(No Model.)

E. PRIETZ.

LATHE ATTACHMENT.

No. 431,392. Patented July 1, 1890.

Fig. 1.

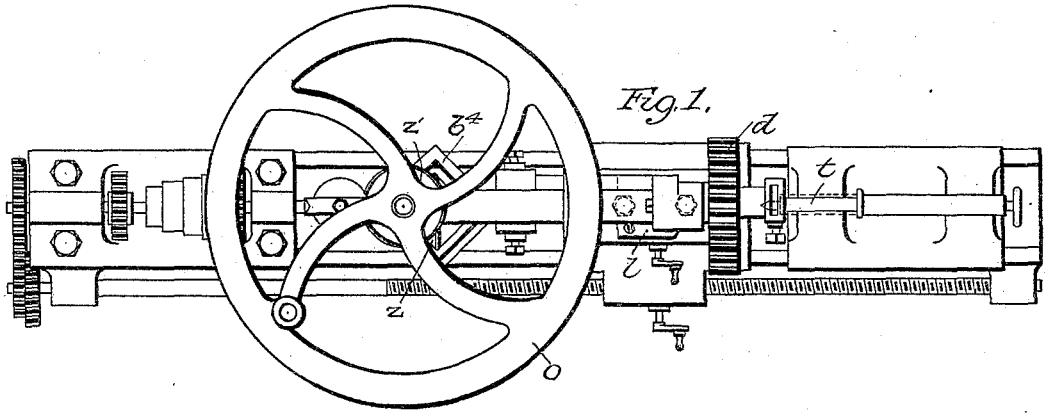


Fig. 2.

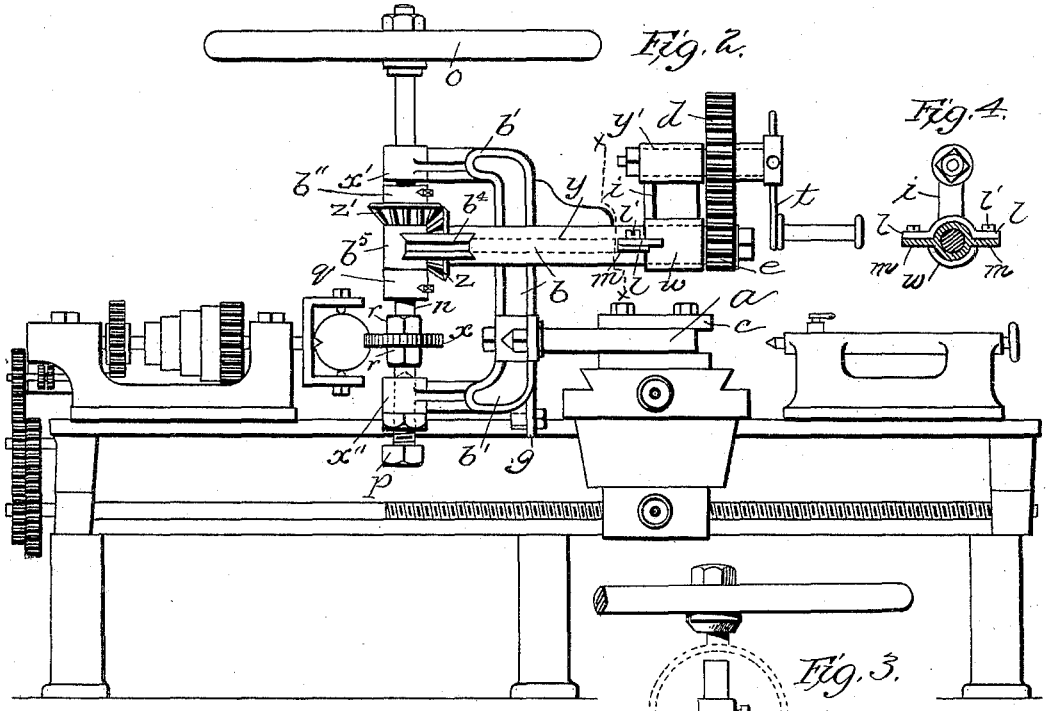
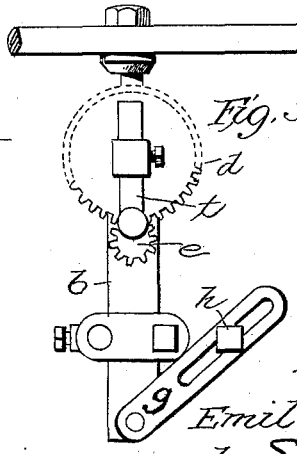


Fig. 4.

Fig. 3.



Attest

F. L. Middleton

James McLean

Inventor

Emil Prietz

by Ellis & Spear

Atty.

UNITED STATES PATENT OFFICE.

EMIL PRIETZ, OF CHRISTIANSTADT, PRUSSIA, GERMANY.

LATHE ATTACHMENT.

SPECIFICATION forming part of Letters Patent No. 431,392, dated July 1, 1890.

Application filed July 18, 1889. Serial No. 317,953. (No model.)

To all whom it may concern:

Be it known that I, EMIL PRIETZ, of Christianstadt-on-the-Bober, in the Kingdom of Prussia and German Empire, have invented new and useful Improved Means and Apparatus for Shaping Wood, Metal, and the Like, of which the following is a specification, reference being had therein to the accompanying drawings.

My invention consists in combining with the cutter-spindle having a driving-wheel at its end a supplemental driving means, also connected with said spindle for driving it at a different rate of speed.

In the drawings, Figure 1 is a plan view of the mechanism attached to a lathe; Fig. 2, a side elevation of the same; Fig. 3, a front view of part of the same; Fig. 4, a detail sectional view on line x x of Fig. 2.

In the drawings, the cutter X is held upon the main spindle n by nuts r r. This spindle has bearings in the ends x' x'' of the main supporting-frame b, one end being engaged by the needle-pointed screw p, extending through the bearings x''. The main frame b consists of the two arms b', which have the bearings x' x'' thereon, said arms extending rearwardly and toward each other to unite with the main part b of the frame. A third bearing b^5 is provided for the spindle n, this also being attached to the frame b by the yoke b^4, extending from the front end of the main part b of said frame. The spindle has an ordinary driving-wheel o, through which motion may be communicated to it. The supplemental driving means consists of the bevel-pinions z' on the spindle n, meshing with the pinion z, which is on the supplemental spindle or shaft y, extending at right angles to the cutter-spindle and supported by the main part of the frame. The yoke b^4 at the forward end of the frame is formed so that the pinion z can be conveniently positioned within it. The proper position of the spindle can be determined by the adjustable collar q, which bears upon the bearing b^5 by the screw p, while the beveled pinion z' can be adjusted by the adjustable collar b''. Motion is communicated to the spindle y by a pinion e at its rear end, which pinion is driven by the pinion d on a spindle y', which in turn is driven by a crank t. The spindle y' of the driving-pinion d is supported in a bracket i. This bracket has a collar w, which fits on the outside of the rear part of the frame b. This collar has a lug or lugs l projecting therefrom, adapted to be alongside of the lugs m on the frame b, the attachment being completed by a screw l'.

A bolt or projection a is fixed upon the frame b, and by this the entire mechanism can be attached to the carrier of a lathe by the clamp-plate c, as shown. This allows the apparatus to be placed in any position. Another bolt h is provided, Fig. 3, in the slotted guide g, fixed by screws to the support b, and this insures secure attachment to the support of a lathe.

I claim as my invention—

1. In combination, the spindle, the cutter x thereon, the wheel o, attached to the spindle for driving the same, the shaft y at right angles to the spindle, the beveled pinions z' z on the spindle and shaft, respectively, means for driving the shaft y, and the supporting-frame b, substantially as described.

2. In combination, the spindle, the cutter x thereon, the shaft y at right angles to the spindle, the pinions z' z, the supporting-frame b, and means for driving the said shaft y, consisting of the gear d, with the crank t, supported upon the frame b, and the pinion e on the shaft y, substantially as described.

3. In combination with the spindle and cutter and mechanism for driving the same, the supporting-frame, and the pin a, for attaching the said parts to the lathe, substantially as described.

4. In combination, the spindle with the cutter x, the means for driving said spindle, the frame having bearings x' x'' and means for adjusting the said spindle in its bearings, and the pin a, for securing said parts to the lathe, substantially as described.

In witness whereof I have hereunto set my hand in presence of two witnesses.

EMIL PRIETZ.

Witnesses:

OSWALD FIEBIG,
Handschuhfabrikant.

ROBERT JACOB,
Handelsmann.