

Black Hawk Planters

TWO ROW

BLACK HAWK planters are the accepted standard for accurate work. Accuracy is obtained by the edge drop system of seed selection and features that assure every hole in the seed plate being filled before reaching the cut-off valve.

These planters are built in different sizes and styles to meet varying conditions.

Manufactured by

D. M. Sechler Carriage & Implement Co.
Moline, Illinois

FOR



Oliver Chilled Plow Works



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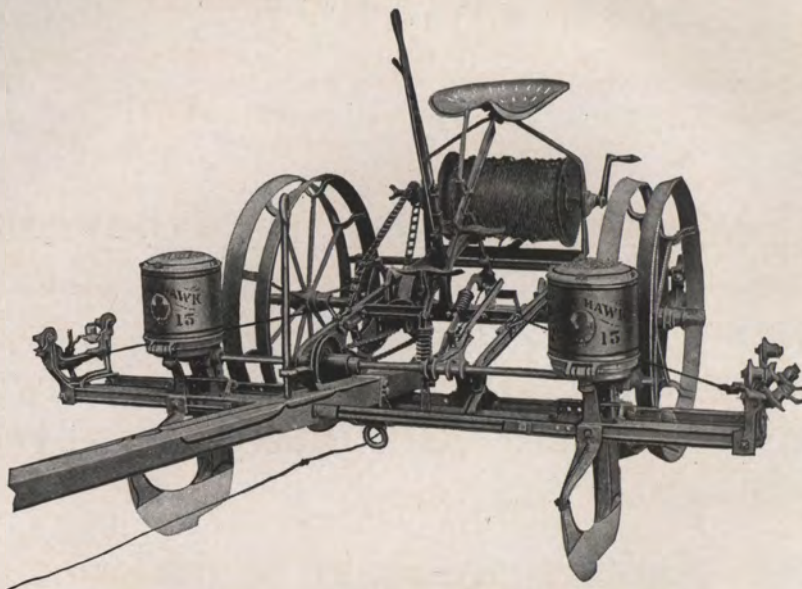
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The Oliver Line is Growing



Black Hawk Planters



Black Hawk No. 15 planter

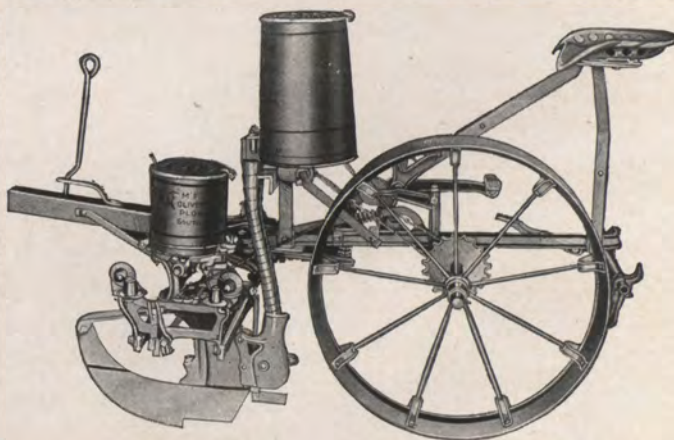
The Black Hawk was the first planter to successfully make use of the edge drop system of depositing seed. So successful was this planter that practically all corn planters are now edge drop type.

It is a well known fact that corn is more uniform in thickness than in width or length. For this reason it is possible to make the cells of an edge drop planter more nearly conform to a standard size of corn than any other system of seed selection.

Accurate Planter

Accuracy in depositing seed is the first essential in a planter, and a planter that skips a hill now and then or fails to deposit the exact number of seeds desired in a given hill is a source of loss to a farmer.

On account of the edge drop seed selection and other desirable features that were originated by the Black Hawk, this planter has become known among farmers as a most accurate machine, and for this reason has become extremely popular. Additional features that make it accurate in planting will be explained in detail further on in the circular.



All Black Hawk planters can be equipped with fertilizer attachments



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Black Hawk No. 15 Planter

The Black Hawk No. 15 planter is a general purpose check row planter. It can also be used as a drill. This planter can be adjusted to plant rows 3 feet to 3 ft. 8 inches apart. When specified in the order planters will be furnished to plant 3 ft. to 4 ft., 3 ft. to 5 ft., 3 ft. to 6 ft., 2 ft. 4 inches to 3 ft. 8 inches and 2 ft. 4 inches to 4 ft. distance apart.

This planter is equipped with a disk marker, quick detachable curved runners, or stub runners and open or concave wheels, as ordered. This planter is regularly furnished with tongue, anchor stakes, 80 rods Barlow check wire, center reel, and three sets of seed plates. If so desired, this planter will be furnished without check rower attachment, to be used for drilling only.

The planter is regularly furnished with 30-inch wheels and when specified it will be equipped with 38-inch wheels, making this planter of practical use where listed corn is grown. The high wheel enables the planter to straddle the ridges and plant the corn in furrows. This planter is also good for use on stony or stumpy land where obstructions must be straddled.

A fertilizer attachment can be furnished for all Black Hawk planters. Detail information regarding the fertilizer attachment will be given later.

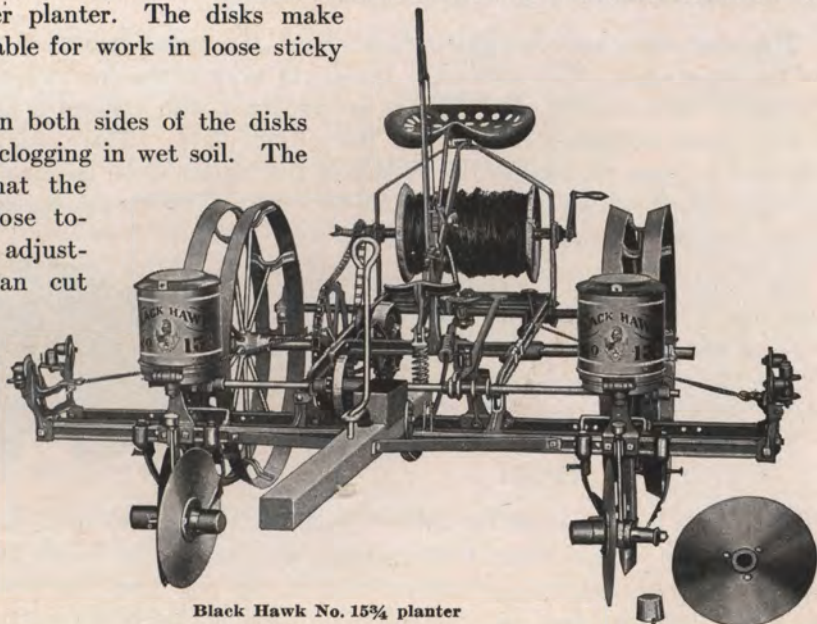
Black Hawk Planter No. 15 $\frac{3}{4}$

The No. 15 $\frac{3}{4}$ planter is identically the same as No. 15 with 30-inch wheels except that the furrow openers consist of two 13-inch disks instead of the usual runner. This planter has the same width adjustments and same styles of wheels as the regular No. 15 planter. It has the same shank and valve arrangement. It is designed to work in soils that contain roots and trash which are liable to clog a runner planter. The disks make this planter especially desirable for work in loose sticky soils, or in wet ground.

Scrapers are furnished on both sides of the disks to clean them and prevent clogging in wet soil. The disks are adjustable so that the front edges can be kept close together as wear occurs. This adjustable feature insures a clean cut furrow.

A variable drop device is furnished on the Black Hawk No. 15 $\frac{3}{4}$ planter.

Farmers who prefer a double disk planter find the Black Hawk No. 15 $\frac{3}{4}$ most satisfactory.



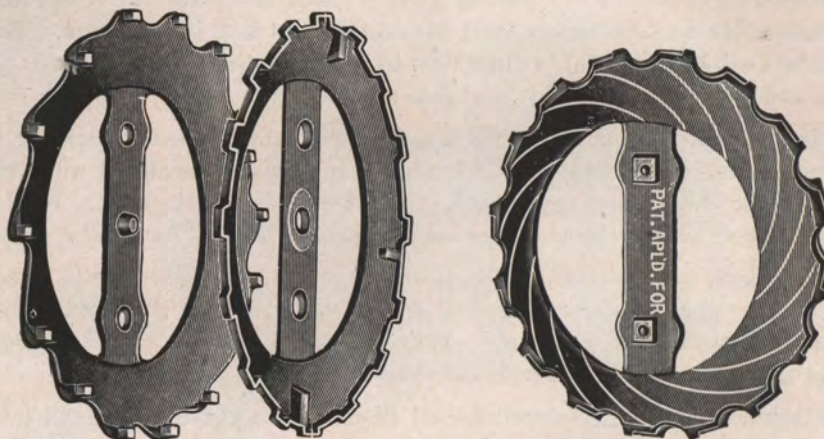
Black Hawk No. 15 $\frac{3}{4}$ planter



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Seed Plates

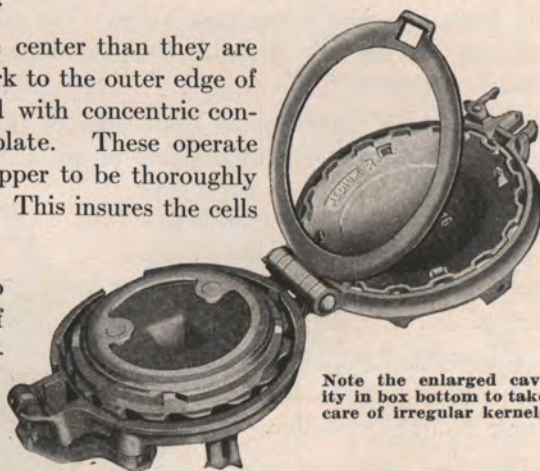


An adjustable plate. May be used on all Black Hawk variable drops

The seed plates are rotated by means of a specially constructed gear consisting of a pinion and gear ring which permits the seed plate to come to a full stop every time it moves the distance of one cell. This frequent starting and stopping causes an impulse movement which is very effectual in throwing the seed into the cells of the seed plate. This feature is one of the reasons for the remarkable accuracy in the Black Hawk planter.

The seed plates are constructed higher near the center than they are on the outer edge. This causes the kernels to work to the outer edge of the plate. The surfaces of the plates are provided with concentric convulsions, and projecting fingers from the cut-off plate. These operate together to cause the seed in the bottom of the hopper to be thoroughly agitated and forced to the outer edge of the plate. This insures the cells of the seed plates being properly filled.

The small pinion on the clutch shaft reaches into the cogs on the gear ring without the necessity of marked cogs and also without reference to the position of the plates. This feature makes the Black Hawk planter most desirable.



Note the enlarged cavity in box bottom to take care of irregular kernels

Reel

The reel is located under the driver's seat. It is operated by a chain drive from the axle and regulated by a friction clutch which permits the wire to wind evenly under all conditions. A wire guide in front of the spool and one on front of the pole keep the wire off the ground and out of the way of the horses' feet. Side reel will be furnished in place of the center reel, if specified on the order.



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Positive Dropping

The No. 15 planter shanks are equipped with double channels. This gives a straight unobstructed channel for drilling. In the Black Hawk system the kernels at the lower end of the shank are ready to be deposited in the ground the instant the valve is opened. This effectively prevents mixing of hills when driving slow or fast. The bottom valves open outwardly in such a way as to positively prevent the heel of the shank from becoming clogged with earth when the ground is wet.

In the illustration at the top of the page one hill is in the bottom of the shank ready to be deposited in the earth, and the other is resting at the top. When the lower kernels leave the shoe, the ones at the top start down, ready to drop in the next hill.

In the illustration at the right of the page the seed in the bottom of the shank has been deposited in the ground, and the kernels which laid at the top of the shank are now at the bottom ready to drop into the ground when the valve is opened. The corn only having to drop from the bottom of the shank to the ground insures accurate placing of the hills on account of the short distance which it has to travel.

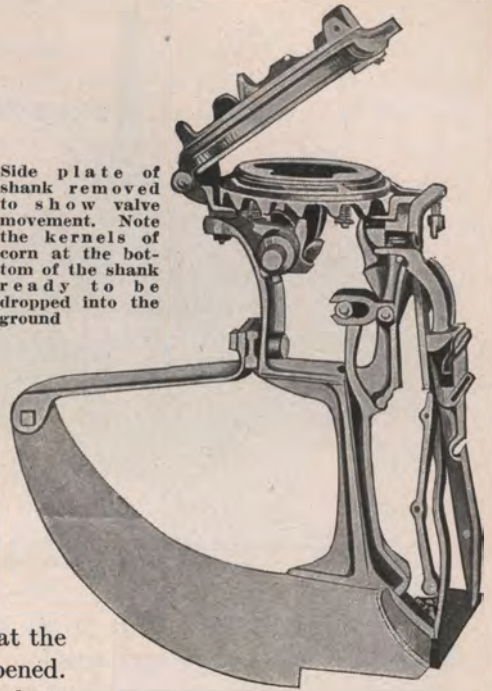
The motion of the heel in preventing the shank from becoming clogged with wet soil and the short distance the corn drops when being deposited in the ground is a feature that would appeal to any farmer who wants his corn planted accurately. It enables him to plant seed in the proper manner even though the ground is not in the best of condition.

While it is always best for the seed bed to be in good condition, there are occasions in the late spring when it is impossible for the farmer to wait to do his planting until the ground is in proper condition. This feature of the Black Hawk planter will enable him to do his planting when it is necessary.

The No. 15 planter can also be used for drilling corn very successfully on account of the unobstructed passageway down the shank.

A straight passageway down the shank offers no obstructions to retard the corn or to cause it to drop unevenly. The result is that the Black Hawk No. 15 planter is accurate in drilling.

Side plate of shank removed to show valve movement. Note the kernels of corn at the bottom of the shank ready to be dropped into the ground



The shank arranged for drilling. Observe that the kernels fall without meeting obstructions



The kernels dropped in the hill. Observe that D has moved downward, forcing the corn out in a bunch

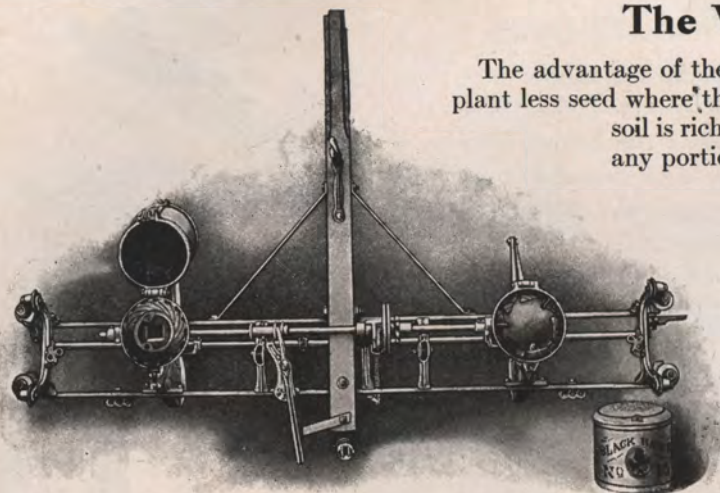


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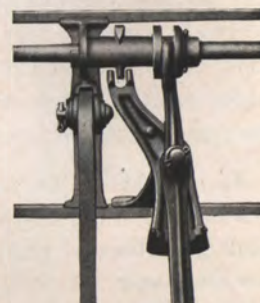
The Variable Drop

The advantage of the variable drop is that the farmer can plant less seed where the soil is poor and thicker where the soil is rich. He can do this in the same row in any portion of the field, either in hilling or drilling, without stopping the team.



The plates are higher near the center to force the kernels to the edge. The lever for changing the drop can be operated without stopping the team.

The change is made by moving the lever to the right or left by hand or foot. The figures two, three and four placed under the notches on



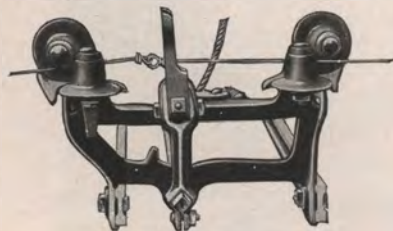
The Black Hawk variable drop is simple and is easily controlled by moving a lever to the right or left.

the shifting lever show where to set the lever for the number of kernels desired. This variable dropping mechanism is very simple consisting only of four pieces which are exposed to view at all times. For this reason nothing can go wrong without being seen instantly.

Check Row

The check row with which the No. 15 planter is equipped is exceptionally simple. The illustration of the check fork shows the position it is in at the beginning of the operation of dropping a hill of corn, and the accumulation of another. All the work required of this fork is the operation of the valves and the throwing in of the clutch.

All the hard work of operating the plates is done by the chain which drives the clutch shaft from the main axle. This construction relieves the wire and check row of the hardest part of the operation of the planter, meaning greater durability and a more accurate planter.



Note the simplicity of the check fork and the ease with which the fork can be removed should occasion arise.

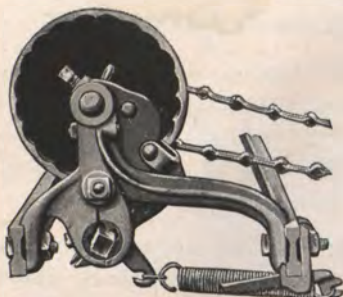
Check Wire Release

A convenient foot lever has been provided for disengaging the wire from the check heads at the end of each row. This release operates so as to instantly drop the wire from the check row head by a slight pressure of the foot.

The illustration of the No. 15 planter on the second page [and the No. 15 $\frac{3}{4}$ on the third] page show this feature. This release does away with the difficulty of the rope breaking when it is most inconvenient to replace it.



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A simple clutch. Clutch is at rest

A Simple Clutch

The clutch on this planter has been in constant use for eighteen years. It has proven to be the most desirable means for locking and unlocking the feed shaft that has ever been produced for this purpose.

The clutch is thrown in and out of gear by the check row wire fork thus insuring a positive dropping of the seed at the time the check row opens the valve.

The clutch is thrown out of gear by means of a trip dog and held out of gear until the button on the wire operating the check row fork throws it in again. The trip dog is provided with a steel roller which prevents friction and wear on both the dog and the ratchet. This means an accurate clutch and one that will last a great many years.

Chain Drive

A chain drive operated by the planter wheels revolves the plates. The chain is kept at the proper tension by a gravity chain tightener.

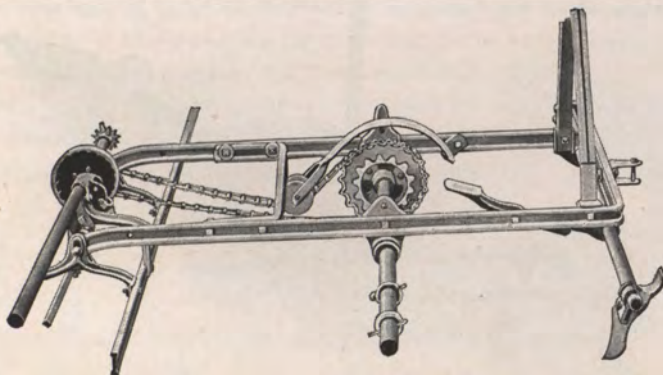
There are three sprocket wheels on the main axle for driving the plates at different speeds. These three wheels in connection with the different plates furnished give a great variety of drops for all kinds of seed.



The clutch in operation. The little roller on the dog coming in contact with the grooves eliminates wear on both the dog and the ratchet

A Strong Main Frame

The main frame of the Black Hawk planter is made of one piece of "I" beam steel bent into shape. A strong cross brace gives rigidity. Everyone knows the necessity of a rigid frame for a corn planter. The Black Hawk construction, by making the frame in one piece and placing it over the axle, is as simple and strong as it is possible to make any type of frame.



This simple center drive relieves the fork of the hard work and wear of driving the plates. Observe the well braced, substantial frame

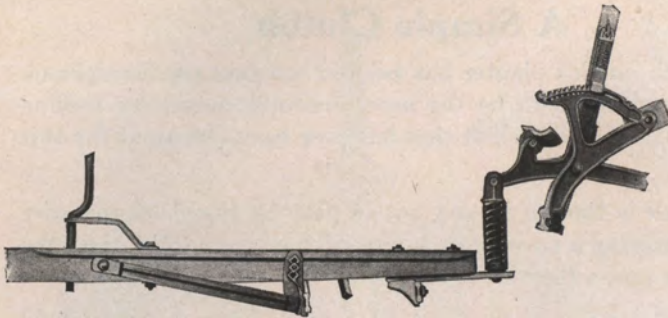
Scrapers

The scrapers are operated by a foot lever convenient to the operator, giving him the advantage of keeping the wheels clean at all times.

Scrapers that are operated with the foot are of advantage since the planter is often used when no scrapers are necessary. However, when it is necessary to clean the wheels, a slight pressure of the operator's foot causes the scrapers to thoroughly clean the wheels.



The Oliver Line is Growing



The tongue braces are adjustable. The carrying spring makes a flexible connection

Tongue Adjustment

A planter tongue should be almost straight, reasonably stiff and provided with a rigid adjustment for the purpose of keeping the corn in check for various heights of teams.

The tongue braces, tongue adjustment and tongue plate on the Black Hawk planter are capable of sufficient adjustment to adapt the planter to any height of teams.

The spring on the connection between the foot lever and the rear of the pole makes it so flexible that the planter runners will conform to uneven conditions.

Convenient Lever

The lever for raising and lowering the runners is convenient to the operator.

An auxiliary foot lever aids in raising the levers from the ground. The planter is so well balanced that it does not require a lifting spring to assist in raising the runners from the ground.

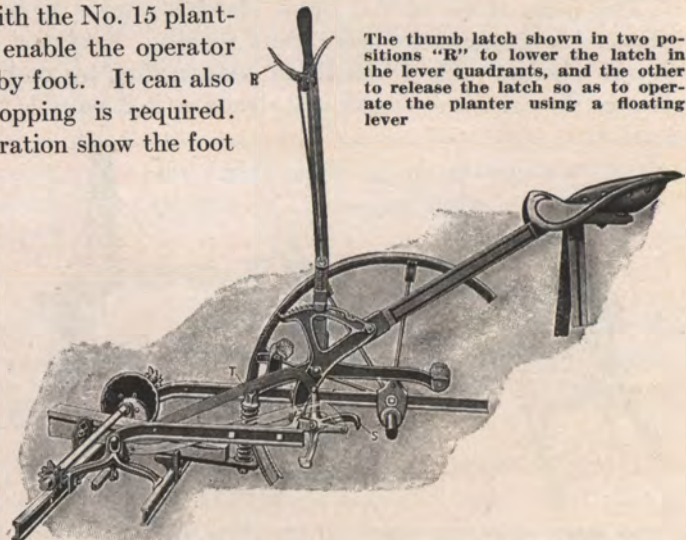
The thumb latch is capable of two positions. In the position "R" it locks the lever in the quadrant. In the other position it releases the latch so that the lever floats, giving the operator both the advantages.

Foot Drop Attachment

A foot drop attachment is furnished with the No. 15 planter. The purpose of the foot drop is to enable the operator to check the hills at the end of the rows by foot. It can also be used for other purposes where dropping is required. "S" and "T" in the accompanying illustration show the foot drop.

The pedal that operates the foot drop attachment is convenient to the operator of the planter. A foot drop attachment is important since it enables the planter to do accurate dropping up to the end of the field.

The thumb latch shown in two positions "R" to lower the latch in the lever quadrants, and the other to release the latch so as to operate the planter using a floating lever

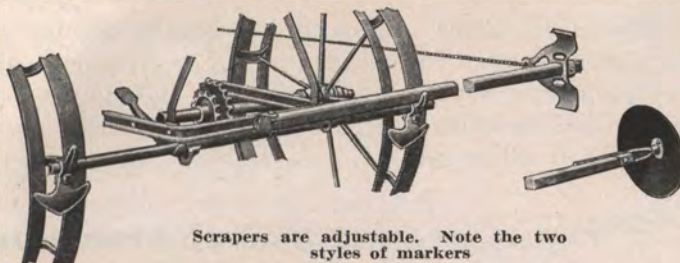




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Markers

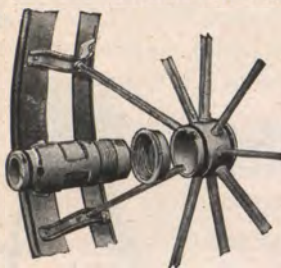


Scrapers are adjustable. Note the two styles of markers

The No. 15 corn planters are regularly furnished with disk markers. The advantage of the disk marker is that when planting in trashy ground or in fields where there is a great deal of crab grass the disk marker makes a clearer mark than the drag marker. A show marker will be furnished when ordered.

Wheels

The wheels with which the Black Hawk planter is equipped are all steel. The spokes are made of oval steel with wide shoulders at the hub and the rim. The riveting of the outer end of the spokes is done in such a way as to subject the outer end to the least possible wear when coming in contact with the ground.



The wheels are equipped with renewable bushings

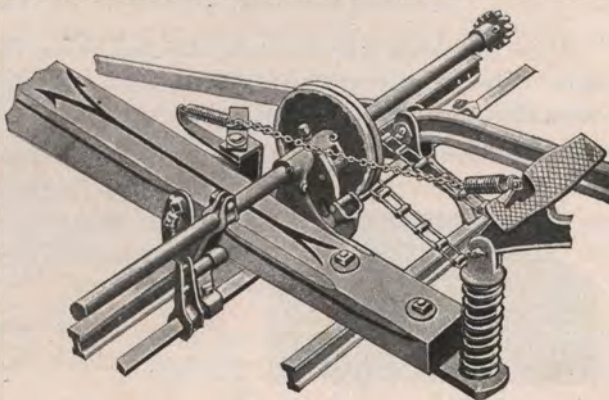
The wheels are equipped with removable bushings. In different localities different types of planter wheels are required, consequently, when ordering planters care should be used to specify whether open, or concave tire wheel is desired.

Automatic Hill Drop

When ordered as an extra the No. 15 corn planter will be equipped with an automatic hill drop attachment. The purpose of this attachment is to stop the action of the dropping device when the levers raise the runners out of the ground and permit operation while the runners are in the ground.

When putting on this attachment there are no parts to remove and very few to attach. This attachment will plant three and four kernels in hills 36 or 44 inches apart.

The automatic hill drop prevents wasting seed and makes the planter more easy to operate.



The automatic hill drop is an exceedingly simple arrangement

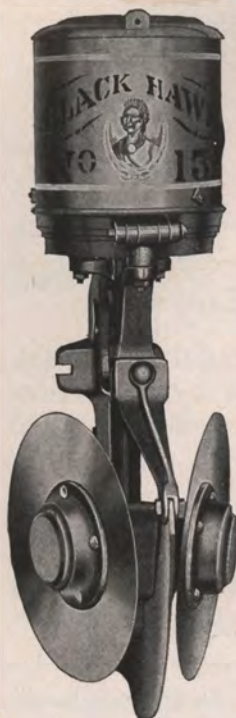


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Disk Furrow Openers

Double disk furrow openers for attaching to planters with runners can be supplied as extras. These furrow openers are equipped with the most improved bearing and can be attached to almost any make of planter equipped with runners. This furrowing attachment is especially useful when working in heavy clay soils or sod ground and in all conditions where furrowing is desirable.



Double disk furrow opener attachment for use on planters with runners. It is equipped with ball bearings



Rear view of double disk furrow opener attachment. Note the simple method of attaching

Covering Shovel Attachment

When the disks are set to throw out a wide furrow it is sometimes desirable to use covering shovels to thoroughly cover the corn. These covering shovels are particularly useful when making wide furrows in heavy clay soils or sod ground.

These covering shovels are adjustable and equipped with springs which are useful in keeping the shovels the proper depth in the ground, and also to prevent breakage in event they strike an obstruction. These covering shovel attachments will be furnished as extras on order.

Stub Runners

Stub runners are especially desirable for running under trash to carry it up and then back out of the way.

In localities where such a runner is desired it can be furnished in place of the regular runners on the Nos. 15 and 35 planters.



Covering shovels for planters with double disks

Furrowing Shovel Attachment

These furrowing shovels can be attached to any Black Hawk planter with runners. The purpose of these shovels is to make furrows where conditions are such that they are necessary.

These furrowing shovels can be equipped with covering wings, making a complete furrow. The shovel covering device and furrowing shovel attachments are furnished on order as extras.



Furrowing shovels to be attached to planters equipped with runners

Furrowing shovels are easily attached to Black Hawk planters.



Furrowing shovel equipped with covering wings



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Gauge Shoe

The gauge shoe for the No. 15 Black Hawk planter is for the purpose of keeping the runners at uniform depth in the ground. Every farmer knows the advantage of having the corn planted at a uniform depth. This little attachment which is furnished as an extra on order, will go a long ways towards bringing about this result when conditions are such that they are needed. The gauge shoe is one piece of steel. It helps to break up clods.

Fertilizer Attachment

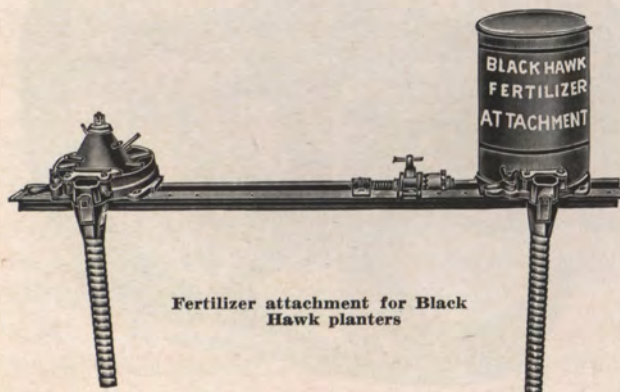
Fertilizer attachments will be furnished as extras on all Black Hawk planters. These attachments are operated by sprocket wheels and chain from the main axle to a shaft which operates the fertilizer feeds. The tube which carries the fertilizer to the ground is a flexible steel riven tube which cannot buckle when the runners are raised from the ground. The fertilizer is deposited in the ground directly in the furrow with the seed.

The gear shifter is convenient to the operator so that the attachment can be thrown out of gear whenever the operator desires.

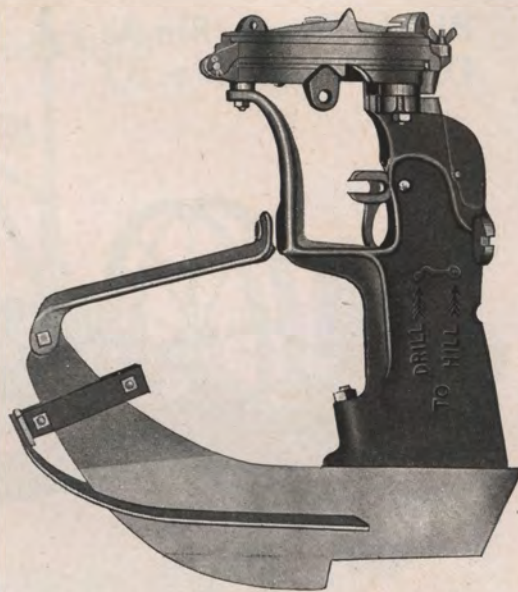
Fertilizer attachments can be furnished for all styles of Black Hawk planters and drills.

The amount of fertilizer sown to the acre can be varied from a very small amount to 800 pounds. These figures, of course, are based upon mineral fertilizer and naturally would not be correct when using animal fertilizer.

An extra large sprocket will be furnished with this fertilizer attachment if desired. This extra sprocket enables more fertilizer to be distributed than can be done with the regular sprocket.



Fertilizer attachment for Black Hawk planters



Shoe gauge attachment holds the runner at an even depth

The fertilizer drops through a straight tube that has no obstructions to interfere with its passage. This results in accurate fertilizer feed and assures the fertilizer being distributed in the ground in the exact quantities desired and without uneven distribution.

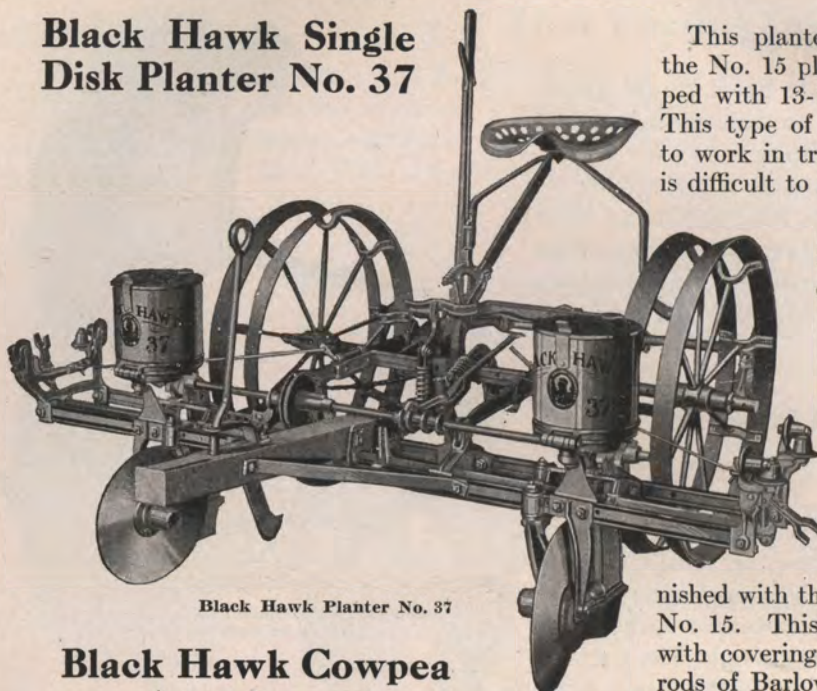
When desired the gear shifter can be permanently thrown out of gear and the fertilizer feed of the Black Hawk planter made inoperative.



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Black Hawk Single Disk Planter No. 37



Black Hawk Planter No. 37

This planter is identically the same as the No. 15 planter, except that it is equipped with 13-inch disks instead of runners. This type of planter is especially adapted to work in trashy or hard ground where it is difficult to use a runner planter.

The disks roll on ball bearings which are enclosed in dust proof cases.

The shoe which holds the disk can be removed from the shank by taking out one bolt.

Runners can be furnished with this planter when ordered, thus making either a disk or runner planter out of the No. 37. It is furnished with the same wire equipment as the No. 15. This planter is regularly equipped with covering shovels, disk scrapers and 80 rods of Barlow check wire.

Black Hawk Cowpea Attachment

All Oliver variable drop corn planters can be equipped with an attachment for planting cowpeas with the corn, either in the hill or when drilling.

During the past few years the value of cowpeas for silage and the effect they have on soil as a fertilizer has caused many farmers to make a practice of planting cowpeas in the same field with their corn.

The Black Hawk pea attachment is the result of the increasing demand for the best means of planting the double crop.

It is claimed that the combined crop produces the best results when the cowpeas are planted in the same hill with the corn. This is done with the Black Hawk attachment. However, the cowpeas are not mixed with the corn but are carried in a separate hopper so that either kind of seed can be regulated separately.

The pea attachment is driven from the seed shaft and is positive in action.

Black Hawk planters can be equipped with a pea attachment

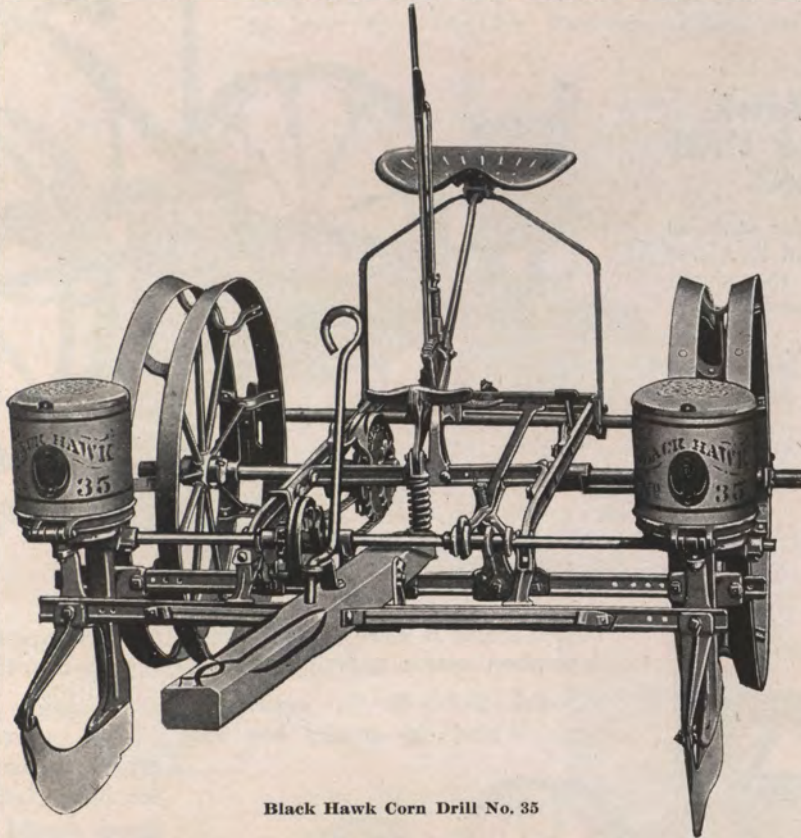




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Black Hawk Corn Drill No. 35



Black Hawk Corn Drill No. 35

This drill has the same frame construction and variable drop as the No. 15 planter. It has the automatic in and out of gear device. It is equipped with 30-inch open or concave wheels as ordered. It will drill the seed in drill rows from $3\frac{1}{2}$ inches to 48 inches apart, covering any intermediate distance required.

This drill can also be furnished with 38-inch wheels when desired. This makes a light machine for use where a high wheel drill is required. It is especially adapted to the planting of beans and other seeds of like character.

The Black Hawk corn drill, No. 35 is equipped with the variable drop device furnished for other Black Hawk planters. Special plates can be furnished with the drill for any distances desired. The drill throws the in and out of gear device automatically when turning the drill at the end of rows.



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Black Hawk Corn Drill No. 35½

This drill is identically the same as the No. 35 except it is equipped with double disk furrow openers. The value of the double disk furrow openers is that they work exceptionally well in loose, wet and sticky ground. The disks have good penetration. This drill is equipped with 30-inch open or concave wheels.

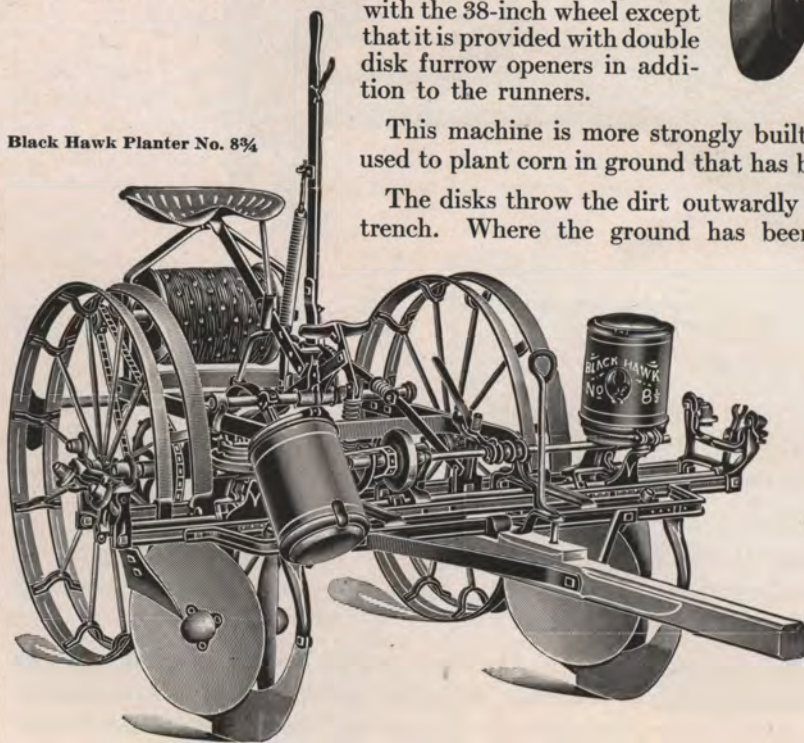
Black Hawk Single Disk Drill No. 35¾

This drill is the same as the No. 35 except that it is equipped with the single disk furrow openers.

Black Hawk Check Row Lister Corn Planter No. 8¾

This planter is the same in principle as the No. 15 planter with the 38-inch wheel except that it is provided with double disk furrow openers in addition to the runners.

Black Hawk Planter No. 8¾



This machine is more strongly built than the No. 15 and can be used to plant corn in ground that has been plowed in the Fall.

The disks throw the dirt outwardly and the corn is planted in the trench. Where the ground has been freshly plowed two horses are enough to pull this planter, but in fall plowing four horses should be used, particularly if a deep furrow is desired. The disks are adjustable up or down for deep or shallow furrows.

This planter can be furnished with 38-inch open or concave wheels and 16-inch disks, or 14-inch on order. The planter can be adjusted to plant from 3 ft. to 3 ft. 8 in. It is regularly furnished with 80 rods of Barlow check wire.



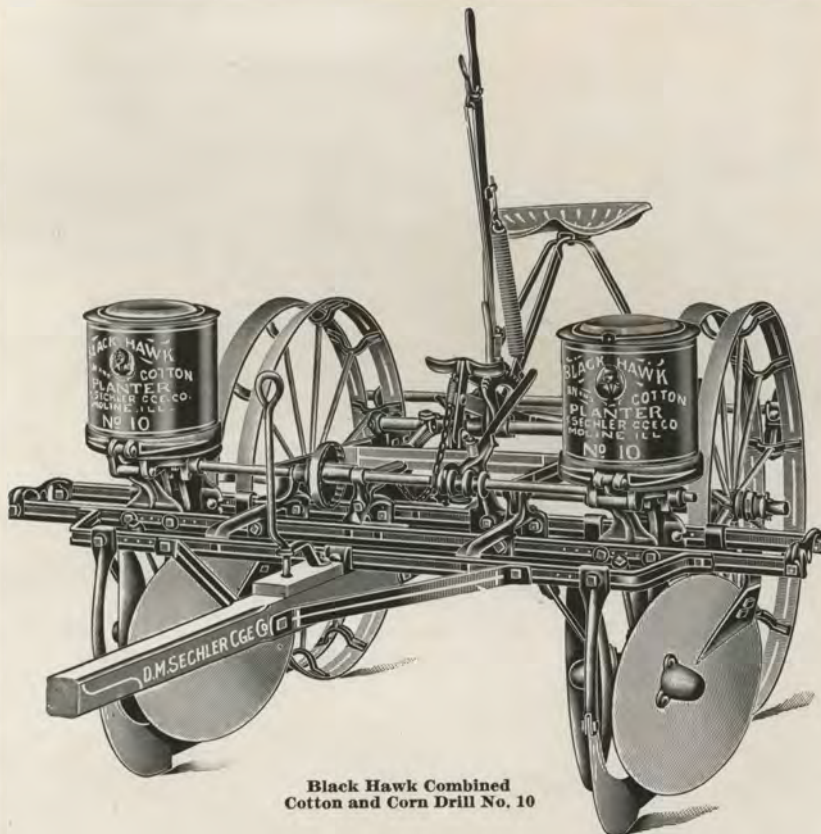
Black Hawk Corn Drill
No. 35½



The Oliver Line is Growing



Black Hawk Corn and Cotton Loose Ground Lister Drill No. 10



Black Hawk Combined
Cotton and Corn Drill No. 10

This planter is equipped with combined disk and runner furrow openers adapted for planting cotton and corn by the lister system. It can be used in loose ground or on Fall plowed ground. It has a high frame, 38-inch wheels open or concave, and is similar to the No. 15 planter in principle.

The disks are 18 inches and are adjustable up and down.

This machine is built strong enough for four horses and the frame is high enough to straddle ridges in listed ground. It has a trip over hopper, variable drop and all other modern devices with which the No. 15 planter is equipped.

The gauge for regulating the amount of cotton seed deposited is within easy reach of the operator.

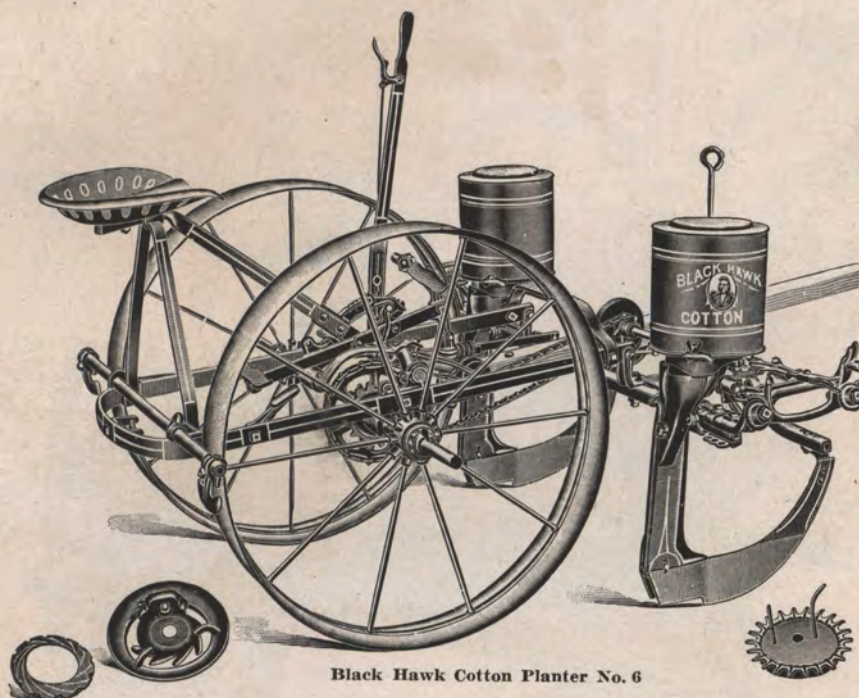
The drill automatically throws in and out of gear when turning at the end of the row.



The Oliver Line is Growing



Black Hawk Combined Corn and Cotton Planter No. 6



Black Hawk Cotton Planter No. 6

This machine is of light construction and is equipped with runners only. It can be used either as a combined check row corn planter and drill or as a cotton drill only.

The attachment for planting cotton is a spider and picker wheel. The cotton is drilled separately through a straight smooth channel in the shank, eliminating danger of clogging. The amount of cotton desired to plant is regulated by a slide convenient to the operator to adjust the inside of the hoppers. The hoppers are large and equipped with agitating pins to prevent the cotton seed from bridging. The operator can see the cotton seed while it is passing from the picker wheel into the shank.

Having a high frame and high wheels, 38 inches, this planter can be used where the lister system of planting is followed.

It is furnished regularly with 80 rods of Barlow check wire.

The line of Black Hawk planters and drills is very complete, and each machine is found to be extremely accurate in operation, and so constructed as to give long service.