

No. 780,785.

PATENTED JAN. 24, 1905.

J. DORSETT.
PULVERIZER AND CULTIVATOR.

APPLICATION FILED AUG. 20, 1904.

2 SHEETS—SHEET 1.

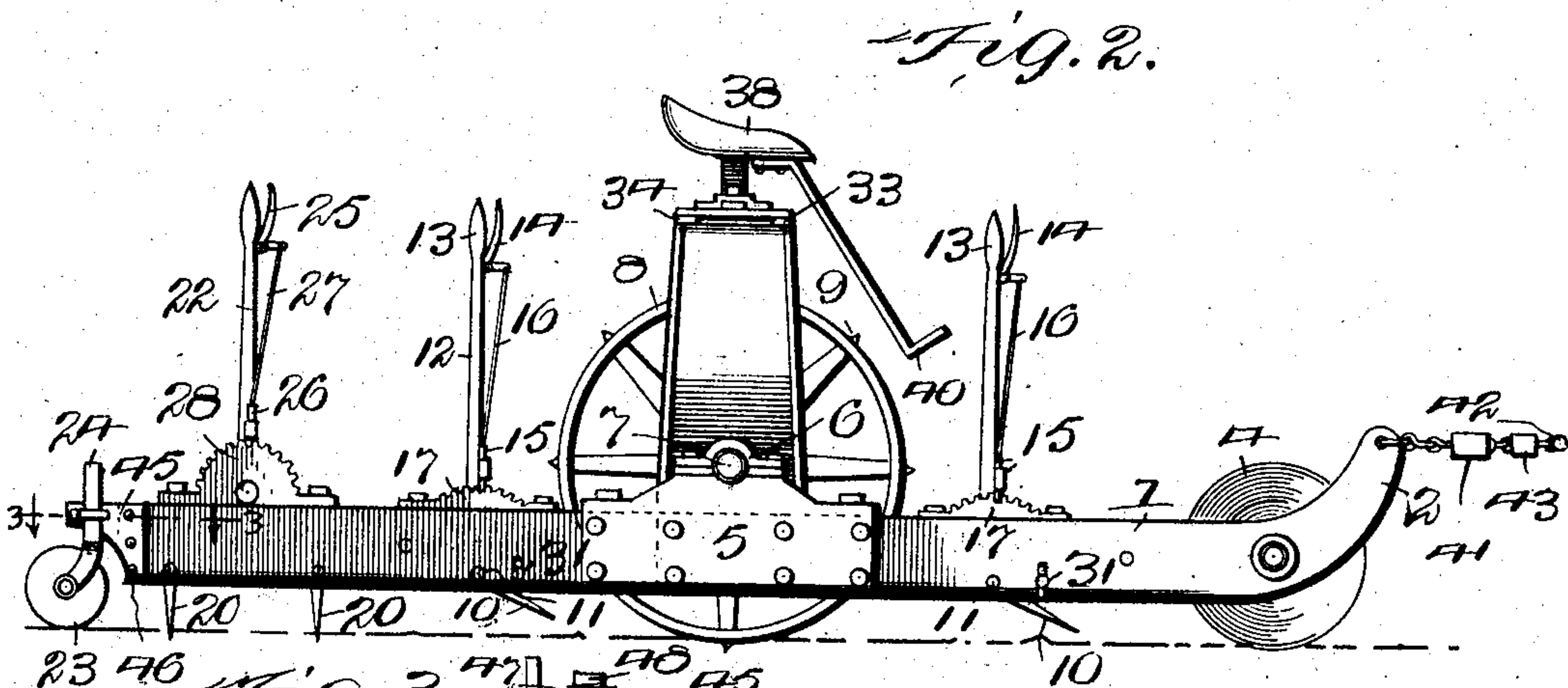
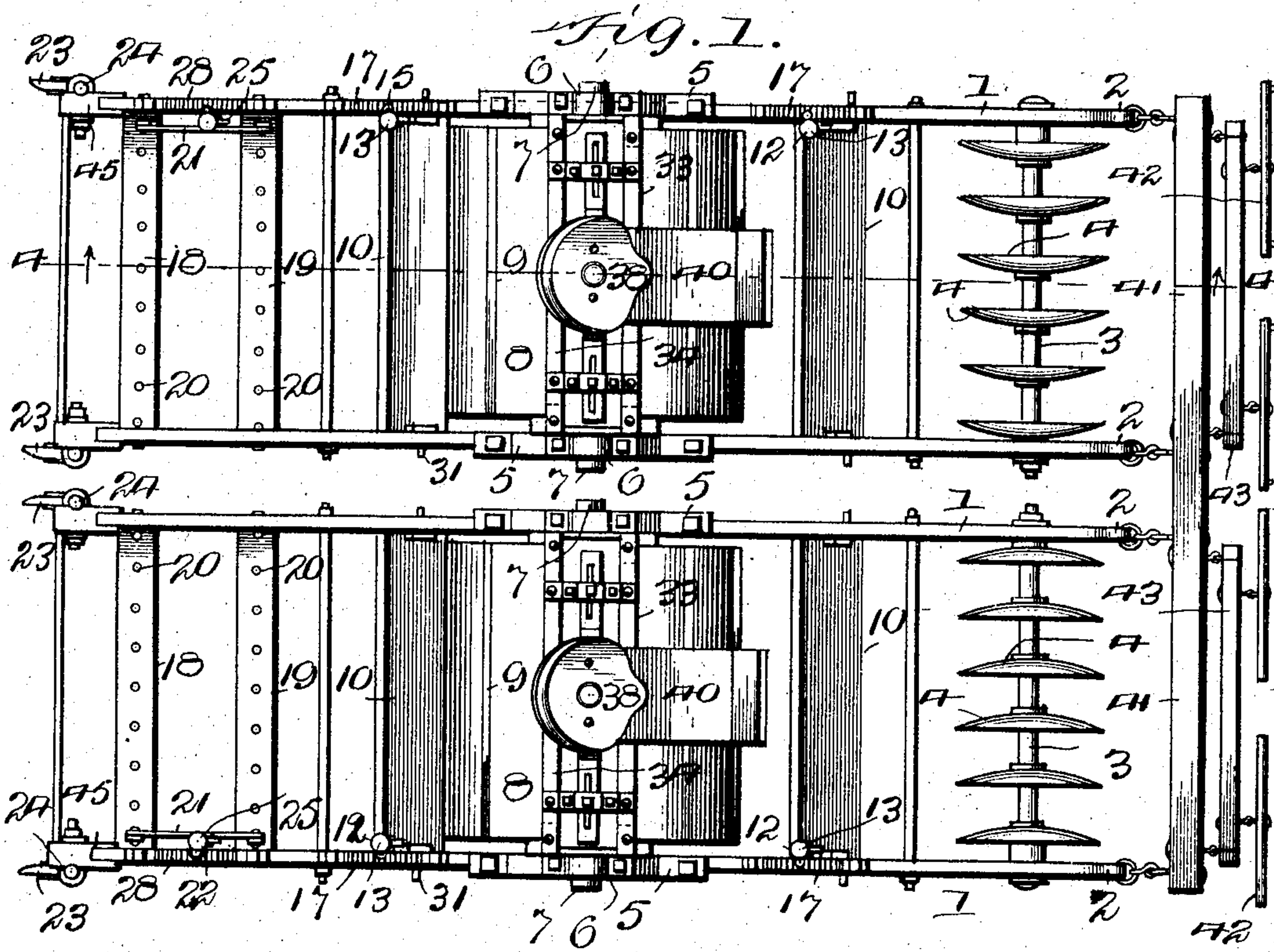


Fig. 3.

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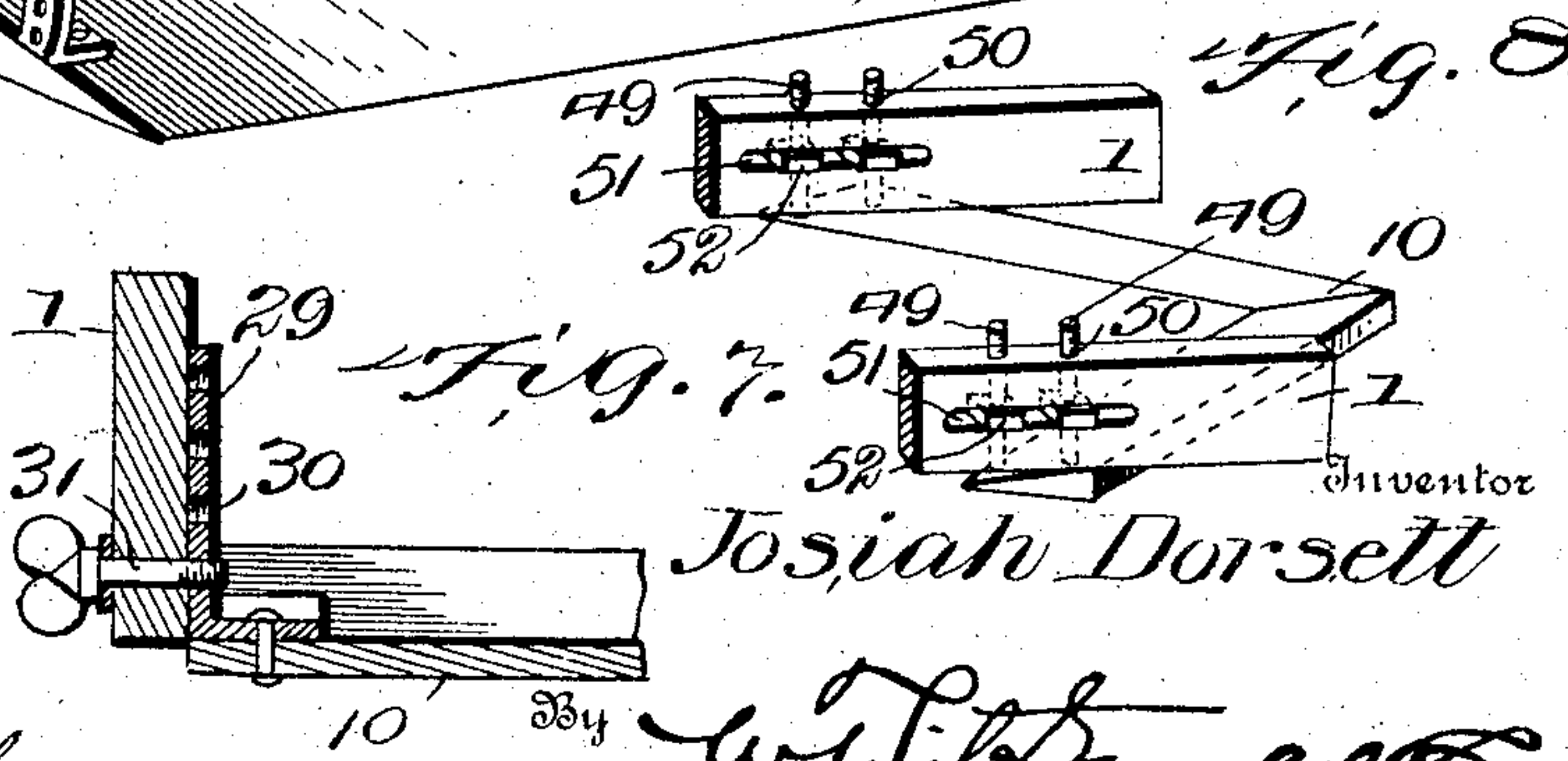
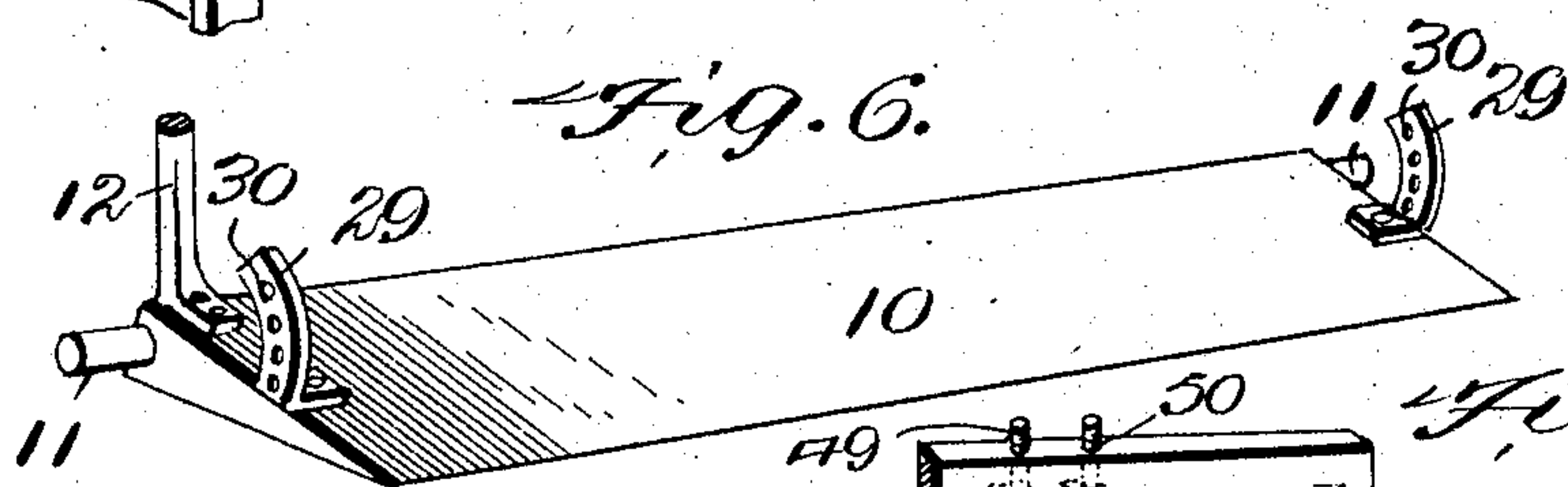
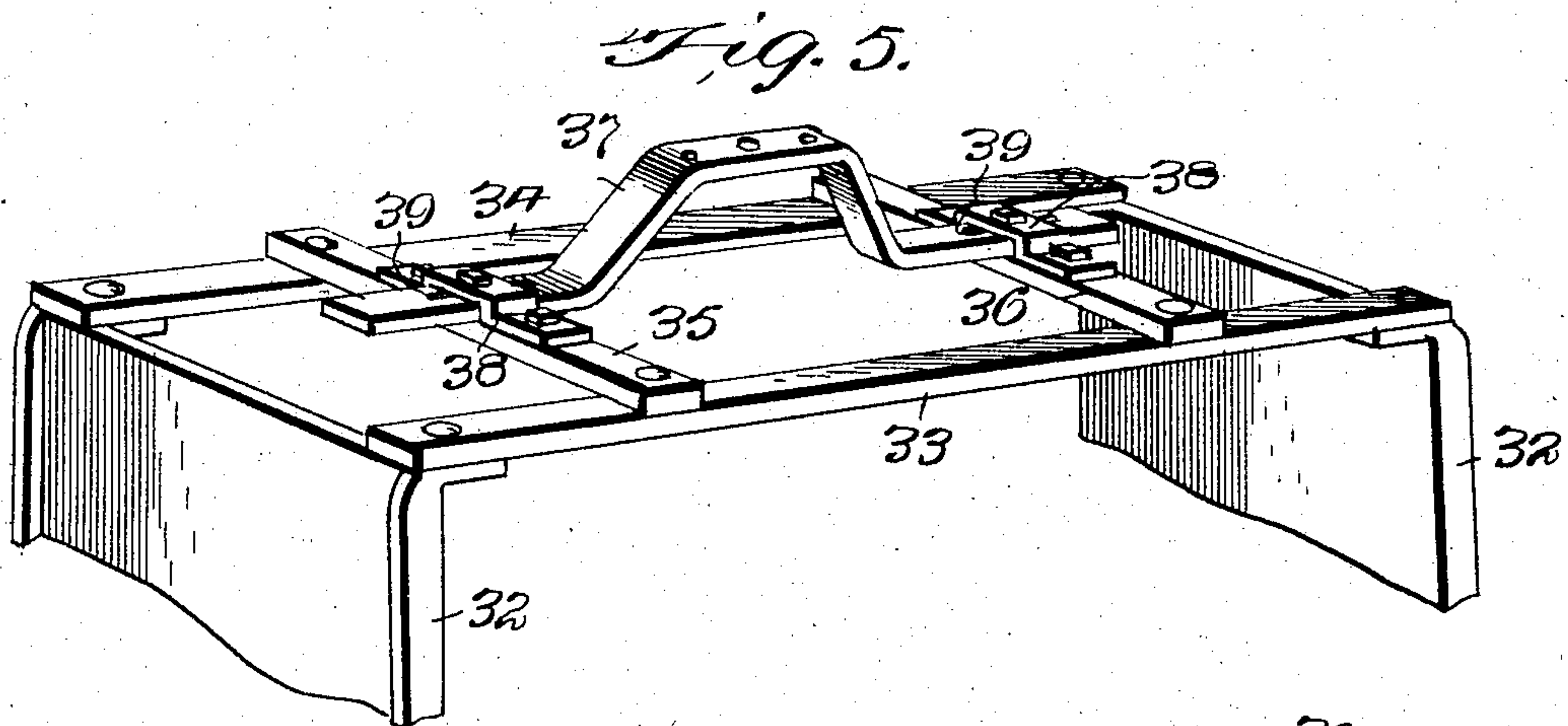
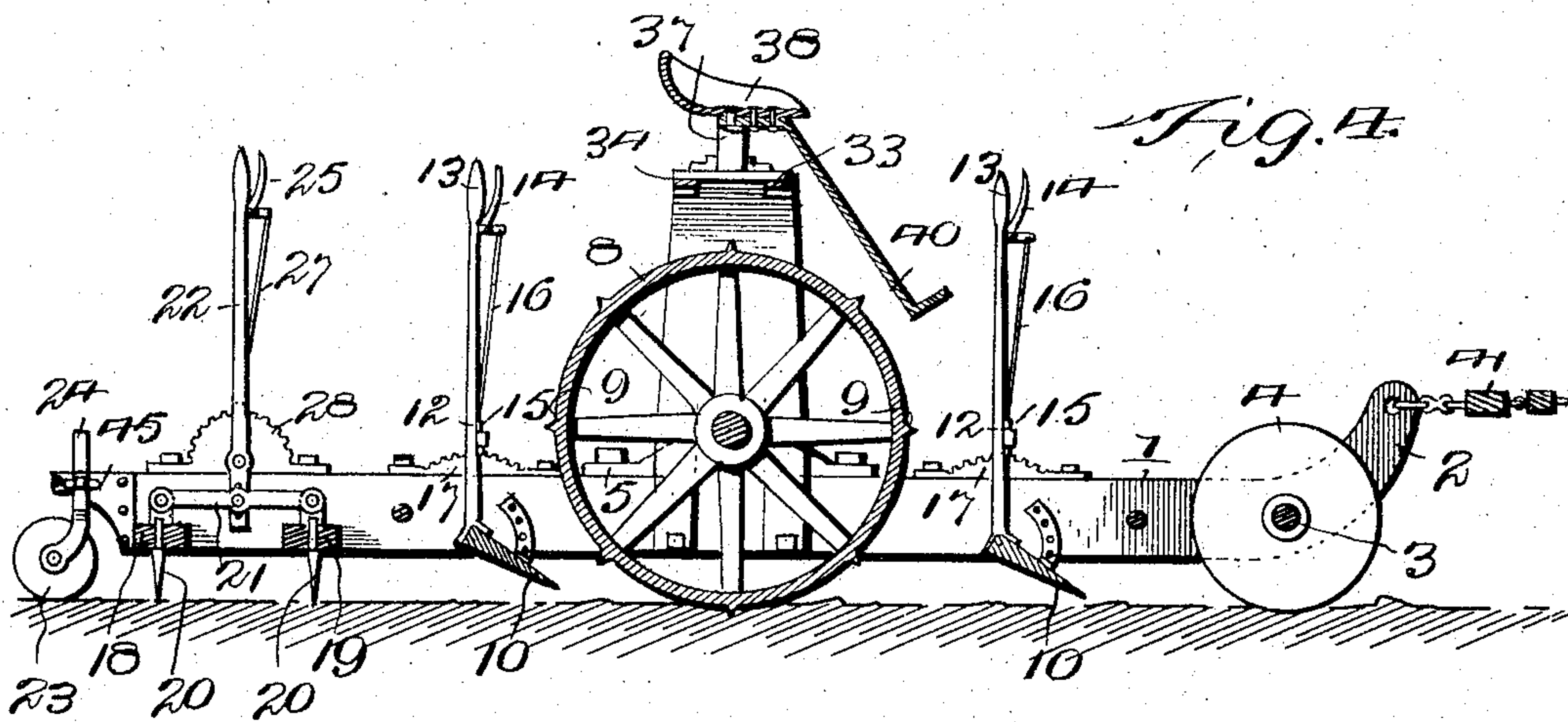
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2 SHEETS—SHEET 2.



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UNITED STATES PATENT OFFICE.

JOSIAH DORSETT, OF CHRISMAN, ILLINOIS.

PULVERIZER OR CULTIVATOR.

SPECIFICATION forming part of Letters Patent No. 780,785, dated January 24, 1905.

Application filed August 20, 1904. Serial No. 221,533.

To all whom it may concern:

Be it known that I, JOSIAH DORSETT, a citizen of the United States, residing at Chrisman, in the county of Edgar and State of Illinois, have invented certain new and useful Improvements in Pulverizers or Cultivators; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

My invention relates to a combined roller and soil-pulverizer or cultivator; and it consists of certain novel details of construction and arrangement of parts, as will be fully set forth in the following specification, reference being had to the accompanying drawings, in which—

Figure 1 shows a top plan view of my invention complete ready for use, there being two of my rollers and pulverizers coupled together. Fig. 2 is a side elevation of my invention complete ready for use. Fig. 3 is a sectional view of part of my invention as taken on line 3 3 of Fig. 2. Fig. 4 is a central sectional view of my invention as taken on line 4 4 of Fig. 1. Fig. 5 is a detail view of the seat-support. Fig. 6 is a perspective detail view of one of the cutting-blades. Fig. 7 illustrates, partly in section, the end of one of the cutting-blades and means for mounting the same in its operative position, while Fig. 8 shows a detail perspective view of a different form of cutting-blade and means to adjust the same.

In order to refer to the details of my invention and other parts coöperating therewith, I will employ numerals, and, referring to the numerals on the drawings, 1 designates sections of the carrying-frame, each of which is bent upward, as indicated by the numeral 2, somewhat in the form of a sled-runner, and near the forward end of said frame-sections I mount the shaft 3, which is provided with a plurality of cutting-disks 4, designed to act upon the clods, pieces of sod, or the like and reduce the same to finer particles.

Near the middle portion of the frame-sections I provide the upwardly-extending brackets 5, there being one of said brackets for each of the frame-sections 1, and in the up-

per edge of each bracket I provide a bearing-seat 6 to receive the shaft or journal 7 of the pulverizing-roller 8, which may have an entirely smooth face or may be provided with a plurality of longitudinally-disposed cutting-ribs 9, whereby any of the clods or particles left by the cutting-disks will be thoroughly crushed and pulverized.

To insure a more perfect stirring action or pulverization of the soil, I provide a plurality of plow-like blades or scrapers 10, each having a journal 11 at each end to fit into a suitable aperture provided in the frame-sections 1, and in order that said blades may be held at any desired angle I secure to the rear edge thereof the controlling-arm 12, which is provided at its upper end with the controlling-handle 13 and with the thumb-lever 14.

The thumb-lever 14 is operatively connected with the detent 15 by the link 16, the said detent being designed to coöperate with the rack-bar 17, carried by one of the frame-sections, and it is therefore possible for the cutting-blades to be readily moved, so that they will take deeply or lightly into the soil, as desired.

In the rear ends of the frame-sections 1 I provide a pair of cross-bars 18 and 19, each of said bars being provided with a plurality of teeth 20, and these bars are connected together by the controlling-link 21, which latter is provided with an extension or lever 22. It therefore follows that by moving the lever rearwardly or forwardly the teeth 20 may be correspondingly inclined as desired, so that they will project forward or incline backward, and thus take into the soil or ride over the same and smooth it and leave it in perfect condition as a seed-bed.

The frame-sections 1 are each also provided with a carrying-wheel 23, so mounted in position, as upon the standard or bracket 24, that the wheel may be adjusted in any desired alignment relative to the carrying-sections. The controlling-lever 22 is provided with a thumb-lever 25, operatively connected to the detent 26 by the link 27, said detent being designed to coöperate with the rack-bar 28, so that the controlling-lever 22 will be held in an adjusted position.

The cutters or blades 10 are also provided at each end with the brackets 29, each having a plurality of apertures 30, whereby the set-screw 31, passing through an aperture in the carrying-section 1, may have its threaded end seated in one of the threaded apertures 30, whereby the cutting-blade 10 may be rigidly held in an adjusted position, thereby taking the strain off of the controlling lever or arm 12.

I also provide suitable standards 32 at each end of the pulverizing-roller 8, said standards having the cross-bars 33 and 34, upon which are permanently secured the members 35 and 36, designed to afford a support for the seat-supporting spring or bracket 37, thus enabling the seat 38 to be secured upon said spring, as will be clearly obvious.

The ends of the spring, it will be observed, pass through the retaining-seats 38, and being provided with a compensating slot 39 the ends of the spring are left free to play incident to the use of the machine. The seat 38 is also provided with a depending foot-rest 40 for the accommodation of the driver.

A draft-bar 41 is connected in any suitable way to the upper ends of the curved terminals 2 and the draft-animals attached to the swingletrees 42, a suitable doubletree 43 serving to connect said swingletrees with the draft-beam 41, as shown in Fig. 1.

In Fig. 3 it will be observed that the caster bracket or arm 24 is passed through an aperture in the end of the clamping member 44, said clamping member being passed through an aperture in the extension or bracket 45, which is bolted or permanently secured, as by the rivet 46, to the rear end of the frame-section 1, and it is therefore obvious that by turning the nut 47 home upon the threaded terminal 48 the arm or bracket 24 will be reliably secured in position. It therefore follows that the carrying-wheels 23 may be ad-

justed relative to the plane of the frame-section to which it is attached.

In Fig. 8 I have shown the cutting-blade 10 as substantially V-shaped, the same being secured to the runners 1 by means of bolts 49 engaging the free ends of said blade and passing up through suitable openings 50 in said runners. The runners are also provided with transverse slots 51, which intersect the slots 50, in which are located adjusting-nuts 52, which are adapted to cooperate with the bolts 49 and raise or lower the blade 10.

Believing that the advantages, construction, and manner of using my invention have thus been made clearly apparent, further reference to the details thereof is deemed unnecessary.

What I claim as new, and desire to secure by Letters Patent, is—

The herein-described combined roller and pulverizer comprising a frame; a pulverizing-roller rotatably mounted in said frame; a plurality of cutting-disks having a shaft 3 located in the forward ends of the frame-section; cutting-blades 10 and means to adjust the same whereby they will take deeply or lightly into the soil; carrying-wheels for the rear ends of the frame-sections and a pair of toothed bars movably mounted transversely to the frame-sections and means to adjust said toothed bars whereby the teeth may be projected forward or inclined rearwardly, and additional means to adjust the carrying-wheels for the rear ends of the frame-sections, all substantially as specified and for the purpose set forth.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses,

JOSIAH DORSETT.

Witnesses:

JAMES M. WELLMAN,
C. T. LANSDOWN.