No. 898,289.

PATENTED SEPT. 8, 1908.

C. R. VOORHIES.

FLUTING OR BEADING MACHINE.

APPLICATION FILED OCT. 18, 1907.

Fig. 1

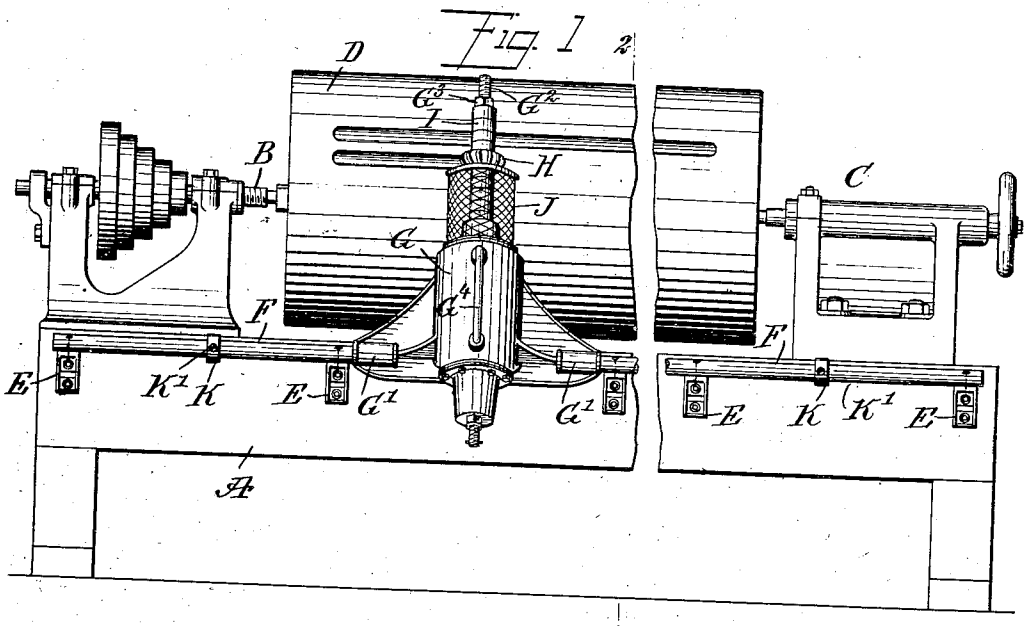


Fig. 2

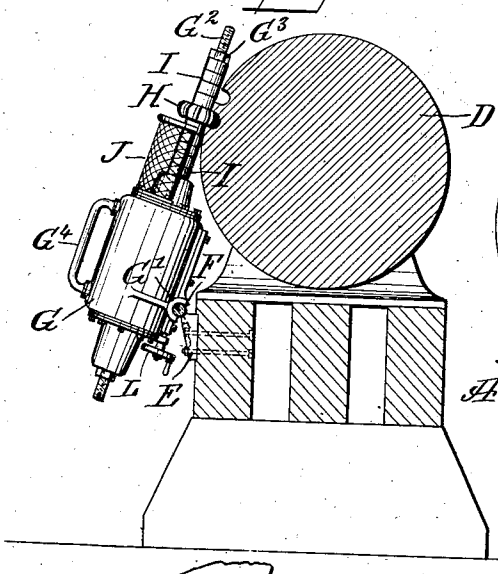


Fig. 4.

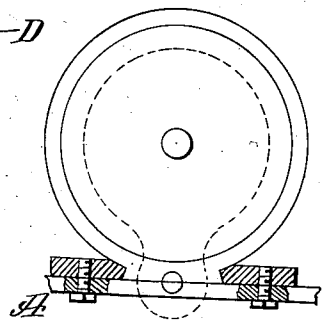
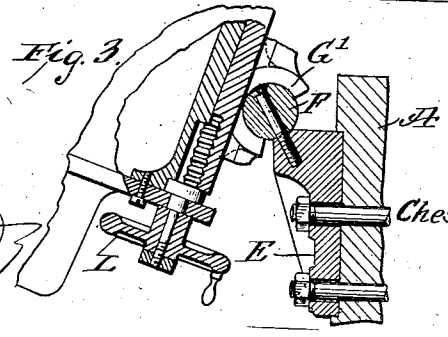


Fig. 3.



WITNESSES

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CHESTER RICHARD VOORHIES, OF PORTLAND, OREGON.

FLUTING OR BEADING MACHINE.

No. 898,289. Specification of Letters Patent. Patented Sept. 8, 1908.

Application filed October 18, 1907. Serial No. 398,082.

To all whom it may concern:

Be it known that I, CHESTER RICHARD VOORHIES, a citizen of the United States, and a resident of Mount Tabor, (Portland), in the county of Multnomah and State of Oregon, have invented a new and Improved Fluting or Beading Machine, of which the following is a full, clear, and exact description.

The invention relates to wood-working machinery and its object is to provide a new and improved fluting or beading machine, more especially designed for forming flutes or beads on columns and like articles, in a very simple and economical manner.

The invention consists of novel features and parts and combinations of the same, which will be more fully described hereinafter and then pointed out in the claims.

A practical embodiment of the invention is represented in the accompanying drawings forming a part of this specification, in which similar characters of reference indicate corresponding parts in all the views.

Figure 1 is a side elevation of the improvement; Fig. 2 is a transverse section of the same, on the line 2—2 of Fig. 1, and Fig. 3 is an enlarged cross section of the guideway for the motor to slide and to rock on. Fig. 4 is a partial transverse section through the motor casing near the lower end thereof.

On the body A of an ordinary wood-working lathe, is mounted the usual spindle B and a tail stock C for supporting the column or other work D to be fluted or beaded.

On the front of the body A are bolted or otherwise secured a number of brackets E, to which is fastened a longitudinally extending guideway F in the form of a rod, engaged by bearings G′ secured to or formed on the casing G of an electric or other rotary motor, having its shaft G^2 provided with a rotary cutter H, for cutting flutes or beads lengthwise on the work D. The cutter H is fitted on the shaft and fastened thereon by washers I, held in place by a nut G^3, screwing on the outer threaded end of the motor shaft G^2, so that the washers I clamp the cutter H in position, for the cutter to rotate with the shaft G^2. By the arrangement described, the cutter H may be adjusted inwardly or outwardly on the shaft G^2, so as to bring the cutter H in proper relation to the work D according to the diameter of the latter, that is, the cutter H is held in place on the shaft G^2 nearer to the inner end of the shaft, on work D of a large diameter, and further out on the shaft for work of smaller diameter.

The casing G of the motor is provided with a handle G^4, adapted to be taken hold of by the operator for sliding the motor lengthwise on the guideway F and for rocking the motor transversely, so as to move the cutter H in and out of engagement with the work D. A guard J is secured to the top of the motor casing G, to protect the workmen from the cutter H. Stop collars K are adjustably secured by set screws K′ on the guideway F, to limit the sliding movement of the motor G on the guideway F, according to the length of the flute or bead to be formed on the work D. The washer I, next below the cutter H, rests on the peripheral face of the work D, thus limiting the cutting depth of the cutter H on the work D. An adjusting screw L, for the motor casing G, serves to move the motor and consequently the cutter H into accurate position in case the washers I fail to bring the cutter into proper position. Now when the motor is running and the cutter H is rotated, then the operator by having hold of the handle G^4 can conveniently slide the motor G along on the guideway F, and at the same time swing the motor G over transversely, for the cutter H to cut into the work. As the cutter H rotates and is bodily carried along in a longitudinal direction, it is evident that the desired flute or bead is cut lengthwise on the work D. The motor G as well as its guide rod F are preferably mounted on an ordinary turning lathe, employed for turning the work down to the desired diameter, so that the work remains truly centered on the lathe while being fluted or beaded by the fluting or beading attachment. By this mode of procedure a separate handling of the work from a lathe to a fluting or beading machine is dispensed with, and at the same time the work remains truly centered during the fluting or beading operation.

Having thus described my invention, I claim as new and desire to secure by Letters Patent:

1. A fluting or beading machine, comprising a support for the work, a guideway, and a motor mounted to slide and to rock on the said guide-way and carrying and revolving a fluting or beading cutter and means for adjusting the motor transversely of the guideway.

2. A fluting or beading machine, compris-

ing a guideway, and a motor mounted to slide on the said guideway in the direction of the length of the work and capable of rocking on the guideway in a transverse direction, the shaft of the motor being arranged transversely to the guide-way and provided with a fluting or beading cutter.

3. A fluting or beading machine, comprising a lathe bed, a spindle, a tail stock, a guideway lengthwise on the lathe bed, and a motor mounted to slide lengthwise and to rock transversely on the said guideway, the shaft of the motor extending transversely to the guide-way and carrying a fluting or beading cutter.

4. A fluting or beading machine, comprising a lathe bed, a spindle, a tail stock, a guideway lengthwise on the lathe bed, a motor mounted to slide lengthwise and to rock transversely on the said guideway, the shaft of the motor extending transversely to the guide-way and carrying a fluting or beading cutter, and means on the said shaft for limiting the cutting depth of the cutter.

5. A fluting or beading machine, comprising a lathe bed, a spindle, a tail stock, a guideway lengthwise on the lathe bed, and a rotary motor having its cylinder extending transversely to the guide-way and provided with longitudinally arranged bearings engaging the said guideway to allow of sliding the motor lengthwise on the guideway and to rock it transversely, the said motor casing having a handle for engagement by the operator and the shaft of the motor having adjustable means for adjustably securing a rotary cutter in place on the motor shaft.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

CHESTER RICHARD VOORHIES.

Witnesses:

ERNEST MORRIS,

WM. TURNER.