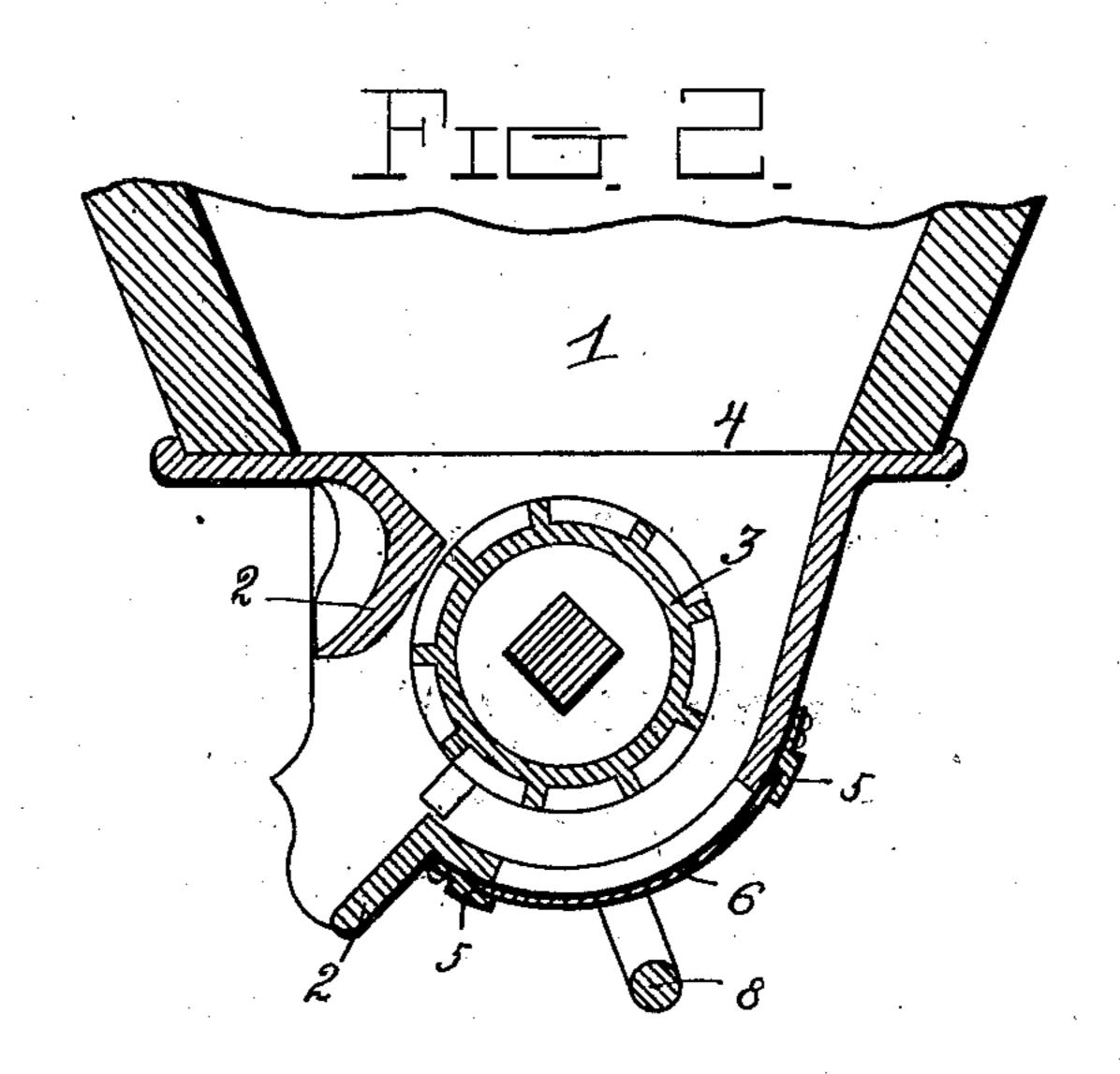
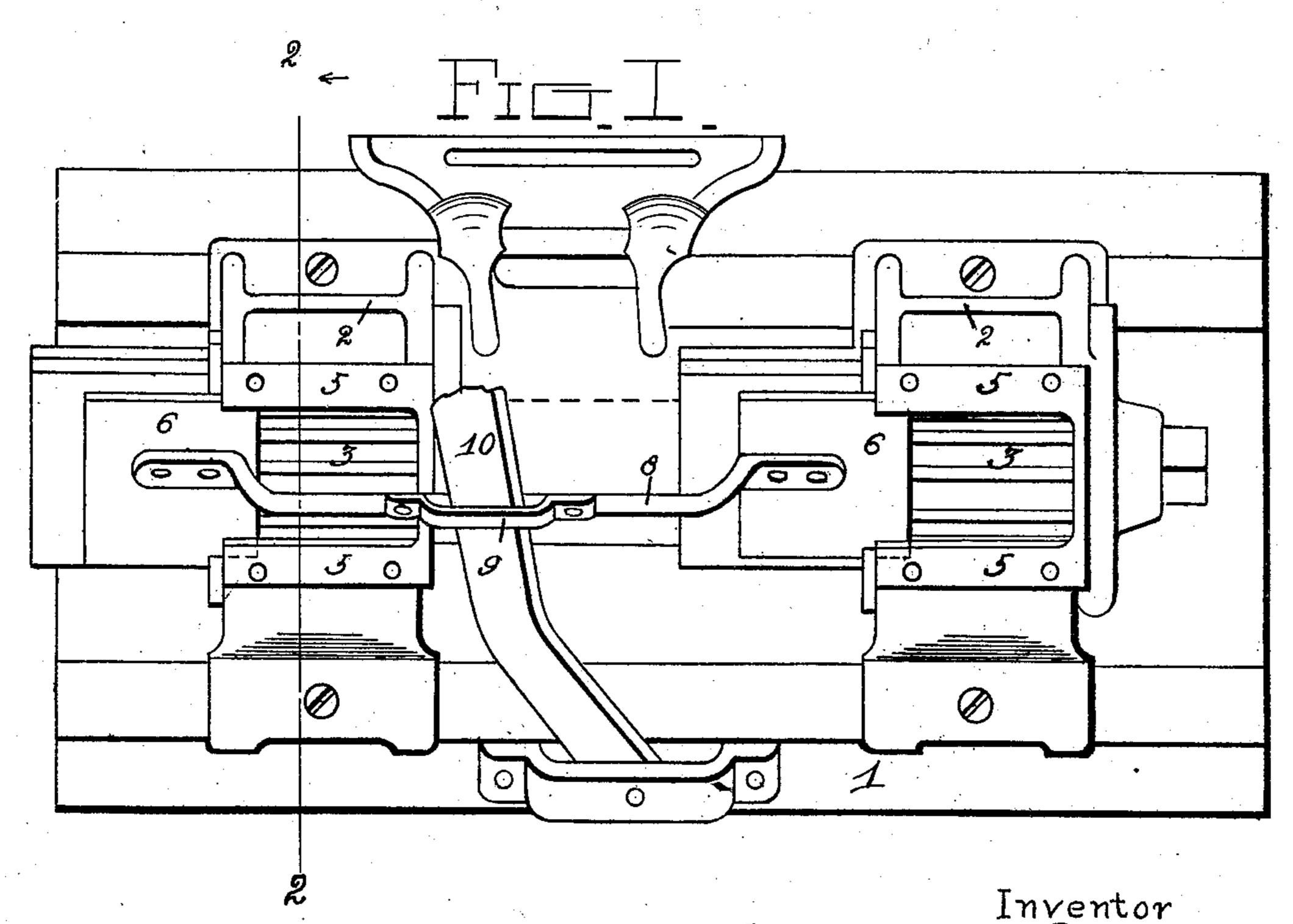
C. O. PALLAS. ATTACHMENT FOR SEED PLANTERS. APPLICATION FILED JUNE 29, 1907.





VVitnesses. C.9. Sterzer By Franks, applemen

UNITED STATES PATENT OFFICE.

CHARLEY O. PALLAS, OF BARNESVILLE, MINNESOTA.

ATTACHMENT FOR SEED-PLANTERS.

No. 889,329.

Specification of Letters Patent.

Patented June 2, 1908.

Application filed June 29, 1907. Serial No. 381,455.

To all whom it may concern:

Be it known that I, Charley O. Pallas, citizen of the United States of America, and resident of Barnesville, in the county of Clay and State of Minnesota, have invented certain new and useful Improvements in Attachments for Seed-Planters, of which the following is a specification.

This invention relates to new and useful improvements in seeders and has relation more particularly to that class known as

"force feed."

It is an object of this invention to provide novel means in a device of this character whereby that portion of the delivery cups beneath the wheel may be cleansed.

Furthermore, an object of this invention is to provide a device of the character noted which will possess advantages in points of simplicity, efficiency and durability, proving at the same time comparatively inexpensive to manufacture.

With the foregoing and other objects in view, the invention consists in the details of construction and in the arrangement and combination of parts to be hereinafter more fully set forth and claimed.

In describing the invention in detail, reference will be had to the accompanying drawings forming part of this specification wherein like characters denote corresponding parts in the several views, in which—

Figure 1, is an inverted plan view of the seed hopper; and Fig. 2, is a section on the

35 line 2—2 of Fig. 1.

In the drawings, 1 indicates the base of a hopper which is in communication with the delivery cups 2, provided with the forcing wheels 3. These parts may be of any ordiator and or preferred construction except that

the under surface of each cup is provided

with the opening 4.

Clamped to the exterior of the cups and adjacent the edges of the openings therein are the plates 5, which form runways or 45 guides for the closing plates 6. It is thought that it will be plainly apparent that by moving these closing plates 6, access can be had to the delivery cups for the purpose of cleansing the said cups at those portions be- 50 neath the forcing wheels. The plates 6, may be moved from their normal or closed position by any desired means, but it has been found preferable to provide the arrangement as illustrated in the drawings. 55 Secured to the plates 6, is the angular rod 8. This rod 8, is provided intermediate its length with the strap 9, through which passes the handle 10, which is pivoted at one end to the hopper 1. By moving this handle 10, 60 the plates 6, are caused to either open or close in unison.

What I claim is:—

In combination, a hopper, delivery cups carried thereby, forcing wheels within the 65 cups having openings beneath the wheels, plates clamped to the cups around the openings forming guideways, plates movable in the guideways for closing the openings of the cup, a rod secured to the plate, a strap on the 70 rod, and an operating handle pivoted to the hopper passing loosely between the strap of the rod for moving the rod.

In testimony whereof I affix my signature in the presence of two witnesses this 1st day 75

of June, 1907.

CHARLEY O. PALLAS.

Witnesses:

ORRIS OLIVER, NELLIE BRISLAIN.