2 Sheets—Sheet 1.

S. L. LEACH & A. W. GRIFFIN.

Relishing-Machine.

No. 218,284. **Patented Aug. 5, 1879.**

Fig. 1.

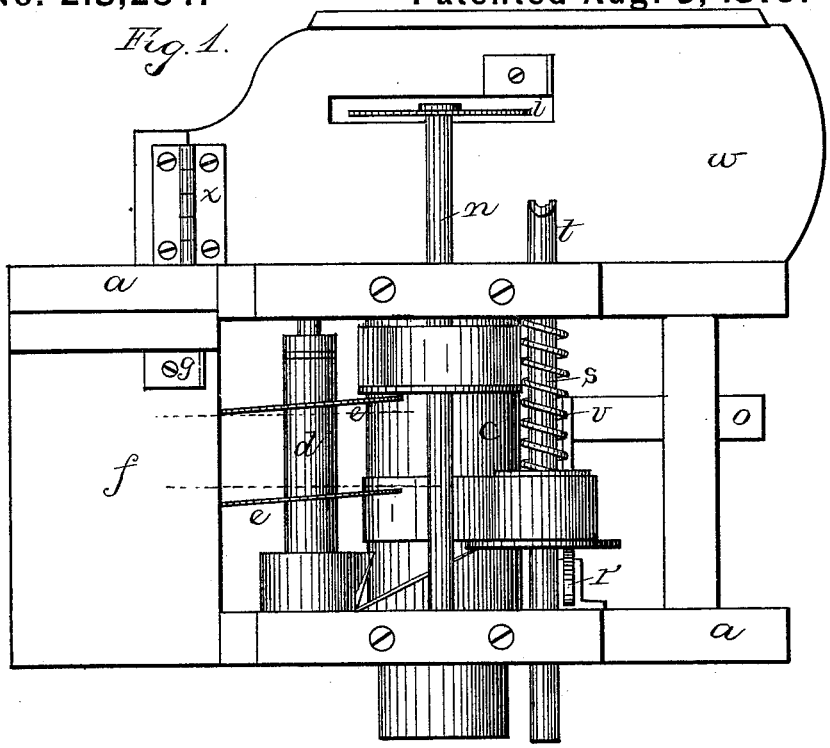
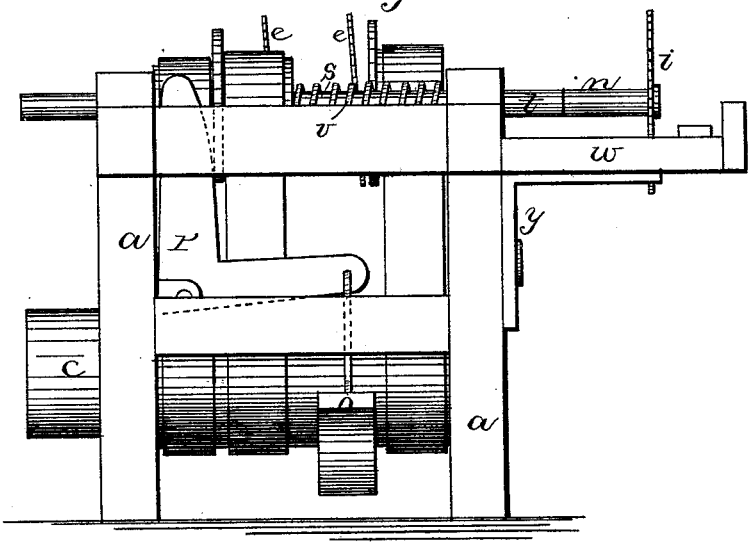


Fig. 2.



Witnesses:

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W. S. D. Haines

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2 Sheets—Sheet 2.

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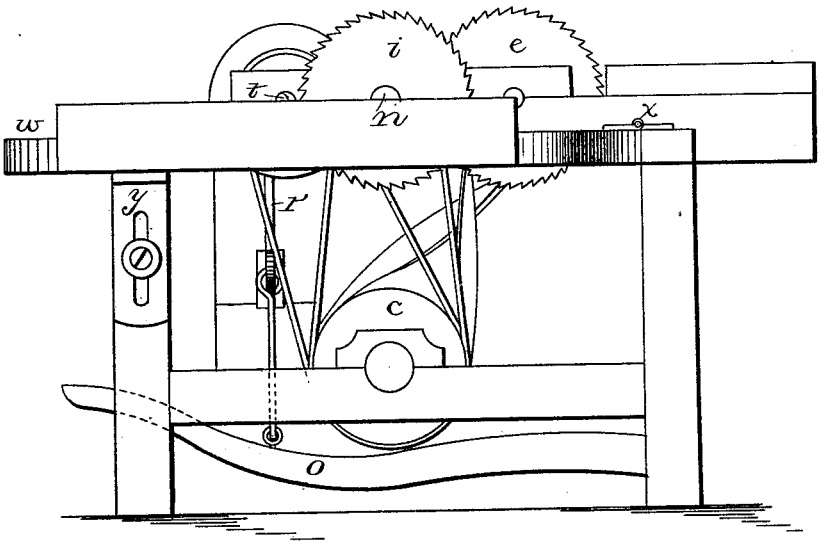
Fig. 3.



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Atty

UNITED STATES PATENT OFFICE.

SIMEON L. LEACH AND ALBERT W. GRIFFIN, OF CORRY, PENNSYLVANIA.

IMPROVEMENT IN RELISHING-MACHINES.

Specification forming part of Letters Patent No. **218,284**, dated August 5, 1879; application filed June 3, 1879.

To all whom it may concern:

Be it known that we, SIMEON L. LEACH and ALBERT W. GRIFFIN, of Corry, in the county of Erie and State of Pennsylvania, have invented certain new and useful Improvements in Relishing-Machines; and we do hereby 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 pertains to make and use it, reference being had to the accompanying drawings, which form part of this specification.

Our invention relates to an improvement in relishing-machines, and is intended more especially for use upon sashes, blinds, and doors; and it consists in the arrangement and combination of parts, that will be more fully described hereinafter.

Figure 1 is a plan view of our invention. Fig. 2 is an end elevation, and Fig. 3 is a side elevation, of the same.

a represents a suitable frame, in the lower portion of which is journaled the driving drum or pulley *c*, from which run the belts which are to drive the different operating parts. Journaled in the upper part of this frame *a* are three separate and independent shafts, each one being run by its own belt.

Upon the shaft *d* are secured the two saws *e*, which are set obliquely, and at any desired angle that may be preferred, for the purpose of cutting out relishes in the tenons of doors and blinds, or any kind of work where a portion of the tenon requires to be cut away. These saws will be placed a distance apart proportioned to the angle at which they are set, and the width of the tenon desired, and may be used to relish both sides of the tenon at once; or either saw may be used on one side only of the tenon.

In front of these two wabbling saws is placed a table, *f*, upon which there is a stop, *g*, and upon this table is placed the piece that is to be relished, and pushed up to the saws, when the whole work is finished at a single operation.

All that has to be done to relish a door-rail is simply to drive it against the stop *g*, and the saws will cut away the portions to be removed.

In order to form the tenons for sashes, the piece is pushed up to the saw *i* on the shaft *n*, and the tenon is sawed to the proper width. The operator then puts his foot upon the treadle *o*, and, by means of the cranked lever *r*, forces the shaft *s*, which has the bit *t* on its inner end, up against the piece being sawed, and the bit cuts away that portion of the tenon desired to be removed. This bit is square on the end, as shown, so as to cut the tenon squarely off, instead of merely boring a hole in it. As soon as the pressure is removed from the treadle, the spring *v* moves the shaft back to the first portion at once.

As the thickness of the material used varies considerably, the table *w*, around the saw *i*, is hinged at *x*, and provided with means, *y*, at the other end for raising and lowering the free end of the table up and down, as required.

We are aware that two angling saws secured eccentrically to their shaft, and placed in close relation to each other, for the purpose of rounding off the edges of fellies, are not new, and this we disclaim. Our saws are placed far enough apart to cut two relishes at the same time, or only one, and are secured centrally upon their shaft.

Having thus described our invention, we claim—

1. The combination of the saw *i* on the shaft *n* with the movable shafts *s*, provided with a bit, *t*, and a treadle or other means of moving the shaft, substantially as described.

2. The combination of the saw *i*, bit on the shaft *s*, and table *w*, movable at one end, substantially as set forth.

In testimony that we claim the foregoing we have hereunto set our hands.

SIMEON L. LEACH.
ALBERT W. GRIFFIN.

Witnesses:
M. CAMERON,
J. B. GEER.