D. COPELAND, Jr.

Lawn-Roller.

No. 166,915. Patented Aug. 24, 1875.

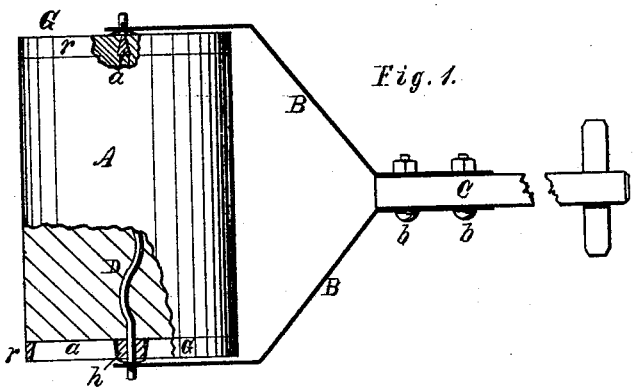

Fig. 1.

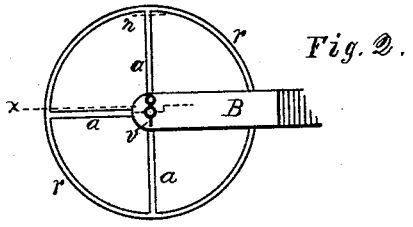

Fig. 2.

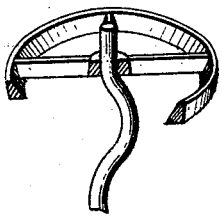

Fig. 3.

Witnesses:
E. B. Whitmore
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UNITED STATES PATENT OFFICE.

DAVID COPELAND, JR., OF ROCHESTER, NEW YORK.

IMPROVEMENT IN LAWN-ROLLERS.

Specification forming part of Letters Patent No. **166,915**, dated August 24, 1875; application filed May 3, 1875.

To all whom it may concern:

Be it known that I, DAVID COPELAND, Jr., of Rochester, in the county of Monroe and State of New York, have invented a new and useful Cement Lawn-Roller; and I do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawings making part of this specification, in which—

Figure 1 is a top sectional view of my invention. Fig. 2 is an end view of the roller. Fig. 3 is a perspective sectional view of one head and one end of the axial rod D.

The object of this invention is to provide a lawn-roller that shall be substantial and durable, and as heavy as desired, and that may be afforded at a fraction of the cost of either stone or iron. It consists in the employment of a roller formed of cement, strengthened and protected by an axial rod and metallic heads molded in the ends.

The roller A is formed in a mold, preferably composed of a cylindrical case divided longitudinally and suitably clamped together, and one end fitted into a follower-board. The metallic heads G are composed of a rim, *r*, hub *h*, and two or more spokes, *a*. These parts are each beveled, as shown in the sectional portions of Fig. 1, the dotted line *x* in Fig. 2 indicating the direction of the section shown at the lower end of the roller in Fig. 1, and the dotted line *n* that shown at the upper end. I prefer to bend the axial rod D, as shown in Fig. 1, to prevent the possibility of its getting loose by use. One end of the rod D is inserted through the hub *h* of one of the heads G, and then placed upon the follower or mold board, and the case adjusted around them. This head G is placed with the thin edge of the rim *r* and arms *a* downward. The cement is tamped in, filling the spaces between them and around the rod D, until the case or mold is filled. The other head is then placed upon the rod D, and forced down into the upper end of the case, and the cement struck off to the outer face of the spokes or arms and rim of the head.

This upper head may be adjusted upon the rod, and within the end of the case, before the filling of the mold is commenced, if desired, which would avoid the necessity of providing any centering support or guide for the upper end of the rod.

The handle C is secured to the draft-straps B by suitable bolts *b*. The straps B are keyed to the ends of the rod D by keys or pins *v*.

From a long series of varied experiments in the effort to produce a low-priced lawn-roller, I have at last succeeded in providing not only a cheap one in price, but one which is also thoroughly substantial and durable in practice.

It will be seen that the metallic heads G thoroughly protect the ends of the roller, and prevent the cement from being flaked or chipped off by coming in contact with stones or other hard substances.

The rod D may be flattened in places, or otherwise roughened, instead of being bent or curved, as shown; or it may be made in two short sections.

What I claim as my invention is—

In a lawn-roller, the concrete body, the crooked shaft, and the dovetail heads and arms, all combined substantially as shown and described.

D. COPELAND, JR.

Witnesses:

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