

A. U. Hill,

Slide Rest for Lathes,

No. 14, 563,

Patented Apr. 1, 1856.

Fig: 1

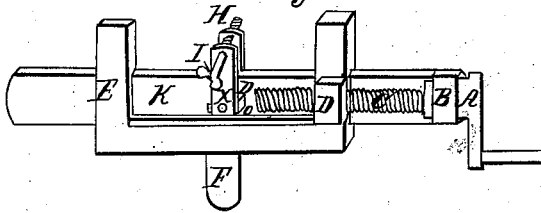


Fig: 2

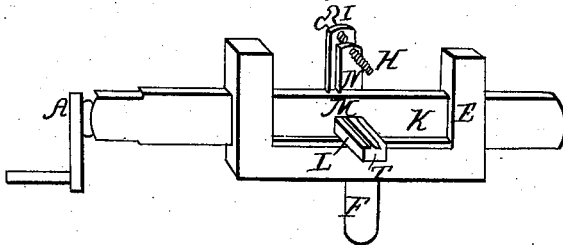


Fig: 3

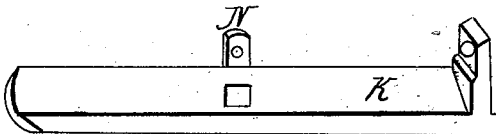


Fig: 4

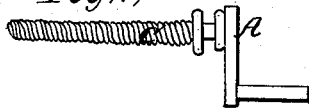


Fig: 5

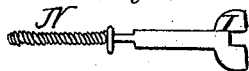


Fig: 7

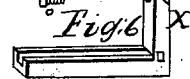


Fig: 6

Albert U. Hill. Inventor

UNITED STATES PATENT OFFICE.

ALBERT V. HILL, OF HINSDALE, NEW YORK.

SLIDE-REST.

Specification of Letters Patent No. 14,563, dated April 1, 1856.

To all whom it may concern:

Be it known that I, ALBERT V. HILL, of Hinsdale, in the county of Cattaraugus and State of New York, have invented a new and Improved Machine, which I call "Mortise Slide-Rest," for Turning Iron in a Foot-Lathe to any Desired Taper; and I do hereby declare that the following is a full and exact description of the said invention, reference being had to the annexed drawing as part of specification.

The nature of my invention consists of a rest, with a mortise at each end, through which a slide bar passes, which bar is driven by means of a screw, the chisel rest and chisel passes through the slide bar at right angles, which is fed by means of a screw.

Figure 1 consists of a front view of the entire machine, or that side thereof which fronts the operator, in which letter A represents the crank to the driving screw, by means of which the main slide is propelled. Letter B represents a section of the sliding bar, through which the screw passes, to which it is made fast on one side by means of a shoulder, and on the other by means of the crank, so constructed as to operate as a shoulder. Letter C represents the driving screw. Letter D represents a nut on the side of the rest, through which the driving screw passes. E represents a portion of the rest with a mortise to admit the passage of the slide. F represents the handle of the machine, which consists of a round tenon to be inserted in a round mortise in the lathe and made fast at the desired angle by means of a screw. The turning of this tenon in the mortise is the means whereby any desired true taper can be produced. H represents the feeding screw. I represents the handle of the feeding screw. X represents the

chisel rest which slides through a mortise in the main slide. The chisel rest is made with a groove in the upper side to admit the chisel. O represents the small screw to fasten the chisel in the chisel rest.

Fig. 2 represents the rear view of the entire machine of which letter I represents the handle to the feeding screw. Letter H represents the feeding screw. Letter N represents a nut formed on the upper side of the main slide. M represents the mortise through which the feeding slide and chisel passes. K represents the main slide; L, the chisel rest; T, the point of the chisel and E represents the main rest.

Fig. 3 is a separate view of the main slide.

Fig. 4 is a separate view of the driving screw.

Fig. 5 is a separate view of the feeding screw.

Fig. 6 is a separate view of the chisel slide.

Fig. 7 is a separate representation of the small screw which fastens the chisel.

One of the principles of my machine which has an advantage over all others is the facility with which irregular forms, such as heads, shoulders, &c., may be turned. The chisel moves while the rest stand still; a retrograde motion is produced at will, and the chisel cuts each way. The machine can be obtained with little casts, and is within the reach of all mechanics where a foot lathe is used.

What I claim as my invention is—

The use of the slide mortise K, driving screw C arranged and operating connection as herein described.

A. V. HILL.

Witnesses:

ALEXANDER STORRS,
F. O. CLARK.