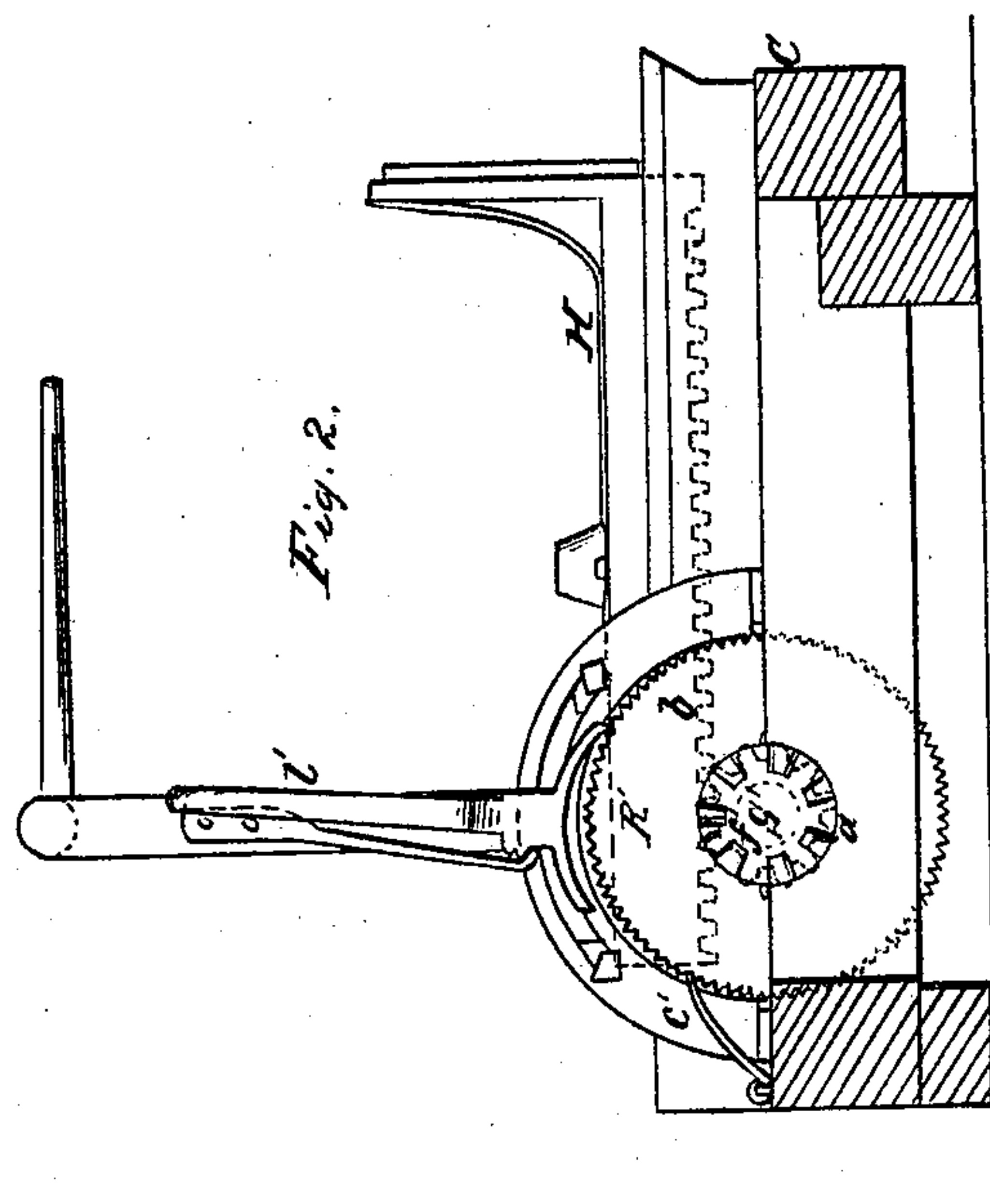
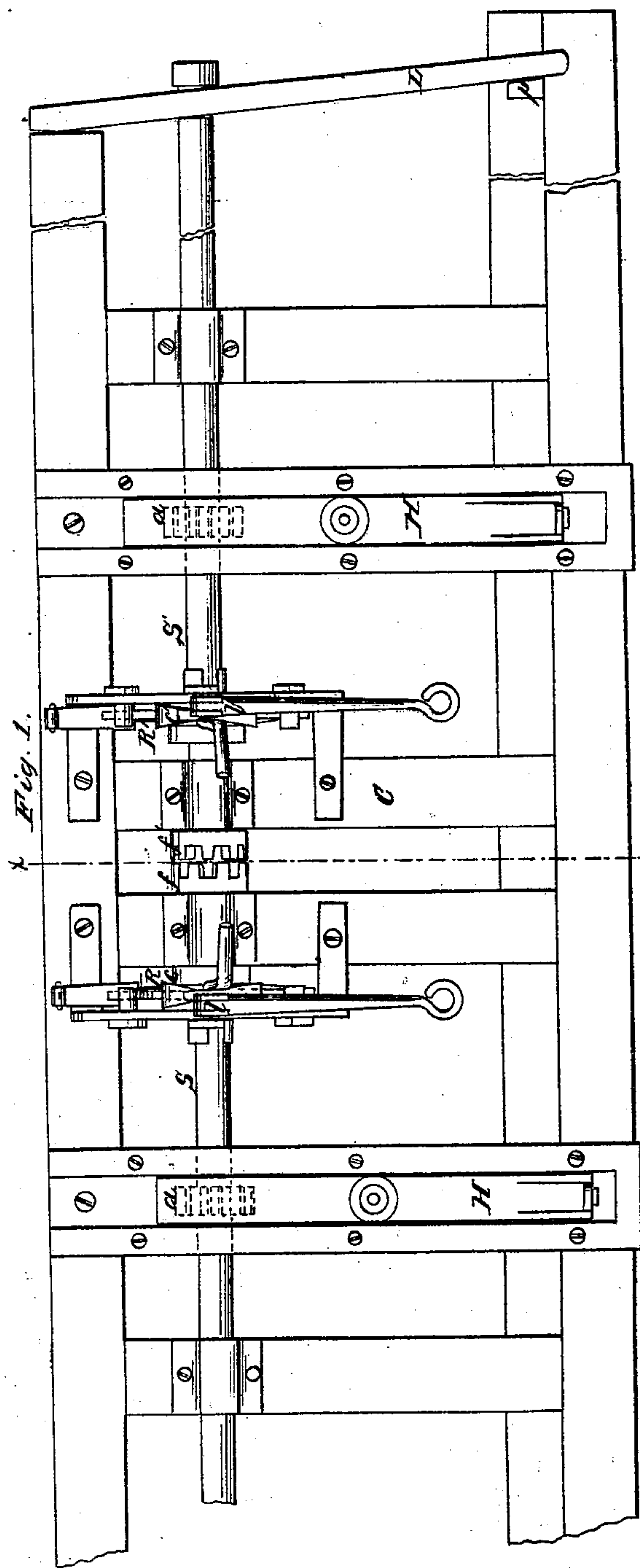


G. W. Hearn,  
Saw-Mill,  
No. 16,795, Patented Mar. 10, 1857.



# UNITED STATES PATENT OFFICE.

GEO. W. HEARN, OF PRINCESS ANN, MARYLAND.

## METHOD OF OPERATING SAWMILL-DOGS.

Specification of Letters Patent No. 16,795, dated March 10, 1857.

*To all whom it may concern:*

Be it known that I, G. W. HEARN, of Princess Ann, in the county of Somerset and State of Maryland, have invented a new and  
5 useful Improvement in Sawmills; and I do hereby declare that the following is a full, clear, and exact description of the construction and operation of the same, reference being had to the annexed drawing, forming  
10 part of this specification, in which—

Figure 1 is a top view of head blocks and mechanism for operating them. Fig. 2 is a vertical section on  $x x$ , looking to the right.

Similar characters of reference in the several figures denote the same part.  
15

The nature of my invention consists in constructing the machine with two shafts in the prolongation of each other, as head block drivers, each provided with feed  
20 ratchet and connected mechanism. One of said shafts to be capable of longitudinal movement, and the adjacent ends of both furnished with clutches. So that at the will of the operator the head blocks may be  
25 moved either together or separate, substantially as, and for the purpose hereinafter to be set forth.

In the drawing C is the carriage, H H, the head blocks, and S S' the operating shafts,  
30 each having a pinion  $a$ , meshing in a rack  $b$  giving the set in the usual manner.

R R' are the ratchets, having pawls  $c c'$  and moving levers  $l l'$ . The shafts S S' are in the prolongation of each other, and have

on their adjacent ends the clutches  $f f'$ . 35  
The shaft S' together with its ratchet R' is capable of being moved longitudinally by a lever L. In the position shown in the drawing, the clutches are disconnected, and each head block can be set separate. When  
40 the clutches are united the setting will be effected by power applied to one of the ratchet wheels only. The stop  $p$  holds the lever L in whatever position it may be desirable to place it. 45

This construction is advantageous on account of the facility it gives for difference of set to the opposite ends of the log; and the ease with which both head blocks may be made to move uniformly by power applied  
50 to one ratchet.

I make no claim to operating the head blocks from the movement of a single ratchet wheel; nor do I claim the separate movement of the head blocks; but 55

I claim—

The longitudinally moving shaft S' in combination with the shaft S and the clutches  $f f'$  arranged and operating as specified. 60

In testimony whereof, I have hereunto signed my name before two subscribing witnesses.

GEORGE W. HEARN.

Witnesses:

GEO. PATTEN,  
NOAH J. TILGHMAN.