E. R. SPREADBURY.

WOOD CARVING DEVICE.

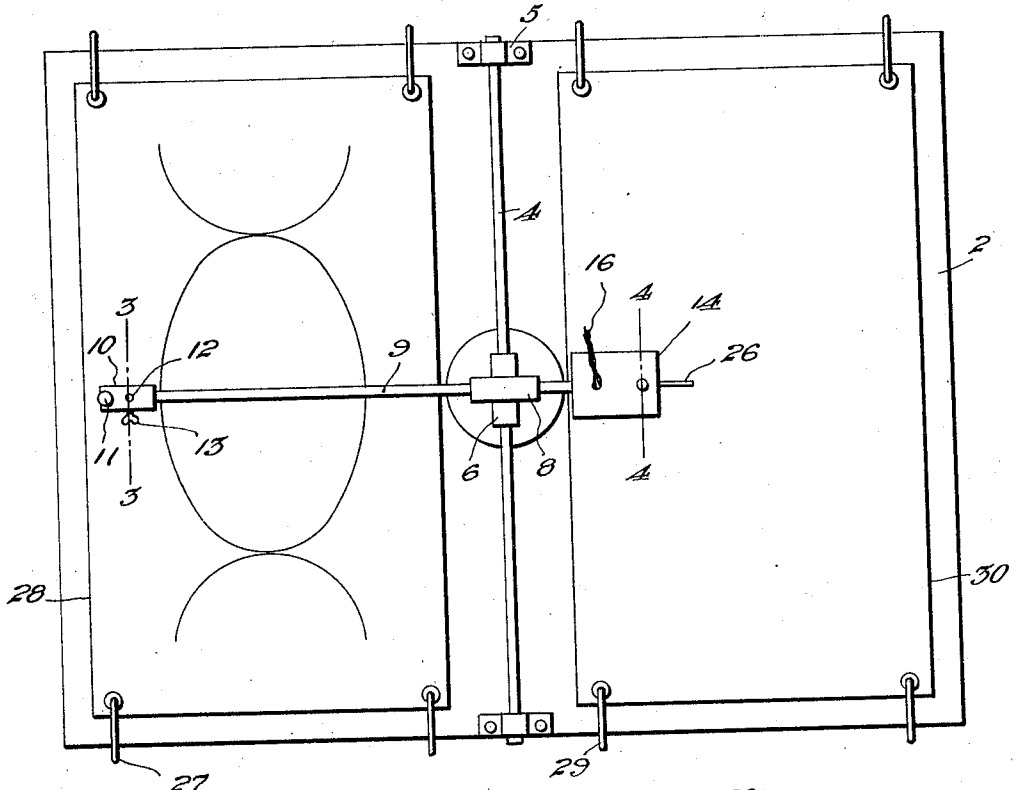
APPLICATION FILED APR. 10, 1920.

1,389,462.

Patented Aug. 30, 1921.

2 SHEETS—SHEET 1.

Fig. 1.



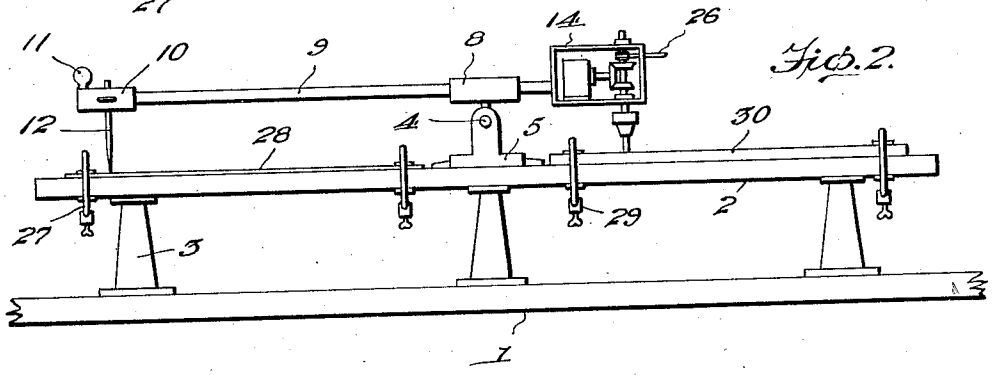


Fig. 2.

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2 SHEETS—SHEET 2.

Fig. 3.

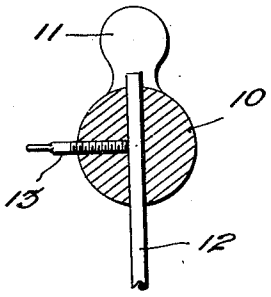


Fig. 4.

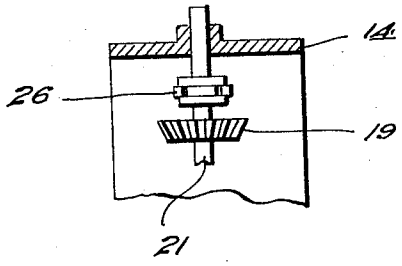


Fig. 5.

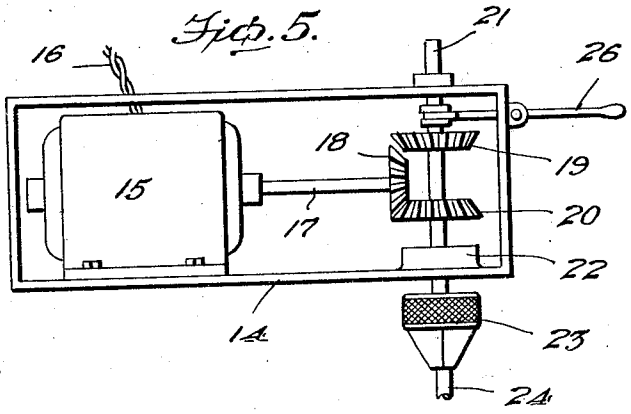




Fig. 6.

Fig. 7.

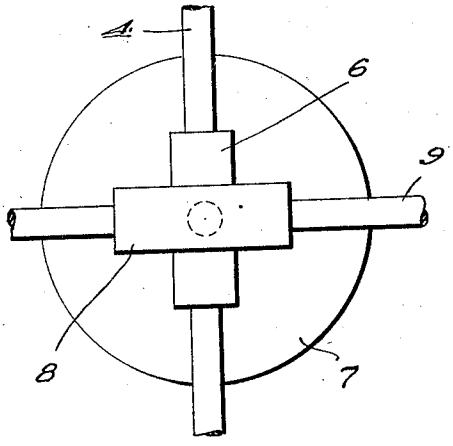
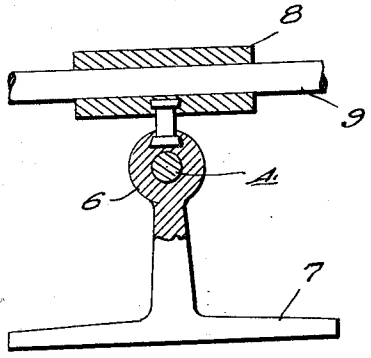


Fig. 8.



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UNITED STATES PATENT OFFICE.

EARL RUSSELL SPREADBURY, OF SAUGUS, MASSACHUSETTS.

WOOD-CARVING DEVICE.

1,389,462. Specification of Letters Patent. **Patented Aug. 30, 1921.**

Application filed April 10, 1920. Serial No. 372,830.

To all whom it may concern:

Be it known that I, EARL RUSSELL SPREADBURY, a citizen of the United States, residing at Saugus, in the county of Essex and State of Massachusetts, have invented new and useful Improvements in Wood-Carving Devices, of which the following is a specification.

The present invention has reference to a wood carving machine.

The object of the invention is to produce a simple mechanism whereby a reproduction from a carved pattern may be made in an easy and expeditious manner.

A further object is to construct a pattern reproducing machine in which a motor driven bit is employed and directed to its work by an element that travels over a pattern which is to be reproduced.

A further object is to produce in a wood carving machine a base designed to receive thereon a paddle and also a plate to be carved to reproduce the design of the pattern, such base having mounted on a shaft a slide that carries a swiveled socket through which extends a movable rod, the said rod having at one of its ends a stylus designed to be directed over the paddle and on its other end a motor driven bit designed to operate on the plate on which the pattern is to be reproduced.

A further object is to produce a wood carving machine that shall be of a simple construction, one which will not require the service of a skilled wood carver in the operation thereof, and one which will in an easy, quick and accurate manner reproduce on a plate or board all of the details of a pattern.

The foregoing objects, and others which will appear as the nature of the invention is better understood, may be accomplished by a construction, combination and operative arrangement of parts such as is disclosed by the drawings.

In the drawings:—

Figure 1 is a plan view of the improvement.

Fig. 2 is a side elevation thereof.

Fig. 3 is a sectional view approximately on the line 3—3 of Fig. 1.

Fig. 4 is a sectional view approximately on the line 4—4 of Fig. 1.

Figs. 5 to 8 illustrate details.

On a suitable bench or other support 1 I attach the base 2 of my improvement.

The base is sustained above the support by foot members or pillars 3 attached to the under face of the base and secured to the bench or support.

As disclosed by the drawings the base 2 is in the nature of a rectangular member of a suitable size for the purpose intended. The base 2 may be of any desired material, and strength.

Extending transversely at the center of the base is a shaft 4. This shaft has its ends supported in suitable upright bearings 5.

On the shaft 4 is a slidable sleeve 6. The slide has at its under face a depending neck portion that terminates in a flat foot 7, and this foot rests directly on the base 2.

Swiveled to the slide 6, at the upper portion and at the center thereof is a socket member 8. Slidable through the socket is a rod 9. This rod has on one of its ends a head 10 that is provided with an upstanding handle 11. The head has an opening therethrough for the reception of a pin or stylus 12. The stylus is retained adjusted in the head through the medium of a binding element 13.

On the opposite end of the rod 9 is a casing 14. In this casing is a motor 15. The motor is preferably in the nature of a small electric dynamo, the circuit wires for which, indicated by the numeral 16 have their outer ends connected to a plug provided with the usual switch designed to be connected to a socket in the power circuit. The shaft for the motor, indicated by the numeral 17 has on its outer end a toothed pinion 18. This pinion is designed to mesh with one of two similar pinions 19 or 20 splined upon a shaft 21 journaled in suitable bearings 22 in the casing 14 and extending through the casing. The lower end of the shaft has a chuck 23 whereby a bit 24 may be removably connected to the chuck and operated by the motor. The pinions 20 and 19 are brought into or out of mesh with the pinion 18 by lever operated means 26, so that the bit 24 may be turned in either direction. Secured on the base 2 by clamps 27 is a pattern 28. It will be observed that the pattern is arranged on the side of the base on which the stylus 12 is positioned. On the other side of the shaft 4 there is secured on the base, by clamps 29 the stock 30 to be carved.

In operation the handle 11 of the head 13 is grasped and the stylus 12 is brought over the outlines of the pattern 28. The bit 24

traveling over the stock will cut the same to accurately reproduce thereon the figure or figuration of the pattern. The rod 9 is susceptible to a lateral movement with respect to the shaft 4, a longitudinal movement with respect to the said shaft as well as an angular and a swinging movement, so that the bit 24 will accurately follow the path of the stylus. The bit can be turned in either direction in the cutting operation, and of course the chuck 23 permits of varying classes of bits being arranged on the device. The foot 7 engaging with the base 2 prevents the accidental movement of the slide 6 on the shaft 4, and it is believed that the foregoing description, when taken in connection with the drawings will fully set forth the construction, operation and advantages of the improvement.

Having thus described the invention, what I claim is:—

1. A base, a transverse shaft thereon, a slide on the shaft, a socket swiveled to the slide, a rod passing through the socket, a stylus on one end of the rod, and a motor driven chuck on the other end of the rod.

2. A base, a transverse shaft thereon, a slide on the shaft, a shoe on the slide resting on the base, a socket swiveled to the slide, a rod passing through the socket, a stylus on one end of the rod, and a motor driven bit carrying chuck on the other end of the rod.

3. A base, a transverse shaft arranged centrally thereon, and elevated thereabove, a slide on the shaft having a flat foot portion that rests on the base, a socket swiveled to the upper portion of the slide, a rod movable longitudinally through the socket, a head on one end of the rod, an adjustable stylus carried by the head, a handle on the head, and a motor driven bit carrying chuck on the other end of the rod.

4. A support, a base supported thereon and elevated thereabove, a transverse shaft disposed centrally on the base and having its ends supported thereabove, a slide on the shaft, a foot on the slide resting on the base, a socket swiveled to the top of the slide, a rod longitudinally movable through the socket, an adjustable stylus on one end of the rod, a motor driven chuck carrying bit on the other end of the rod, and means for revolving the bit in either of two directions.

In testimony whereof I affix my signature.

EARL RUSSELL SPREADBURY.