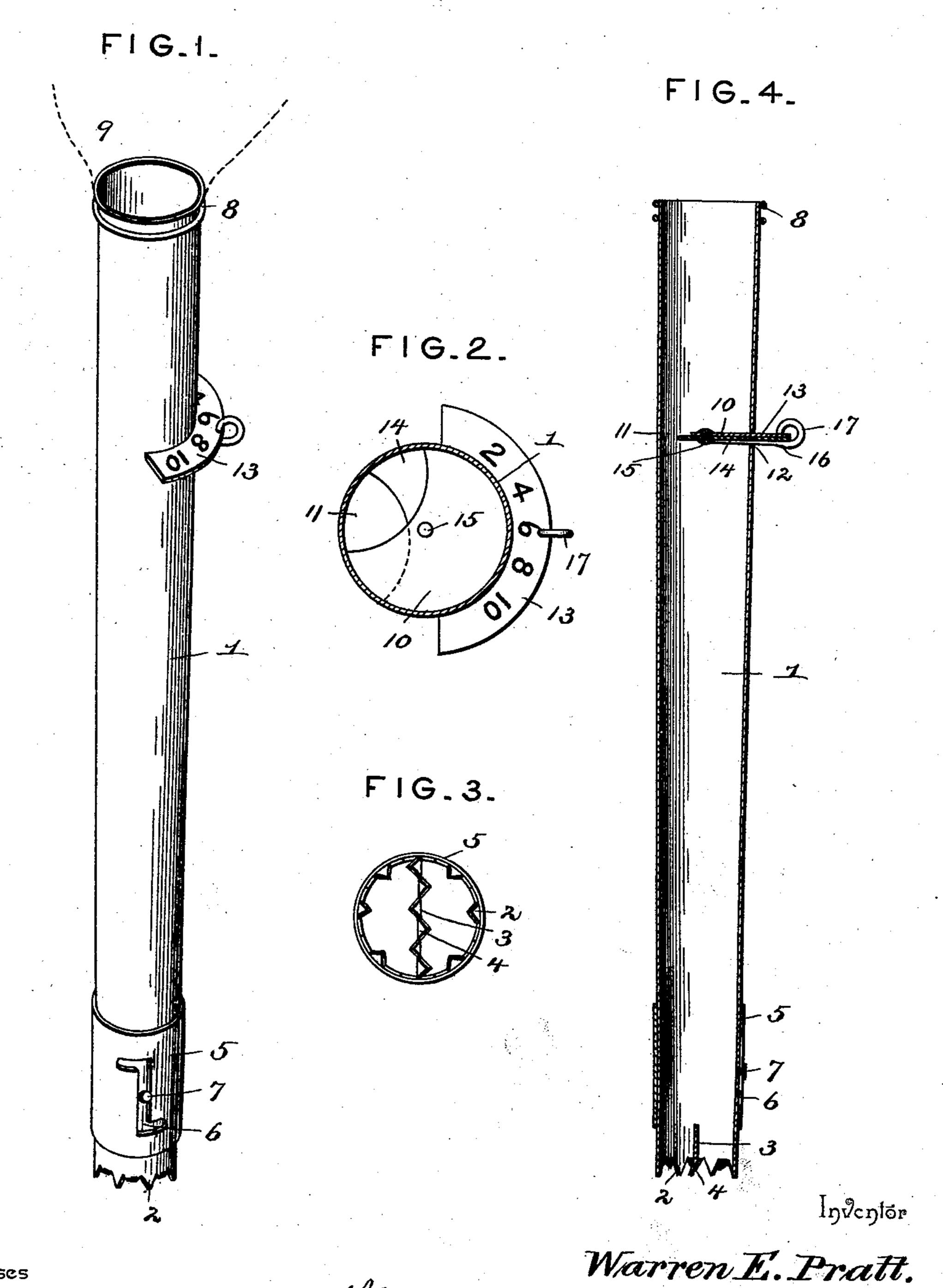
## W. E. PRATT. BROADCAST SEED SOWER.

No. 506,542.

Patented Oct. 10, 1893.



Witnesses

By his Afforneys

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## United States Patent Office.

WARREN E. PRATT, OF SAGEVILLE, MICHIGAN.

## BROADCAST SEED-SOWER.

SPECIFICATION forming part of Letters Patent No. 506,542, dated October 10, 1893.

Application filed June 21, 1893. Serial No. 478,363. (No model.)

To all whom it may concern:

Be it known that I, Warren E. Pratt, a citizen of the United States, residing at Sageville, in the county of Shiawassee and State of Michigan, have invented a new and useful Broadcast Seed-Sower, of which the following is a specification.

My invention relates to improvements in seeders, and more particularly to that class operated by hand or manually designed for the purpose of sowing broadcast grass-seed, or it may be employed for sowing other small seed.

The objects of the invention are to provide a planter of this class that may be conveniently carried or supported in any suitable way and which is adapted to accurately determine the quantity of seed being discharged per acre, and also which will evenly distribute said seed over the surface which it operates upon.

Other objects and advantages of the invention will appear in the following description and the novel features thereof will be particularly pointed out in the claims.

25 Referring to the drawings—Figure 1 is a perspective view of a planter embodying my invention. Fig. 2 is a transverse sectional view above the cut-off. Fig. 3 is a bottom plan view of the lower end of the discharge tube.

30 Fig. 4 is a vertical longitudinal sectional view.

Like numerals of reference indicate like parts in all the figures of the drawings.

In practicing my invention I employ a tube or pipe 1, the same being of any suitable length 35 and preferably being decreased in size or tapered from its upper to its lower end. The lower end of the tube is provided with a series of teeth 2, each alternate tooth being bent inwardly, as shown. This lower end is also 40 crossed by a transverse strip 3, whose lower edge is also toothed, as at 4, said teeth being deflected in alternate opposite directions. Over this lower end a movable sleeve 5 is passed, the same having a bayonet-slot 6 in 45 one side which is engaged by a lug 7 projecting from the tube or pipe, and which limits the up and down movement of said sleeve upon the pipe and serves to lock said sleeve in either of its positions. When the sleeve is up the 50 teeth at the lower end of the tube or pipe are exposed, and when in its lowest position they

are covered and protected by said sleeve. The upper end of the tube or pipe 1 is provided with two angular beads 8 between which the mouth of a sack, shown by dotted lines and 55 designated at 9, may be bound or otherwise secured. At a point below the sack and the upper end of the tube or pipe a crescentshaped diaphragm 10 is fixedly located therein, and by reason of its shape an opening 11 6c occurs at one side thereof. This diaphragm is at its outer edge extended through a slot 12 formed in the side wall of the tube or pipe and projects beyond the same thus forming an indicator plate 13 upon which degrees are 65 marked and indicated. Pivoted to said crescent-shaped diaphragm is an oscillating cutoff 14, also crescent shaped, and its opening is adapted to combine with that of the cut-off so as to increase or decrease the size of the same. 70 A rivet 15 passes centrally through the diaphragm and cut-off and serves to swivel or pivot the two together. A wire arm 16 is secured to one edge of the cut-off, extends through the slot below the indicator plate and 75 is upwardly and inwardly bent to form a convenient eye 17 by which it may be manipulated, and also terminates against said indicating plate or has frictional contact therewith whereby it may be locked at any point 80 of its movement upon the plate.

This completes the construction of the planter and the operation of the same is as follows: The seed being placed in a bag the latter is secured in position upon the upper 85 end of the tube or pipe, and the handle swung upon the indicating plate to a desired degree which will indicate the number of quarts per acre. Such movement upon the part of the handle will, of course, serve to adjust the cut- 90 off with relation to the diaphragm, in a manner heretofore mentioned, so that the out-put of seed per acre can be accurately and to a certainty determined. The seed dropping through the opening in the diaphragm and 95 cut-off strike against the deflected teeth at the lower end of the tube or pipe, and hence the same are distributed evenly and scattered in all directions.

From the foregoing description in connection with the accompanying drawings, it will be seen that I have provided a very simple and

effective planter to be employed for distributing evenly grass and other small seed, and this too in predetermined quantities.

Having described my invention, what I

5 claim is—

1. In a planter of the class described, a tube or pipe having its lower end provided with a series of teeth inwardly disposed, substantially as specified.

2. In a planter of the class described, a tube or pipe having its lower end provided with a series of teeth alternately inwardly disposed,

substantially as specified.

3. In a planter of the class described, a tube or pipe having its lower end provided with teeth some of which are inwardly disposed or bent, a transverse strip arranged in said tube or pipe, the lower edge of the same being toothed and deflected in reverse directions, substantially as specified.

4. In a planter of the class described, a tube or pipe, combined with a diaphragm located therein, a slot adjacent to the diaphragm, an indicating plate arranged adjacent to the slot,

25 a rotary cut-off pivoted to the diaphragm, and an arm extending from the cut-off and adapt-

ed to move over the plate, which latter is divided into degrees, substantially as specified.

5. In a planter of the class described, the combination with a tube or pipe having a slot, 30 a crescent-shaped diaphragm arranged above the slot and extending beyond the same to form an indicating plate and divided into degrees, of a crescent-shaped cut-off pivoted to the diaphragm, an arm extending from the 35 outer edge of the cut-off to the slot and bent upwardly and inwardly forming an eye embracing the edge of the indicating plate and resting thereon where it is locked by frictional contact therewith, substantially as specified. 40

6. In a planter of the class described, a tube or pipe having its lower end provided with a series of teeth, and a transverse strip arranged in said tube or pipe and also having a toothed lower edge, substantially as specified.

In testimony that I claim the foregoing as my own I have hereto affixed my signature in the presence of two witnesses.

WARREN E. PRATT.

Witnesses:

A. A. MARSHALL,

C. R. CRANE.