No. 732,826. PATENTED JULY 7, 1903.

C. W. CARTER.

SNOW OR ROAD ROLLER.

APPLICATION FILED NOV. 19, 1902.

NO MODEL.

Fig. 1.

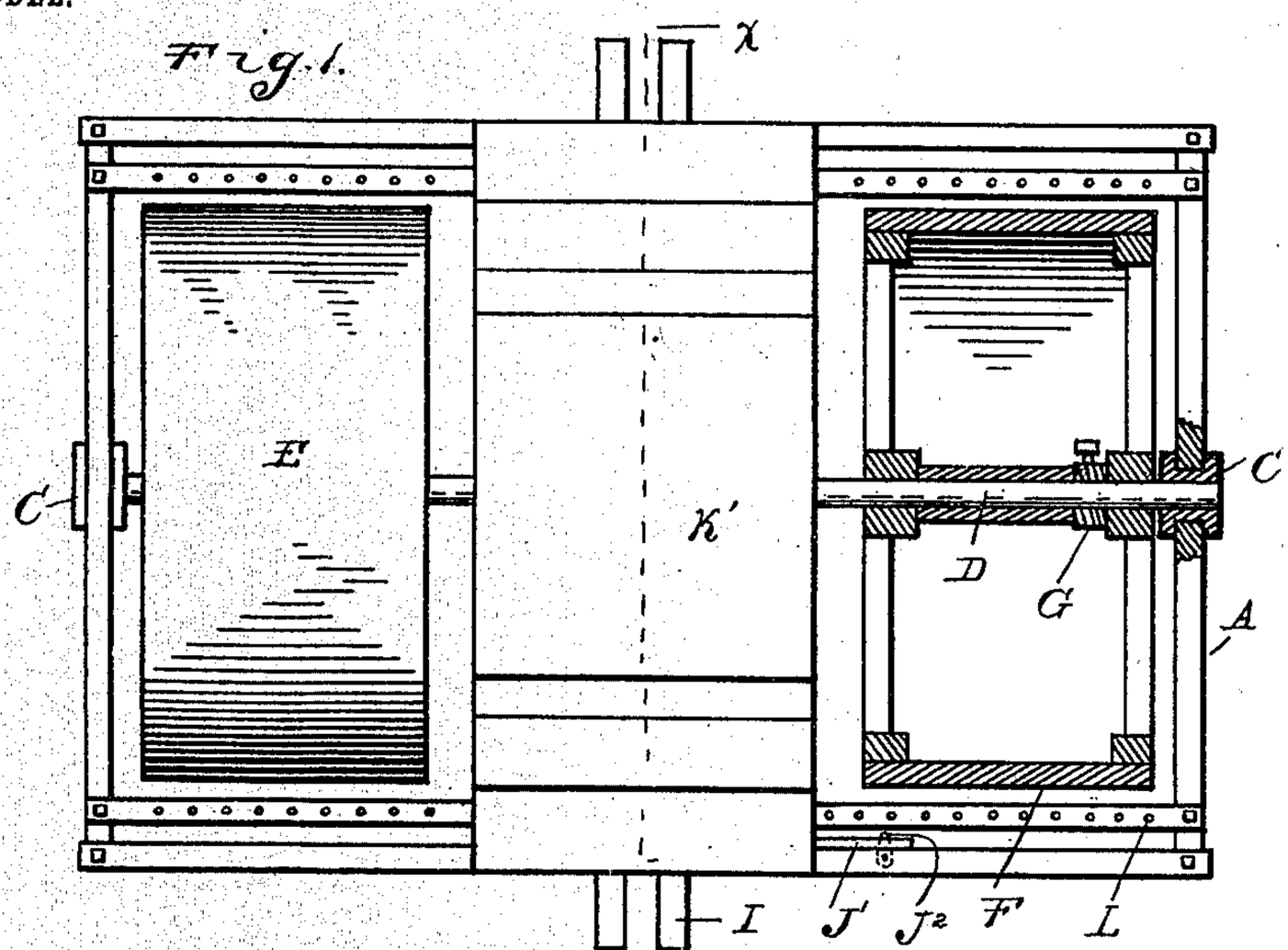


Fig. 2.

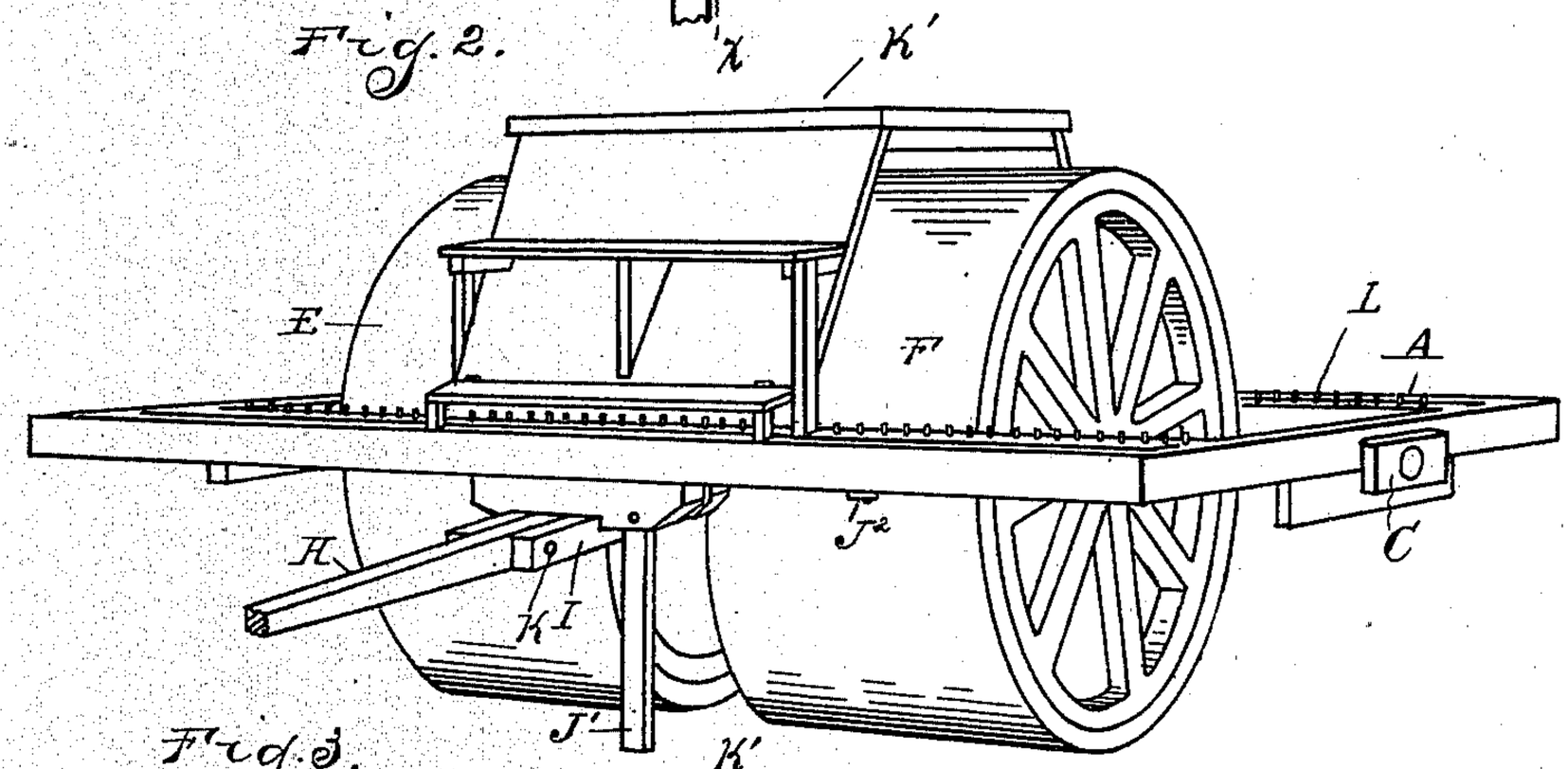
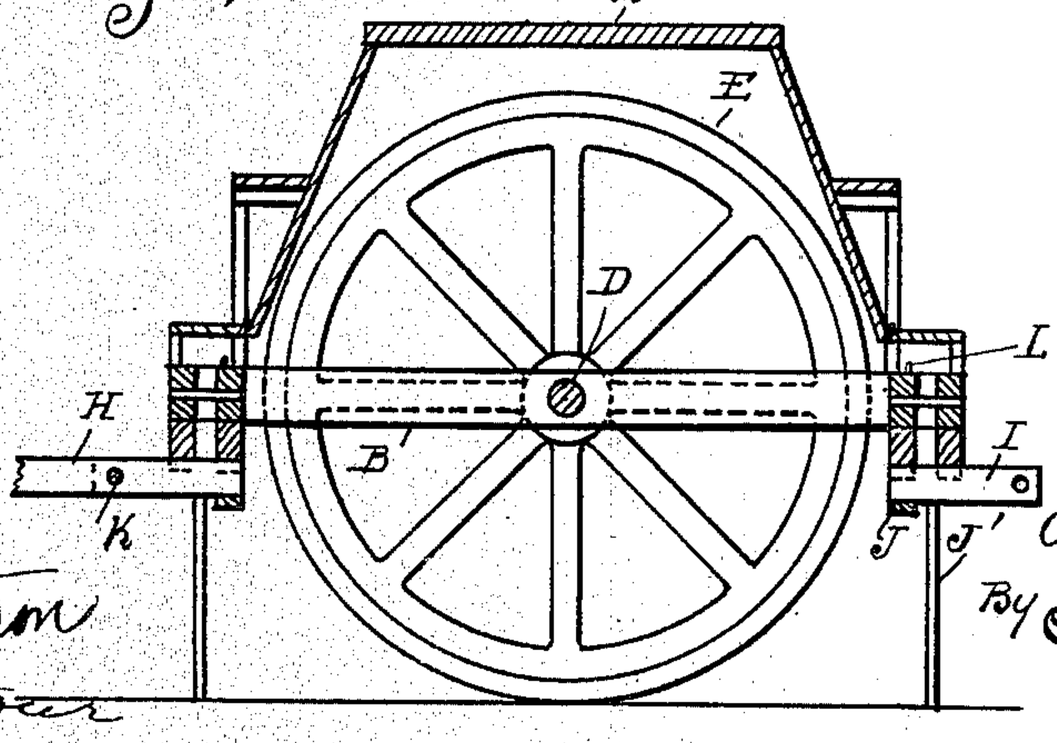


Fig. 3.



Witnesses:
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No. 732,826. Patented July 7, 1903.

UNITED STATES PATENT OFFICE.

CHARLES W. CARTER, OF ST. JOHNS, MICHIGAN.

SNOW OR ROAD ROLLER.

SPECIFICATION forming part of Letters Patent No. 732,826, dated July 7, 1903.

Application filed November 19, 1902. Serial No. 131,931. (No model.)

To all whom it may concern:

Be it known that I, CHARLES W. CARTER, a citizen of the United States, residing at St. Johns, in the county of Clinton and State of Michigan, have invented certain new and useful Improvements in Snow or Road Rollers, of which the following is a specification, reference being had therein to the accompanying drawings.

This invention relates particularly to a snow or road roller, and has for its object the production of an implement of this character of simple and economical construction and of considerably less weight than those heretofore manufactured.

With these objects in view the invention consists in the novel construction of the snow or road roller and in the peculiar arrangement and combination of the various parts thereof, as will be more fully set forth.

In the drawings, Figure 1 is a top plan view of the roller. Fig. 2 is a perspective view thereof, and Fig. 3 is a section taken on line X X of Fig. 1.

In the construction of the road-roller I employ, preferably, a rectangular frame A, substantially equal in width to the entire width of the road-bed. This frame is provided with a strengthening-bar B, which extends across its central portion. Journaled longitudinally within the frame in bearings C is a shaft D, upon which on opposite sides of the frame center are sleeved the rolls E and F. The rolls are adapted to be shifted either to or away from the frame center for a purpose hereinafter set forth and are provided with a collar G at the outer end of each roll for locking or maintaining the rolls in their adjusted positions. A draft-bar or tongue H is employed in connection with the frame and is detachably secured to suitable bearings in the latter, so that it may be shifted from side to side, and thus obviate the necessity of turning the road-roller around upon its forth and back travel. The preferable connections for the draft-bar consist of a pair of spaced members I at each side of and projecting forwardly from beneath the frame, as shown, each pair carrying at its inner end a cross-bar J. The tongue may be inserted between either pair of members and is held in place by a pivot K and the bar J, the inner end of the tongue projecting between said bar and the frame.

Each of the rolls previously referred to is of less width than the width of half the frame, the preferable dimensions being one-quarter the frame width, so that the roll may be shifted sufficiently to travel over different paths on the road.

In practice the roller is adapted on its travel in one direction to roll either the sides or the center of the road and upon its return travel to pass over the unrolled portion. Preferably the center of the road is rolled first in order that the team may be kept on a hard surface while rolling the sides. To adjust the machine to roll the sides, the tongue is detached from the frame and shifted to the opposite side thereof in the manner previously set forth, and the rolls are adjusted to any desired position. Supporting-bars J′ are preferably carried by the frame at either side, adapted previously to the withdrawal of the tongue to depend from the frame and prevent the latter from tipping during the shifting of the draw-bar. When the roller is traveling, these pivoted supporting-bars are held in parallelism with the frame by means of buttons J^2, so as to be out of the way. The rolls are shifted from their central position to the extreme end portions of the frame by means of a lever adapted to be inserted between the pins L on said frame and are held in their adjusted positions by the collars G, the frame being first elevated by suitable appliances, such as lifting-jacks, to permit of the adjustment.

A seat K′ is mounted upon the central portion of the frame and is arched, as shown, so as to form a partial housing for the rolls. It may be connected to the frame in any suitable manner.

In the usual construction of snow or road rollers the rolls ordinarily extend the entire width of the frame, producing a heavy and cumbersome machine. In constructing my roller in the manner set forth, only two rolls being employed of the dimensions specified and being adjustable, as set forth, the same results may be obtained and the weight of the machine is materially lessened.

What I claim as my invention is—

1. In a road-roller, the combination with a main frame substantially equal in width to the width of the road-bed, of a shaft extending longitudinally of and journaled in bear-

ings in the frame, two adjustable rolls sleeved upon the shaft one upon each side of the center, each roll being less than half the width of the frame and having a flat periphery, lugs on the frame for the reception of a lever to forcibly adjust the rolls, and means for locking the rolls in their adjusted positions.

2. In a road-roller, the combination with a main frame, of rolls having a flat periphery journaled therein for longitudinal adjustment, means for retaining the rolls in their adjusted position, a draft-bar having detachable connections with and adapted to be shifted to either side of the frame, supporting-bars pivoted to swing longitudinally of the frame, and means for holding said bars normally out of contact with the ground.

3. In a road-roller, the combination with a main frame, of rolls journaled therein for longitudinal adjustment, and having a flat periphery, lugs on the frame for the reception of a lever to forcibly adjust the rolls, means for locking the rolls in their adjusted positions, a draft-bar having detachable connections with and adapted to be shifted to either side of the frame, and means pivoted to swing longitudinally of the frame for preventing tipping thereof during the shifting of the bar.

4. In a road-roller, the combination with a box-frame, having longitudinal and side sections, of rolls journaled therein for longitudinal adjustment, a draft-bar having detachable connections with and adapted to be shifted to either side of the frame, supporting-bars pivoted to the frame, and means on the frame for normally holding the bars in parallelism with the longitudinal sections of the frame.

5. In a road-roller, the combination with a frame having longitudinal and side sections, of rolls journaled therein for longitudinal adjustment, a draft-bar having detachable connections with and adapted to be shifted to either side of the frame, supporting-bars pivoted to swing longitudinally of the frame, and means on the frame for normally holding the bars in parallelism with the longitudinal sections of the frame.

6. In a road-roller, the combination with a main frame, of rolls of less than half the width of the frame journaled upon opposite sides of the center, the rolls being adjustable longitudinally to permit of their being shifted toward or away from said center, and lugs on the upper surface of the main frame for the reception of a lever to forcibly adjust the rolls.

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

CHARLES W. CARTER.

Witnesses:
S. M. DU PONT,
J. S. KING.