

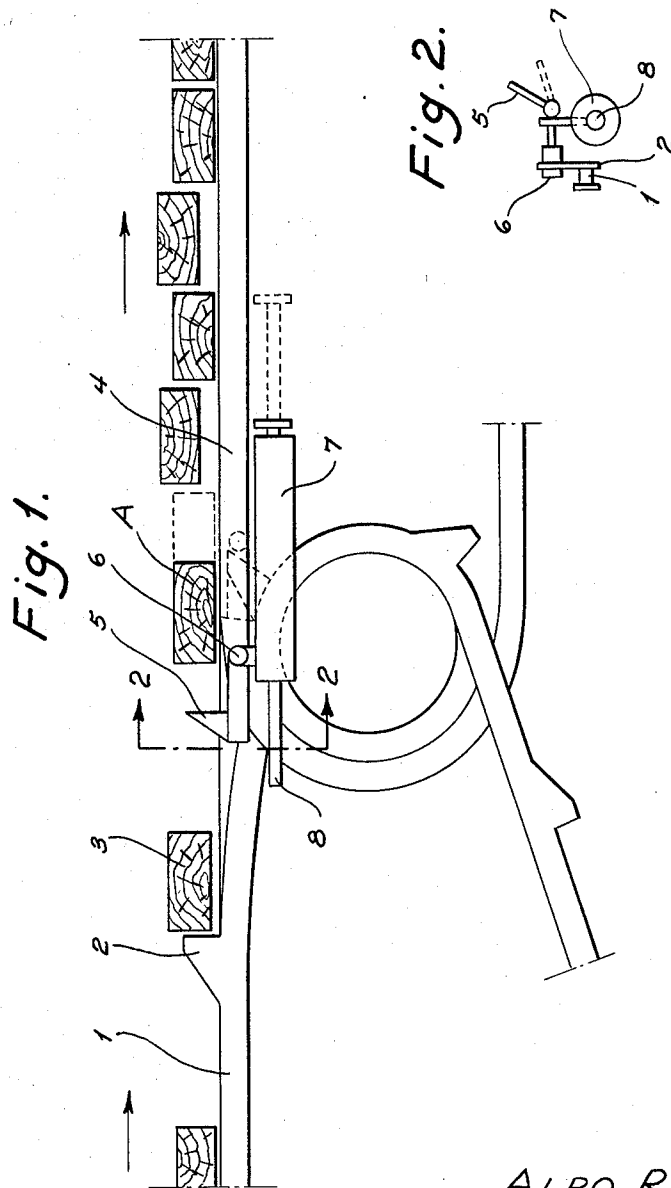
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ARRANGEMENT IN CONVEYORS FOR LUMBER

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ARRANGEMENT IN CONVEYORS FOR LUMBER

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3 Claims. (Cl. 198—33)

When transporting boards by a conveyor so that the boards are transferred from one conveyor equipped with pusher fingers to another one, it may happen, if there is a crooked board, that one end of the board is lifted to such extent that the pusher fingers on that side travel underneath the board and only the ones on the other side move the board forward. Thus such board might come into an oblique position on arriving at the following conveyor.

This invention relates to an arrangement eliminating this inconvenience and is generally characterized by the installation of feeding devices placed at the end of the first conveyor and the beginning of the second one, which are arranged to perform a linear feeding motion in the level of the second conveyor, through the effect of the pusher fingers on the first conveyor, and thereafter automatically to return into their initial position.

In the following the invention is described in more detail with reference to the embodiment shown in the accompanying drawing.

In the drawing 1 designates a conveyor equipped with pusher fingers 2, which conveyor feeds the boards 3 delivering them to another conveyor 4 without pusher finger. In the embodiment shown the driving wheels of the first conveyor and the return wheels of the second conveyor are mounted on common shaft.

Adjacent this shaft there is a feeding element 5 positioned at the side of each chain of the first conveyor, to which a roller 6 is connected at such a level that the pusher fingers 2 will strike against it. The rollers 6 are in addition thereto connected to restoring devices arranged on one or both sides of the conveyor and comprising a cylinder 7 having a guide rod 8 and a coil spring fitted therein. The feeding elements 5 are mounted turnably in the lateral direction (see Fig. 2) so that they due to the effect of a spring, normally remain in a position slightly inclined to one side. The back edges of the feeding devices 5 are bevelled and this fact in addition to their inclination causes the feeding elements 5

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to turn down as shown by broken lines in Fig. 2, when a board carried by the conveyor 1 strikes against them from behind so that the board can travel over them, after which they rise again.

When the board carried by the conveyor 1 has approached so far, or into position A in Fig. 1, that the pusher fingers 2 are no longer in touch with it, the pusher fingers 2 hit the rollers 6 of the feeding device 5 thereby pushing the feeding devices 5 steered by the rods 8 rectilinearly in the direction of the upper level of conveyor 4. The feeding devices now shift their position as shown by broken lines, pushing at the same time the board into the position also shown by broken lines and as soon as the pusher fingers 2 have reached the position shown by broken lines, so that they move beneath the rollers 6, the feeding devices return to their initial position due to the release springs. The feeding devices 5 thus move the board in correct position upon the conveyor 4 regardless thereof, that the pusher fingers 2 leave the boards in an oblique position.

The foregoing construction is intended only to illustrate the invention, thus it goes without saying, that constructional details can be varied in many ways without parting from the basic idea of the invention.

What I claim is:

1. In mechanism for conveying boards, a first chain driven conveyor and a second conveyor at the end of said first conveyor, pusher fingers carried by said first conveyor, feeding devices positioned adjacent the end of said first conveyor and the beginning of said second conveyor, and mounted for rectilinear feeding motion along the level of said second conveyor, means for effecting said rectilinear motion by the action of said pusher fingers and means to automatically restore said feeding devices to initial position on completion of said rectilinear motion.

2. Mechanism as in claim 1 wherein one of said feeding devices is installed next to each chain of said chain conveyor, said feeding devices including rollers, said rollers positioned to lie in line with said pusher fingers.

3. Mechanism as in claim 2 wherein cylinders having guide rods longitudinally slidable therein are mounted alongside of said second conveyor, said feeding devices being connected to said guide rods and springs mounted in said cylinders and engaging said guide rods to restore said feeding devices to said initial position.

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