

O‘TT 631.313.4**TRIANGULAR GEAR LEVER****Hasanov Ulug‘ Ibrohimovich
Olmasov Sukhrob Xurshid oglu**

Tashkent Institute of irrigation and agricultural mechanization specialists national research university “Bukhara institute of natural resource management”

Ulugbek.hasanov.1989@mail.ru

Abstract: *The article presents the results of scientific research on the development of a plough design equipped with an advanced deep softener, which allows to soften the subsoil without compaction, and the organization of the process of its introduction into agricultural production.*

This article describes the research on the creation of an improved pit in the form of a vertical ridge for the deep tillage of the subsoil in the main tillage, in particular plowing.

Key words: *plug, tier, blade-softener, sinker, housing, drive underlayment, secondary compaction, energy consumption., Berch layer, compensation layer, gypsum layer, drive layer, operational, energy consumption, flanges.*

Consistent measures are being taken to improve the competitiveness of agricultural and melioration techniques produced in our republic, to provide manufacturers of products with modern, high-quality agricultural techniques. At the same time, the incompatibility of certain agricultural and reclamation techniques entering from foreign countries with the soil and climatic conditions of the Republic creates a number of problems during the implementation of the established agrotechnical measures in the cultivation of agricultural crops.

Effective scientific developments are being introduced to the activities of agricultural and melioration techniques and their aggregates and components in the soil-climatic conditions of the Republic and to test their reliability, support innovative methods, programs and promising ideas that promote the development of the industry, agricultural and melioration techniques and local enterprises producing their aggregates and components [1].

An important role in human life is played by the importance of agricultural products. The higher the fertility of the Earth, the more products it will be possible to obtain. To achieve the fertility of the Earth, it is necessary to take into account the environmental indicators of the soil. Reducing soil compaction is now important in the agricultural sector. Our implementation of various measures to reduce soil compaction is currently among the pressing problems. Nowadays, widely used earth-working borones and disc devices of this type are being processed on irrigated land before planting crops.

Large incisors, pores appear on plough-plowed land and the field surface is not flat enough. Seeds cannot be planted on such lands with good quality. Therefore, it should also be loosened and leveled by additional shallow processing of the soil in the plowed ground without overturning it.

If certain weed sprouts have already appeared on the plowed lands before the planting season, they should be removed to the edge of the field, tearing them with roots, losing them to the cover. After deep precipitation, tar can form if the air intake becomes high, which is required to be broken. To reduce the evaporation of moisture from the ground, it is necessary to soften its top. In irrigated land farming, work such as the loss of weeds in the crop row range, loosening the soil is carried out. The surface is shallowly softened to enhance the development of hay in the Meadow ground [1. 98-99].

When performing the above work, gears, disc-shaped studs and cultivators are used. The sutures are divided into toothed and discoidal types. toothed braces are divided into heavy (16...20), medium (12...15), and light (6...10 N) types, depending on the weight that falls on a single tooth. The toothed rake is used to crush cuttings on ploughed ground, level the field surface before planting crops, break the resin, bury the sown seed and scattered fertilizer mixed with soil, and remove weeds to partially soften the grassland.

It is processed into the soil with a toothed rake to a depth of 3...10 cm. The cutouts on the ground softened by the nail should be no more than 5cm in size than the depth of the trace left by the tooth should not exceed 3-4 cm [2. 111-110].

It is known that at present, the cross-sectional surface of the toothed braces is square, circular and oval in shape, consisting of raked Earth incisions, leveling the field surface before planting crops, breaking the resin, burying the sown seed and scattered fertilizer mixed with the soil, and circular planks, Bolt bricma and rectangular teeth used in maintaining its moisture, it is used for the purpose of not letting out the moisture of the soil until it collects enough heat for crop growth after Salt washing of the cultivated areas, as well as preparing a soft layer for seed planting. To date, in the

process of technological work of the rafters, teeth with a cross-section surface that is square, circular and oval, freely compacted with a bolt are installed on the plank.

The main disadvantage of these braces is that the large total surface area of the bristle teeth during ground processing requires greater power from the tractor and at the same time causes the processing surface to be eaten in large quantities on account of its rectangular shape. To eliminate this drawback, a triangular gear lever is offered. In order to solve the task set, we are carried out by installing teeth with a triangular cross-section on the plank, and as a novelty of the work, a decision was made by the intellectual property agency of the Republic of Uzbekistan to issue a patent for an application dated FAP 20180099. The quality of work and energy efficiency increase when performing the work of preparing the land for planting with this rake.

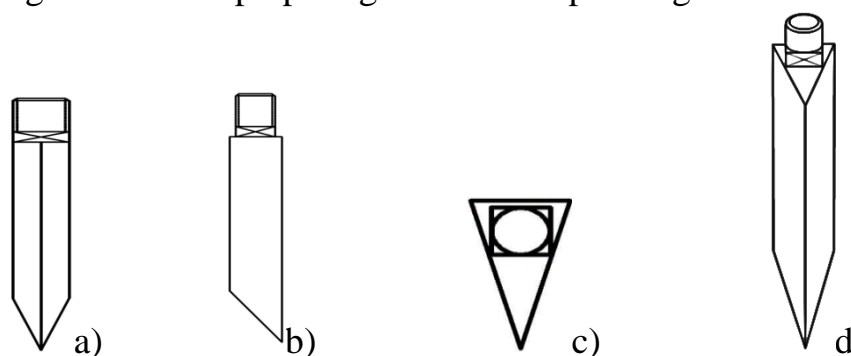
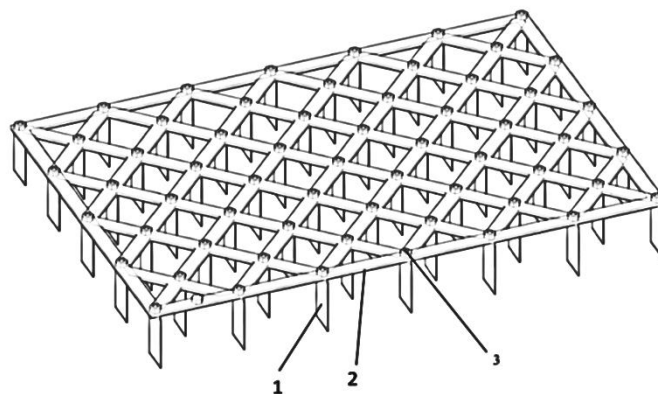


Figure 1. The proposed transverse cross section of the triangular tooth from the front side a), Side B), Top c) and General d) appearance



1st tooth, 2nd plank, 3rd Bolt attachment

Figure 2. The position of the transverse cross section of the triangular teeth fixed on the traction planks is given

The technological process of operation of the triangular gear lever is as follows: the lever works in the following order. When it moves across the field using a tractor, its transverse cross section is fixed in the direction of the movement of the tractor with the help of a bolt Joint (3), making it unobtrusive to the triangular teeth (1), plank (2).

In this case, the transverse cross-section, which is fixed to the suture, is achieved when the sharp end of the triangular tooth is easily cut off the soil and rubs well. As a result of the decrease in the number of shoots in the process of preparing the land for planting, energy consumption is reduced and an economic effect is achieved. At the same time, the leveling quality of the soil increases. Resistance to pulling is reduced in accordance with The Shape of the tooth.

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