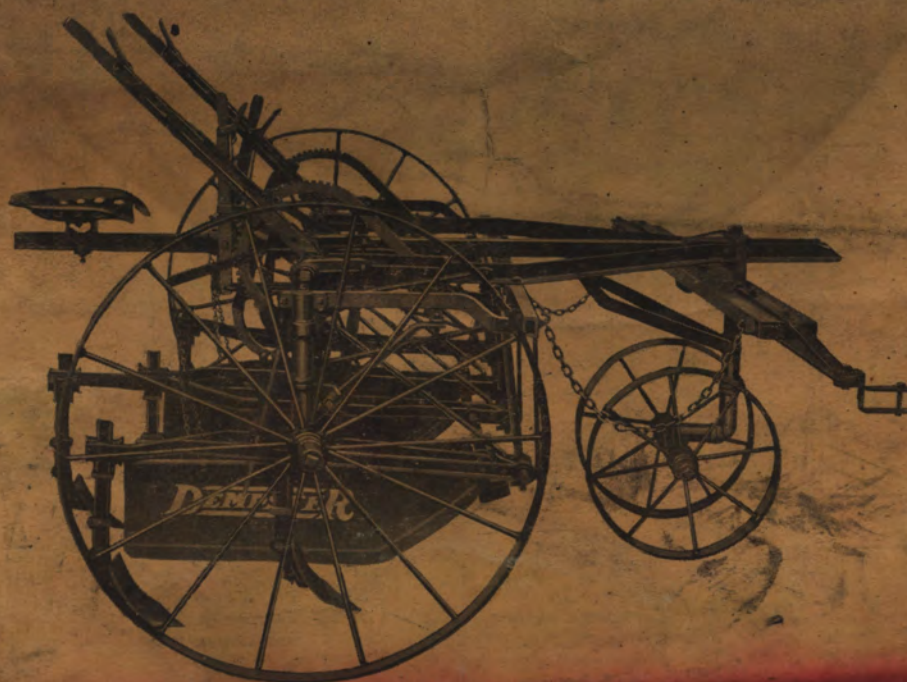


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|---|-----------------------------|---|-------------------------|
| A | IL-536 PIPE SUPPORT CASTING | G | IL-421 LIFTING ARM |
| B | IL-547 AXLE CASTING | H | IL-550 PIPE STANDARD |
| C | G-275 BELL WHEEL | I | IL-557 SPRING BAR |
| D | IL-555 BELL CRANK | J | IL-563 SPRING |
| E | IL-554 LIFTING LINK | K | IL-551 SPRING BAR GUIDE |
| F | BELL CRANK SUPPORT | L | IL-548 HUB |

ILLUSTRATION NO. 14



DEMPSTER THREE-ROW LISTER



SIDE VIEW DEMPSTER CULTIVATOR