

No. 610,335.

Patented Sept. 6, 1898.

C. TRICK.

BONE CUTTING MACHINE.

(Application filed Nov. 22, 1897.)

(No Model.)

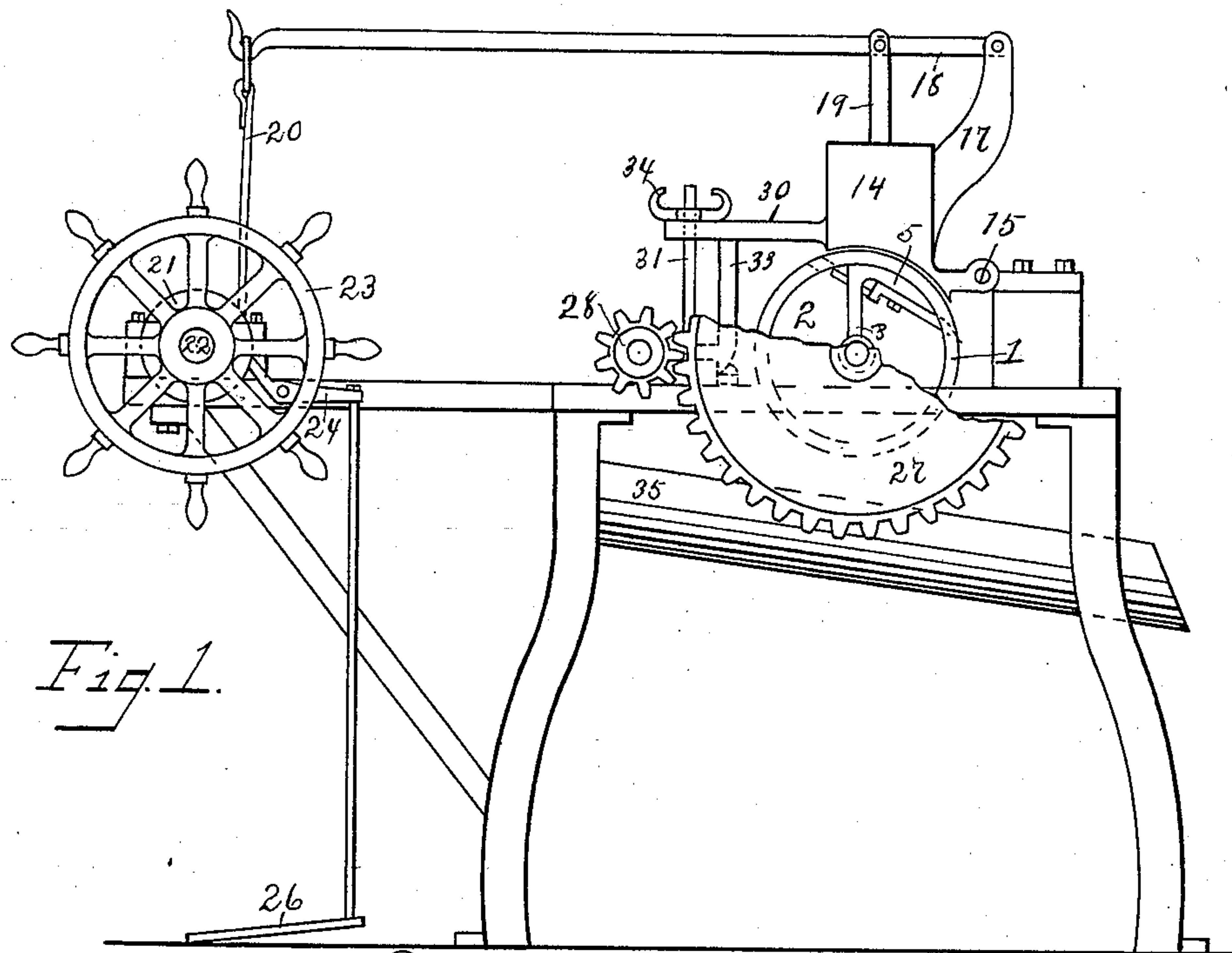


Fig. 1.

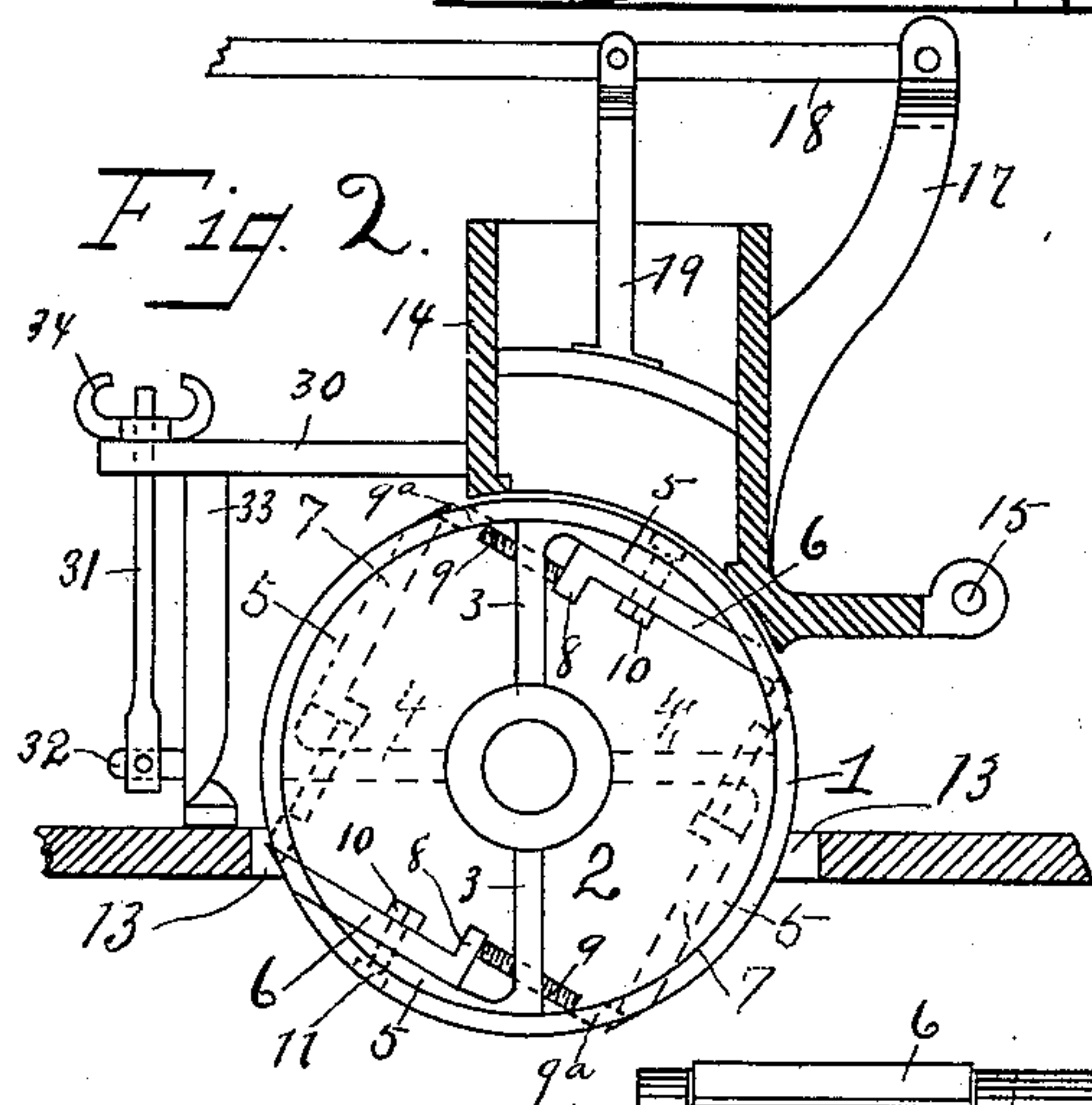


Fig. 2.

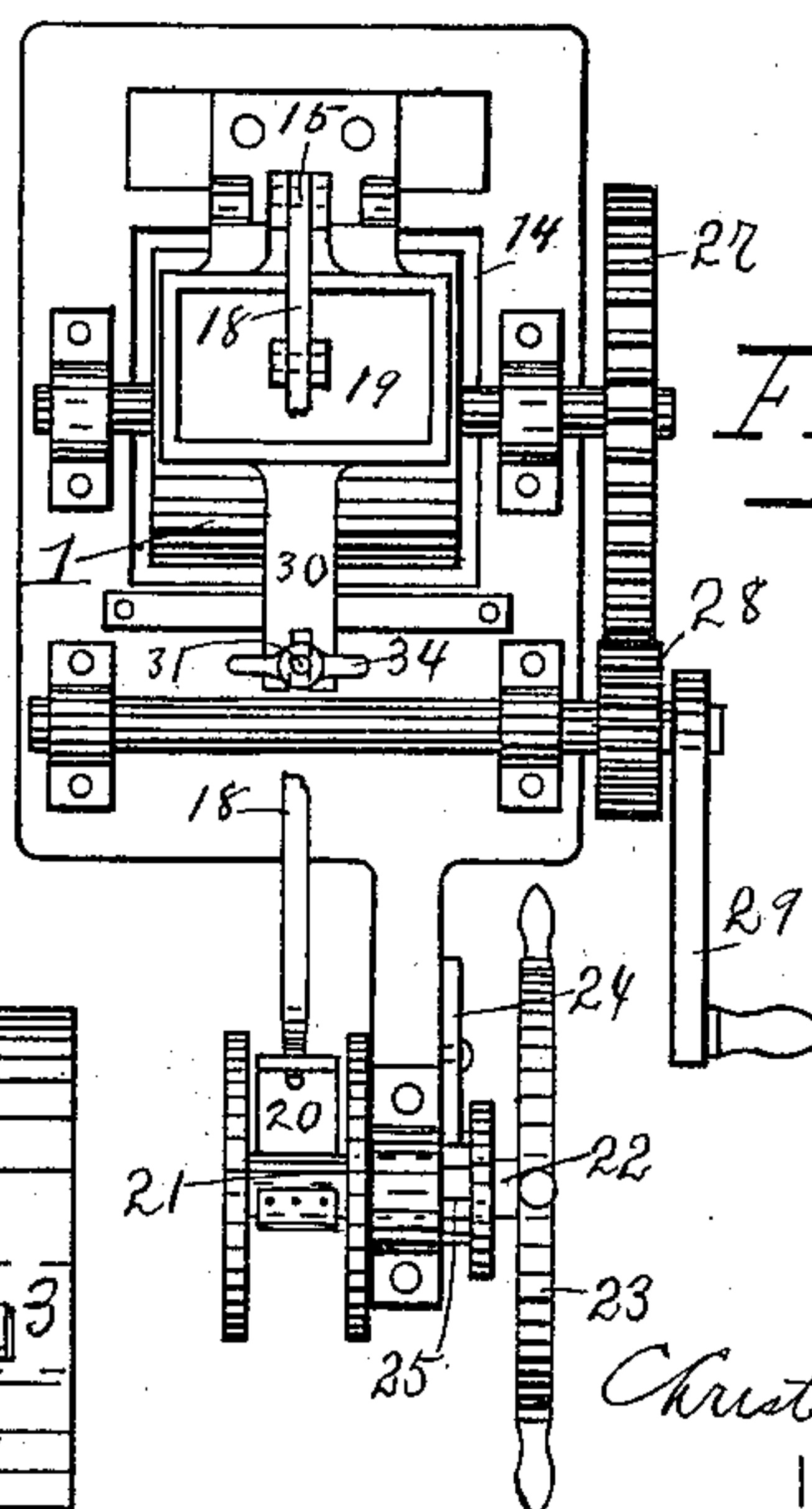
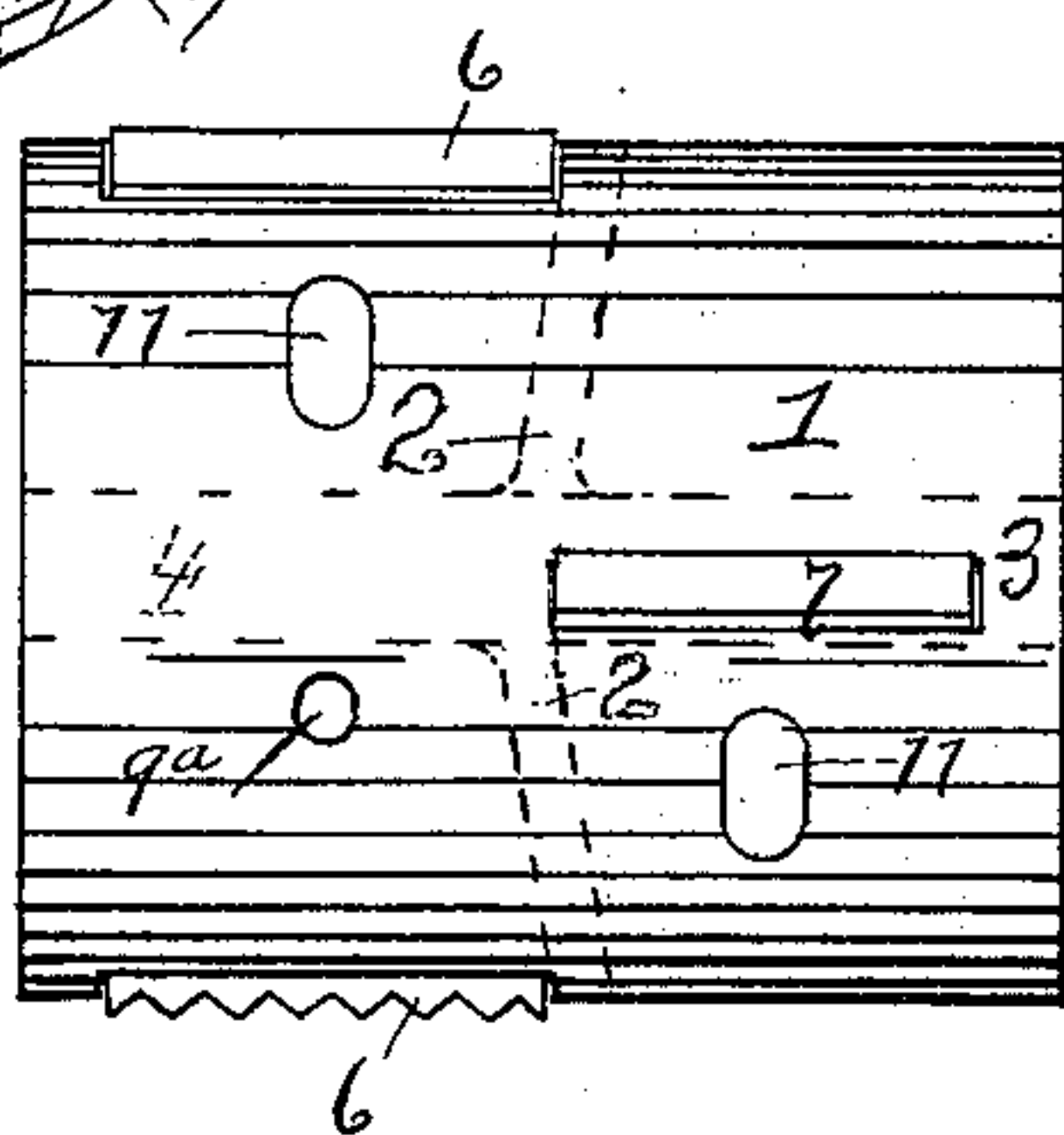


Fig. 4.

Fig. 3.



WITNESSES

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BONE-CUTTING MACHINE.

SPECIFICATION forming part of Letters Patent No. 610,335, dated September 6, 1898.

Application filed November 22, 1897. Serial No. 659,429. (No model.)

To all whom it may concern:

Be it known that I, CHRISTOPHER TRICK, a citizen of the United States, residing at Dayton, in the county of Montgomery and State of Ohio, have invented certain new and useful Improvements in Bone-Cutting Machines; 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, reference being had to the accompanying drawings, and to the figures of reference marked thereon, which form a part of this specification.

My invention relates to improvements in bone-cutting machines.

The object of the invention is to provide a mill or machine for cutting green bone with a capacity for cutting a maximum quantity of bone.

The peculiar features of the invention will be hereinafter fully described in the specification and pointed out in the claim.

Referring to the accompanying drawings, Figure 1 is a side elevation of my improved bone-cutting machine. Fig. 2 is a vertical section through the bone-hopper and part of the table adjacent thereto, the knife-cylinder appearing in elevation. Fig. 3 is a front or rear elevation of the cylinder. Fig. 4 is a plan view of the machine.

Similar reference characters indicate corresponding parts in the several views of the drawings.

The hollow cylindrical knife-support 1 is provided with longitudinal alternating knife-openings, a central partition-disk 2, (shown in dotted lines, Fig. 3,) and longitudinal webs 3 and 4, extending from each side of said partition in planes at right angles to each other and which provide a greater thickness of the rim of the cylinder at the points where said webs join said rim, as shown at 5. The partition-disk 2 divides the cylinder into two halves and is bent away from a common diameter toward the ends of the cylinder at points adjacent to the knife-openings. The knives 6 and 7 project through said alternating openings and have their inner adjacent ends extending to or overlapping a common plane. This enables the cutting of bone approximately throughout the length of the cyl-

inder. Each of the knives has a shoulder 8, with which an adjusting-screw 9 abuts. These screws 9 penetrate openings in the rim of the cylinder and in the webs 3 4, and by means thereof the cutting edges of the knives are adjusted in and out. The bodies of the knives are secured to the cylinder by bolts 10, that pass through oblong holes 11 therein and through the parts 5. The heads of the bolts 10 are of an oval form and lie in the oblong holes in the rim of the cylinder. The cylinder is mounted in an opening 13 in the table, and above it the bone-hopper 14 is placed. The said hopper is hinged at 15 to a block and may be thrown back to clear the cylinder when required. Projecting rearwardly from the hopper is an arm or standard 17, in which a lever 18 is fulcrumed. Depending from this lever is a ram or bone-presser 19, which fits in the hopper and presses on the upper side of the bone therein. The outer end of the lever 18 is coupled to a belt 20, that winds around a sheave 21, the shaft 22 of which is turned by a hand-wheel 23. This wheel is locked against turning back by a dog 24, that engages a ratchet 25 on the shaft. To lessen the pressure on the bone, the dog may be tripped by pressing on the foot-treadle 26 and the wheel turned back the desired extent. The cylinder is driven by a gear-wheel 27 on the shaft thereof and a toothed pinion 28, driven by a crank 29. The bone-hopper is held down by an arm 30, that projects out from the front thereof. The outer end of said arm is slotted to receive a bolt 31, which is pivoted to an arm 32, projecting from the lower end of an upright 33. This upright is a support for the arm 30, and the said arm is tightened thereagainst by a wing-nut 34 on bolt 31. Thus the hopper is firmly held in position. A trough 35 below the cylinder receives the cut bone as it falls from both ends of the cylinder and through the knife-openings.

Having described my invention, I claim—

The combination of a hollow cylindrical knife-support formed with longitudinal alternating knife-openings, a central partition-disk comprising halves bent away from a common diameter toward the ends of the cylinder, longitudinal webs 3 and 4 extending from each side of said partition in planes at

right angles to each other, knives formed with
shoulders and projecting through said alter-
nating openings and having their inner ad-
jacent ends extending to or overlapping a
5 common plane, knife-adjusting screws pene-
trating openings in the rim of the cylinder
and the webs 3 4 and abutting against the
knife-shoulders, and means for securing the

knives to the cylinder; substantially as set
forth. 10

In testimony whereof I affix my signature
in presence of two witnesses.

CHRISTOPHER TRICK.

Witnesses:

R. J. MCCARTY,
O. J. BARD.