

F. M. SEELEY.
 PROPELLING DEVICE FOR POWER LAWN MOWERS.
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1,345,109.

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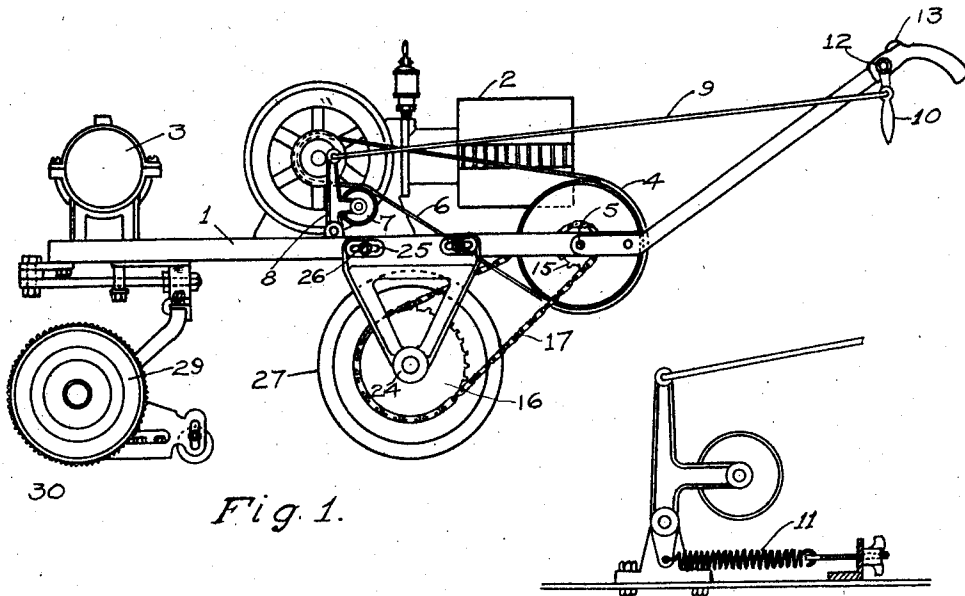


Fig. 1.

Fig. 2.

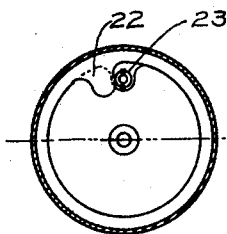


Fig. 3.

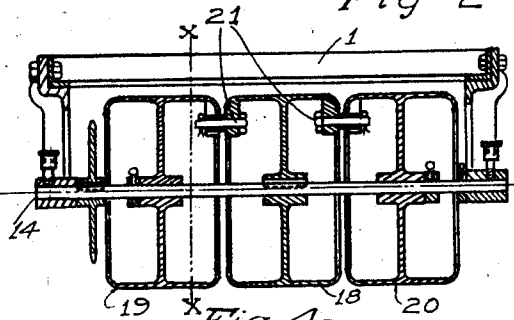


Fig. 4.

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PROPELLING DEVICE FOR POWER LAWN-MOWERS.

1,345,109.

Specification of Letters Patent. Patented June 29, 1920.

Application filed August 12, 1918. Serial No. 249,591.

To all whom it may concern:

Be it known that I, FAYETTE M. SEELEY, a citizen of the United States, residing at Lansing, in the county of Ingham and State of Michigan, have invented a new and useful Improvement in Propelling Devices for Power Lawn-Mowers, of which the following is a specification.

My invention relates to power lawn mowers adapted to be propelled by an internal combustion engine or similar means and more especially to the means by which such propulsion is accomplished.

The purposes of my invention are: to make a device that shall be convenient and simple to control, that shall be free from the likelihood of breaking any part of the machine in case of meeting an obstruction, that shall be convenient in adjustment and comparatively inexpensive to construct.

I attain these purposes by the means shown in the accompanying drawing in which Figure 1 shows an elevation of my device from the left hand side looking toward the front of the machine. Fig. 2 is a detail of the belt tightener mechanism. Fig. 3 is a cross section of Fig 4 along the line $x-x$ and Fig. 4 is a vertical section of the driving rollers and frame through the center of the driving shaft.

Referring more particularly to the drawings,—1 is the main frame of my device which is preferably constructed of angle iron. An internal combustion engine 2 of any approved type is mounted on the frame 1 and is supplied with fuel from a tank 3. The engine 2 drives an intermediate pulley 4 mounted on a shaft 5 by means of a belt 6 and an idler pulley 7. The idler pulley 7 is operated by a lever 8, which is connected by a connecting rod 9 to the handle 10, which is normally kept in an operative position by a spring 11. When it is desired to stop the motion of the machine the handle 10 is thrown upward and backward striking a lug 13 which projects outward from the side of the handle of the machine in such position that when the handle 10 is thrown backward it will abut against this lug. The lug 13 is placed in such position on the handle of the machine that when the handle 10 engages with it the connecting rod 9 will pass beyond the pivot 12 of the handle 10. It is evident that the form of the lug 13 might be materially altered or some other method of retaining the handle 10 in position might be

used without departing from my invention. For this reason I do not more fully describe it. By the peculiar construction of the lever 8, when the handle 10 is thrown into this position the pulley 7 is drawn downward and freed from the belt 6.

Power is transmitted from the pulley 4 to the driving shaft 14 by means of the sprockets 15 and 16 and the chain 17. As the device is constructed, and as I prefer, the shaft 5 is stationary and the sprocket 15 is connected to the pulley 4, and both revolve freely on the shaft 5, but the pulley and sprocket might be attached to the shaft 5 which might revolve in suitable bearings at its extremities without departing from my invention. The driving roller 18 is securely attached to the shaft 14. The rollers 19 and 20, however, revolve freely on this shaft as I have shown in the drawings. Two of these rollers are employed but more might be used if desired. Pins 21 are securely mounted near the rim on each side of the roller 18 and engage with lugs 22 on the rollers 19 and 20. For the purpose of avoiding shock and noise in the contact, the pins 21 are preferably provided with rubber buffers 23 but these are not essential to the operation of my device. By means of this feature of my device, when the machine is started it moves ahead by the operation of the roller 18 alone until the pins 21 engage with the lugs 22. From that time on all the rollers work together in driving the machine as long as it travels in a direct line ahead; but when it is desired to turn, it is evident that the outside roller can move ahead to the extent of nearly an entire revolution before its lug engages with the opposite side of the pin 21. This gives great facility in turning.

The shaft 14 revolves in bearings 24 mounted in brackets 25 which are adjustably connected to the frame 1 by bolts 26 passing through slots 27. The purpose of this adjustment is to regulate the amount of weight carried by the mower 29. It may also serve if desired for an adjustment of the chain 17. The mower 29 is attached to the under side of the frame of the machine at the front end in any suitable manner so as to permit of vertical and horizontal oscillatory movement, but as this mode of attachment forms no part of my present invention, I do not more fully describe it. It will also be noted that in this construc-

tion the mower reel is driven by its own driving wheels 30 and therefore any approved mower may be employed, the function of the engine 2 being simply to drive the frame and thus the mower over the ground.

I claim as my invention and desire to secure by Letters Patent:

1. In a device of the character described, in combination, a main frame; an internal combustion engine mounted on said frame, said frame being provided with downwardly extending brackets provided with bearings at their lower extremities; a driving shaft adapted to revolve in said bearings; a plurality of driving rollers mounted on said shaft, one of said rollers being firmly attached to said shaft and the others adapted to revolve freely upon it, and means for automatically making an operative connection between said fixed and said free driving rollers.

2. In a device of the character described, in combination, a main frame; an internal combustion engine mounted on said frame, said frame being provided with downwardly extending brackets provided with bearings at their lower extremities; a driv-

ing shaft adapted to revolve in said bearings; a plurality of driving rollers mounted on said shaft, one of said rollers being firmly attached to said shaft and the others adapted to revolve freely upon it, and lugs on the side of said rollers adapted to mutually engage with each other and compel said free rollers to revolve with said attached roller when so engaged.

3. In a device of the character described, in combination, a main frame; an internal combustion engine mounted on said frame, said frame being provided with downwardly extending brackets provided at their lower extremities with bearings; a driving shaft adapted to revolve in said bearings; a plurality of driving rollers mounted on said shaft, one of said rollers being firmly attached to said shaft and the others adapted to revolve freely upon it; a pin projecting from the side of one of said driving rollers and adapted to engage with a lug formed on the side of the adjacent driving rollers, and means for operatively connecting said engine to the driving roller attached to said shaft.

FAYETTE M. SEELEY.