

(No Model.)

A. TORGERSON.

PULVERIZING ATTACHMENT FOR SEEDERS.

No. 369,481.

Patented Sept. 6, 1887.

Fig: 1.

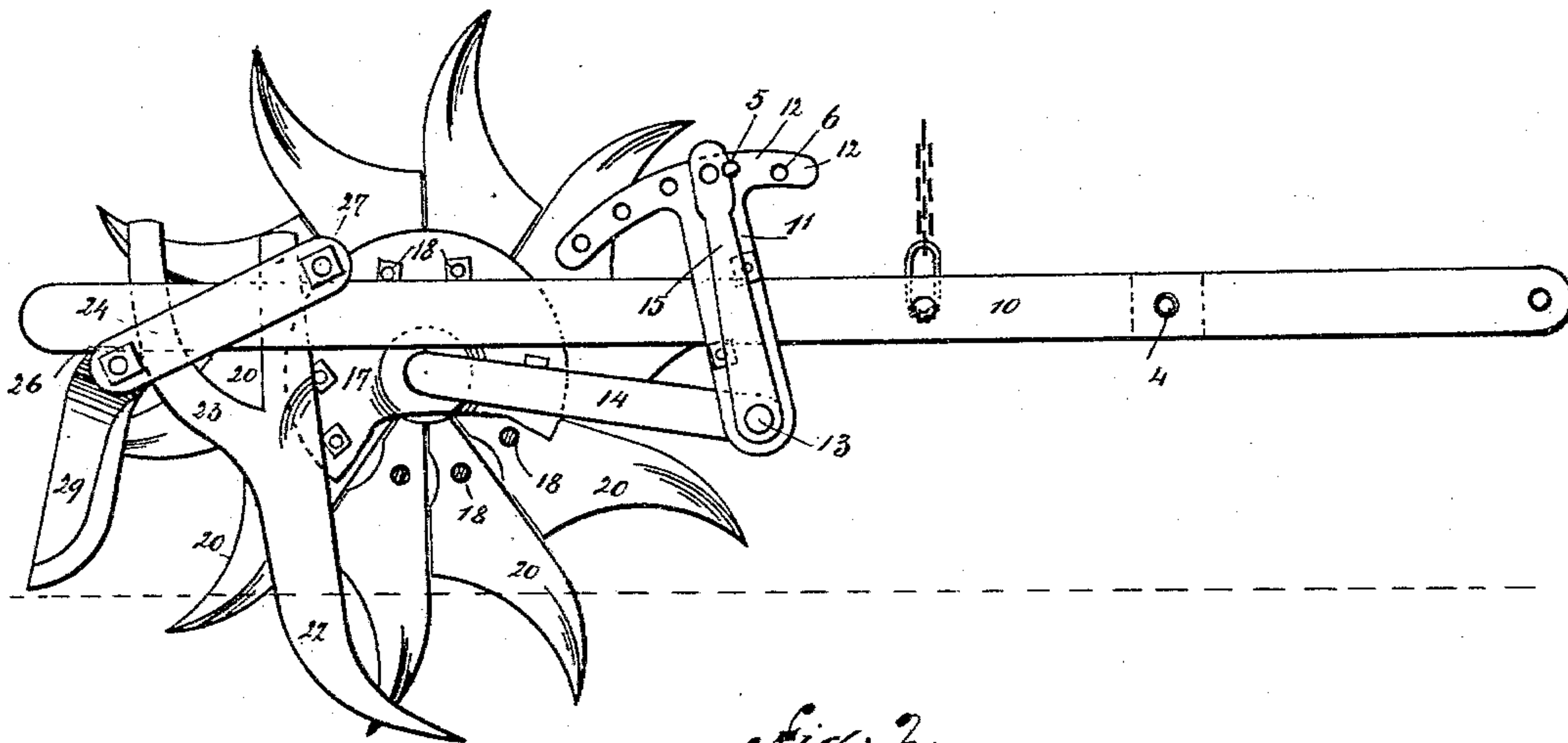


Fig: 2.

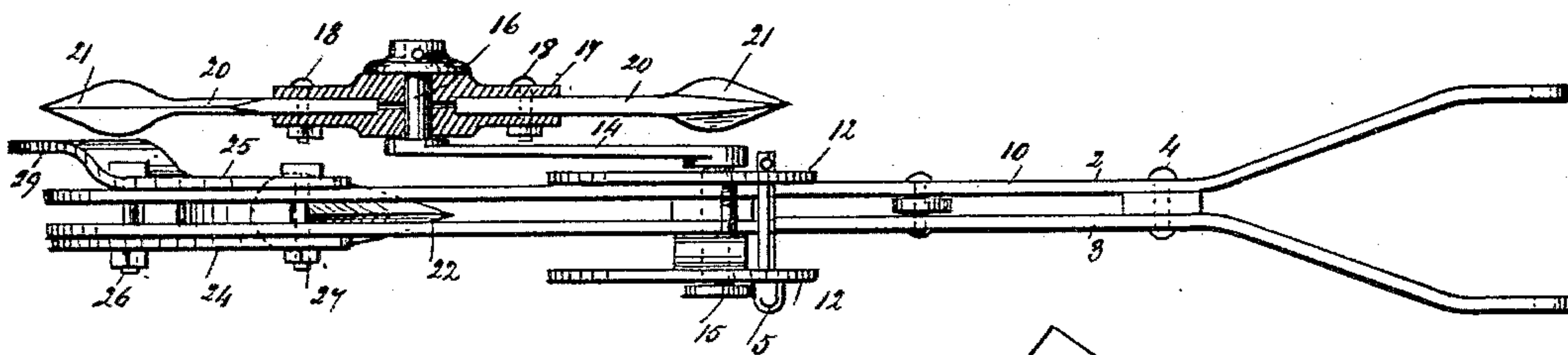


Fig: 3

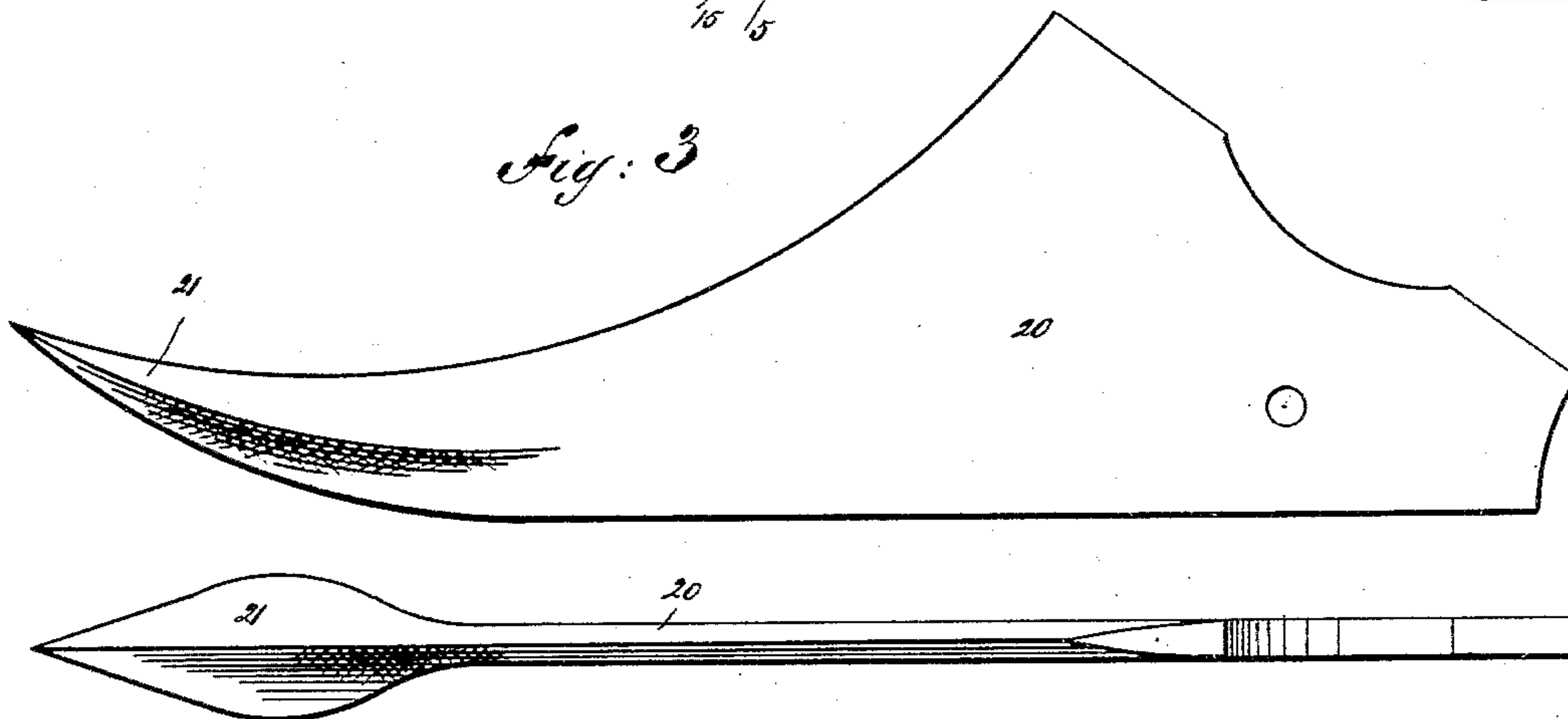


Fig: 4.

WITNESSES:

WITNESSES:
Chas. Nida.
C. Sedgwick

INVENTOR:

BY *A. Sorgerson*
Munn & Co.
ATTORNEYS.

UNITED STATES PATENT OFFICE.

ANTHONY TORGERSON, OF BARNES, DAKOTA TERRITORY.

PULVERIZING ATTACHMENT FOR SEEDERS.

SPECIFICATION forming part of Letters Patent No. 369,481, dated September 6, 1887.

Application filed June 18, 1887. Serial No. 241,747. (No model.)

To all whom it may concern:

Be it known that I, ANTHONY TORGERSON, of Barnes, in the county of Barnes and Territory of Dakota, have invented a new and Improved Pulverizing Attachment for Seeders, of which the following is a full, clear, and exact description.

This invention relates to seeders, the object of the invention being to provide a pulverizing attachment for each of the seeder-shovels; and to this end the invention consists of a sectional hub carrying radially-extending curved blades, said hub being arranged in connection with a clearer and mounted upon an adjustable arm, all as will be hereinafter more fully described, and specifically pointed out in the claims.

Reference is to be had to the accompanying drawings, forming a part of this specification, in which similar figures of reference indicate corresponding parts in all the views.

Figure 1 is a side view of a seeder-beam, representing the same as it appears when provided with my improved pulverizing attachment, a portion of the hub being broken away. Fig. 2 is a plan view of the construction illustrated in Fig. 1, the pulverizing attachment being represented in central horizontal section. Fig. 3 is a detail view of one of the pulverizer-blades, the view being given upon an enlarged scale and representing the side of said blade; and Fig. 4 is an edge view of the blade illustrated in Fig. 3.

In the drawings, 10 represents a seeder-beam, which is preferably made of two strips or lengths of metal, 2 and 3, that are united by bolts or rivets 4, spacing-strips being placed at proper intervals between the strips. Upon this beam 10, I clamp a segmental rack, 11, the upper portion of which is formed with circular apertured arms 12, while the lower portion serves as a bearing for a short shaft, 13, which carries a rigidly-connected arm, 14, and a lever, 15, said lever being held at any angle desired by moving a pin, 5, so that it will engage with the proper apertures, 6, of the arms 12.

To the end of the arm 14 there is secured a journal, 16, upon which there is mounted a segmental hub, 17, said hub being formed of two plates, that are apertured to receive clamp-

ing-bolts 18. Between the two sections of the hub 17, I arrange blades 20, the upper ends of which are substantially in the form of sectors, so that when a series of blades is inserted between the hub-sections their approaching edges will abut the one against the other, as is clearly shown in Fig. 1. The ends of these blades 20 are shaped to form shovels 21.

Just to the rear of the journal 16, I mount a cultivator-shovel, 22, the standard of which passes up through the bars 2 and 3, said standard being provided with a rearwardly-extending brace, 23, and this standard and brace are held to the beam by side clips, 24 and 25, that are united by bolts 26 and 27, the bolt 27 passing above the bars 2 and 3, while the bolt 26 passes below said bars. Just beyond the bolt 26 the clip 25 is carried toward the blades 20 and then down and to the rear in a vertical plane that is substantially parallel with the edges of the blades, this downwardly and rearwardly extending portion forming a clearer, 29. The points of the forward blades, 20, dip toward the ground.

By means of the attachment above described the ground passed over by the seeder will be thoroughly pulverized and broken, all clods and lumps carried upward by the blades 20 being cleared therefrom by the clearer 29, while the depth of cut of the shovel 22 may be regulated by adjusting the lever 15. When it is desired to raise the shovel 22 entirely above the ground, the lever 15 is moved forward and the pin 5 is inserted to the rear of the lever.

By reversing the position of the clearer-blades the apparatus can be used as a clearer on old ground.

Having thus fully described my invention, I claim as new and desire to secure by Letters Patent—

1. A pulverizing attachment for seeders, consisting of a hub, a series of radially-extending blades carried by the hub, and a means, substantially as described, for connecting the hub to a beam, as and for the purpose stated.

2. A pulverizing attachment for seeders, consisting of a hub, a series of blades carried by said hub, a journal upon which the hub is mounted, an arm by which the journal is sup-

ported, and a means for connecting the arm to a beam, as and for the purpose stated.

3. The combination, with a beam, of a rack, 12, secured thereto, a shaft, 13, carried by the
5 rack, a lever, 15, and an arm, 14, carried by the shaft, a hub mounted upon a journal carried by the arm, radial blades connected to the hub, and a clearer arranged in connection with the blades, substantially as described.

10 4. The combination, with a beam, 10, of a shaft, 13, a rack, 12, by which the shaft is

supported, an arm, 14, and a lever, 15, carried by the shaft, a sectional hub, 17, mounted on a journal carried by the arm, blades carried by the hub, a shovel, 22, and clips 24 and 15 25, the clip 25 being formed with a clearer, 29, substantially as described.

ANTHONY TORGERSON.

Witnesses:

HENRY L. LLOYD,
JOHN M. OLSON.