No. 869,676. PATENTED OCT. 29, 1907.

J. WOLFINGER.

LAND ROLLER.

APPLICATION FILED JUNE 20, 1907.

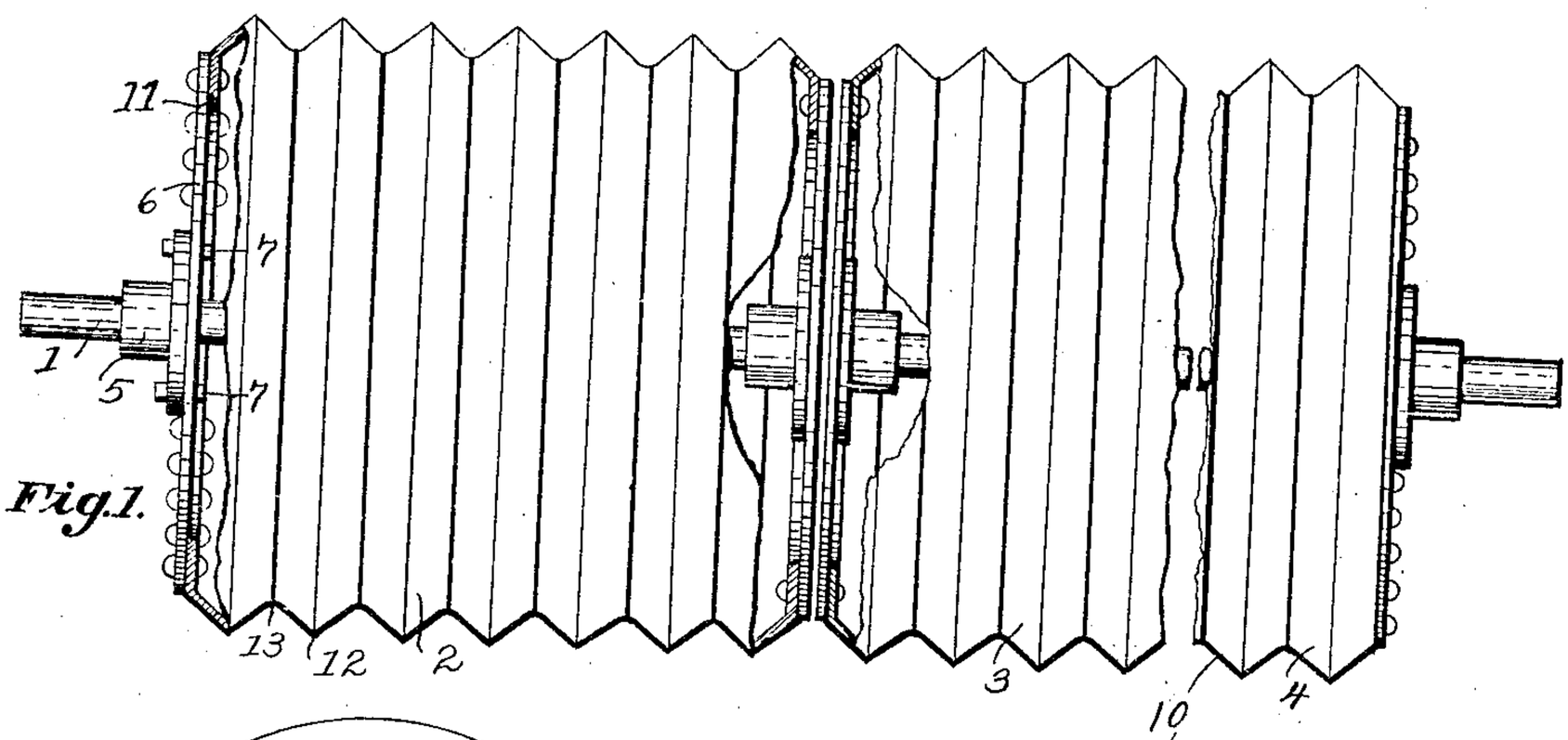

Fig. 1.

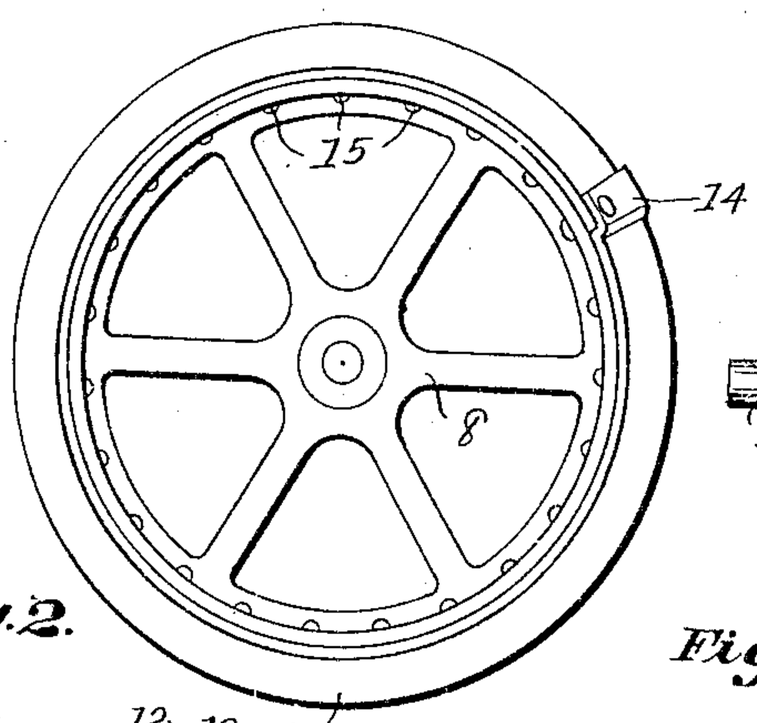

Fig. 2.

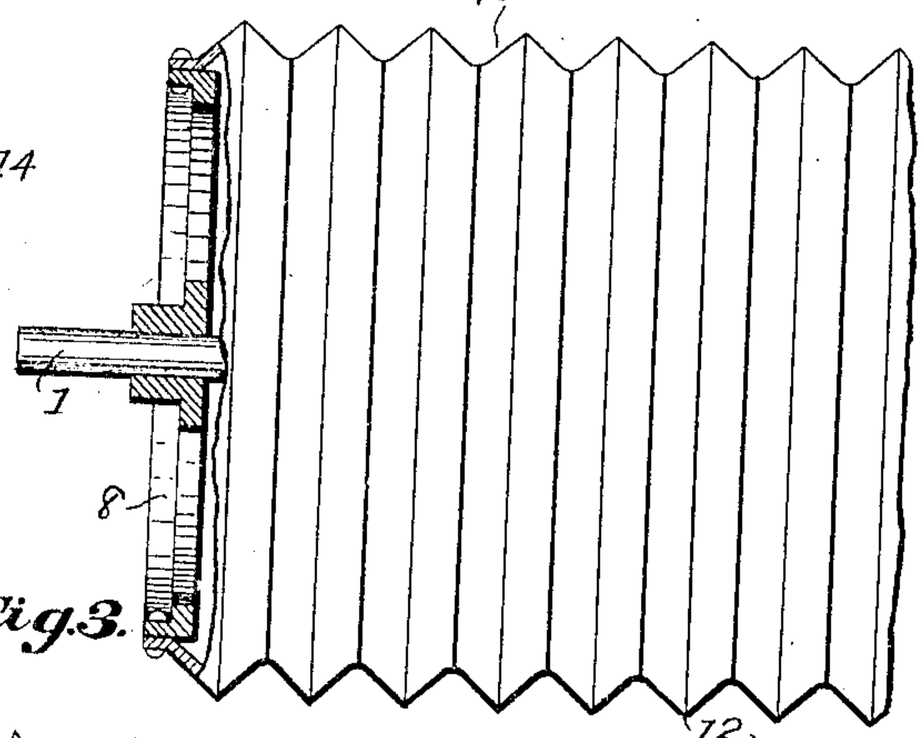

Fig. 3.

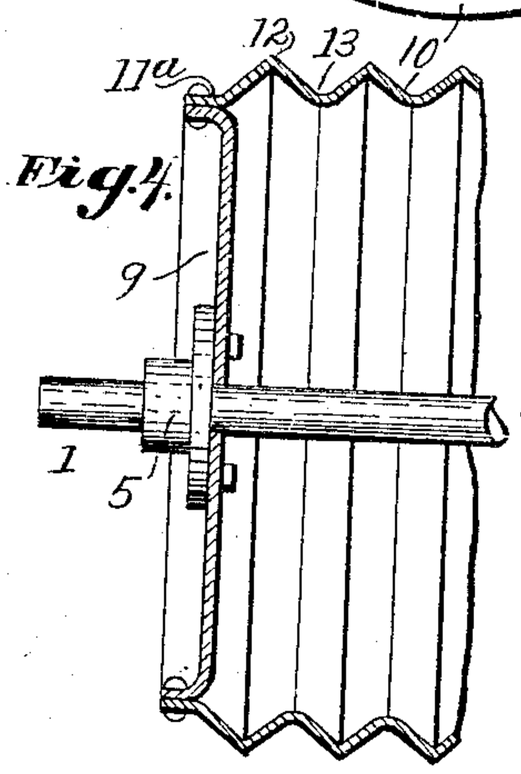

Fig. 4.

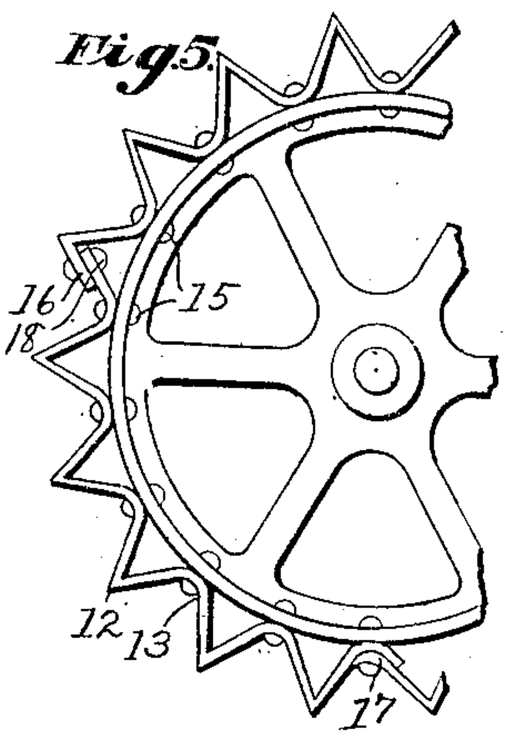

Fig. 5.

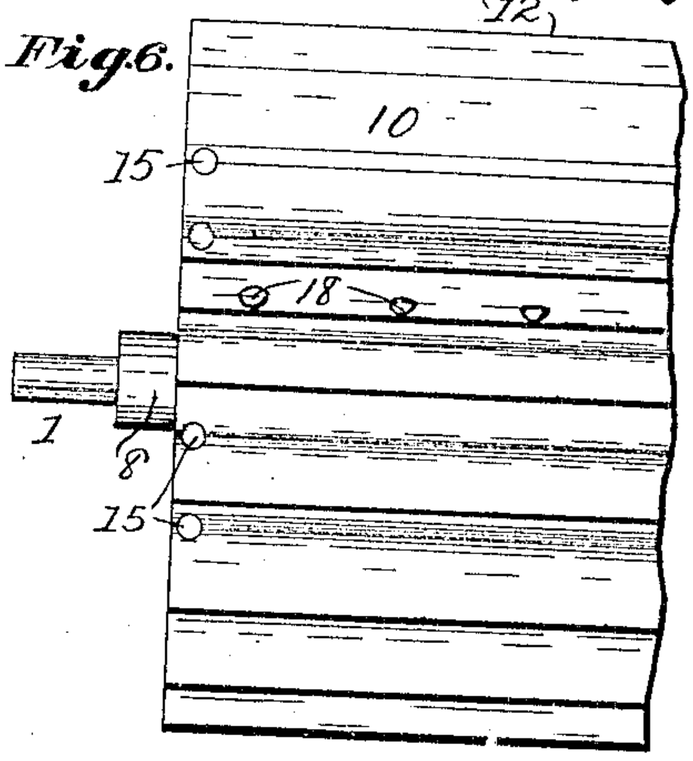

Fig. 6.

Witnesses
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UNITED STATES PATENT OFFICE.

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LAND-ROLLER.

No. 869,676. Specification of Letters Patent. Patented Oct. 29, 1907.

Application filed June 20, 1907. Serial No. 379,951.

To all whom it may concern:

Be it known that I, JOSEPH WOLFINGER, a citizen of the United States, residing at Dundas, in the county of Calumet and State of Wisconsin, have invented a new and useful Improvement in Land-Rollers, of which the following is a specification.

My invention relates to the construction of the outside shell of the roller of sheet metal, the same being corrugated, and forming thereby a roller having a corrugated surface throughout its length, the corrugations being for the purpose the better pulverizing of the soil upon which the roller is used, and the object of the improvement is, to make a corrugated surfaced roller of sheet metal at a lower cost than one can be made corrugated of cast metal, when a considerable thickness of its shell is in one solid body of metal, thé corrugations being applied to the rollers, circumferentially or longitudinally, the improvement being shown in the accompanying drawing, in which,

Figure 1 is a side elevation of a portion of the length of a roller embodying my improvement, the shell being broken in places for showing its construction. Fig. 2 is an end elevation of a roller showing a different end or head than in Fig. 1. Fig. 3 is a side elevation of one end of a roller, the end being in section. Fig. 4 is a vertical section longitudinally of an end portion of a roller, showing another modification of the end or head of the roller. Fig. 5 is an end view of the roller, the corrugations of which are arranged lengthwise of it. Fig. 6 is a side elevation of the same.

Similar numerals and letters indicate like parts in the several views.

1, indicates a shaft upon which any suitable number of roller sections, 2, 3 and 4, are mounted; 5, a flanged hub secured upon the shaft 1, to which a flat circular disk 6 is secured with bolts or rivets 7. The ends of the roller can be formed in various ways, a flange and disk in Fig. 1, of a cast spider 8 in Fig. 2, or a flange 5 and plate 9 in Fig. 4, with the circumference of the plate flanged like a boiler head, and the ends of the cylindrical shell 10, provided with a flange 11, or 11ª, as required for their connection with the particular form of head used. Sheets of metal of a suitable thickness, quality and width and length, are corrugated into the desired form by running them between suitably formed rollers for producing the connecting flanges, as 11 or 11ª, the pointed ridges 12 and rounded depressions 13, said ridges and depressions being any angle or circle desired. After being properly corrugated, the sheets are to be riveted together, as at 14, and then riveted or bolted to the heads of the roller with rivets 15. It will be evident that the sheets can be joined together by riveting at the side or end edges of the sheets.

I am aware that rollers having a corrugated surface are not new, and I make no claim broadly to a roller having such a surface.

Having described my invention, what I claim and desire to secure by Letters Patent, is,—

1. A land roller formed of corrugated sheet metal.

2. A land roller formed of corrugated sheet metal and having the corrugations circumferentially arranged thereon.

3. A land roller, the shell of which is formed of corrugated sheet metal, the edges thereof where they are to be connected with the ends of the roller, being adapted in form to be bolted thereto.

4. A land roller formed of corrugated sheet metal, the outer circumference of the corrugations being a comparatively sharp angle.

5. A land roller formed of corrugated sheet metal, the outer surface of the inner corrugations being curved transversely of the corrugations.

6. A land roller formed of corrugated sheet metal, the corrugations being circumferentially arranged, and of a curved form transversely of their smallest diameter.

7. A land roller formed of corrugated sheet metal, and consisting of a plurality of independent sections, a head at each end of each section, said sections being mounted upon a single shaft and forming thereby a substantially continuous corrugated surface the length of the roller.

8. A land roller formed of corrugated sheet metal, the corrugations thereof being circumferentially arranged and their outer circumference forming a comparatively sharp angle.

JOSEPH WOLFINGER.

Witnesses:
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GEORGE RINTHER.