

April 27, 1965

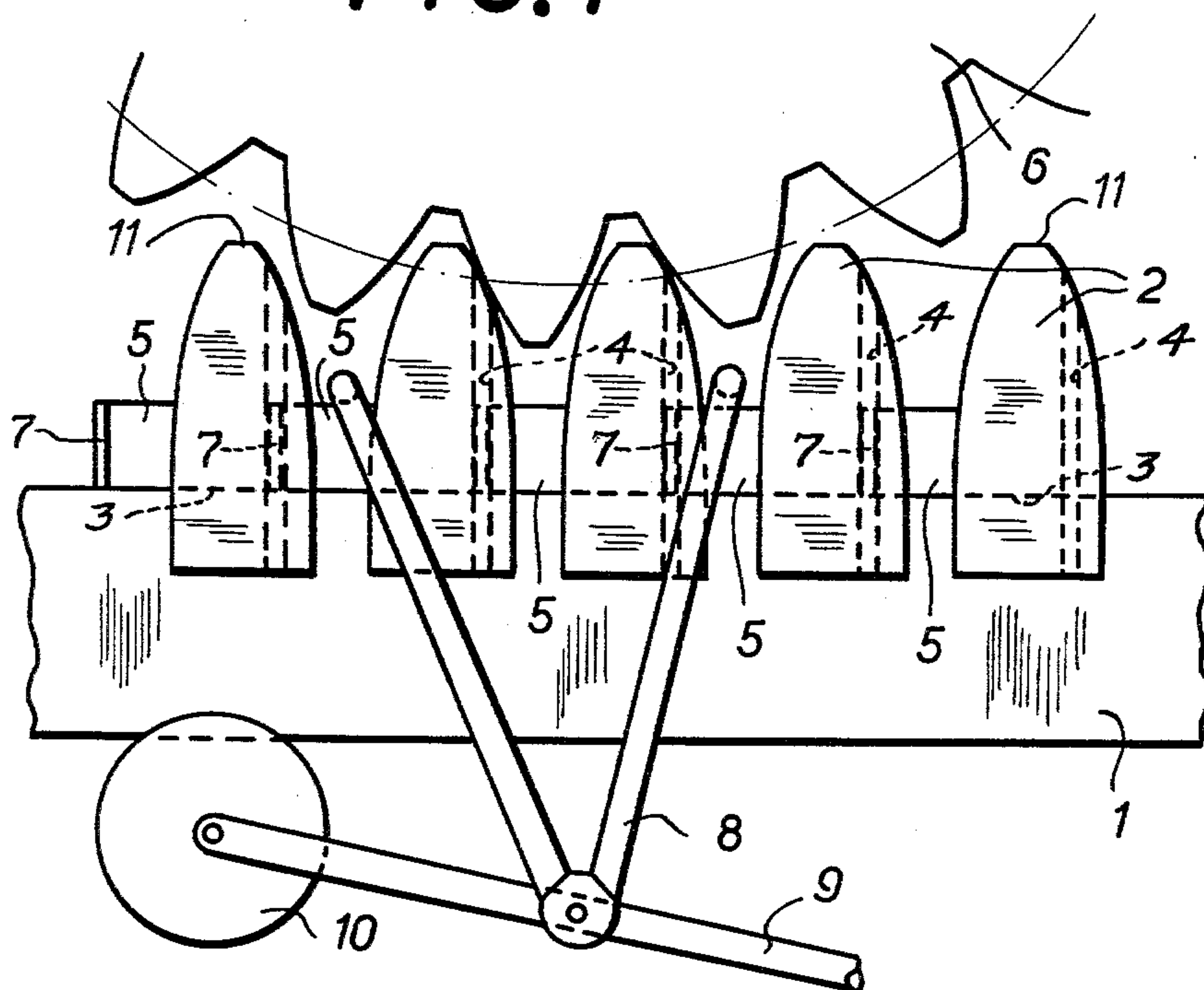
P. HAESTAD

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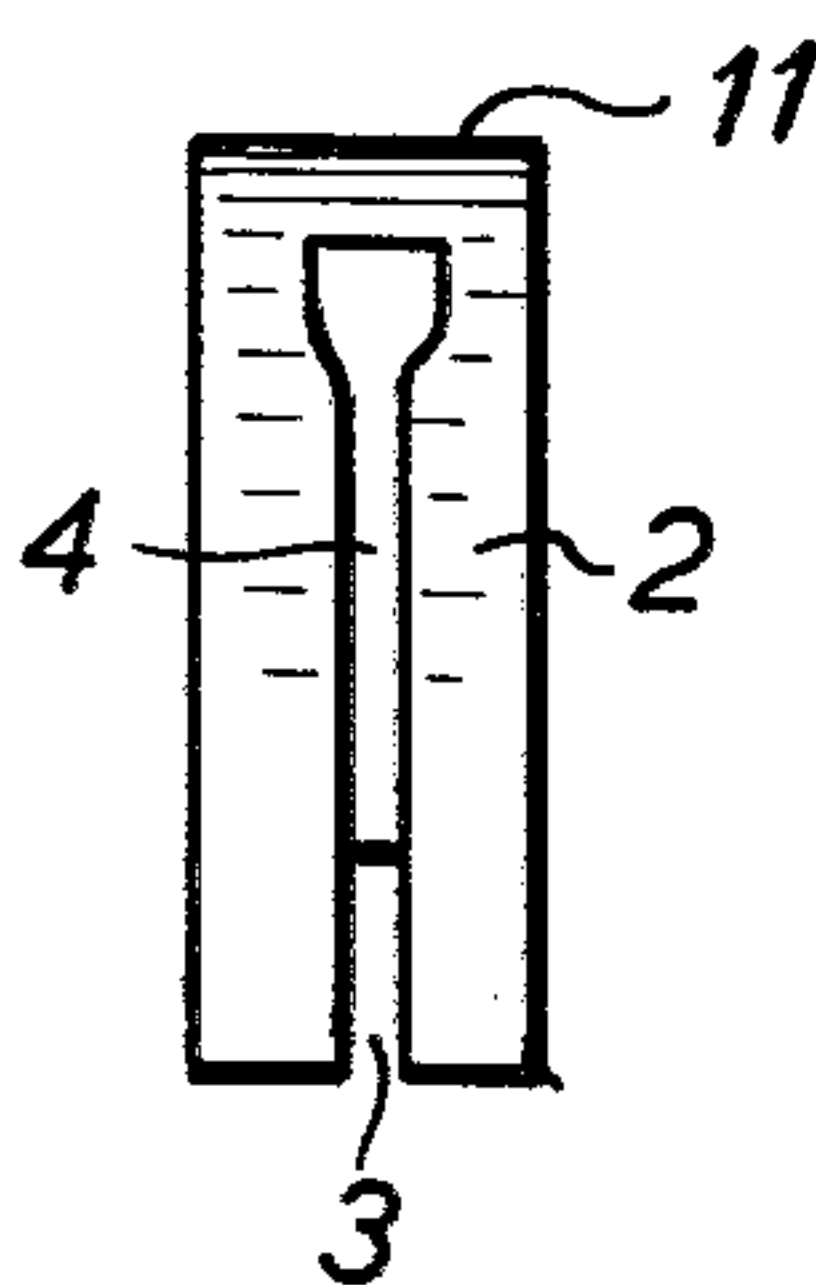
CONVEYOR

Filed Aug. 15, 1962

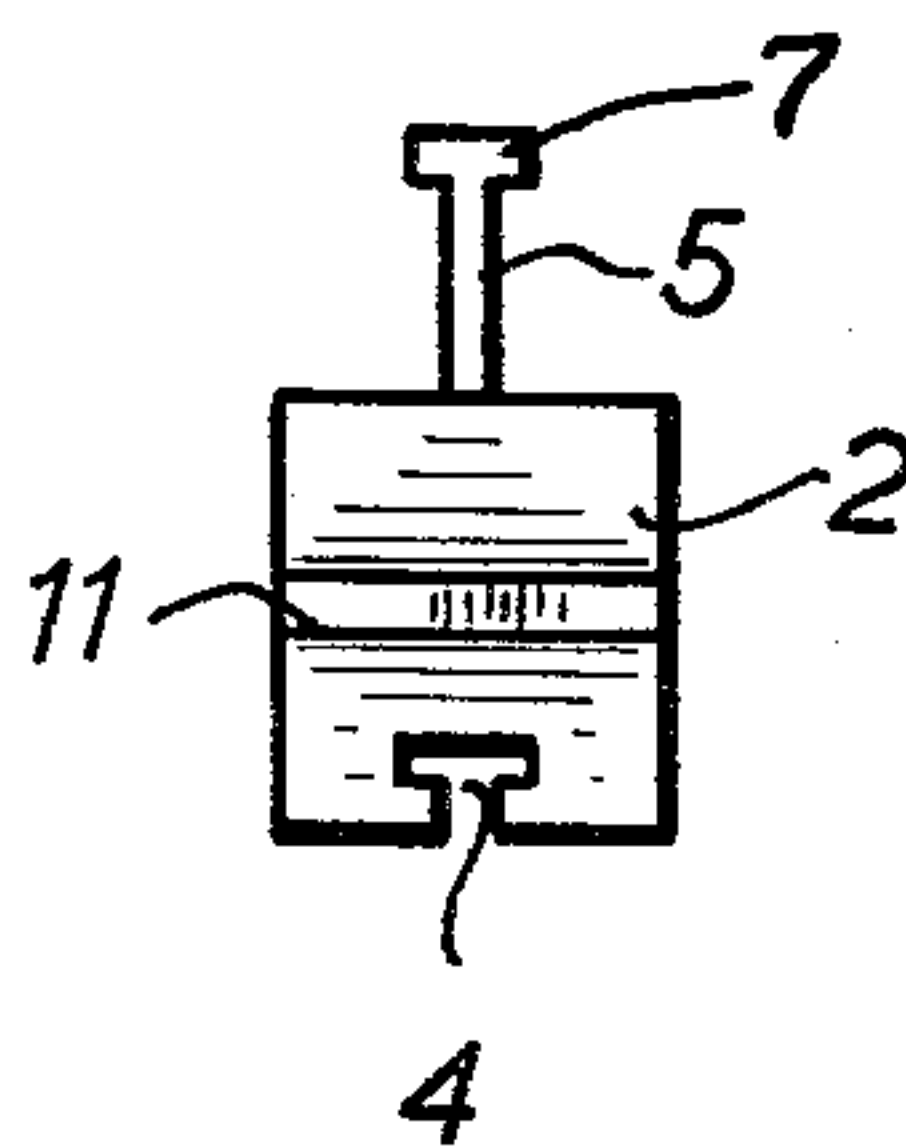
**FIG. 1**



**FIG. 2**



**FIG. 3**



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CONVEYOR

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Filed Aug. 15, 1962, Ser. No. 217,089

Claims priority, application Norway, Aug. 26, 1961,  
141,290

4 Claims. (Cl. 198-177)

The present invention relates to a conveyor, especially for transport of suspended objects, comprising an edge-wise suspended rail and a number of units movable on said rail and adapted for suspension of the objects.

In conveyors of this type the moveable units consist of casters or carriages, which are interconnected by means of a driven chain or wire, or they may be individually driven.

The object of the invention is to provide a conveyor, which is of very much simpler construction, and thus is more easily mountable and cheaper than the hitherto known conveyors of this type.

According to the invention this is achieved thereby that said units consist of springy resilient material and have the shape of a body of quadrangular cross section, the base of which is provided with a groove adapted to engage the top edge of the rail, each of said units having the shape of a tooth having side flanks transversely of said groove, one side face of which tooth is provided with a wedge-groove or the like extending in the longitudinal direction of the body, the other side face thereof being provided with a connecting member the outer profile of which corresponds to the wedge-groove or the like in an adjacent unit, in such a manner that when the rail is provided in its entire length with interconnected units, they may be moved by means of a driven toothed wheel which engages the rack formed by said interconnected tooth-shaped units.

Preferably said units consist of an artificial product, e.g. of nylon.

In a preferred embodiment of a conveyor according to the invention an auxiliary means is provided for the suspending objects. Preferably said auxiliary means comprises a V-shaped arm, the ends of which are attached in bores in two of said units or are hooked into the openings between adjacent units, the downwardly extending point of said V being provided with a bearing for a two-arm lever, one end of which carries a rotatable roller having a peripheral groove engaging the lowermost edge of the rail, the other end of said lever being provided with a hook, an eye or the like, for the suspension of the objects.

An embodiment of the invention will be explained hereinafter by way of example, with reference to the drawing, in which:

FIG. 1 is a sideview of part of a conveyor provided with a series of movable tooth-shaped units in accordance with the invention.

FIG. 2 illustrates a moveable unit of the invention turned 90° in relation to the units of FIG. 1.

FIG. 3 is a plan view of the unit shown in FIG. 2.

The conveyor comprises a rail 1 consisting of a steel band suspended edgewise and a number of moveable tooth-shaped units 2 having a quadrangular base face provided with a slot 3 for engaging the top edge of the rail. The upper portion of each unit 2 has the form of a tooth of a toothed wheel or rack, including the rectangularly-

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shaped area 11 at the top of the tooth, and one side face thereof is provided with a profile groove 4, whereas its opposite side face is provided with a projecting coupling member 5, the outer T-shaped profile 7 of which corresponds to said groove 4, so that the units are interconnected by passing the T-shaped head 7 of the coupling member 5 into the groove 4 from above. When the rail 1 forms a closed path and is provided with interconnected units 2 coupled by members 5 which rest on and ride along rail 1, along its entire length, the whole series of coupled units may be moved by means of a driven toothed wheel 6. For suspension of the objects there is provided a V-shaped bail 8, the free ends of which are hooked between two adjacent units 2, and the downwardly extending narrow end of which is provided with a bearing for a two-armed lever 9, one end of which carries a roller 10 having a peripheral groove, which bears against and engages the lowermost edge of the rail 1, and the other end of which (not shown on the drawing) is provided with a hook, an eye or the like for suspension of the objects.

In an alternative construction the arms of the bail 8 may be attached directly to two spaced units 2.

I claim:

1. A conveyor for transport of objects suspended therefrom including a rail in the form of an edgewise-placed steel band, a plurality of spaced units slidably mounted on the rail for suspension of the objects, and means for moving said units along the rail, characterized in that said units are of springy resilient material and quadrangularly shaped in cross section, the base of each unit being provided with a groove adapted to engage the top edge of the rail, each of said units having the shape of a rack tooth having side faces transversely of said groove, one side face of which is provided with a wedge-shaped groove extending longitudinally of the unit, the other side face of each unit being provided with a projecting coupling member the outer profile of which corresponds to that of and fits in the wedge-shaped groove in the adjacent unit facing said other face, the arrangement being such that when the rail is provided along a length thereof with a series of interconnected units they may be moved therealong to transport suspended objects, and a driven toothed wheel engaging the rack formed by said interconnected tooth-shaped units for moving them along the rail.

2. A conveyor according to claim 1, characterized in that said units are of nylon.

3. A conveyor according to claim 1, characterized by including means for suspending objects from the series of units on the rail comprising a V-shaped arm, the ends of which are hooked into the openings between adjacent units above the rail, the downwardly extending point of said V being provided with a bearing, a two-arm lever fulcrumed on said bearing one end of which carries a rotatable roller bearing against the lowermost edge of the rail while the other end of said lever is provided with means for engaging an object.

4. A conveyor for transport of objects suspended therefrom including a rail in the form of an edgewise-placed steel band, a plurality of spaced units slidably mounted on the rail for suspension of the objects, and means for moving said units along the rail, characterized in that said units are quadrangularly shaped in cross section, the base of each unit being provided with a groove adapted



to engage the top edge of the rail, each of said units having the shape of a rack tooth having side faces transversely of said groove, one side face of which is provided with a wedge-shaped groove extending longitudinally of the unit while the other side face of each unit is provided with a projecting coupling member the outer profile of which corresponds to that of and fits in the wedge-shaped groove in the adjacent unit facing said other face.

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