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Temporary Treatment on Household Instead of Cotton Manufacturing

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ABSTRACT: The article analyzes the design of the device by simultaneously extending cotton raw material to the pneumatic equipment used by ginneries. As a result of uniform cotton transfer to pneumatic transport pipes, the processing of cotton processing machines is ensured efficiently. As a result, the seeds are damaged.

KEY WORDS. Tape, drum, worm, pipe, pockets, bunker, elastic base, additional bunker.

I. INTRODUCTION

Settlement of issues that arose during transition to market economy is linked to the reform of all types of production. To achieve this goal, first of all, it is necessary to thoroughly improve science and technology. The Republic of Uzbekistan is the world leader in the production and export of cotton. That's why cotton in the country's economy is important. High-quality fiber production, corresponding to world-class standards, puts the task of improving the existing technology and technology to the specialists and scientists in the field of cotton processing. In turn, the rising level of spinning and weaving equipments demands also to pay special attention to the quality of cotton fiber.

II. MAIN PART.

The initial processing of cotton consists of a number of technological processes (grinding, storage, transportation, drying, cleaning, fiber separation, etc.), a specific technological chain. This chain is closely linked to the quality of work of each unit and the performance of its previous machines. Considering this issue, it is possible to conclude that the quality of cotton raw materials is influenced by the technological chain.

At present, the process of transportation of raw materials from warehouses to the workshops is carried out by air-pipe. The pipe system is simple to design and can be transported to any of the most sophisticated routes of transportation, as well as the shedding of cotton in the transportation process has led to the widespread use of the cotton ginning industry.

Quality of cotton in the process of transportation of pipes is mainly due to the impacts of cotton seeds on the walls of the pipe during shooting.

At the pneumatic transport, cotton falls in the range of 1.2 - 1.4%, when the cotton velocity is $V = 24 - 26$ m / s. As a result, fiber defects within the cotton fiber will increase by 0.3 - 0.4%. There is a need to extend the pneumatic transport line from cotton warehouses, which are far away from workshops, which is expected to break up the seeds and create any defects in the fiber.

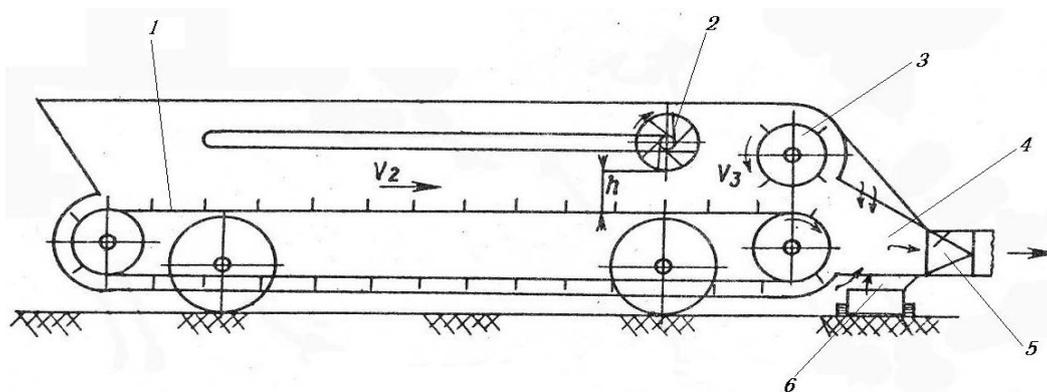
The main reason for this is the uneven transfer of cotton from raw materials to pipes. The crusher of the crusher machine RBX stacks the ball into the ribbon. Cotton raw material is distributed in the form of uneven hollows on the ribbon [1].

Failure to dispose of the cotton pipe evenly leads to deterioration of the operation of the device. As a result, the productivity of cotton combustion will be reduced, fiber and cotton seeds will be damaged, fractures on the net surfaces of the separators will occur, the fiber will fall into the pockets with heavy compounds in the slabs, and the probability of leaving the air as it is used in the separator will increase. In addition, the poor quality of cotton, reduces the efficiency of drying drums and cleaning machines.

Grain-cleaning plants do not work smoothly, but their efficiency is not high. This is due to the fact that frequent cases of cotton jams occur because of the fact that cotton is not uniformly accessible to machines installed in the technological process.

Uneven delivery of the cotton to the pipes occurs mainly with the demolition machine at the beginning of the technological process. Later, this notch also affects other technology drives, resulting in uneven performance. Moreover, the density of the cotton density along the height of the stump does not allow it to be pulled straight into the pipes.

Given the convenience of using cotton ginning technology in the technological process, a horizontal ribbon blanket was created. The scheme is illustrated in Figure 1, and the provider has a technical solution (C.A. (certificate of authorship)-1694727) because it is protected by copyright protection [2].



Picture 1. Horizontal Provider (C.A. - 1694727)

The device consists of the following basic elements:

1-tape, 2-drum drum, 3-reeling drum, 4-worm, 5-pipe, 6-pockets.

The horizontally secured worker works as follows: the crushed cotton pickers fall into the top of the strip, distributed unevenly on the tape (1). The movement of the tape is straightened with a stainless steel drum (2) on it. The trowel is applied to the tube (5) through the rod (4) with the help of the tear-off drum (3). Some of the heavier compounds contained in the cotton will fall into the pocket (6).

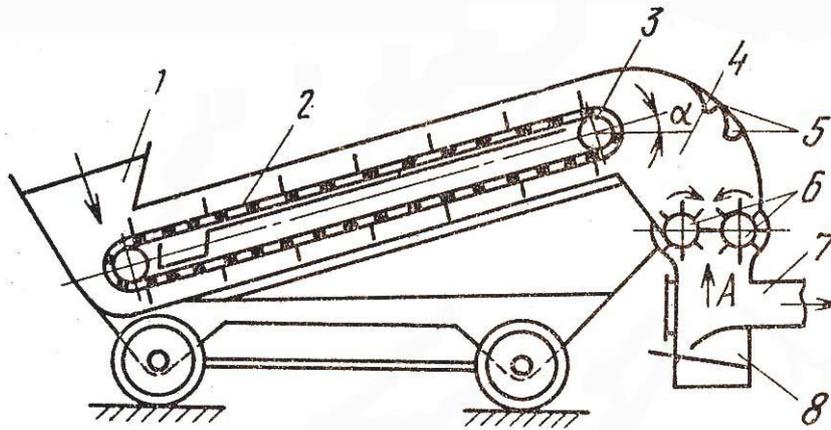
The thrust drum ensures smooth movement of the cotton trough on the tape. This ensures that the cotton raw material is dispatched uniformly, allowing the tube to move without hitting its walls. In this case, it is necessary to determine the velocity of the tape and determine the distance between them. It is possible to change the distance between the tape and the pile drum at a given speed of rotation and to ensure the different performance of the cotton raw material transfer.

A bunker was mounted on the tape to check whether the process of transmitting cotton raw material to the pneumatic equipment was dependent on work efficiency. In the course of the work, the bunker is loaded with cotton and transferred to the tape with the required productivity.

At the end of the ribbon there is a high level of cotton pellets for different speeds, and it adapts to specified productivity. As a result, results were obtained indicating that the height of the cotton sheet depends on the efficiency of the transmission of the tape at different speeds. Based on these results, we will be able to transfer cotton raw material to the pneumatic equipment at the required speed of tape. According to the results, the height of the flat drum to be fixed on the tape ribbon is determined. The next thing to do is to determine the drum speed that flies. If it is not properly selected, it is likely that the raw material will be stuck between the ribbon and the pile drum.

Based on the results, it was determined that the flatter drum speed should be 1.5 times the band speed.

The horizontally secured lining of cotton over the tape is accompanied by the accumulation of excessive part of the drum, which is gradually accumulated and clogged. Therefore, in order to overcome this shortage, the design of the ribbon lining drawer (Figure 2) is created. (C.A. - 1763534) [3].

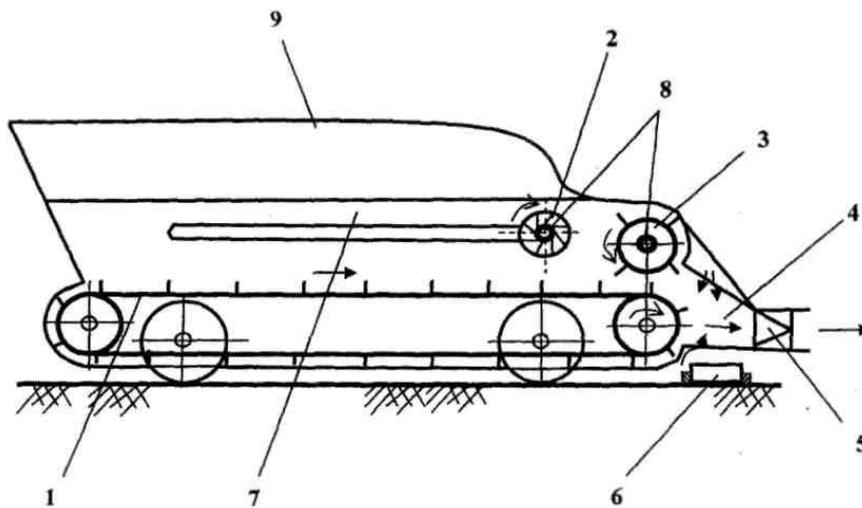


Picture 2. Qi-Tape Holder Provider
(C.A. - 1763534)

1-cotton bunker, 2-lane tape, 3-tape drum, 4-vertical bunker for cotton harvesting, 5-beacon cotton fillers, 6-pickup rollers, 7-pipes, 8-heavy the pouch that separates the compounds.

This appliance works as follows: the stinging machine extends the cotton pickup bunker (1). The bunker moves upwards with a moving tape (2). As a result of movement on the cotton tape surface, small dirt breaks down. Then the cotton falls into a vertical bunker (4). As the rolling roller 6 rotates, cotton is pulled straight up to the pipes 7. In the cotton tube, heavy compounds are broken down into the pocket (8)

If the bunker (4) is filled with cotton during operation, the cotton pick-up can be stopped using sensors (5). The following is an up-to-date version of the uniform cotton-fired equipment [4].



Picture 3. Cotton Gear Pipeline Supplier (UZ FAP 00871)

1-tape, 2-drum, 3-drum drum, 4-worm, 5-pipe, 6-pockets, 7-bunker, 8-elastic base, 9-additional bunker

Important features of the proposed Supplier are placed on the flexible basis to prevent cotton seeds from sinking during the laying and fixing of the cotton lintel. A bunker was installed on the tape supply to verify the dependence of the pneumatic equipment on the workload of cotton raw material. In the process of storage, the cotton is loaded into the bunker and transferred to the tape feeder as required.

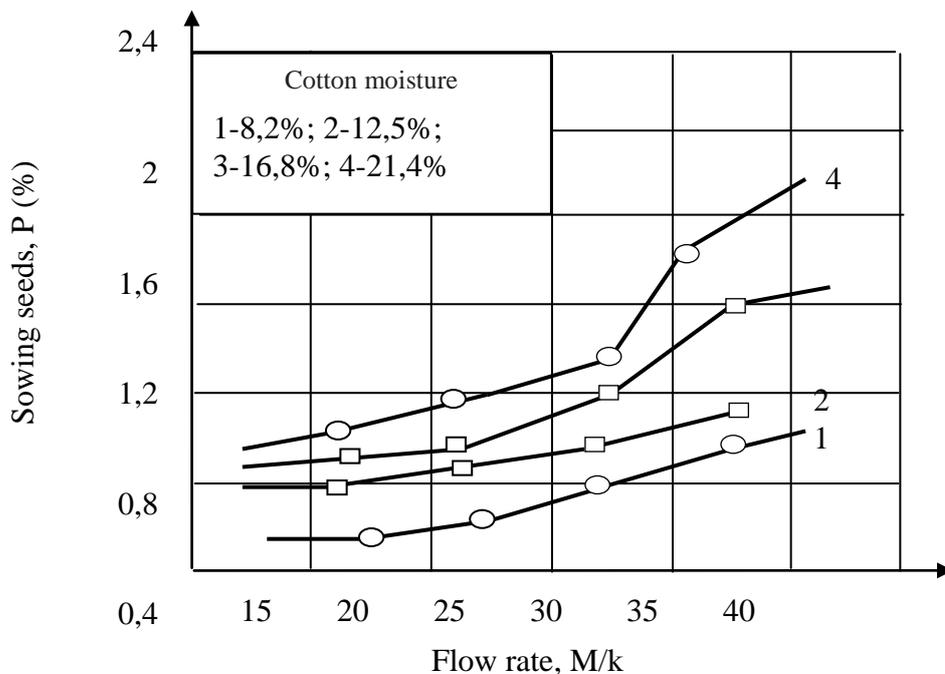
The Horizontal Supplier works as follows: The stubborn carcass falls into a ball rolled out unevenly over the cotton tape (1) transmitted by tapes. The movement of the tape is straightened with a stainless steel drum (2) on it.

The rectifying drum pads are mounted with an elastic base (8) to reduce the mechanical impact during cotton pick-up. The trowel is applied to the tube (5) through the rod (4) with the help of the tear-off drum (3). Some of the heavier compounds contained in the cotton will fall into the pocket (6).

A bunker (7) is mounted on the tape to verify that the process of transmitting cotton raw material to the pneumatic equipment is dependent on performance. There is also an additional bunker (9) installed on the bunker to ensure that excess cotton does not fall on the ground. In the course of the work, the cotton is loaded into the bunker and removed from the demanded state.

As a result, results will be obtained indicating that the laminar casing of the height of the cotton shell depends on the yield rate of the various speeds. Based on these results, we will be able to transfer cotton raw materials to the pneumatic equipment at the required speed of the lantern supplier.

Based on the results, it was determined that the straightening drum speed should be 1.5 times the bandwidth. After the uniform transfer of cotton, it was determined that the rate of flow of the seeds was reduced by changing the air flow velocity and hitting the pipe walls at different moisture levels. In this way, the graphic in Figure 4 was built.



Picture 4. Flat velocity of cotton flow in different moisture the effect of slaughtered seeds in the conditions provided

III. CONCLUSION.

At the bottom of the vertical bunker, the rollers allow the cotton to be pulled straight into the pipe. Thanks to the use of the conduit for the smooth transfer of cotton raw materials, high efficiency can be achieved by utilizing machines installed in the technological process at full capacity. Moreover, due to the smooth movement of cotton in the pipes, the impact on the walls of the plant is diminished and the slaughtering of the cotton seeds is prevented.

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