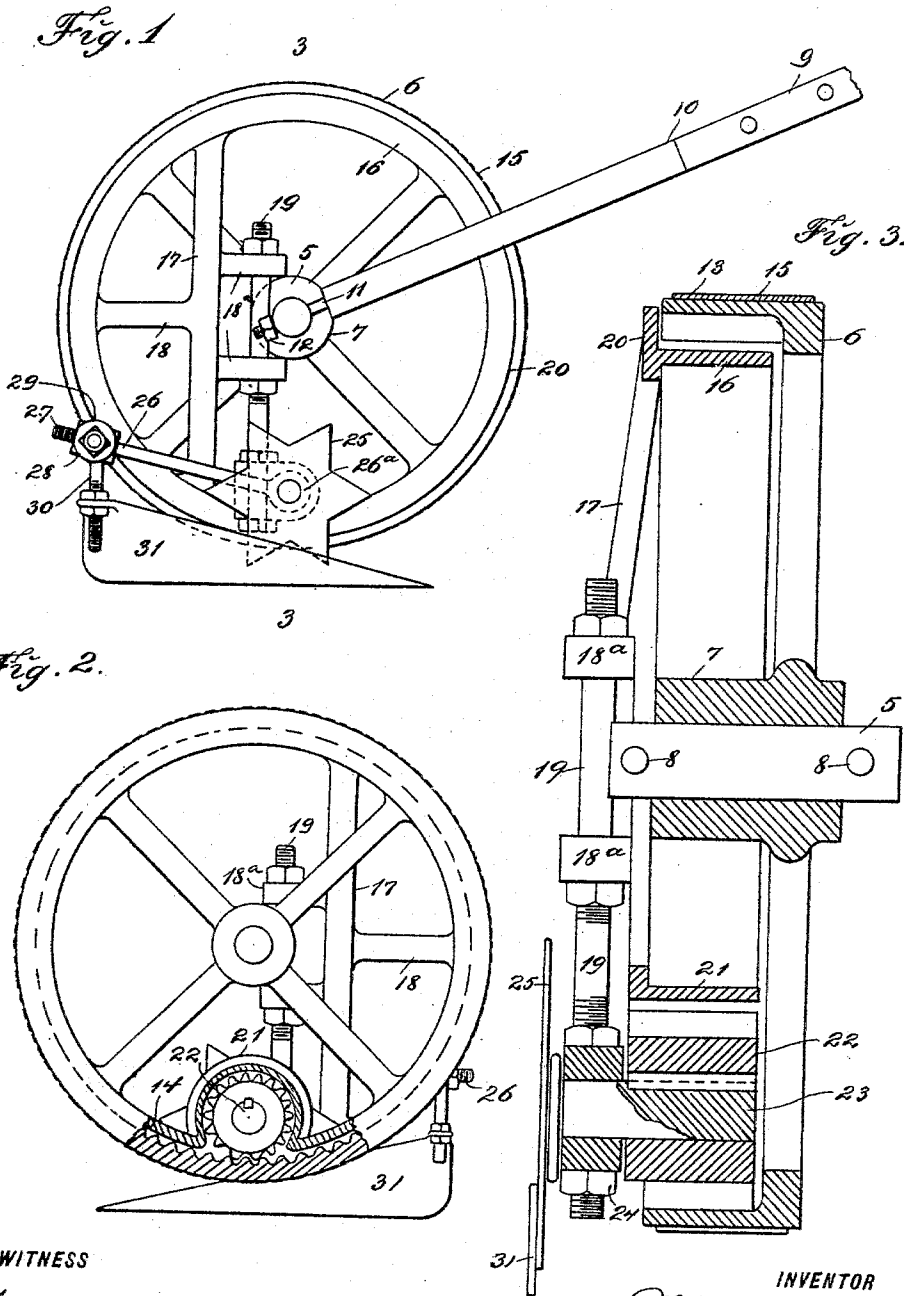


(No Model.)

B. B. KELLY.
MACHINE FOR CUTTING EDGES OF PATHS.

No. 584,041.

Patented June 8, 1897.



WITNESS

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MACHINE FOR CUTTING EDGES OF PATHS.

SPECIFICATION forming part of Letters Patent No. 584,041, dated June 8, 1897.

Application filed January 21, 1897. Serial No. 620,114. (No model.)

To all whom it may concern:

Be it known that I, BARLOW B. KELLY, a citizen of the United States, residing at Millbrook, in the county of Dutchess and State of New York, have invented certain new and useful Improvements in Machines for Cutting the Edges of Paths or Walks, of which the following is a full and complete specification, such as will enable those skilled in the art to which it appertains to make and use the same.

This invention relates to machines for cutting the edges of gravel paths or walks and for other and similar purposes; and the object thereof is to provide an improved machine of this class which is simple in construction and operation and which is adapted to be operated by hand.

The invention is fully disclosed in the following specification, of which the accompanying drawings form a part, in which—

Figure 1 is a side view of my improved machine; Fig. 2, a similar view of the opposite side thereof, showing part of the construction in section; and Fig. 3, a central vertical section on the line 3 3 of Fig. 1.

In the drawings forming part of this specification the separate parts of my improvement are designated by numerals of reference in each of the views, and in the practice of my invention I provide a central shaft 5, on which is mounted a main drive-wheel 6, provided with a hub 7, through which the shaft 5 passes, and said shaft 5 is provided near each end with a transverse hole or opening 8, and I also provide a handle 9, to one end of which is secured a yoke 10, the separate sides of which are provided with shafts 11, which pass through said holes or openings 8 and are held therein by nuts or burs 12.

The wheel 6 is provided at one side with a flange or rim 13, which is provided on its inner side with gear-teeth 14 and on its outer side with transverse lugs or projections 15, which are designed to prevent it from slipping, and mounted in the flange or rim 13 of the wheel 6 is an inner stationary wheel 16, which is provided at one side with a frame consisting of a transverse bar 17 and a bar 18, which connects therewith and with said wheel, and the bar 17 is provided with inwardly-directed arms 18^a, through which are

passed a rod 19. The wheel 16 is also provided with an outwardly-directed flange or rim 20, which conceals the gear-teeth 14 on the inner perimeter of the flange 13 of the wheel 6, and the transverse bar 17 is preferably curved outwardly or set outwardly, as shown in Fig. 3. The wheel 16 is also provided at the lower side thereof with an inwardly-directed circular housing 21, in which is mounted a pinion 22, which operates in connection with the gear-teeth 14 on the inner side of the flange 13 of the wheel 6, and said pinion 22 is mounted on a shaft 23, which is supported by a bearing 24, secured to the lower end of the rod 19, and mounted on the outer end of the shaft 23 is a cutter 25, which preferably consists of a star-shaped blade, as shown in Figs. 1 and 2.

Mounted on the shaft 23, between the bearing 24 thereof and the cutter 25, is an arm 26, which consists of a rod which is screw-threaded at its outer end, as shown at 27, and which is provided at its inner end with a head 26^a, through which the shaft 23 passes, and the screw-threaded portion of the arm 26 passes through a bearing 28, secured to the wheel 16 at 29, and connected with said bearing is a depending rod 30, which supports a supplemental cutter or blade 31, which is triangular in form and the narrow or pointed end of which projects forwardly beneath the cutter 25.

The pinion 22 is geared to the shaft 23 and turns therewith, and the said shaft is free to turn in the head of the arm 26, and the cutter 25 turns with said shaft, to which it is secured in any desired manner, and the operation will be readily understood from the foregoing description when taken in connection with the accompanying drawings and the following statement thereof.

The machine is pushed along by the handle 9, and in this operation the main wheel 6 revolves, and said wheel operates the pinion 22, which operates the shaft 23, which in turn operates the cutter 25, and this cutter, as will be understood, cuts out the grass or soil adjacent to the side of the path or walk, and in this operation the supplemental blade or cutter 31 passes beneath the grass or sod and through the loose soil and assists in the op-

eration of cutting the same and separating the cut-away portion from the main body of the sod or grass adjacent to the walk or path.

It will be apparent that the cutter 25 may be lowered by loosening the connection of the arm 26 with the bearing 28 and turning the wheel 16 backwardly, and the supplemental blade or cutter 31 may also be adjusted on the arm 30, by which it is supported, and, as will be apparent, this device is simple in construction and operation and perfectly adapted to accomplish the result for which it is intended, while being also comparatively inexpensive.

15 Having fully described my invention, I claim as new and desire to secure by Letters Patent—

1. A machine for the purpose herein specified, consisting of a main wheel, provided with gear-teeth, on the inner surface of the perimeter thereof, a supplemental wheel mounted therein, around which the main wheel is adapted to be revolved, said supplemental wheel being provided with a pinion which is secured to a shaft mounted in a frame or support connected with the supplemental wheel, said pinion and said shaft being adapted to be operated by the main wheel, and said shaft being provided with a cutter, substantially as shown and described.

2. A machine for the purpose herein specified, consisting of a main wheel, provided with gear-teeth on the inner surface of the perimeter thereof, a supplemental wheel mounted therein, around which the main wheel is adapted to be revolved, said supplemental wheel being provided with a pinion which is secured to a shaft mounted in a frame or support connected with the supplemental wheel, said pinion and said shaft being adapted to be operated by the main wheel, and said shaft being provided with a cutter, and the frame of the supplemental wheel being also provided with a supplemental cutter or blade which is mounted below the cutter connected with said shaft, and which operates in connection therewith, and means for adjusting the position of the cutter on the shaft con-

sisting of an arm which is connected with said shaft and with a support carried by the supplemental wheel in which it is adapted to be adjusted, substantially as shown and described.

3. A machine for the purpose herein specified, consisting of a main wheel, provided with gear-teeth, on the inner surface of the perimeter thereof, a supplemental wheel mounted therein, around which the main wheel is adapted to be revolved, said supplemental wheel being also provided with a pinion which is secured to a shaft mounted in a frame or support connected with the supplemental wheel, said pinion and said shaft being adapted to be operated by the main wheel, and said shaft being provided with a cutter, and the frame of the supplemental wheel being also provided with a supplemental cutter or blade which is mounted below the cutter connected with said shaft, and which operates in connection therewith, and means for adjusting the position of the cutter on the shaft consisting of an arm which is connected with said shaft and with a support carried by the supplemental wheel in which it is adapted to be adjusted, and said supplemental cutter or blade being also adapted to be vertically adjusted, substantially as shown and described.

4. A machine for the purpose herein described, consisting of a main wheel, a shaft on which said main wheel is mounted, a handle connected with said shaft, a supplemental wheel mounted in said main wheel, said supplemental wheel being provided with a pinion which is mounted on a shaft supported by a frame connected therewith, said pinion being adapted to be turned by the main wheel, and said shaft being provided with a cutter, substantially as shown and described.

In testimony that I claim the foregoing as my invention I have signed my name, in presence of the subscribing witnesses, this 18th day of January, 1897.

BARLOW B. KELLY.

Witnesses:

THOMAS WETHERAL,
WALTER F. HAIGHT.