June 1, 1926. 1,586,797

L. E. GULLIFORD

SAWING ATTACHMENT FOR TRACTORS

Filed Sept. 29, 1923 2 Sheets-Sheet 1

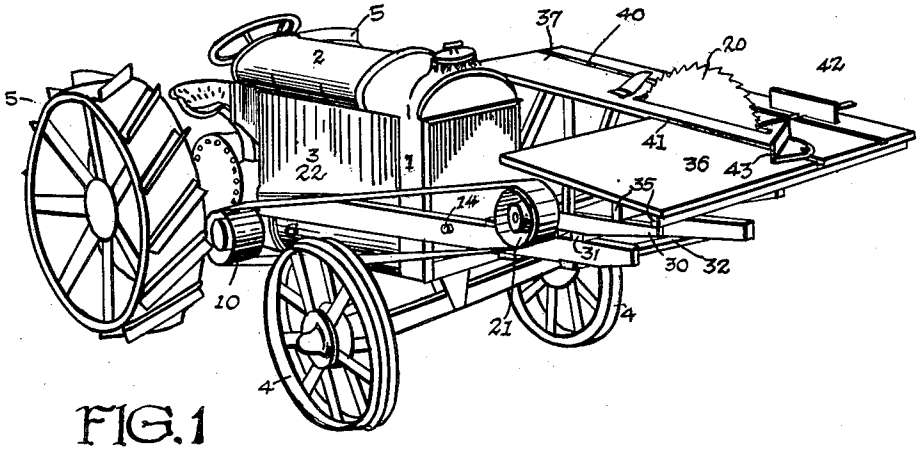


FIG. 1

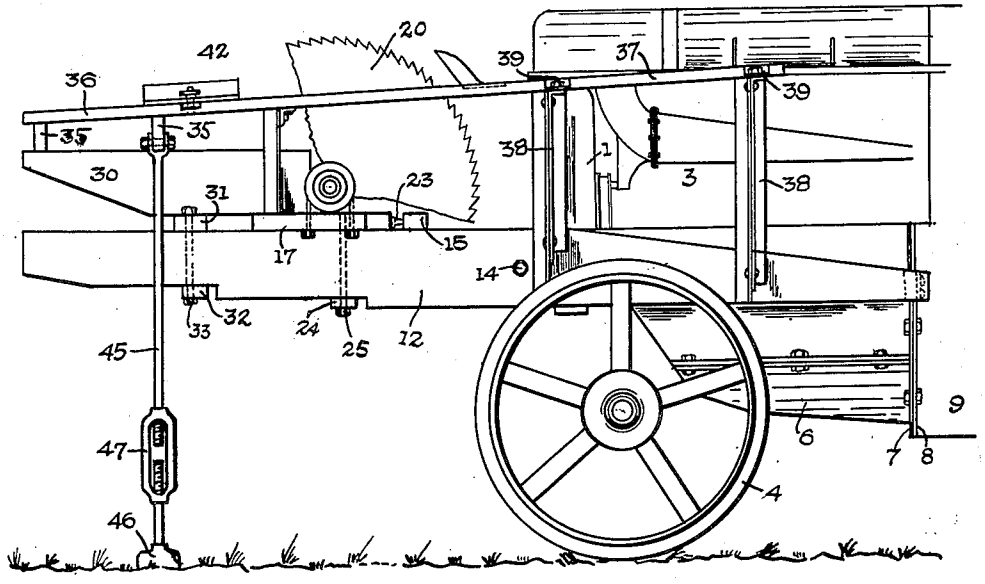


FIG. 2

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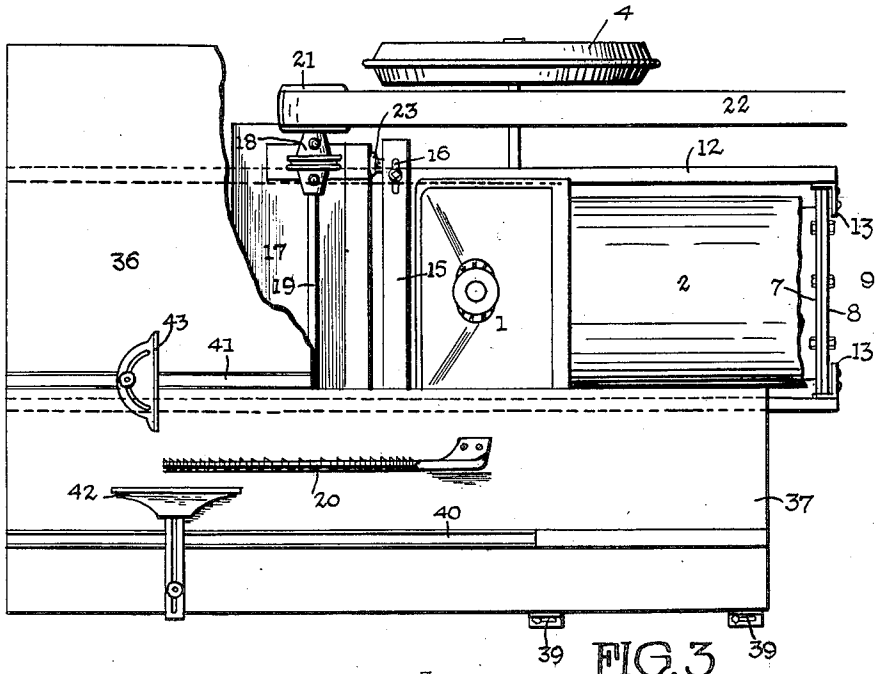


FIG. 3

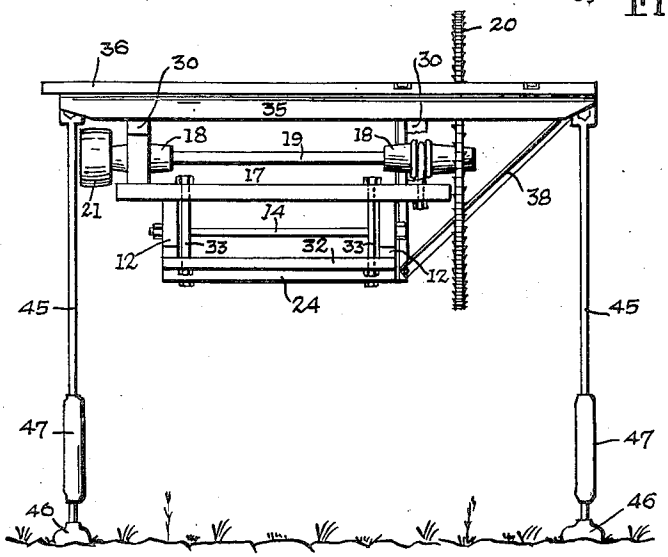


FIG. 4

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Patented June 1, 1926. 1,586,797

UNITED STATES PATENT OFFICE.

LOUIE E. GULLIFORD, OF BEDFORD, OHIO, ASSIGNOR, BY MESNE ASSIGNMENTS, TO OLIVER W. JOHNSON, OF GENEVA, OHIO.

SAWING ATTACHMENT FOR TRACTORS.

Application filed September 29, 1923. Serial No. 665,721.

This invention relates to sawing attachments for tractors and has for its object the provision of a simple and comparatively inexpensive saw table which can be fastened to and carried by a common and popular form of gasoline tractor and operated therefrom, by means of which a carpenter or other contractor can increase the speed and decrease the labor of erecting frame buildings, concrete forms, stagings, bridges, etc. To accomplish this it is necessary to have a saw table which will handle long and wide boards, and receive them lengthwise as well as sidewise; which will cut with accuracy in all directions, which can be applied, removed with ease, and transported without removal; and it is desirable that the device be so constructed as to enable the tractor to be used for its original purpose without removing the sawing attachments. All these things are accomplished by my invention, while further objects and advantages will become apparent as the description proceeds.

In the drawing accompanying and forming a part of this application, I have shown one physical structure in which my inventive ideas can be embodied though without intent to limit myself to the particular forms or arrangements herein shown. Fig. 1 is a perspective view of a simple form of tractor equipped with my device and in traveling condition; Fig. 2 is a side elevation of my device and a part of the tractor; Fig. 3 is a top plan view with part of the table broken away; and Fig. 4 is a front elevation of the saw table omitting the tractor.

Describing the parts herein shown by the use of characters of reference appearing on the drawing, the tractor is equipped with a radiator 1, tank 2, engine 3, front wheels 4, and driving wheels 5. The engine is located in a fore and aft position behind the radiator and has a crank case 6 flanged at 7 and bolted to a similar flange 8 carried by the gear case 9. Gears of some kind being common in all tractors I do not show the same, but a transverse work-shaft is journaled in this gear box and provided with a belt pulley 10 and suitable clutches are provided (not shown herein) whereby the power of the engine can be delivered either to the drive wheels 5 or to the pulley 10 at will.

To the sides of the tractor I secure two forwardly projecting sills 12, 12, preferably by bolting their rear ends to the flanges 7, 8 by the use of suitable angle-brackets 13, and gripping their forward ends against the radiator by a cross-bolt 14. To the upper edges of these sills is fastened a cross bar 15 in such wise as to prevent its movement thereby while permitting the sills to approach each other, as by the slot 16 in Fig. 3. In front of this bar is slidably mounted a second cross bar 17 having bearings 18 thereon supporting the arbor 19 having at one end the circular saw 20 and at the other end the pulley 21 connected to the work-pulley 10 by the belt 22. Thrust bolts 23 are interposed between the bars 15 and 17 to tighten the belt, and a clamping bar 24 beneath the sills is connected to the bar 17 by bolts 25, 25, to enable the latter bar to be secured in place. Thus far the device is identical with that described and claimed in the applications of O. W. Johnson, filed April 28, 1921 and March 16, 1922 Serial Nos. 465,342 and 544,222.

To the bar 17 I attach bolsters 30, 30 which project forward parallel to the sills 12, and in case I distrust the width and strength of the cross bar 17 I introduce another cross bar 31 between the bolsters and sills, together with a companion clamping bar 32 and clamping bolts 33. To the upper edges of the bolsters I fasten the cleats 35, 35 which in turn support the saw table 36. This table is formed with a slot for the saw 20 and is also made somewhat in the shape of the letter L, one portion projecting laterally in front of the radiator and the other portion 37 lengthwise past the radiator. The arbor 19 is located as near the radiator as is safe in view of the prevailing width of boards to be cut, say from one to two feet, and the saw is displaced laterally from the radiator enough to enable satisfactory rip-saw service. The rear end 37 of the saw table is elevated sufficiently to direct all pieces of lumber over the rear wheel of the tractor and supported by suitable brackets 38, 38. These are preferably rigid with the sill 12 and attached to the saw table by a slot connection 39, 39.

Formed in the top of the table are suitable longitudinal guideways 40, 41 in which are mounted the gauge 42, follower 43, or other guiding and measuring devices. To steady the table and enable more accurate work to

be done I may employ the temporary supports shown in Figs. 2 and 4. These consist of iron rods 45, 45 bolted to some part of the table and connected to iron feet 46, 46 by turnbuckles 47, 47. These can readily be accommodated to rough ground, which is the kind generally found where building operations are going on, but are seldom necessary except for fine work.

The tractor can be driven about with the same facility with the saw table as without. It can draw a load of lumber to the job or about a job, sawing it wherever most convenient. The saw table being rigid with the shaft support, the guides are always accurate relative to the saw. To tighten the belt the bolts 25, 33, and 39 are loosened, the bolts 23 advanced, and the bolts 25, 33 and 39 tightened again. The entire device can be removed from the tractor at any time by loosening the bolt 14 and unfastening the brackets 13, 13 and reattached by reversing the process.

I have designed and described a device of minimum complexity and maximum utility. It will be obvious that additional features may be incorporated or advantages omitted without departing from my inventive idea or avoiding a proper construction of these my Letters Patent, and I do not limit myself to any of the features herein illustrated and particularly described but only as specifically recited in my several claims with benefit of equivalents in accordance with the state of the art.

Having thus described my invention what I claim is:

1. The combination with a tractor having wheels of unequal size, of a detachable frame carried thereby, a saw table carried by said frame and located over one of the smaller wheels and directed over the top of one of the larger wheels, said table having a slot therein, and a saw journaled to said frame and projecting through said slot and adapted to be driven by said tractor.

2. The combination with a tractor, of a frame supported at one end thereof and extending beyond the same, a transverse arbor journaled thereto, means for driving said arbor from the tractor, a saw on said arbor located outside the body of the tractor, and an L shaped saw table carried by said frame and overlapping the end and side of said tractor.

3. The combination with a tractor having smaller front wheels than rear wheels, of a frame carried by said tractor and extending in front of the same, a transverse arbor journaled thereto, means for driving said arbor from the tractor, a saw on said arbor outside the body of the tractor, and an L shaped saw table carried by said frame and overlapping the front and side of the tractor, said table being located above the front wheels and inclined to bring its plane above the rear wheel.

4. In a tractor attachment, the combination with a frame adapted to be secured to the tractor body of a cross piece movable relatively to said frame, a transverse arbor journaled to said cross piece, means for driving said arbor from the tractor engine, a saw on said arbor, and a saw table rigid with said cross piece and movable therewith.

In testimony whereof, I hereunto affix my signature.

LOUIE E. GULLIFORD.