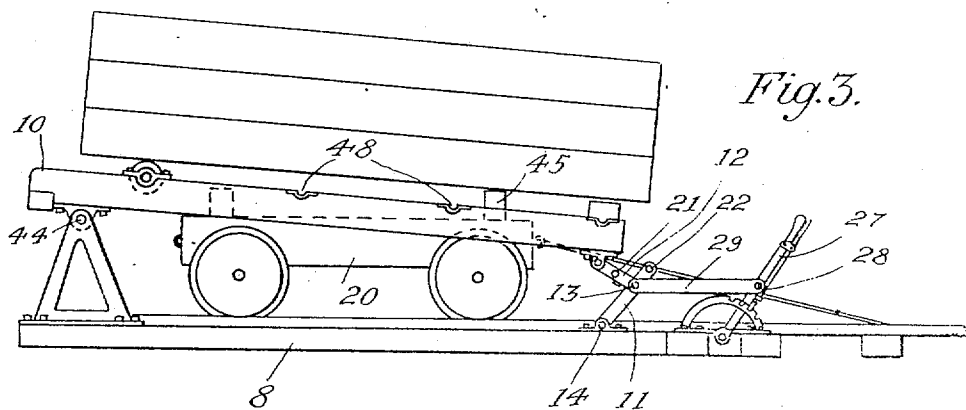
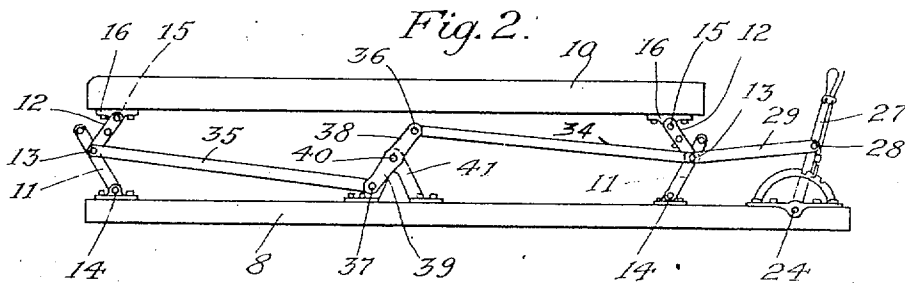
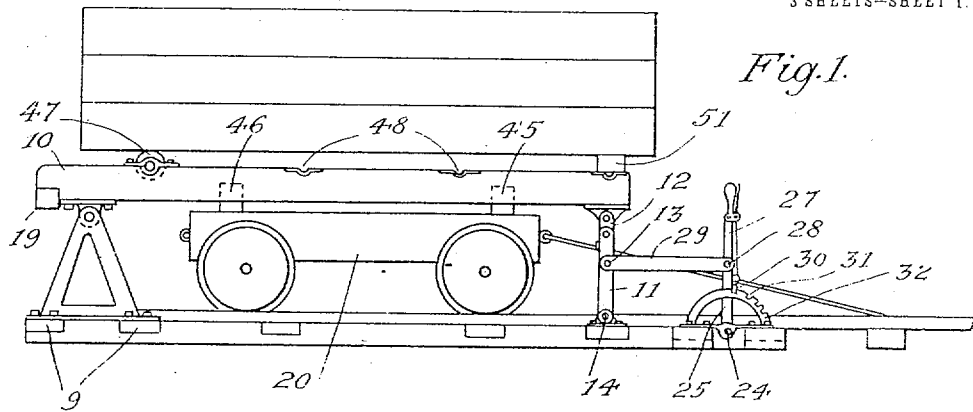


F. E. GUNTHER.
MACHINE FOR TRANSFERRING LOADS OF MATERIAL.
APPLICATION FILED FEB. 28, 1911.

1,017,749.

Patented Feb. 20, 1912.

3 SHEETS—SHEET 1.



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3 SHEETS—SHEET 2.

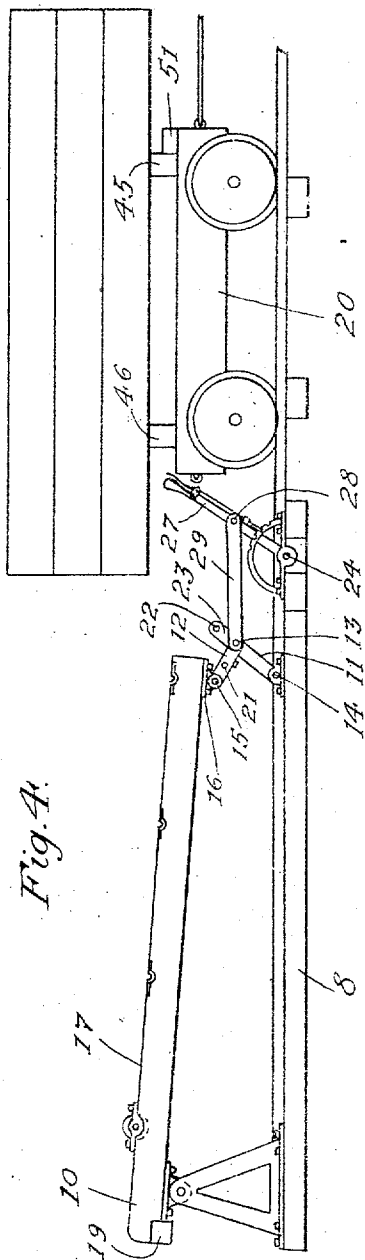


Fig. 4.

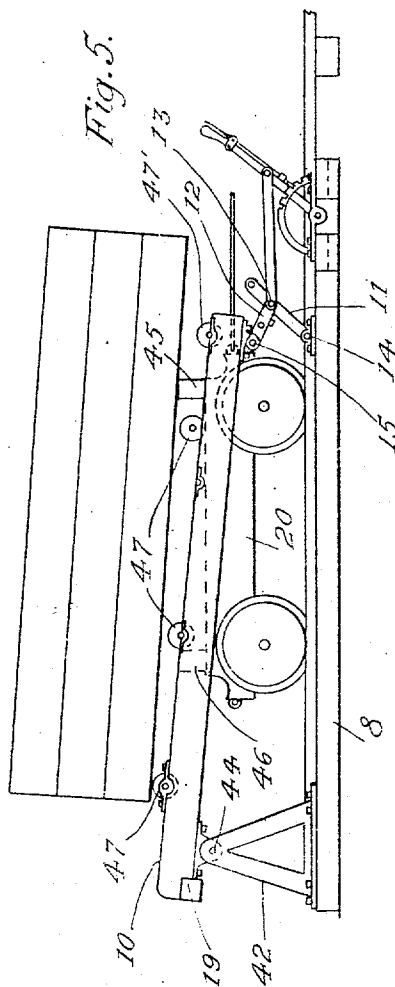


Fig. 5.

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3 SHEETS—SHEET 3.

Fig. 6

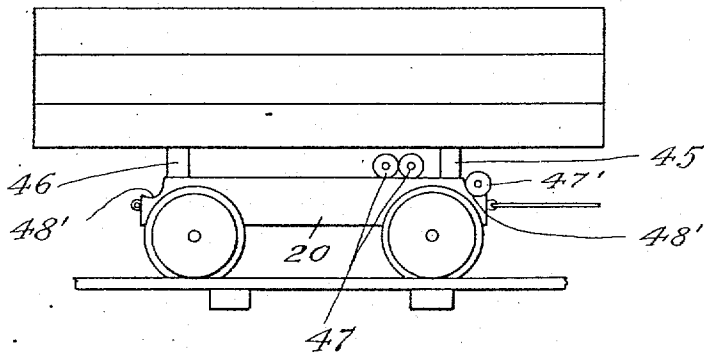
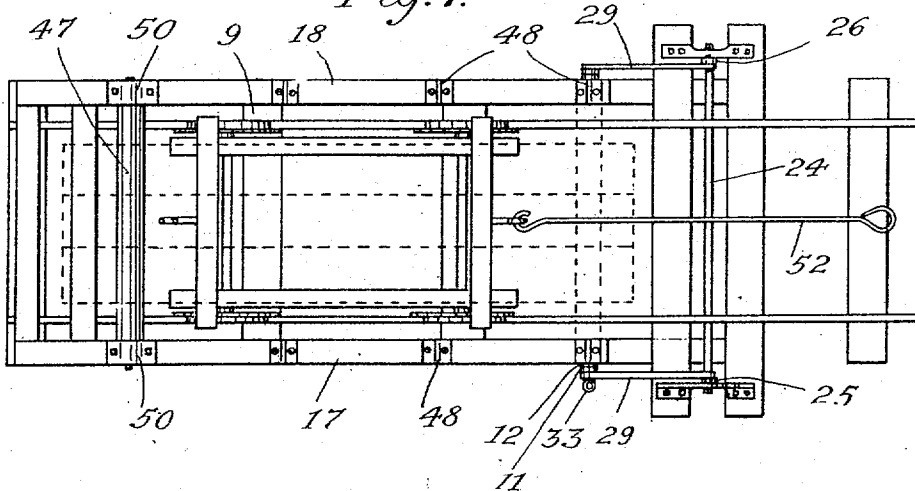


Fig. 7



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UNITED STATES PATENT OFFICE.

FRANK E. GUNTHER, OF MINNEAPOLIS, MINNESOTA.

MACHINE FOR TRANSFERRING LOADS OF MATERIAL.

1.017.749.

Specification of Letters Patent.

Patented Feb. 20, 1912.

Application filed February 28, 1911. Serial No. 611,462.

To all whom it may concern:

Be it known that I, FRANK E. GUNTHER, a citizen of the United States, residing at Minneapolis, in the county of Hennepin and State of Minnesota, have invented certain new and useful improvements in Machines for Transferring Loads of Material, of which the following is a specification.

My invention relates to means for transferring to trucks complete loads of lumber or other material to be transported from the place of manufacture to the place of storage, either in yards, buildings removed from the manufacturing building, or otherwise, as may be desired.

Any especial object of my invention is to provide means separate from the transporting trucks or wagons, upon which loads of said material may be formed or piled during the period of manufacture without requiring the presence of said trucks until said loads are completed, at which time said trucks may be placed in coöperative relation with said material receiving means and the load thereby be transferred to the trucks. This arrangement will greatly reduce the number of trucks required at any lumber mill or other manufacturing plant, and will simplify the system of trackage by which said trucks ordinarily are brought to and from the receiving point in the manufacturing plant.

Other objects and advantages of my invention will appear in connection with the detailed description of the drawings and are particularly pointed out in the claims.

In the drawings, illustrating the application of my invention in one form,—Figures 1 to 5, inclusive, are side elevations showing my device in different relations with respect to the truck. Fig. 6 is a side elevation of a modified form of truck especially adapted to use in my invention. Fig. 7 is a plan view.

A bottom frame is provided comprising longitudinal members one of which is indicated at 8, said members being secured in parallel relation by cross ties 9 and being spaced apart sufficiently to permit a track to be run between them of the sort usually employed for trucks such as are used in conveying the lumber from the mill to the yard; or in case wagons are used the tracks may be omitted and the cross ties covered with a flooring upon which the wagons may be backed for receiving a load of material.

Standards are secured to the longitudinal members in alining pairs, said standards being adapted to support a material-receiving table or frame 10. At least one pair of standards will be formed of a plurality of parts, preferably two of such parts, 11 and 12, respectively, said parts 11 and 12 being pivoted together at 13. Each of the members 11 is pivoted to a projection from one or the other of the longitudinal frame pieces, as indicated at 14 in Fig. 6; and each of the members 12 is pivotally connected at 15 with a casting 16 secured to the bottom parts of longitudinal members 17 and 18, respectively, forming sides of the material-supporting table or frame 10. Said members 17 and 18 are rigidly secured together at one end by means of a crossbar 19 but are unconnected at the other end, as clearly shown in Fig. 7.

In Fig. 1 the jointed standards 11, 12 on each side of the frame members 8 are shown in their closed position, when the frame 10 will be held up substantially above the top plane of a truck 20 adapted to receive the load. To lock the members 11 and 12 in their upright position a hole 21 is provided in the member 12 adapted to coöperate with a hole 22 in a portion 23 of the member 11 extended beyond the pivot point 13, so that when the members 11 and 12 are in their closed position a pin 33 may be inserted in these holes, thus effectively locking the members 11 and 12 in vertical position.

To operate the members 11 and 12 so as to break the joint at 13 and cause said members to pass from the position shown in Fig. 1 to that shown in Figs. 2, 3 or 5, I provide a rod 24 journaled in the frame members 8 and extending across the trackway beneath the rails thereof, if rails are provided. At each end of said rod are rigidly secured arms 25 and 26, respectively, one or both of which, as desired, may be formed as a hand lever 27. Pivoted to the arms 25 and 26 on each side of the bottom frame at 28 is a link 29 pivotally connected with the members 11 and 12 at the aforesaid point of pivotal connection 13. The lever 27 is provided with a hand-operated ratchet 30 of ordinary construction adapted to coöperate with notches 31 of a ratchet segment 32 carried by the longitudinal frame members 8.

In the form shown in Fig. 2 in which jointed standards are used to sustain both

ends of the frame 10, I further connect the sets of members 11 and 12 with the lever or levers 27 by means of links 34 and 35 pivotally connected at 36 and 37 with upper arms 38 and lower arms 39, respectively, of levers centrally pivoted at 40 to stands 41 carried by the frame members 8.

In the form shown in Figs. 1, 3, 4 and 5 where but one set of jointed standards is used, which arrangement is sufficient for most practical purposes, in place of the jointed standards to uphold the front of the table 10 I may employ ordinary brackets 42 to which the material supporting table 10 is pivoted at 44.

In practical use the truck or wagon 20 will be provided with crossbars 45 and 46, respectively, of the proper length to pass between the said members 17 and 18 of the material supporting table 10. The material is laid upon the cross supports on the table 10, which cross supports may be a series of rollers 47 journaled on said table in bearings 48 in the side members 17 and 18 provided for that purpose, a plurality of sets of said bearings adapted to receive a plurality of rollers being shown. The first roller 47 will preferably be permanently secured in said bearings by means of straps 50 overlying the trunnions of said roller 47, the other rollers being held freely in the open bearings 48 so as to be capable of removal therefrom. In place of using a series of rollers, as above indicated, it will frequently be desirable to use only the front roller 47 and a cross piece 51 of square timber or other material placed across the rearward ends of the members 17 and 18 entirely unconnected therewith. When the load has been placed upon the material-supporting table 10, as above indicated, the truck 20 will be placed in position with the bars 45, 46 thereon extending between the members 17, 18. If the form shown in Fig. 1 is used, upon operating the lever 27 after removal of the pin 33, if such pin is used, the supporting members 11, 12 will be jack-knifed rearwardly, as shown in Figs. 3 and 4, the frame will oscillate about the pivots 44 dropping the rear end of the load upon the crossbar 45. By means of a drawbar 52 traction is applied to the truck 20. The load of material readily runs along the roller 47 passing off of the same and dropping upon the crossbar 46. At the same time the crossbar 51 will have come in contact with the crossbar 45 and be carried with it off of the frame 10, as indicated in Fig. 4. In case a series of rollers 47 are used, as shown in Fig. 5, it will not be necessary to remove the interior rollers by hand, as they will be pushed down along the members 17, 18 by the crossbar 46, the rear roller 47' being engaged by a seat 48' especially provided on the truck 20 for that purpose, and automatically lifted from its bearings 48

and all said rollers carried along with the truck 20, as shown in Fig. 7. In certain cases it will be desirable to drop the load on the receiving table 10 vertically throughout its length, which effect can readily be produced by means of the arrangement shown in Fig. 2.

The advantages of my device will be apparent. It is simple in structure and operation, can be manufactured cheaply, and applied to advantage in lumber manufacturing plants without changing the system or apparatus now in use for transporting lumber or other material from the place of manufacture to the yard or other point of storage.

I claim:

1. In combination with a truck for transporting material, oscillating means positioned above the top plane of the truck for receiving material, means to oscillate said receiving means so as to cause one end of the material to rest upon the truck, and a rotatable member on the receiving means holding the other end of the material and adapted to release the material and permit the same to be transferred to the truck when said truck is withdrawn from beneath said receiving means.

2. In combination with a truck for transporting material, standards, a material-supporting frame sustained by said standards above the top plane of the truck, a roller upon the frame above the forward standards and a cross piece loose on the frame above the rear standards upon which the material is directly supported, and means to shorten the effective length of the rear standards to lower the rear end of the frame and bring the material into contact with the truck, said roller operating to permit the material to be released from the frame and transferred to the truck when the said truck is withdrawn from beneath said frame.

3. In combination with a truck for transporting material, a base frame having standards thereon, a material-supporting table carried by said standards above the top plane of the truck, said table comprising side members secured together at one end only and crossbars loosely mounted on said side members upon which the material is directly placed, and means for lowering said table to bring the material thereon into contact with the truck.

4. In combination with a truck for transporting material, a base frame having standards thereon, a material-supporting table carried by said standards above the top plane of the truck, said table comprising side members secured together at one end only and crossbars loosely mounted on said side members upon which the material is directly placed, said side members being spaced apart so as to come outside the truck

on both sides thereof, and means for lowering said table to bring the material thereon into contact with the truck.

- 5 In combination with a truck for transporting material, a lower frame comprising longitudinal base members spaced apart to receive the truck between them, a pair of front standards rigidly secured to said base members, a pair of rear standards pivotally secured to said base members and each comprising a jointed member, a material-receiving frame pivoted to said front standards at one end and pivoted to said rear standards at the other end of said frame, a rod 10 journaled in said base members having arms, one or both of which may include a hand lever, and links pivotally connecting said arms with said jointed standards whereby said joints may simultaneously be broken to 15 lower the rear end of said frame and bring the material thereon into transferring engagement with the truck.

6. In combination with a truck having crossbars for receiving material to be transported, a base frame having standards thereon, a material-supporting table carried by said standards comprising side members secured together at their front ends only and spaced apart so as to come outside of said crossbars on the truck, rollers carried in 25 open bearings on said side members upon which the load of material is originally placed, and means to lower said table to transfer said load from said rollers to said crossbars, said crossbars operating to remove 30 the rollers from said table when the truck is withdrawn.

In testimony whereof I affix my signature in presence of two witnesses.

FRANK E. GUNTHER.

Witnesses:

F. A. WHITELEY,
H. A. BOWMAN.