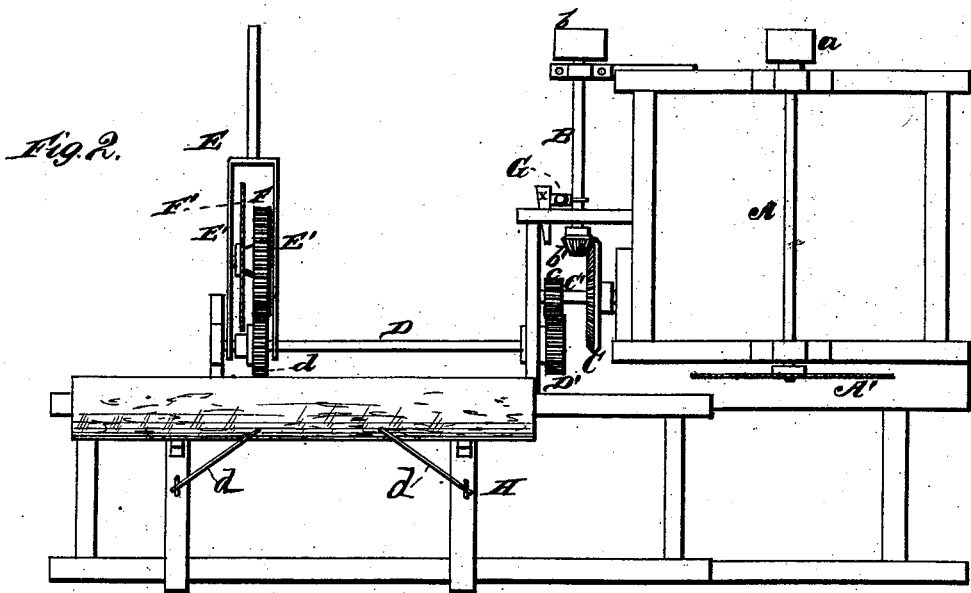
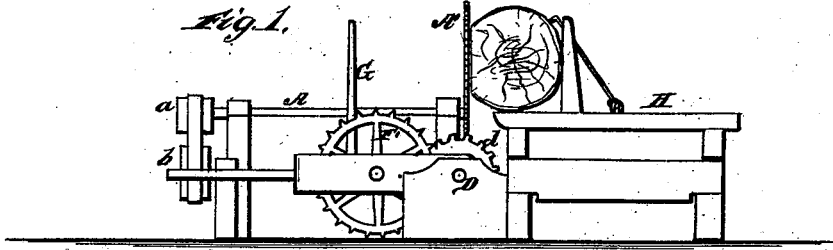


S. W. & M. L. GATTS.  
Log-Turner.

No. 209,881.

Patented Nov. 12, 1878.



WITNESSES  
*Robert L. Smith,*  
*Geo. J. Sherry,*

INVENTORS.  
*Silas W. Gatts,*  
*M. Luther Gatts.*  
By *Jedwards, Smith & Co.*  
ATTORNEYS.

# UNITED STATES PATENT OFFICE.

SILAS W. GATTS AND M. LUTHER GATTS, OF WILLIAMS TOWNSHIP, WOOD COUNTY, WEST VIRGINIA.

## IMPROVEMENT IN LOG-TURNERS.

Specification forming part of Letters Patent No. 209,881, dated November 12, 1878; application filed October 12, 1878.

### *To all whom it may concern:*

Be it known that we, SILAS W. GATTS and M. LUTHER GATTS, of Williams township, in the county of Wood and State of West Virginia, have invented a new and valuable Improvement in Portable Log-Turners; and we 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 drawings, making a part of this specification, and to the letters and figures of reference marked thereon.

Figure 1 of the drawings is a representation of an end of our saw-mill log-turner, and Fig. 2 is a top-plan view of the same.

Our invention relates to an attachment for saw-mills; and it is adapted to turn the log on the carriage by the same power which turns the saw.

The novelty consists in a lever which is so pivoted to a shaft as to allow it to be elevated in connection with the log on the carriage at will. This shaft is adapted to be thrown in and out of gear with the power-shaft by a suitable shifter. The lever carries a toothed wheel, which is rigid with a gear-wheel which is always in gear with the lever-shaft.

Referring to the drawings, A represents the saw-shaft, A' the saw, and a pulley, *a*, is rigid with the shaft, with which a belt connects a pulley, *b*, on a shaft, B, having a beveled pinion, *b'*, which gears with a cog-wheel, C, on a shaft, C', having a pinion, *c*.

D represents a shaft having a suitable gear-wheel, D', which meshes with the pinion *c*, and on it is pivoted a bifurcated lever, E, between the branches E' of which is journaled a cog-wheel, F, on the same shaft of which and rigid therewith is a toothed wheel, F'. The wheel F meshes into a pinion, *d*, on the shaft D. A shifting-lever, G, connected with the shaft B,

allows the pinion *b'* to be thrown in and out of gear at will, and a wedge, *x*, serves to hold said pinion firmly in gear.

H represents the log-carriage, of any ordinary construction, adapted to feed the log to the saw, and it is so arranged relatively to the toothed wheel F' and lever E that when the lever is raised the wheel F' comes in contact with the log on the carriage.

When it is desired to turn the log after one or more sides of the same have been sawed off, the dogs *d d* should be released, and the shifter G and wedge *x* employed to throw the pinion *b'* and cog-wheel C in gear, when the band from the pulley *a* will communicate motion from the saw-shaft, through B and D, to the wheels F F'. The lever E E' should be then raised to cause the teeth of the wheel F' to come in contact with the log, when, by the revolution of the said wheel F', the log may be turned to the desired position, the dogs again fastened to hold it, and the shifter G operated to throw the log-turning mechanism out of gear.

What we claim as new, and desire to secure by Letters Patent, is—

In a log-turner, the combination of the lever E E', pivoted to the shaft D, and carrying the wheels F F', with the shaft D, having gears *d* and D', connected by adjustable gearing and driving mechanism with the saw-shaft A, substantially as set forth.

In testimony that we claim the above we have hereunto subscribed our names in the presence of two witnesses.

S. W. GATTS.  
M. L. GATTS.

Witnesses:

GEO. LOOMIS,  
L. N. TAVENNER.