

UNITED STATES PATENT OFFICE.

EDWARD WRIGHT, OF WORCESTER, MASSACHUSETTS, ASSIGNOR TO WRIGHT MACHINE COMPANY, OF SAME PLACE.

TOOL-SUPPORT FOR LATHES.

SPECIFICATION forming part of Letters Patent No. 237,654, dated February 8, 1881.

Application filed October 13, 1880. (No model.)

To all whom it may concern:

Be it known that I, EDWARD WRIGHT, of Worcester, in the county of Worcester and State of Massachusetts, have invented certain new and useful Improvements in Chuck-Rests; and I declare the following to be a description of my said invention, sufficiently full, clear, and exact to enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, which form a part of this specification.

This invention relates to improvements in tool rests or supports employed on turning-lathes for holding and guiding chucking-drills.

The objects of my invention are to provide a convenient and serviceable chuck-rest adapted for giving firm support to drills of various kinds and sizes, and readily adjustable for the same; to afford facilities whereby the drill-holding devices may be temporarily removed from the line of the lathe-centers, to permit the use of a reamer without disturbing the proper adjustment or relation of the rest with the work; to arrange the several holding and guiding devices for being consecutively brought into line with the lathe-centers by revolution of the rest-plate, and to furnish means for locking the devices in position securely, and the quick and convenient unlocking of the same. I attain these objects by mechanism such as illustrated in the accompanying drawings, and herein described, the particular subject-matter claimed being hereinafter definitely specified.

In the drawings, Figure 1 represents a front view of my improved revoluble chuck-rest, illustrating its position and method of use upon the lathe. Fig. 2 is a plan view of the same. Fig. 3 is a side view, showing the plate in position for holding a flat drill. Fig. 4 is a similar view, showing the plate in position to permit the use of a reamer. Fig. 5 is a perspective view of one of the thimbles for holding a round or twist drill.

In the construction of my improved chuck-rest a foot-piece, A, is fitted to stand upon the slideways *a a* of the lathe, where it is securely held in position by the bar B and clamping-bolt *b* in the manner indicated.

To the upper part of the foot-piece A, on its side toward the lathe-head, is secured the rest-plate C by means of a stud or pivot, *d*, upon which the plate C can be revolved in direction perpendicular to the axis of the lathe-spindle, the upper part of the plate passing across or occupying a position between the lathe-centers. The plate C is made in the form shown, or with arms C' and depressions or recesses C² about its periphery. In the arms C' are formed rectangular openings E, of different sizes, in which square or flat drills or chucking-tools H can be held, as indicated in Fig. 1. In one or more of the arms C', I arrange a removable thimble, F, through the center of which is an opening, *f*, fitted to receive or support a round or twist drill. A series of thimbles, F, having different sizes of openings *f*, to suit the different sizes of drills, may be interchangeably used with the plate C. The thimbles F are retained in position by a set-screw, *m*, or other suitable fastening.

The openings E may, if desired, be fitted with steel or other metal bushings *e*, or said bushings may be omitted, as preferred.

The openings E and thimble F are so located in the arms C' that they will each swing into line with the lathe-centers as the plate C is revolved on its stud *d* without changing the position of the foot-piece A, so that either one of the rests or guiding devices may be used, when desired, by simply revolving the plate C sufficiently to bring it to position.

I indicates a locking bolt or pin arranged through the piece A, so as to be pressed into openings *i* formed in the plate C by means of a spring, K, while a hand-lever, L, is pivoted to the piece A, as indicated, and arranged for drawing back said bolt I against the strain of the spring K when it is desired to release the plate C, so that it may be revolved. The openings *i* severally correspond with the working positions of the resting-openings E and thimble F.

In the operation the opening E or thimble is set, as in Fig. 3, for holding or resting the flat drilling-tool while boring out the work. The plate is then unlocked and turned so that the depression C² will be uppermost, as in Fig. 4, thereby giving space for the free in-

production and use of the reaming-tool, after which the plate C can be reset to its exact former position by simply turning it on its pivot-axis.

5 When different drills are used the rest can be quickly adjusted therefor by pressing back the lever L and turning the plate C to bring the proper corresponding opening into line with the lathe-center.

10 The stud *d* may, if desired, be made adjustable in the foot-piece A, so that the plate C can be raised or lowered, or otherwise moved to bring it into proper relative position as regards the lathe-spindle.

15 What I claim as of my invention, and desire to secure by Letters Patent, is—

1. A lathe-rest consisting of a revoluble plate having a series of rectangular openings adapted for the support of flat drills or boring-tools of
20 different sizes, and an opening for a series of interchangeable thimbles or bushings adapted for the support of round or twist drills, said

plate being mounted for swinging said openings consecutively into line with the lathe-center, and provided with mechanism for retaining it in adjusted position, as set forth. 25

2. The combination, substantially as described, of the foot-piece A, the revoluble plate C, having depressions C², and arms C', provided with openings E, pivoted to said
30 foot-piece, and provided with a locking mechanism for retaining the parts in adjusted position, as set forth.

3. The combination, with the foot-piece A and revoluble plate C pivoted thereto and
35 provided with openings E and holes *i*, of the locking-bolt I, spring K, and hand-lever L, substantially as and for the purposes set forth.

Witness my hand this 17th day of September, A. D. 1880.

EDWARD WRIGHT.

Witnesses:

CHAS. H. BURLEIGH,

GEO. M. RICE.