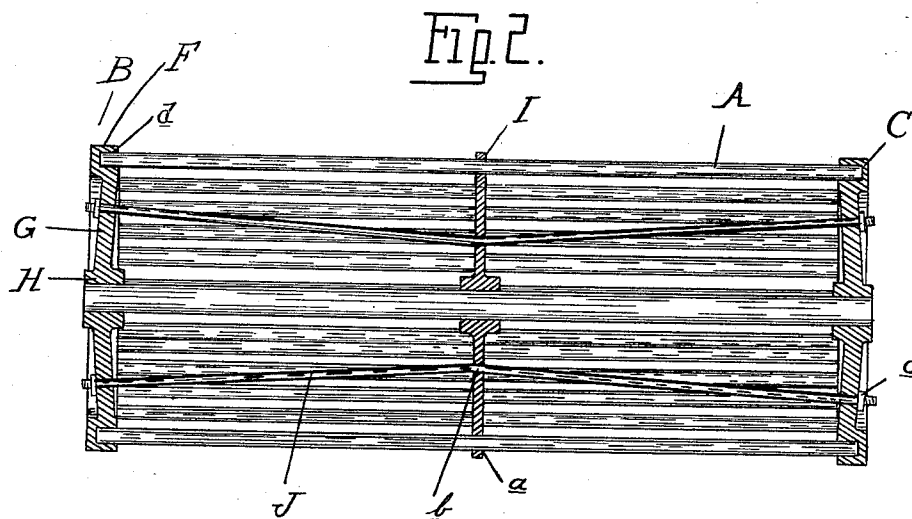
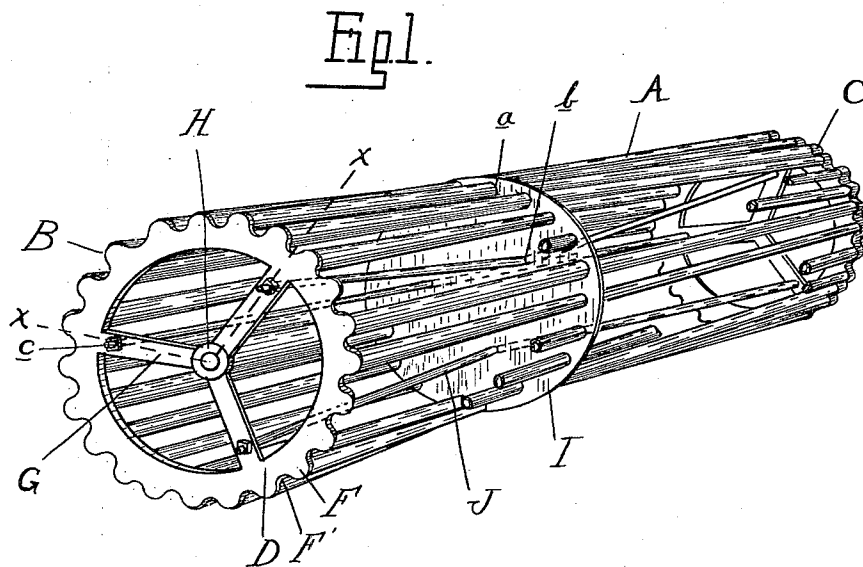


E. S. WILDER.
LAND ROLLER.
APPLICATION FILED JAN. 9, 1909.

1,009,122.

Patented Nov. 21, 1911.



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UNITED STATES PATENT OFFICE.

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LAND-ROLLER.

1,009,122.

Specification of Letters Patent.

Patented Nov. 21, 1911.

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To all whom it may concern:

Be it known that I, EDWARD S. WILDER, a citizen of the United States of America, residing at Monroe, in the county of Monroe and State of Michigan, have invented certain new and useful Improvements in Land-Rollers, of which the following is a specification, reference being had therein to the accompanying drawings.

The invention relates particularly to a roll section for a land rolling or soil pulverizing implement, and it consists in the construction of the roll section, and in the peculiar arrangement and combination of its parts; further, in a reinforcement for the cylindrical rolling surface of the section, in means for holding the reinforcement in its operative position; and, still further, in certain details of construction, as will be more fully hereinafter set forth.

In the drawings,—Figure 1 is a sectional perspective view of a roll section embodying my invention; and Fig. 2 is a section taken on line $x-x$ of Fig. 1.

The roll section illustrated is of a type for pulverizing the soil, comprising a cylindrical rolling surface made up of a circumferential series of spaced bars A. Heads B and C are provided for the ends of the bar series, which are preferably of the spider type as illustrated in Fig. 1, consisting of an annular section D having preferably an undulated periphery, made up of projections F and depressions F', spokes G, and a suitable hub H.

To strengthen the rolling surface I employ a reinforcement I, which I have here illustrated in the form of a disk positioned centrally within the series of bars A and provided with a circumferential series of apertures a through which the several bars of the roll section extend. To prevent longitudinal travel of the reinforcement, one or more tie members J are employed which extend through apertures b in the reinforcing disk and are connected at their ends to the heads, the tie bars extending in oblique angular relation to the disk, preferably in the form of a truss rod. The ends of the tie rods, as shown, project through the spokes of the heads, are threaded upon their extremities, and provided with nuts c , by means of which they may be tightly

clamped in place. This disk, as shown, is made comparatively thin preferably throughout, so that the circumferential portion projecting beyond the rolling surface will be sufficiently sharp to cut into the soil during the operation of rolling, thereby not only assisting in breaking up the clods but permitting the central portion of the rolling surface adjoining the reinforcement to contact with the ground.

It will be obvious from the construction of reinforcement described that the rolling surface is materially strengthened intermediate the heads, and by reason of the bent tie members employed and its travel in either direction longitudinally of the roll section is limited, whereby it is maintained in its proper position to perform its function of a reinforcement.

In the preferred form of roll section the heads are removable from the series of bars A, each projecting portion F upon the heads being provided with a socket d which receives the end of the bar. As thus constructed, the tie members for the reinforcement also serve the additional function of holding the heads in place against the ends of the pulverizer bars.

From the foregoing description, it will be readily seen that the roll section is materially strengthened by reason of the reinforcement, the latter is at all times maintained in its proper operative position, and the entire structure by reason of its simplicity of construction may be manufactured at minimum cost.

What I claim as my invention is,—

1. In a roll section, the combination with a rolling surface, of an internal reinforcement therefor, and a longitudinal tie member for the reinforcement forming in connection with the latter and the rolling surface a locking truss holding the reinforcement against endwise movement in either direction.

2. A roll section, comprising ends, a rolling surface therebetween, an internal reinforcement for said surface between its ends, and a plurality of longitudinally-extending truss rods connecting the ends and engaging the reinforcement, locking the latter against endwise movement in either direction.

3. A roll section, comprising a circumfer-

ential series of bars forming a rolling surface, removable heads against which the bar ends abut, an internal reinforcement through which the bars pass, and a bent tie member uniting the heads and locking the reinforcement against endwise movement in either direction.

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

EDWARD S. WILDER.

Witnesses:

FRANK STONER,
JESSE H. ROOT.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."