



United States Patent Office.

FREDRIK ZIBELL, OF ST. LOUIS, MISSOURI.

Letters Patent No. 75,822, dated March 24, 1868.

IMPROVEMENT IN TURNING-LATHES.

The Schedule referred to in these Letters Patent and making part of the same.

TO ALL WHOM IT MAY CONCERN:

Be it known that I, FREDRIK ZIBELL, of the city and county of St. Louis, State of Missouri, have invented a new and useful Improvement in Machines for Shafting; and I do hereby declare the following to be a full and exact description of the same, reference being had to the annexed drawings, and letters marked thereon.

Figure 1, in the drawing, represents a side view of my improvement.

B is a spindle passing through the pulley, by means of which the machine is driven. It is provided at the end with a socket and thumb-screw to fasten the drive-screw A to. A is a drive-screw passing through the nut I and extending into the frame D. This screw turns and passes the nut I along, from one end to the other, by means of its thread. I is an ordinary lathe-nut, which is open, so it will pass back over the screw, as seen at I in fig. 3. It is attached to the cutter-head *o o*. *o o* is a carriage-head, which is provided with a groove which fits on the tongue L L in the frame D. Fig. 1 shows only a half section of this carriage-head. H H, in fig. 1, are cutters, which are round, and rest upon a shoulder in the carriage-head *o o*, as seen in fig. 1. The front of this cutter may be seen in Figure 3, and marked H H, and also a half section in Figure 5. K is the shaft of iron to be dressed, held in its place by the tail-heads E E. Fig. 3 is a front view of the carriage-head and cutter H, which is the front cutter. These cutters may be of any number. S, Figure 4, is a turning-head, to be put in the place of the cutters H H when the shaft R is intended to revolve. M M are cutters fitting close in a socket in the turning-head, as seen in the drawing, and fed by the feed-screw N, which is held in its place by a plate, P, attached to the turning-head by screws. R, Figure 2, is a spindle-head, which may be fastened in the same place that E is, in case you wish to make the shaft revolve and use the turning-head, as seen at fig. 4. The cogged wheel works in a corresponding wheel on the spindle B, which causes the spindle-head R to revolve, and thus turns the shaft K.

Now, when I use the tail-heads E E, the shaft K that is to be dressed remains fixed, and the screw A moves the carriage-head *o o*, with the cutters H H, along the shaft, thus dressing any size the cutters may be. But when I wish, as in heavy work, to have the shaft K revolve, and use the head S, as seen in fig. 4, in place of H H, I put the spindle-head R in place of E, over the cogged wheel on the spindle B, fig. 1, and the shaft will revolve and be dressed by the head and cutters, as explained in fig. 4.

Now, what I claim is not the cutters H H alone, or the planers, but

1. I claim the combination of the nut I, screw A, and cutters H H, with the carriage-head, as above described, and for the purposes set forth.

2. I claim the turning-head S, fig. 4, with the cutters M M and feed-screws, in combination with the carriage-head *o o*, as above described, and for the purposes set forth.

FREDRIK ZIBELL.

Witnesses:

Wm. M. ECCLES,

L. C. HOPKINS.