

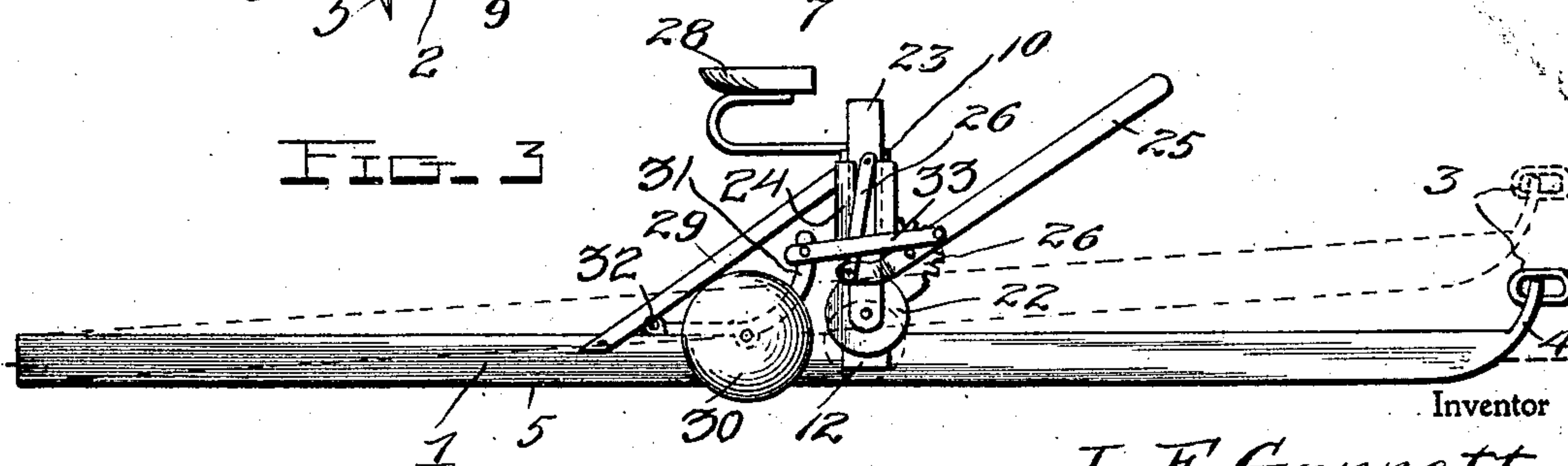
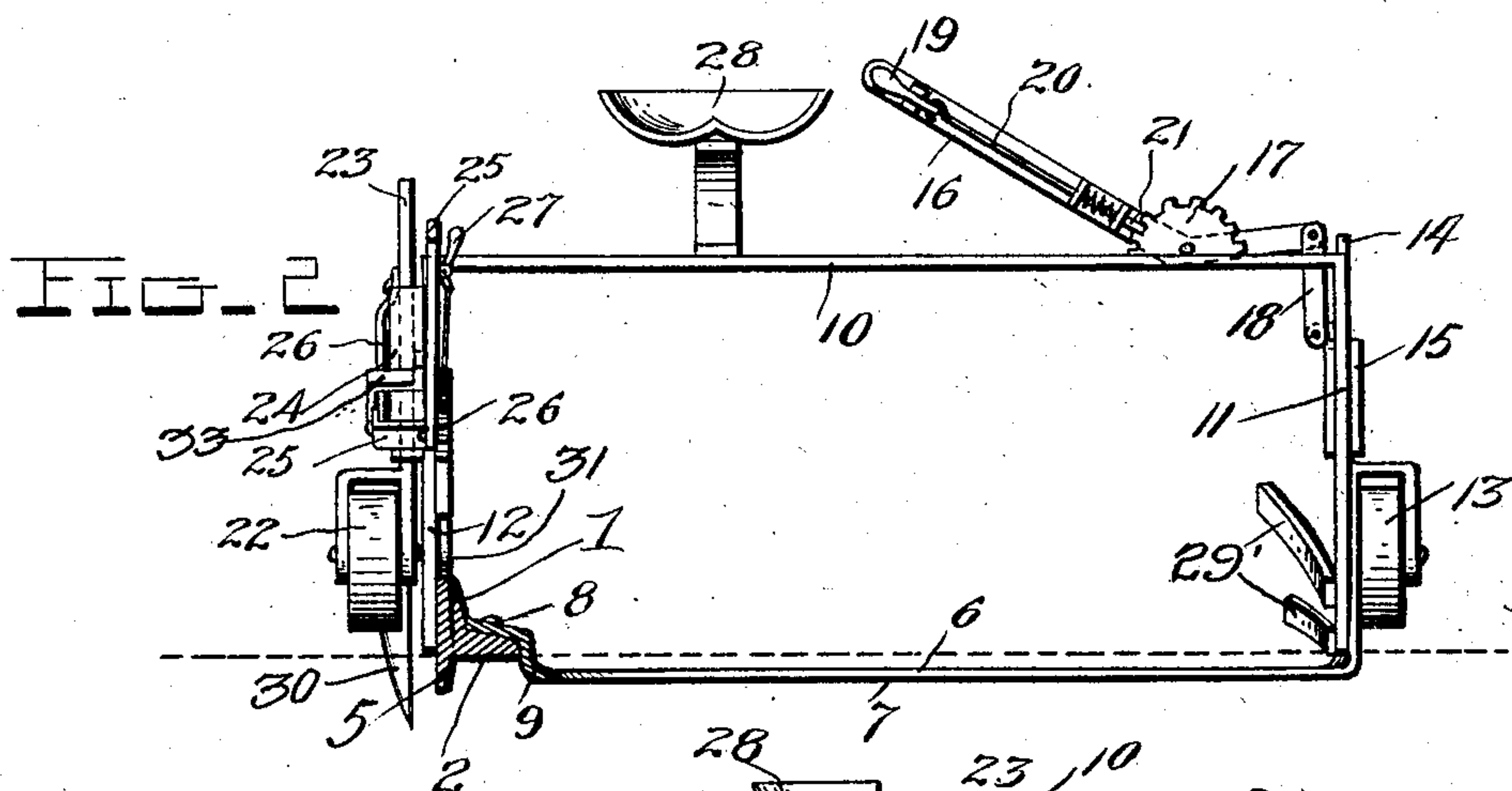
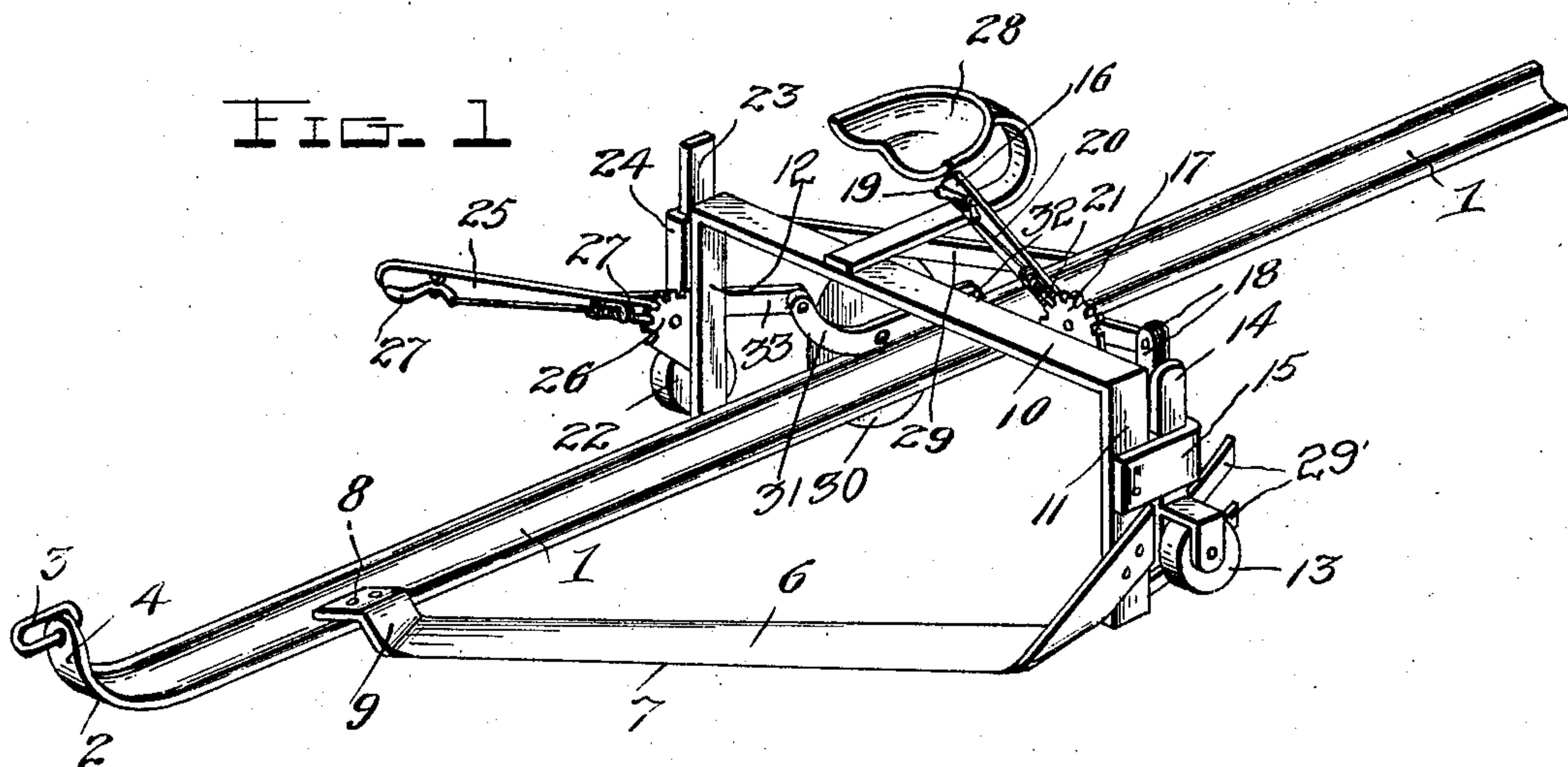
No. 763,055.

PATENTED JUNE 21, 1904.

L. E. GANNETT.
BRUSH CUTTER.

APPLICATION FILED SEPT. 28, 1903.

NO MODEL.



Inventor

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Witnesses

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LEWIS E. GANNETT, OF BELLEVUE, IDAHO.

BRUSH-CUTTER.

SPECIFICATION forming part of Letters Patent No. 763,055, dated June 21, 1904.

Application filed September 28, 1903. Serial No. 174,953. (No model.)

To all whom it may concern:

Be it known that I, LEWIS E. GANNETT, a citizen of the United States, residing at Bellevue, in the county of Blaine and State of Idaho, have invented certain new and useful Improvements in Brush-Cutters; and I do 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.

This invention relates to brush-cutters, and more particularly to improvements in the device or machine illustrated and described in my Patent No. 719,784, dated February 3, 1903.

One object of my present invention is to improve the construction and operation of brush-cutters of this character, thereby rendering them more effective and efficient in use.

Further objects are to provide means for regulating the operation of the cutting-blade and to provide means for facilitating the turning and handling of the machine.

With these and other objects in view the invention consists of certain novel features of construction, combination, and arrangement of parts, as will be more fully set forth, and defined in the appended claim.

In the drawings, Figure 1 is a perspective view of my improved brush-cutter. Fig. 2 is a vertical transverse sectional view through the same; and Fig. 3 is a side elevation of the machine, showing in dotted lines its position when elevated.

Referring to the drawings by numerals, 1 denotes a runner or shoe substantially triangular in cross-section, the bottom 2 of which runs upon the surface of the earth when it is drawn forwardly by draft-animals attached to a ring 3 in its forward turned-up end 4. The bottom of the runner is formed with a longitudinal flange or rib 5, which enters the earth and forms a guide to direct the machine in a straight line and to prevent it from being forced sidewise when the cutting blade or knife 6 strikes a root or other object. This cutter 6 is disposed at an angle to the runner and is adapted to run beneath the surface of the earth, as shown in Fig. 2, in order that its cutting edge 7 will sever the roots of the

sage-brush or other growth being cut. One end of said cutter is secured to the inclined upper side of the runner, as shown at 8, and is formed with a bent portion 9, which drops the cutting portion of the blade below the bottom 2 of said runner. The other end of said cutter is secured to one end, 11, of an arched brace or frame 10, the other end, 12, of which is secured to one side of the runner at a point forward of its center.

In order to regulate the depth at which the cutter travels under the earth, I provide a gage-wheel 13, which is adapted to run upon the surface of the earth and support the end 11 of the arched frame 10. Said wheel is journaled in the forked end of a vertically-adjustable standard 14, which is mounted to slide in a guide 15, secured to the end 11 of said arched frame. In order to adjust said standard and hold the same in its adjusted position, I pivot a hand-lever 16 to a segmental rack-plate 17, secured to the top of said arch-frame 10, and connect one end of said lever by links 18 to said standard 14. The opposite end of said lever is provided with a pivoted hand-piece 19, which is connected by a rod 20 to a spring-actuated pawl 21, which coacts with the rack 17 to lock said lever, as will be readily understood.

In order to facilitate turning the machine and controlling the same and also to assist in holding the cutter above the surface of the earth when not in use, I provide a wheel 22 upon the outer side of the runner adjacent to the end 12 of the arched frame 10. Said wheel is journaled in the lower forked end of a vertically-adjustable standard 23, which slides in a guide 24, secured upon the end 12 of said arched frame. A lever 25, pivoted upon a segmental rack-plate 26, secured to the end 12, is adapted to adjust said standard, one end of said lever being connected by a link 26 to the standard and the other end being provided with a spring-pawl and handpiece 27, similar to the lever 16.

When the machine is used upon uneven ground, the guide-rib 5 of the runner does not always run in the earth, and hence the machine is liable to shift sidewise and permit the cutter to slip around heavy brush. In order

to prevent this sidewise shifting of the runner, I provide a disk or wheel 30, which is adapted to penetrate the earth, as shown in Figs. 2 and 3. Said disk is journaled to rotate in bearings formed on an angle-arm 31, one end of which is hinged to the top of the runner, as at 32, and its other end is loosely connected by a pivoted link 33 to the handle-lever 25, as clearly illustrated in Fig. 3. It will be seen that said disk will penetrate the ground, so that when the machine is passing over a slight elevation and both ends of the runner are off the ground the said disk will prevent any sidewise movement of the machine. By operating the lever 25, as hereinafter explained, the disk may be raised or lowered, as will be readily understood.

The levers 16 and 25 project within convenient reach of the operator, who sits upon a seat 28, secured to the top of said arched frame 10. Said frame is braced at one end by a diagonal brace 29, which connects it with the runner 1, and the end 11 of said frame is provided with one or more deflectors 29', which deflect the brush and growth as it is cut to one side in order to leave a clear path for the machine when it makes its next cut.

The operation of the machine is as follows: When the machine is drawn forwardly, the bottom 2 of the runner slides upon the surface of the earth, while its flange 5 enters the same to direct the machine in a straight line and to prevent it from slipping sidewise. The cutter 6 runs beneath the surface of the earth, cutting the roots at any desired depth, according to the adjustment of the gage-wheels 13 and 22. When it is desired to adjust the cutter, the lever 16 is operated, as will be readily understood, to raise or lower the wheel 13. When it is desired to turn the machine around or to change its direction of movement, the lever 25 is operated to lower the wheel 22, as shown in Fig. 3. It will be seen that said wheel raises the front end of the run-

ner and serves as a pivot for the same to permit the machine to be readily turned. By lowering both wheels the runner can be raised, so that the cutter will be elevated above the surface of the ground. The disk 30 normally runs in the ground, as shown; but when the lever 25 is operated to elevate the runner or lower the wheel 22 the disk is also elevated and moved out of contact with the ground, as will be readily seen.

From the foregoing description, taken in connection with the accompanying drawings, the construction, operation, and advantages of my invention will be readily understood, it is thought, without requiring a more extended explanation.

Various changes in the form, proportion, and the minor details of construction may be resorted to without departing from the principle or sacrificing any of the advantages of this invention.

Having thus described my invention, what I claim, and desire to secure by Letters Patent, is—

A brush-cutter comprising a runner, an arched frame having its inner end secured to said runner, a cutter between said runner and the outer end of said frame and adapted to travel beneath the surface of the earth, a gage-wheel carried by said runner and adapted to elevate the same to facilitate the turning of the machine, a disk carried by said runner and adapted to penetrate the earth to prevent sidewise movement of the runner, and means for simultaneously operating said gage-wheel and said penetrating disk, substantially as described.

In testimony whereof I have hereunto set my hand in presence of two subscribing witnesses.

LEWIS E. GANNETT.

Witnesses:

H. W. ADAMS,
GEO. W. DU BOIS.