(Model.)

J. B. FELLOWS.

Bobbin Turning Lathe.

No. 240,985. Patented May 3, 1881.

Fig. 1.

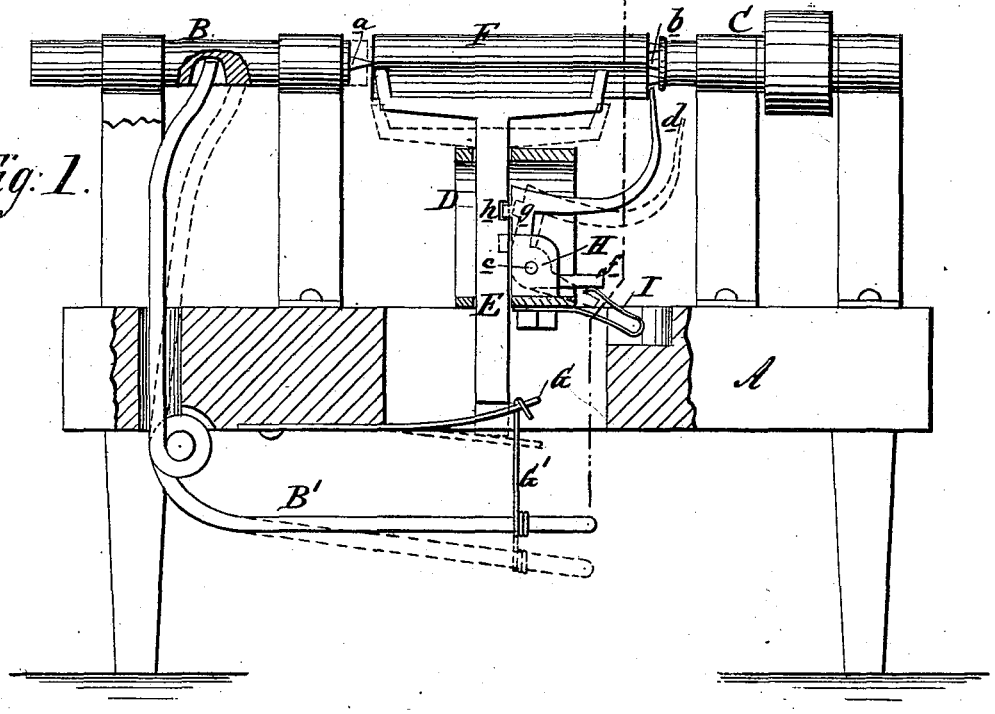
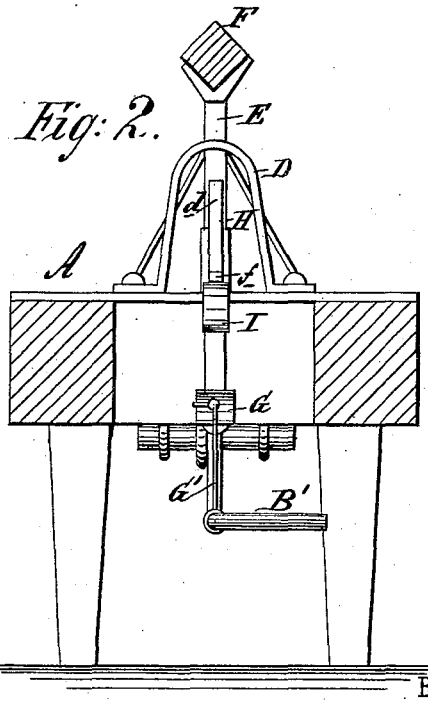


Fig. 2.



WITNESSES:

A. Schehl.
C. Sedgwick

INVENTOR:

J. B. Fellows

BY Munn & Co

ATTORNEYS.

UNITED STATES PATENT OFFICE.

JEROME B. FELLOWS, OF FRYEBURG, MAINE.

BOBBIN-TURNING LATHE.

SPECIFICATION forming part of Letters Patent No. 240,985, dated May 3, 1881.

Application filed December 7, 1880. (Model.)

To all whom it may concern:

Be it known that I, JEROME B. FELLOWS, of Fryeburg, in the county of Oxford and State of Maine, have invented a new and Improved Bobbin-Turning Lathe, of which the following is a specification.

The object of this invention is to provide an automatic device for centering the blocks from which bobbins and quills are formed.

The invention consists of a forked block-supporting post actuated by suitable mechanism to present the block to the lathe-centers, and then fall out of the way to permit the turning of the block.

Figure 1 is a front elevation of the device, partly in section. Fig. 2 is a vertical sectional elevation of the same on line *x x*, Fig. 1.

Similar letters of reference indicate corresponding parts.

In the drawings, A represents an ordinary bobbin-lathe, provided with a movable tail-center, B, actuated by a treadle, B′, and a stationary head-center, C. Fixed on the center of the lathe-bed is an inverted-U-shaped support, D, that supports the vertically-adjustable forked and crotcheted post E, which presents the bobbin-block F to the mandrels *a b*, respectively, of the centers B C. The post E is passed vertically down through the support D, and has its lower end resting on a spring, G, that is connected with the treadle B′ by means of a rope or rod, G′.

Pivoted on the transverse pin *c* within the support D is a dog, H, whose curved tail *d* extends upward nearly in contact with the mandrel *b* of the stationary head-center C.

A spring, I, secured on the bed of the lathe A, presses upward against the horizontally-projecting ear *f* of the dog H and forces the said dog H upward, so that its stud *g* shall engage in the socket *h* of the post E, and thereby hold the said post E up to present the bobbin-block F to the mandrels *a b*.

The said post E is designed to be provided with several sockets, *h*, that it may be adjusted to suit the different sizes of bobbins and quills to be "turned off."

The said post E being adjusted to the proper height and held there by the stud *g* of the dog H, a block, F, is carefully dropped into the fork of said post E. The foot of the operator is then pressed on the treadle B′ with the effect of pushing the tail-center B up to the block F, and thereby the block F against the head-center C, thus centering said block F on the mandrels *a b*. As the mandrel *b* enters the end of the block F the said block F strikes the tail *d* of the dog H and throws said tail *d* down in the position indicated in dotted lines, Fig. 1, and thereby disengages the stud *g* from the socket *h* of the post E, so that said post E falls of its own weight to the position shown in dotted lines, Fig. 1, and leaves the block F free to revolve, the foot of the operator remaining all this time upon the treadle B′. As soon as the bobbin or quill is "turned off" the operator's foot is removed from the treadle B′. The spring G is thereby released and presses the post E up again, the tail-center B is withdrawn, and the bobbin or quill removed, the dog H being also restored to its primary position by the spring I. Another block, F, is then dropped into the fork of the post E, and the work proceeds as before.

In the ordinary bobbin-turning lathe the bobbin-block is centered by the eye, each end of the block being centered in this way. This ordinary method not only involves loss of time, but the centering is so far from correct that to insure bobbins of a given size blocks one-quarter larger are commonly required, thus involving, it will be seen, a loss of about one-quarter of the stock.

In the ordinary bobbin-lathe the average work for one man is five thousand rounded bobbins a day, while with this device a man can easily turn twice that number and use blocks that are of no greater diameter than the bobbins themselves, thus saving also a great deal of stock.

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

1. The combination, with the spring G, spring-dog H, and support D, of a crotcheted post, E, passing through said support and resting on said spring, as shown and described.

2. The combination, with the tail-center B and the crotcheted post E, of the treadle B′ and the spring G, connected together by the cord

or rod G′, substantially as and for the purpose set forth.

3. In a lathe, the combination, with the post E, provided with socket *h*, of the spring-actuated dog H, provided with tail *d* and stud *g*, substantially as herein shown, and for the purpose described.

4. The combination, with the lathe A, provided with movable tail-center B and treadle B′, of the support D, post E, springs G I, and dog H, provided with tail *d* and stud *g*, substantially as herein shown and described.

JEROME B. FELLOWS.

Witnesses:
C. W. PIKE,
S. C. HOBBS.