J. M. SCRIBNER.

PARABOLIC FLUTING LATHE.

No. 28,308. Patented May 15, 1860.

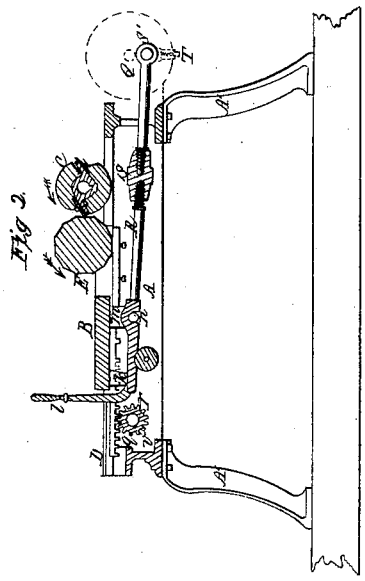
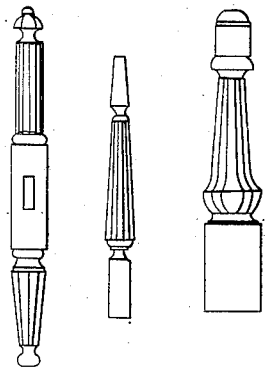


Fig 2.



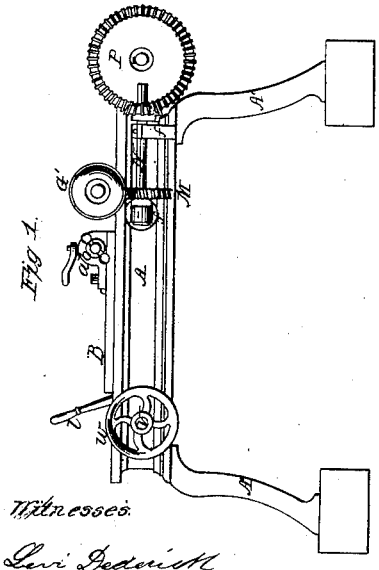


Fig 1.

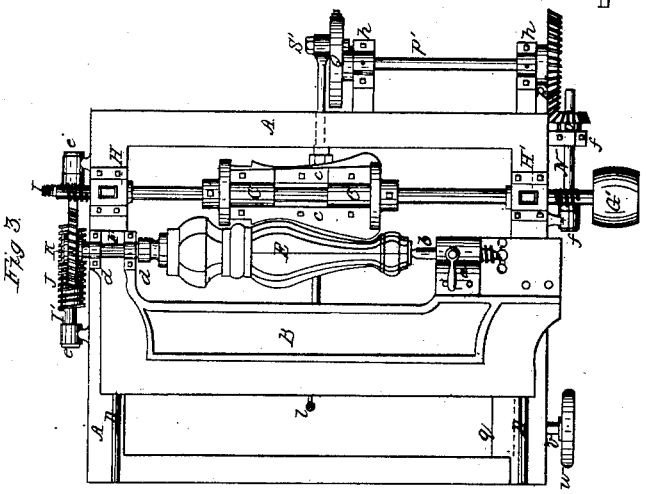


Fig 3.

Witnesses.

Levi Dederick

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UNITED STATES PATENT OFFICE.

JOHN M. SCRIBNER, OF MIDDLEBURGH, NEW YORK.

LATHE.

Specification of Letters Patent No. 28,308, dated May 15, 1860.

To all whom it may concern:

Be it known that I, JOHN M. SCRIBNER, of Middleburgh, in the county of Schoharie and State of New York, have invented a new and useful Parabolic Fluting-Lathe; and I do hereby declare that the same is described and represented in the following specification and drawings.

To enable others skilled in the art to make and use my improved lathe I will proceed to describe its construction and operation, referring to the drawings in which the same letters indicate like parts in each of the figures.

Figure 1, is an elevation of one side. Fig. 2 is a sectional elevation. Fig. 3, is plan or top view of the machine.

The nature of my invention and improvement in fluting lathes consists in the arrangement and construction of certain devices to rotate the piano leg, newel post or article being fluted, and at the same time traverse it toward and from the cutters, so as to cut the flutes.

In the accompanying drawings A, A, is an oblong rectangular frame made strong enough of wood or metal for the purpose intended, and supported by legs A′, A′, at a convenient height for the operator who is to attend it.

The frame A, is provided with ways D, D, for carriage B, to traverse on which carries the piano leg, E, which is to be fluted or cut into the form required; a proper box or head stock *a*, being fastened to the carriage B, to hold the dead center *b*, on which one end of the leg E turns; and the boxes *d*, *d*, are also fastened to the carriage B, for the rotating spur arbor F, to turn in which turns the leg E, as the flutes are cut.

H, H′, are boxes fastened to the frame A for the cutter shaft G, to turn in which shaft is provided with a pulley G′, for a band from some power to operate the machine.

C, C′ are cutter heads fastened to the shaft G, to carry the knives or cutters *c*, *c*, which are fastened to them, which cutters are curved on the edge, so as to cut the leg in the form desired as shown in the drawing. To rotate the leg while the cutters are cutting it, I fasten the endless screw *g*, on the shaft G, to turn the gear I, and shaft I′, which turns in stands *e*, *e*, fastened to the frame A. The shaft I′, carries the endless screw J, which turns the gear K, and arbor F, to rotate the leg E, while it is being cut or fluted by the cutters *c*, *c*. To traverse the carriage B, at the same time that the leg E, is rotated, so as to cut the flute with a parabolic curve; I fasten the endless screw L, to the shaft G, to turn the gear M, and shaft N, which turns in the stands *f*, *f*, fastened to the frame A, as shown in the drawings. The shaft N, carries the pinion O, which turns the gear P, and shaft P′ which turns in boxes *h*, *h*, fastened to the frame A, for that purpose. The disk Q, is fastened to the shaft P′, and provided with a slot for the shank of the stud S′, to traverse in, which stud is traversed radially by the screw T, to vary the diameter of the circle swept by the stud and the distance traversed by the carriage B, which is connected to the stud S′, by rod R, which has a score in it for the stud *n* in the stand *m*, fastened to the underside of the carriage B.

To enable the operator to raise the connecting rod from the stud *n*, conveniently, I fasten the stand *k*, to the carriage B, and arrange the crocked lever *l*, to vibrate upon it, so that the operator can vibrate the lever *l*, and raise the rod R, from the stud or drop it onto it.

To feed the block up to the cutter and traverse the carriage up so as to let the rod drop onto the pin *n*, I fasten the rack *q*, to the carriage B, so that it will be acted on by the pinion *r*, on the shaft *v* which turns in the frame A, and may be operated by the hand wheel W.

To work this machine the rod R is raised from the pin *n*, and the carriage drawn back and a block put in, when the machine is set in motion and the block is fed up to the cutters by the hand wheel W, and rotated at the same time by the gear K, and screw J, and when the operator has rounded his block and reduced it to the size required, he drops the rod R, onto the stud *n*, so as to traverse the carriage and cut the flutes with parabolic curves as heretofore stated.

It is apparent from the foregoing description, that the cutters are turned fast, and leg E, slow in the same direction, and also that the leg or other article is traversed, to and from the cutter by the carriage, at the same time, so as to cut the flutes. And the same result might be produced by traversing the cutter instead of the article fluted.

I believe I have described and represented my improved lathe so as to enable any person skilled in the art to make and use it, I will now state what I desire to secure by Letters Patent to wit:

I claim—

The arrangement of devices as described for traversing the leg or article cut, to and from the cutter, and rotating it at the same time by the mechanism described or its equivalent so as to cut or form curves on the article so-turned and traversed substantially as described.

JOHN M. SCRIBNER.

Witnesses:
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R. D. WELLS.