T. R. MANDERSCHEID.
STONE GATHERER.

APPLICATION FILED MAY 7, 1918. 1,298,239. Patented Mar. 25, 1919. 2 SHEETS-SHEET 1. :000: 000000000 **INVENTOR** Thomas A.Manderscheid WITNESSES ATTORNEY

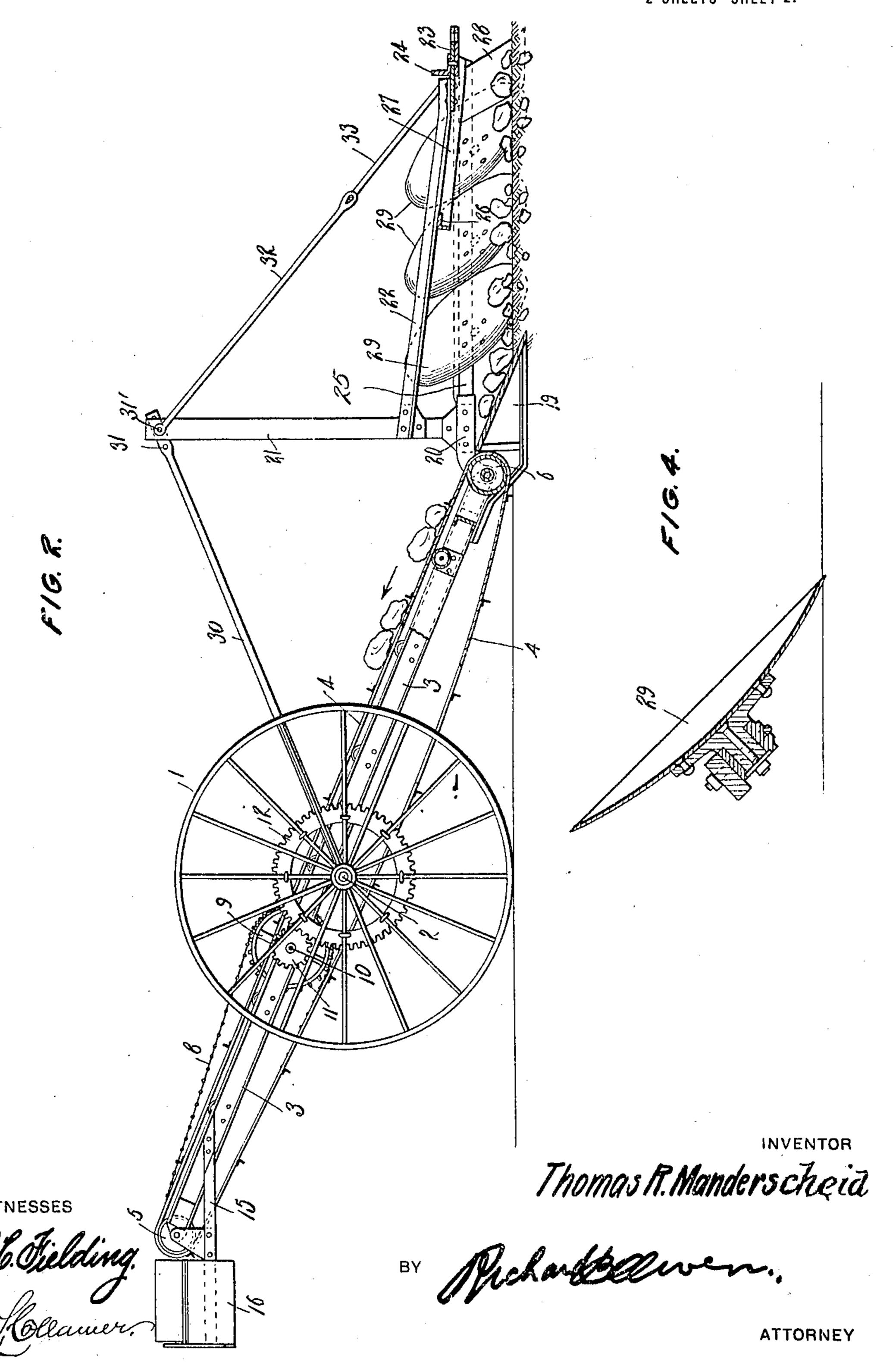
T. R. MANDERSCHEID.

STONE GATHERER.

APPLICATION FILED MAY 7, 1918.

1,298,239.

Patented Mar. 25, 1919.
2 SHEETS—SHEET 2.



UNITED STATES PATENT OFFICE.

THOMAS R. MANDERSCHEID, OF TERREBONNE, OREGON.

STONE-GATHERER.

1,298,239.

Specification of Letters Patent.

Patented Mar. 25, 1919.

Application filed May 7, 1918. Serial No. 233,098.

scheid, a citizen of the United States, residing at Terrebonne, State of Oregon, have 5 invented certain new and useful Improvements in Stone-Gatherers, of which the following is a specification.

This invention relates to harrows and diggers, and more especially to stone gatherers; 10 and the object of the same is to produce a machine for gathering the stones and pebbles at and just beneath the earth's surface and conveying them to a wagon driven alongside.

Other objects will appear from the following specification and claims, and attention is invited to the accompanying drawings wherein:—

Figure 1 is a plan view of this machine 20 complete, and

Fig. 2 a side elevation partly in longitudinal section,

Fig. 3 is a rear end elevation of the delivery box, and

Fig. 4 is a sectional detail of one of the underlies the tongue and is attached to the

disks. A pair of main wheels 1 mounted on an axle 2 supports spaced beams 3 within which an endless carrier moves upwardly as shown. 30 This carrier may be a slatted apron 4 traveling over upper and lower rollers 5 and 6, one of said rollers having a sprocket wheel 7 connected by a chain belt 8 with another sprocket wheel 9 and a counter shaft 10, 35 which latter has gears 11 connecting it with power gears 12 on the hubs of the main wheels. At a suitable point the countershaft contains a backing ratchet indicated at 13 so that the main wheels 1, 1 may travel 40 at different speeds as when the machine is turning corners. Supports 15 extend to the rear from the upper ends of the beams 3 and carry a delivery spout as indicated at 16 in Fig. 3. This is a trough inclined downward 45 in both directions from its center which is immediately behind the transverse center of the endless carrier shown in this view as the belt or apron 4. At the highest point or ridge of the inclined bottom of this trough 50 a triangular element 17 is pivoted at 18. In this view said element is shown in full lines at the left and in dotted lines at the right. As in full lines it will of course shed toward the right in this view whatever ma-55 terial is dumped onto it from the carrier,

whereas when it is turned over to the right

To all whom it may concern:

Be it known that I, Thomas R. Mander
it would shed all of the material to the left, and therefore the delivery spout may be caused by the setting of this element to deliver the material into a wagon along either 60 side of the machine. The lower end of the frame structure consisting of the two beams 3 carries a scoop indicated broadly at 19, and the same is intended to travel just beneath the earth's surface and pick up stones 65 and deliver them onto the carrier, by which latter they are conveyed to the delivery spout as will be clear.

> Secured to the forward end of the main framework is a pair of brackets 20 from 70 which rise posts 21, and from the posts two members 22 extend forward and converge toward each other to constitute a tongue, their front ends being attached to a plate 23 to which in turn is attached the draft not 75 necessary to illustrate in the present instance. Secured at its center upon said plate is a long cross bar 24 whose extremities are connected by oblique bars 25 with the brackets 20 above referred to. Another bar 26 80 members thereof as seen in Fig. 1, and at the sides of the tongue it is bent forward into oblique bars 27 which are connected with the cross bar 24 just inside its ends as shown, 85 the connection being by preference a special one so that it may carry a shovel 28 rigidly or adjustably and of any appropriate shape and size. In rear of each shovel and preferably journaled on the oblique bars 25, are 90 disks 29 inclined obliquely to the rear and overlapping each other slightly, and by which the material picked up by the shovel is passed back onto the scoop 19 for treatment in a manner yet to be described. All 95 of the structure just described as carried by the brackets 20 is supported at its rear end from the main frame bars or beams 3, and at appropriate points this structure itself may be supported on other wheels not neces- 100 sary to illustrate. However, in any event I prefer to support this structure by guy rods 30 leading from the main frame at a point near the axle 2 to the upper ends of the posts 21 where these rods are provided 105 with a series of openings 31 adjustably engaged with a long bolt 31' as best seen in Fig. 1. Forward of the posts are guy rods 32 leading downward to a truss rod 33 whose ends are attached as at 34 to the cross bar 110 24 in any appropriate manner. By this superstructure the elements carried by the

brackets 20 forward of the main frame may well be supported therefrom, leaving the disposition of the additional truss or wheels to the manufacturer for application where he deems wise. All of this superstructure also I would prefer to make of angle iron or of rods so as to give it strength without

unduly adding to its weight.

In use the parts are set so that the shovels, 10 the lower edges of the disks, and the point of the scoop 19 will all travel just a little beneath the earth's surface. When draft is applied to the plate 23 and the entire machine moved forward, rotation of the main 15 wheels causes the upward travel of the endless belt or apron 4 and projects the shovels 28 forward through the earth just at the surface of the same, while the lower edges of the disks 29 also cut into the earth at 20 about the same plane. The result is that a wide swath or path is cleared of gravel, pebbles, stones and other accumulations which are undesirable, all of which are passed back from one disk to another until 25 they are delivered to the scoop 19. This picks them up and delivers them to the endless carrier, which in turn delivers them to the delivery spout shown in Fig. 3, and from the latter they are dropped to either side 30 into a wagon driven alongside this machine.

The foregoing description and the drawings have reference to what may be considered the preferred, or approved form of my invention. It is to be understood that I may make such changes in construction and arrangement and combination of parts, materials, dimensions, et cetera as may prove expedient and fall within the scope of the

appended claims.

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

Letters Patent, is:-

1. In a stone gatherer, the combination with a main framework mounted on wheels, a scoop carried at the lower end of the framework, and means for elevating and delivering the material received by the scoop; of bars extending obliquely forward from said main frame, and shovels and disks on said bars for gathering stones at and near the

earth's surface and passing them back to

said scoop.

2. In a stone gatherer, the combination with a main framework mounted on wheels, an upwardly moving endless carrier disposed in said framework and driven by the rotation of the wheels, and a scoop carried at the lower end of the framework and delivering stones to the carrier; of bars extending obliquely forward from said main 60 frame, and shovels and disks on said bars for gathering stones at and near the earth's surface and passing them back to said scoop.

3. In a stone gatherer, the combination with a main framework mounted on wheels, 65 an upwardly moving endless carrier disposed in said framework and driven by the rotation of the wheels, and a scoop carried at the lower end of the framework and delivering stones to the carrier; of bars extending obliquely forward from said main frame, a cross bar connecting their forward ends, a tongue connecting the main frame with said cross bar and carrying means for attaching the draft, shovels near the ends of 75 said cross bar, and means on said oblique bars for passing material from the shovels

rearwardly to said scoop.

4. In a stone gatherer, the combination with a main framework mounted on wheels, 80 an upwardly moving endless carrier disposed in said framework and driven by the rotation of the wheels, and a scoop carried at the lower end of the framework and delivering stones to the carrier; of brackets 85 carried by the front end of said main framework, posts upstanding therefrom, a skeleton framework structure also carried by said brackets, means thereon for gathering said stones and delivering them to said scoop, 90 and guy members connecting the main framework with the upper ends of the posts and the latter with said skeleton framework, for the purpose set forth.

In testimony whereof I affix my signature 95

in presence of two witnesses.

W. E. DURAND.

THOMAS R. MANDERSCHEID.

Witnesses:
Guy E. Dobson,

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."