

No. 617,613.

Patented Jan. 10, 1899.

J. C. TATE.
SOIL PULVERIZING MACHINE.

(Application filed July 10, 1897.)

(No Model.)

2 Sheets—Sheet 1.

Fig. 1.

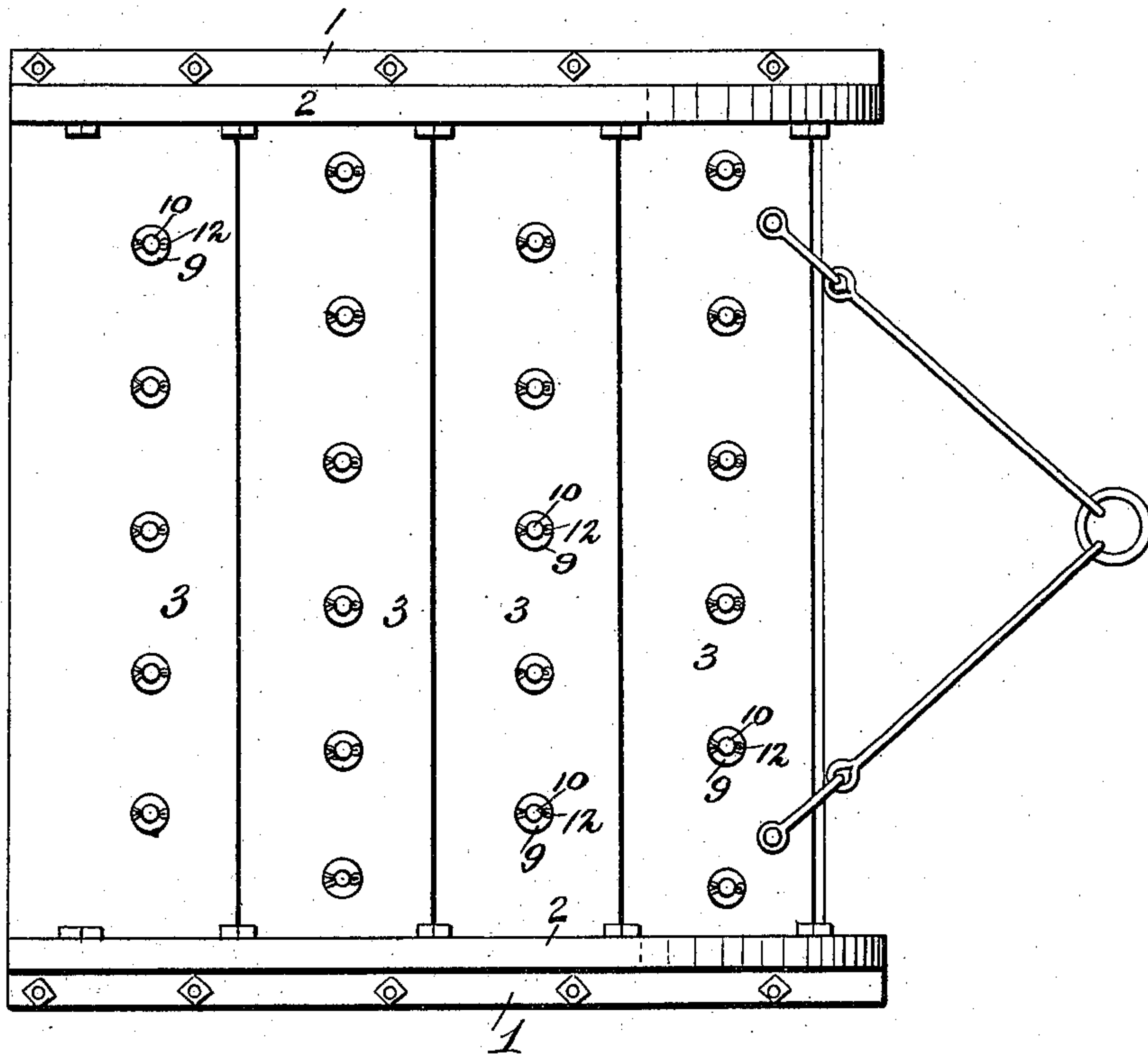
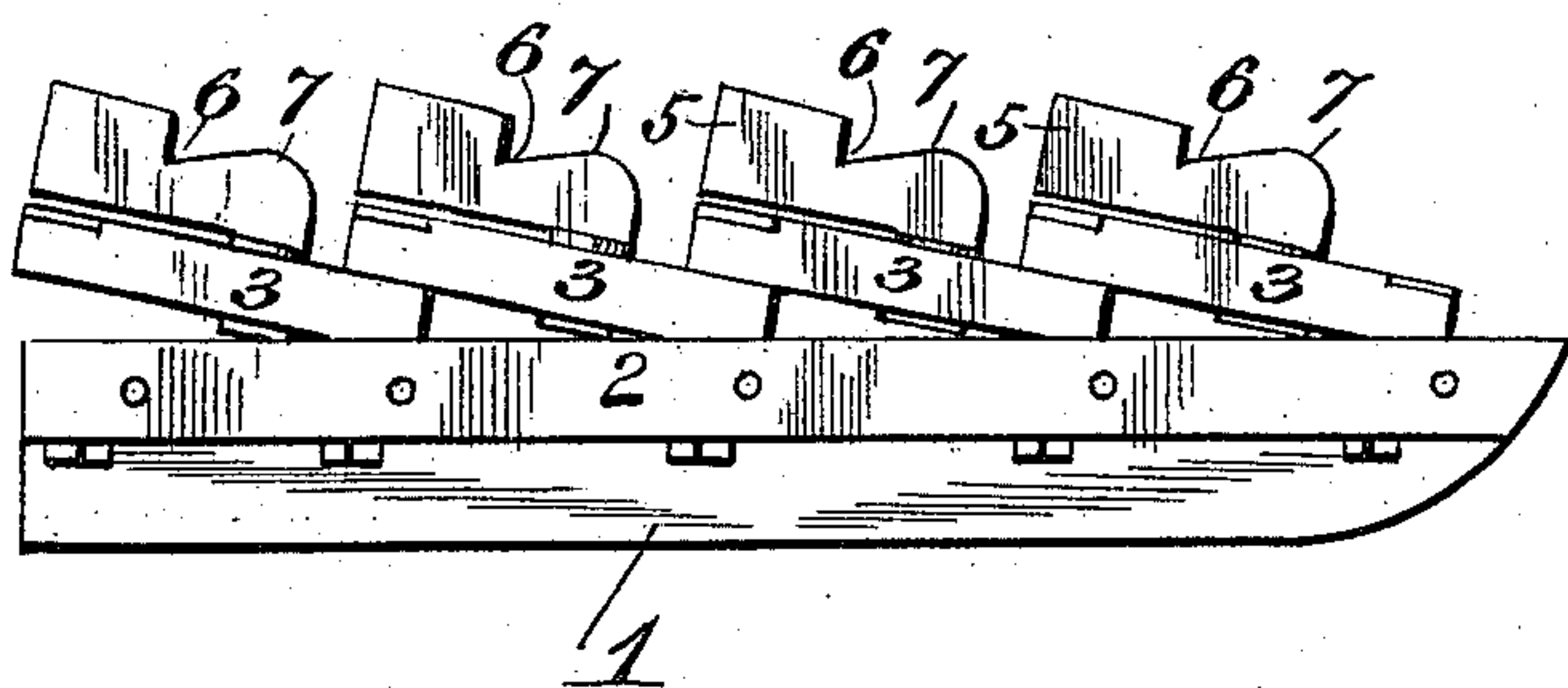


Fig. 3.



WITNESSES:

Frank L. Ourand
Bernett S. Jones

INVENTOR:

James C. Tate,

BY

Louis Baggett & Co.,
ATTORNEYS.

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Fig. 2.

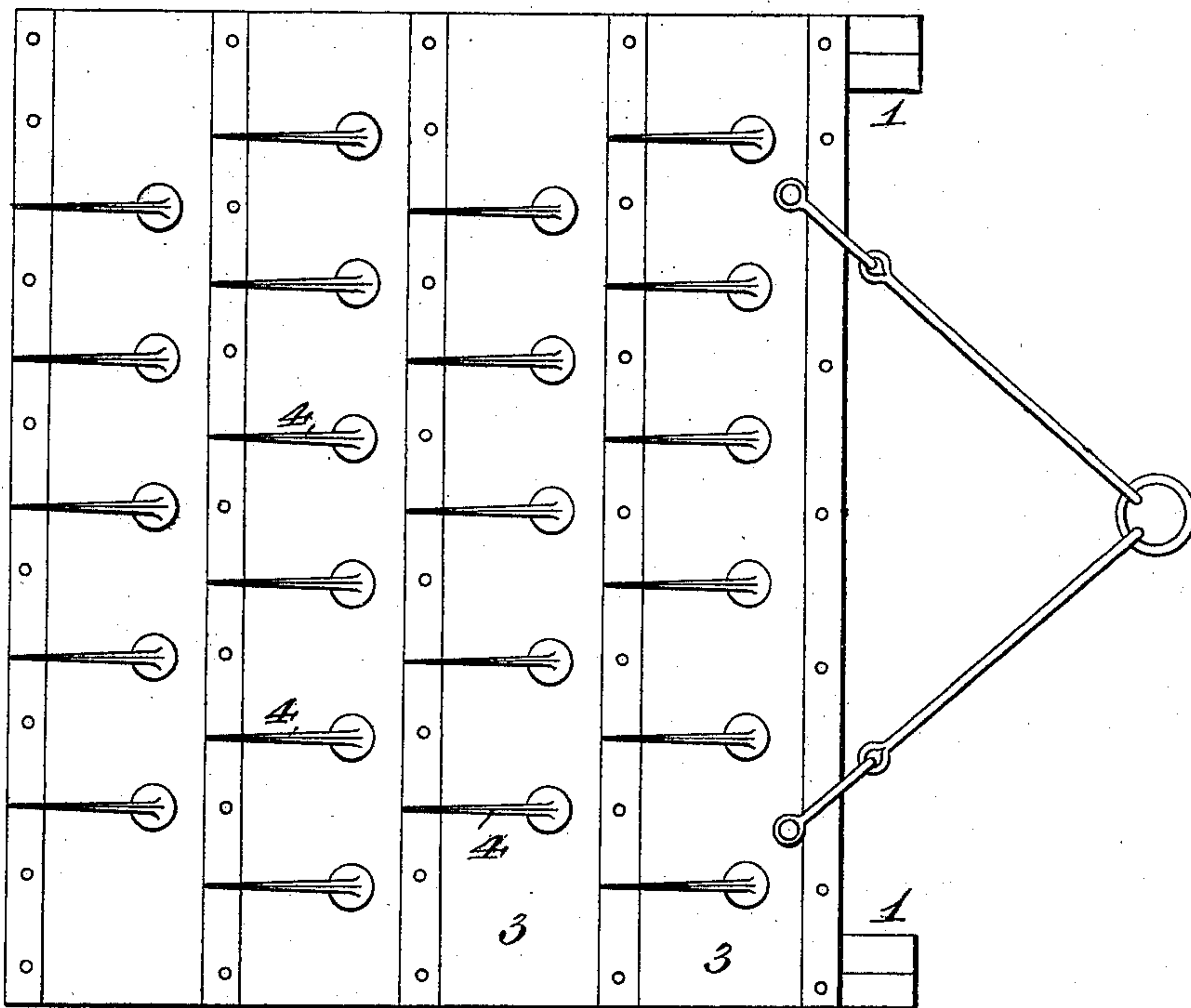


Fig. 5.

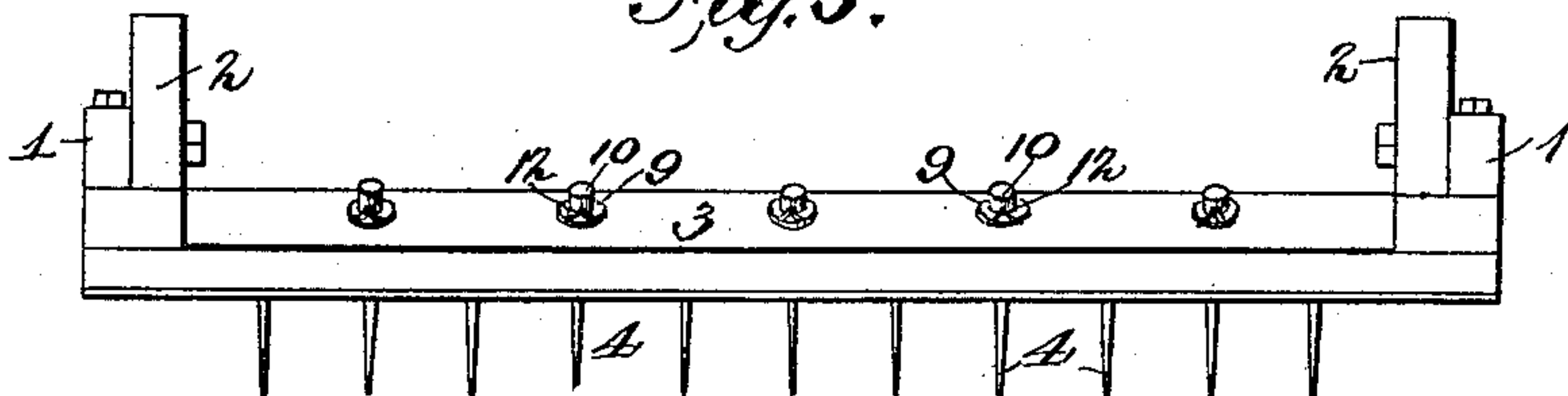
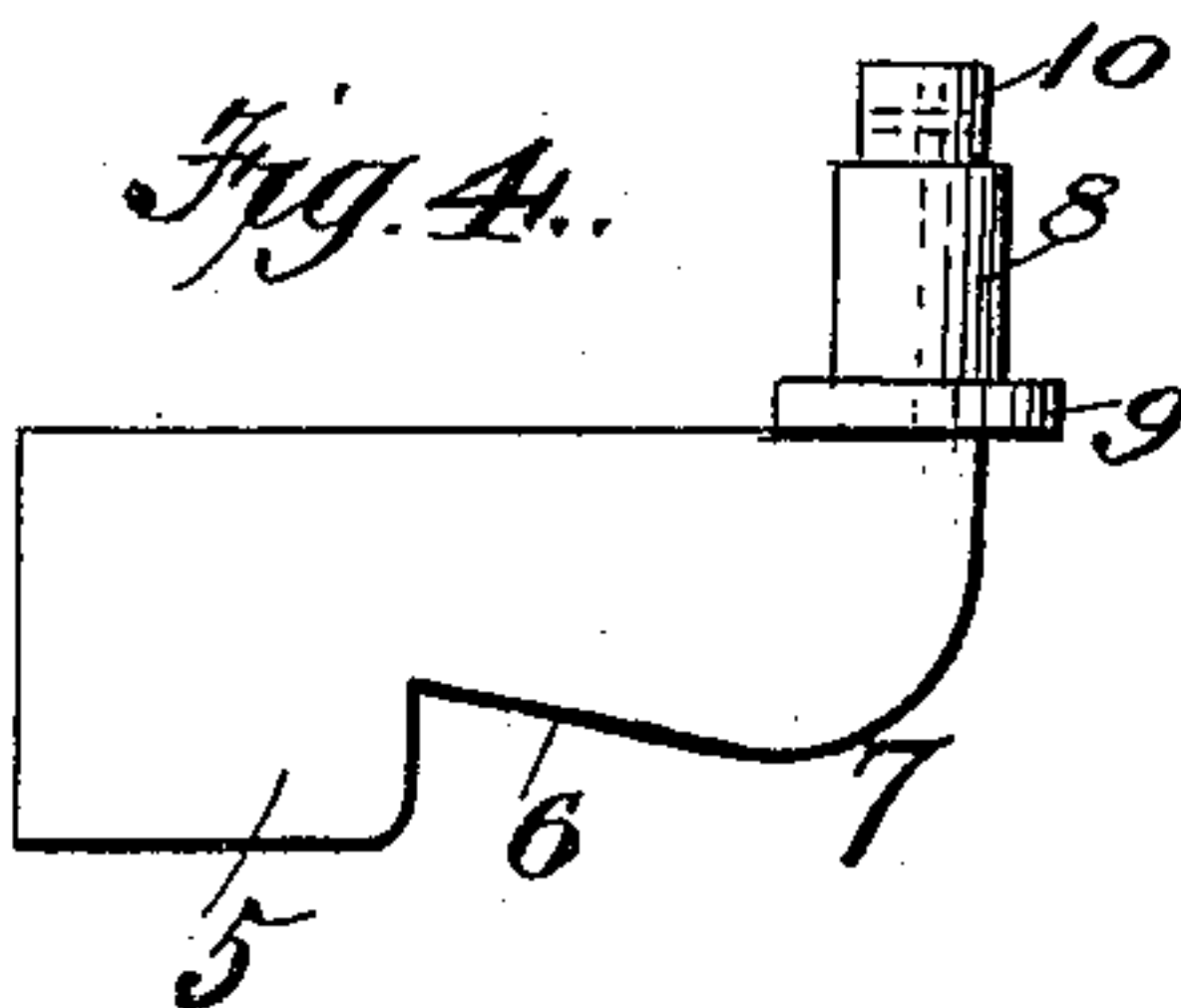


Fig. 4.



WITNESSES:

Frank L. Ourand
Promett & Sons

INVENTOR:

James C. Tate,

BY

Lewis C. Baggett & Co.
ATTORNEYS

UNITED STATES PATENT OFFICE.

JAMES C. TATE, OF KYGER, OHIO.

SOIL-PULVERIZING MACHINE.

SPECIFICATION forming part of Letters Patent No. 617,613, dated January 10, 1899.

Application filed July 10, 1897. Serial No. 644,152. (No model.)

To all whom it may concern:

Be it known that I, JAMES C. TATE, a citizen of the United States, residing at Kyger, in the county of Gallia and State of Ohio, have invented certain new and useful Improvements in Soil-Pulverizing Machines; and I do hereby declare that the following is a full, clear, and exact description of the same.

My invention relates to that class of soil-pulverizing machines provided with transverse overlapping boards carrying pivoted knives, which as the machine is dragged over a field engage with and pulverize the soil, aided by the weight of the machine.

The object of the invention is to provide an improved construction of the same which shall possess superior advantages with respect to efficiency in use.

The invention consists in the novel construction and combination of parts herein-after fully described and claimed.

In the accompanying drawings, Figure 1 is a plan view of a pulverizing-machine constructed in accordance with my invention. Fig. 2 is a bottom view of the same. Fig. 3 is a side view. Fig. 4 is a detail view of one of the teeth. Fig. 5 is a rear end view.

In the said drawings the reference-numeral 1 designates two side bars curved at the front ends and which serve as runners when inverted. Secured to these runners are side bars 2, to which are secured a number of transverse inclined boards 3, the adjoining edges of which overlap each other. Pivot-

ally connected with these boards are a number of teeth or knives 4, each consisting of a blade 5, formed with a triangular notch 6 in the under side intermediate the ends, while the front is rounded, as seen at 7. At the front ends said knives are formed with a cylindrical stud 8, provided with a collar 9 and having the outer ends reduced, as at 10, and formed with a hole for the passage of a pin 12. These studs pass through openings in the boards. The numeral 13 designates wear plates or bars secured to the rear ends of the boards 3.

In practice the machine is dragged across a field, and by means of the inclined boards and knives the clods are crushed and the soil pulverized. By the peculiar construction of the knives they will effectually cut the soil.

Having thus fully described my invention, what I claim is—

In a soil-pulverizing machine, the combination with the runners, the side bars and the transverse overlapping boards, having wear-plates at the rear ends, of the pivoted knives comprising the blades formed with triangular notches in the under sides and rounded at the front ends, the integral studs and collars, and the pins passing through said studs, substantially as described.

JAMES C. TATE.

Witnesses:

C. C. MACK,

A. E. BOATMAN.