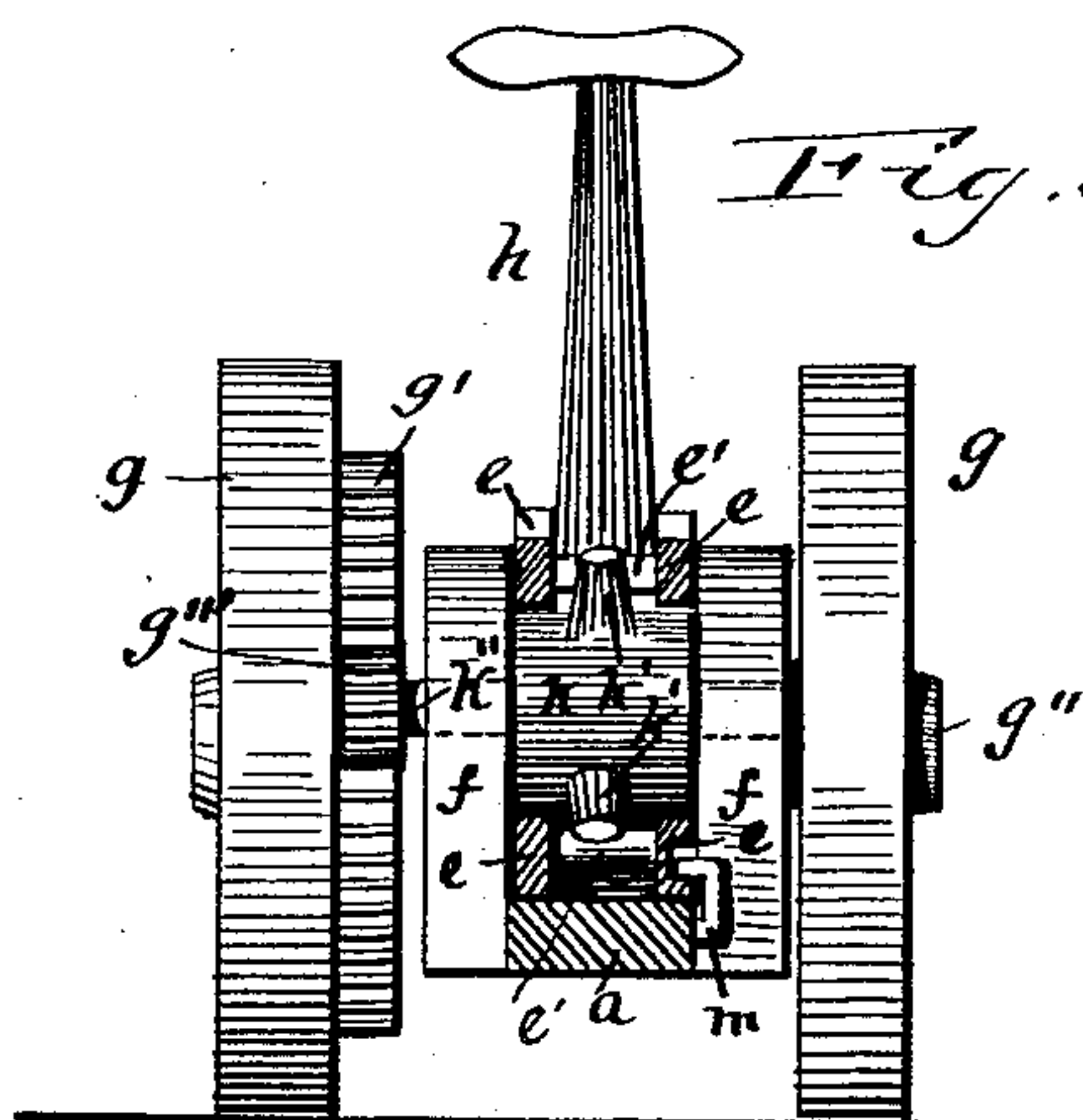
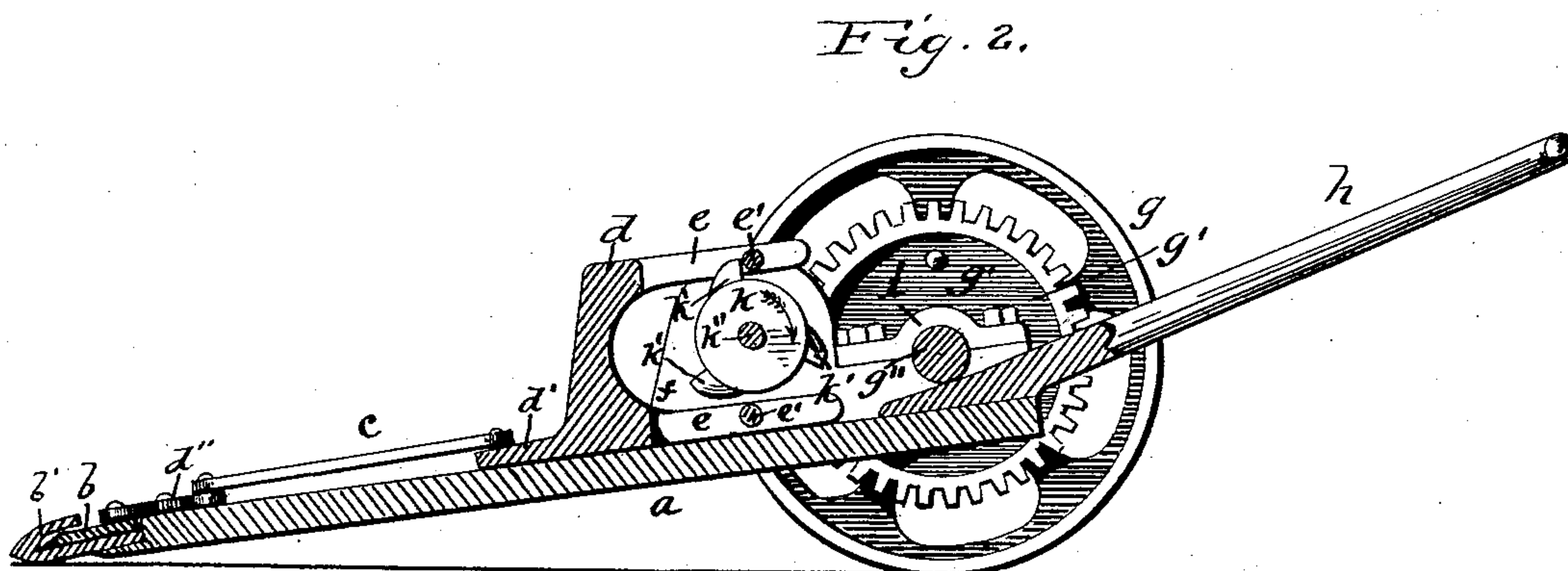
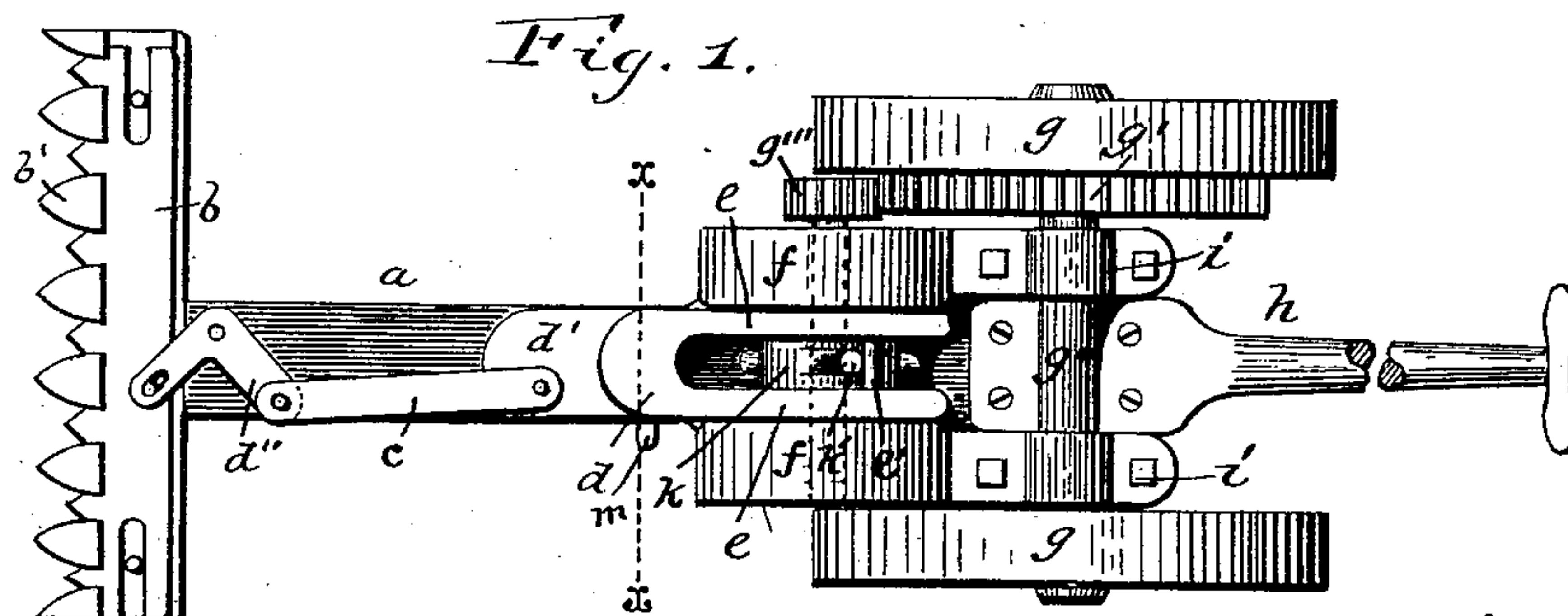


(No Model.)

F. M. HUNT.
LAWN MOWER.

No. 434,787.

Patented Aug. 19, 1890.



Witnesses
C. W. Conway
Chas. D. Davis

Inventor
F. M. Hunt.
By his Attorney
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UNITED STATES PATENT OFFICE.

FRANK M. HUNT, OF ROUND OAK, GEORGIA.

LAWN-MOWER.

SPECIFICATION forming part of Letters Patent No. 434,787, dated August 19, 1890.

Application filed March 19, 1890. Serial No. 344,508. (No model.)

To all whom it may concern:

Be it known that I, FRANK M. HUNT, a citizen of the United States, residing at Round Oak, in the county of Jones and State of Georgia, have invented certain new and useful Improvements in Lawn-Mowers, of which the following is a specification, reference being had therein to the accompanying drawings, in which—

10 Figure 1 represents a plan view of my improved lawn-mower; Fig. 2, a longitudinal vertical sectional view thereof; and Fig. 3, a transverse vertical section on the line $x x$, Fig. 1.

15 In the annexed drawings, the letter a designates the frame of the machine, the forward end of which is provided with suitable guard-fingers b' and cutter-bar b , which are set at right angles to the frame. The rear end of the frame is supported or hung upon an axle g'' , provided with transporting-wheels g , the said axle being journaled in bearings $i i$, secured upon opposite sides of the frame. A handle h is secured to the rear end of the frame, for the purpose of pushing the machine about.

20 Journaled in bearings $f f$, secured on opposite sides of the frame in front of the bearings $i i$, is a transverse shaft k'' , which is provided on one end with a pinion g''' intermeshing with a spur-wheel g' upon the drive shaft or wheel.

25 Secured upon the shaft k'' , between the bearings $f f$, is a wheel or roller k , which is provided with radial spurs or teeth k' , three being employed in this instance. The number of teeth may be varied without departing from the invention in the least.

30 Mounted upon the frame between the bearings $f f$ is a reciprocatory block or frame d , provided with a forward tongue d' , which is connected to the reciprocating cutter-bar b by means of a bar or link c and a pivoted angle-lever d'' . This block d is provided with two pairs of rearwardly-projecting arms $e e$, one of which passes over the top of the wheel k and the other pair under it, as shown. The arms of the upper and lower pairs are respectively connected by transverse bars e' ,

the lower one of these bars being located a little to the rear of the upper one, and both bars being located in the path of the teeth k' . The frame d and its arms fit between the bearings $f f$, and are thereby protected and guided in their movements, whereby a steady, smooth motion, free of lateral vibrations, is obtained. To further guide the block d , I secure on one side of the frame a bent iron or bracket m , and extend the end of the same into a groove formed in the side of the said block, as shown in Fig. 3.

The operation of the machine is clear from the drawings, when taken in connection with the following: The act of moving the machine forward imparts to the shaft k'' , through the medium of the large spur-wheel g'' and pinion g''' , a very rapid rotary motion. This rotary motion is converted into a reciprocating motion by means of the toothed wheel k and the sliding block, which is imparted to the reciprocating cutter-bar through the medium of the link c and angle-lever d'' .

In operation, one of the teeth k' on the roller k strikes against the upper bar e' and forces the frame d forward a short distance and then passes out of the way. Then one of the lower teeth impinges against the lower bar e' and throws the frame back again, and so on, the frame moving back and forth at a very rapid rate.

A machine constructed according to my invention will be very simple and compact, and yet possesses all the advantages of a practical and durable machine.

The essential advantage of the machine is its great simplicity, which enables it to be cheaply manufactured, and which renders it stronger and more durable than more complicated machines.

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

In a lawn-mower, the combination of a frame a , provided with a cutting apparatus at its forward end and hung upon an axle and driving-wheels at its rear end, a handle at its rear end, bearings $f f$ mounted upon opposite sides of the frame, a transverse shaft journaled in these bearings and carrying a roller provided

with radial pins k' , a sliding frame d , provided
with two pairs of arms e , one pair extending
above the roller and the other below the same,
and both provided with pins or bars e' , adapted
5 to engage the radial pins k' , the said frame fit-
ting and working on the main frame and be-
tween the bearings $f f$, a guiding-pin m , and
means connecting the said sliding frame to the

cutting apparatus, all arranged as and for the
purposes described. 10

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

FRANK M. HUNT.

Witnesses:

E. L. SMITH,
JOHN F. CHILDS.