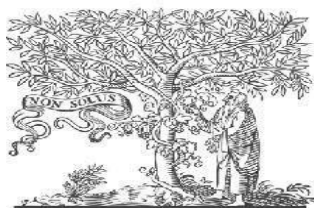




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Title: USE OF A SLIP PLANTER IN PLANTING COTTON SEED.

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Use of a Slip Planter in Planting Cotton Seed.

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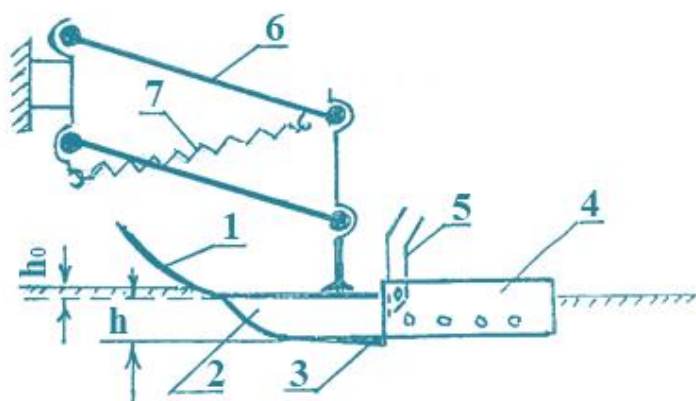
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Abstract. There are many ways to plant cottonseed. One of the most effective of them is planting cotton seeds in the field. Harvesting can be done in autumn and spring. If the seed is planted while the shape of the bush is preserved, it has a positive effect on the increase in productivity. In order to maintain the effectiveness of the push, it is necessary to maintain their shape. In this scientific article, the reasons for the loss of the shape of the hair are presented.

Keywords. *Cotton seed, methods of planting, planting cotton, picking cotton in autumn, picking cotton in spring, height of cotton, decrease in height, recovery of shape, effect of cotton planting.*

There are different types of ecchiches [1]. Their use is selected depending on the age, size, planting scheme and number of rows of the seeds being planted.

For many years, mainly sliding seed drills have been used in mechanical seeders for sowing cotton seed. A slip seeder is very effective in sowing cotton seed on flat fields. The planter installed on it, in addition to the task assigned to it, also carries out the planting direction along the specified line. Its task is to open the seed furrow, place the seed in it and cover it with soil. The function of the slide is to ensure that the seed is planted at the same depth, Picture. 1.



h_0 - sinking the slide into the soil surface, h - planting depth,
1- slippery, 2-planter, 3-soil compactor, 4-protection plate, 5-seed conveyor, 6-parallelogram mechanism, 7-spring.

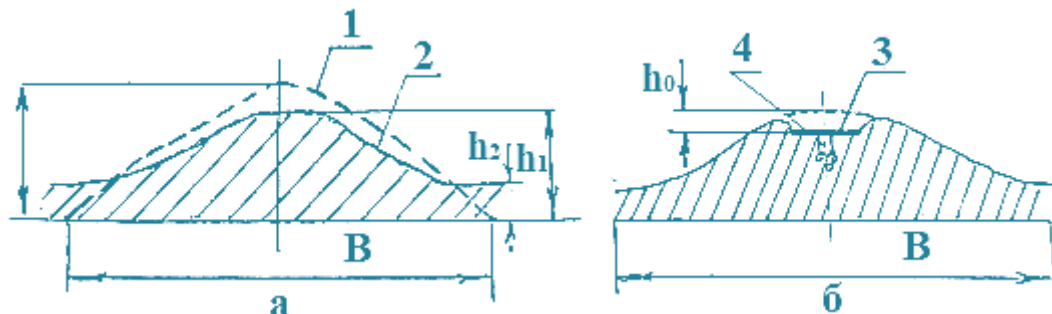
Picture 1. The scheme of the sliding sower

This skid steer planter has been used for many years to plant seeds on flat land because of its efficiency. In order to ensure the stable movement of the seeder by pressing the slide against the moving surface, it should sink into the soil $h_0=0.5...1$ cm due to the parallelogram mechanism. The most reliable planter for planting cotton seed on a flat surface is a sliding planter equipped with a parallelogram mechanism.

Therefore, in the seed drills currently used for sowing cotton seeds, regardless of their use in any conditions, the parts of the sliding coulters mounted on the parallelogram mechanism are used without any changes.

Under any conditions, it is intended to plant cotton seed in the spring on the cotton seed obtained in the fall or to plant the seed in early spring. Because it has been established in practice that the effectiveness of planting seeds in the field is high [2,3].

About the autumn push. The shape of the bush taken in autumn changes until early spring, Picture. 2.



h-box height, B-box width.

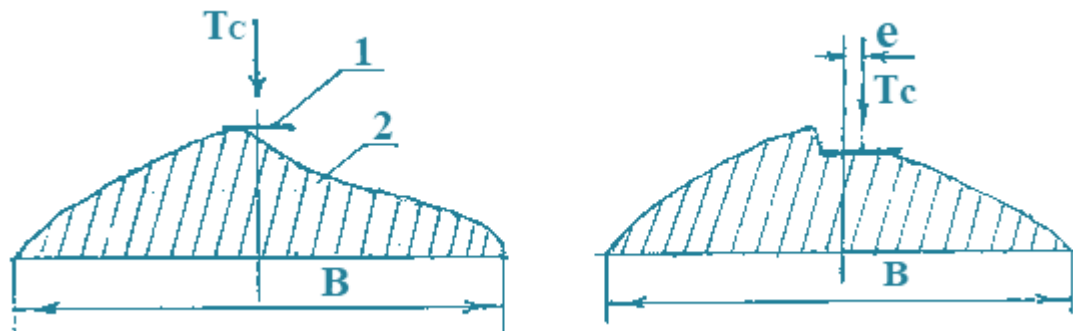
1. The shape of the dust taken in the fall, 2. The shape of the dust taken in the spring, 3. The shape of the pushed soil when the slide is dipped, 4. The slide dipped in the dust.

Picture 2. The change of the shape of the chestnut taken in the fall to the spring.

As can be seen from the figures in the picture, as the shape of the spring decreases, the width of the spring increases (Picture. 2a). The height of the bush can decrease to 3...5 cm. When the seed is sown in spring with a slip seeder in a lowered field, it sinks into the surface of the field due to the vertical force exerted on the slide by the parallelogram mechanism. The skid starts to crush the soil on both sides (Picture. 2b) and the height of the pile decreases again by 2...3 cm. As a result, the heat-increasing part of the bush is lost and its effectiveness decreases to some extent, that is, if the seed is planted 3-5 cm, it is 7-12 cm below the height of the bush. To reverse these losses, it is necessary to restore the shape of the breast. The sectional seeder, which sows cotton seeds while maintaining the shape of the cotton seed obtained in the fall, is equipped with working bodies that restore the shape of the cotton seed. This is a sectional seeder that restores the shape of the cotton and sows the cotton seed at the same time.[4]

About spring chestnut. Knowing the effect of planting cotton, the method of picking cotton first and then planting cotton seed is used in the spring. This method also uses sliding doors with a parallelogram mechanism. The resulting pistachio seed almost does not lose its shape until it is planted. There is one drawback to this method. Even if it is, when the upper part is not symmetrical

in relation to the longitudinal direction, the slipper will not be able to fulfill its function. Such a form is shown in Picture 3.



a) the symmetrical shape of the hill b) the soil under the slide the state of being pushed to a distance of e.

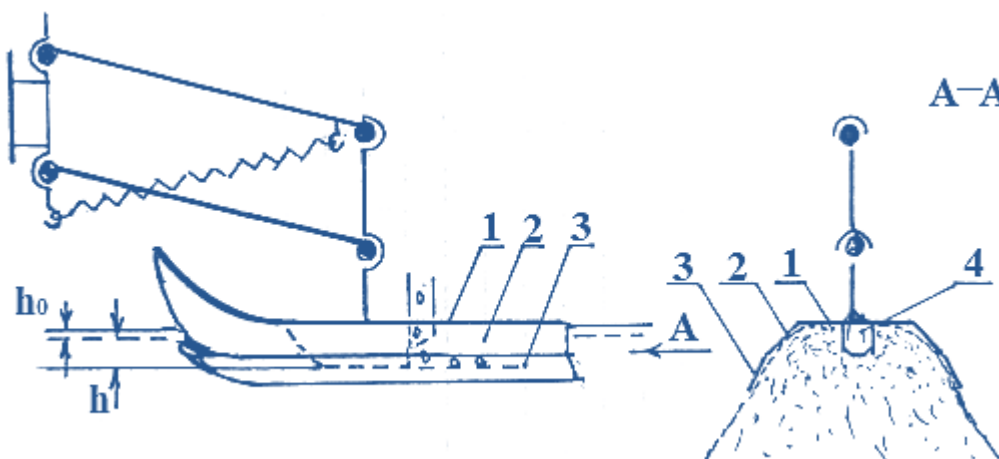
1- slippery, 2- cross section of the breast

Picture 3. Placement of the slip on the symmetrical shape of the spring.

As the surface that should be in the center in Picture 3a above is not fully formed due to the deficiencies in the extraction, under the influence of the vertical T_c force, the sliding parallelogram moves the soil along with it to a distance l due to the slots in the parallelogram mechanism, and forms the base surface, Picture 3.

The cotton seed is planted, but the line of the rows is broken, during the movement, when the cotton reaches the place full of cotton, the slide is restored to its intended direction. This situation often occurs in practice.

In order to prevent such a situation from happening, the shape of the slide is changed for the options of planting in the bush, that is, wings are installed on both sides of the slide, Picture. 4.



1- slippery, 2- shape saver, 3- slippery wings, 4- planter.

Picture 4. A cotton planter's slipper and its wings.

The presence of wings not only stabilizes the sliding direction, but also preserves the shape of the high-performance part of the blade.

If cotton pickers are installed in front of the sectional seed drill designed to preserve the shape of the cotton obtained in the fall, at the same time the cotton seed is planted, restoring the shape lost during the winter. This technology has almost no effect on the increase of movements.

Summary.

If the winged slides are used during the cotton seed planting period, the effective part of the cotton is preserved and it helps to increase the temperature in it.

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