C. Peck,

Lathe-Tool Rest.

No. 24574. Patented June 28, 1859.

Fig. 1.

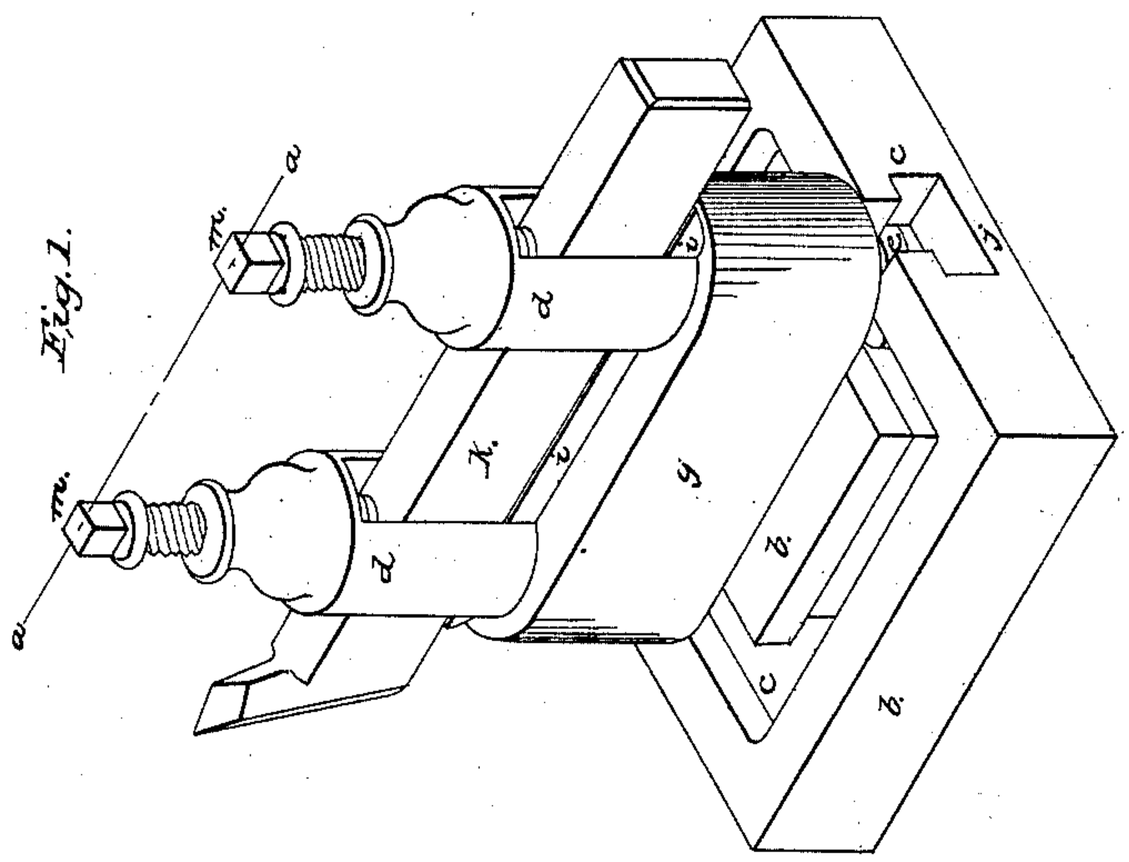


Fig. 2.

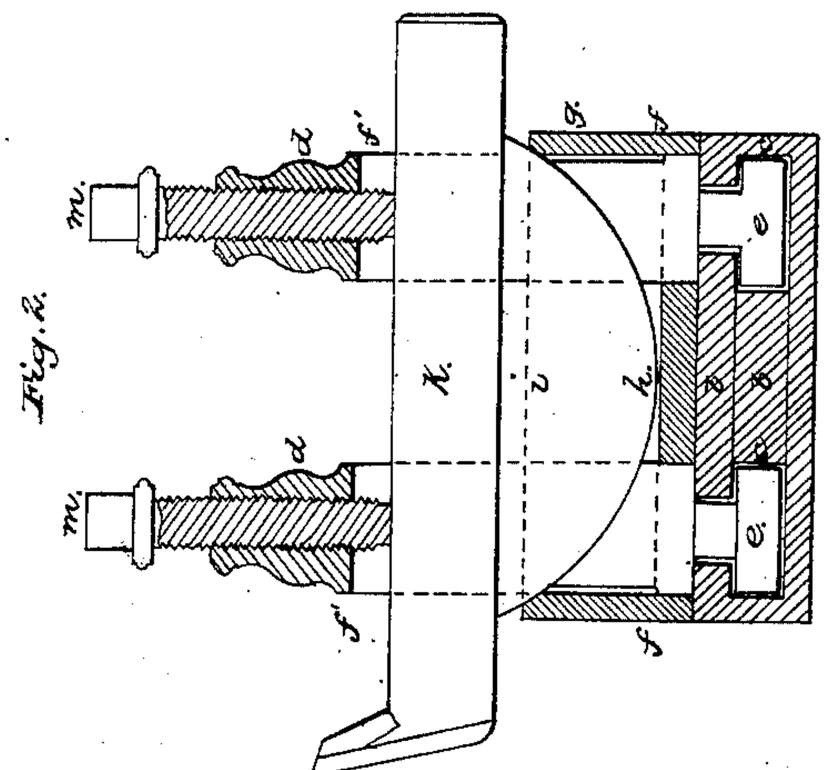
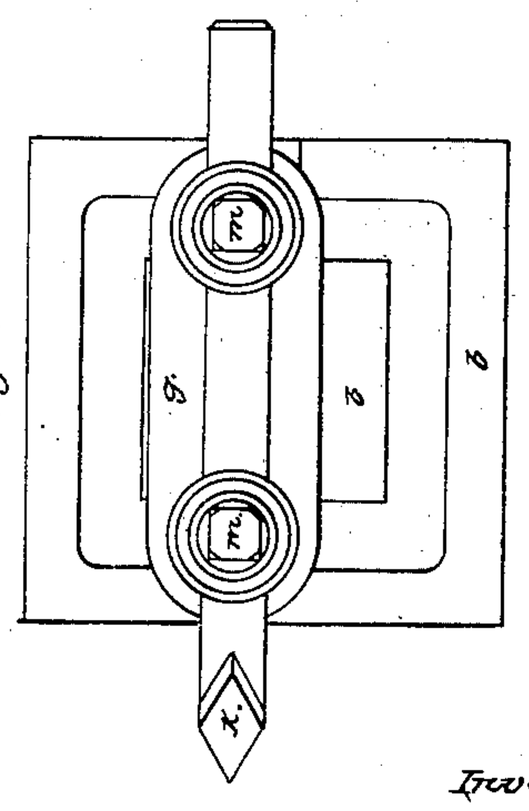


Fig. 3.



Attest:

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UNITED STATES PATENT OFFICE.

CHARLES PECK, OF NEW HAVEN, CONNECTICUT.

TOOL-HOLDER FOR LATHES.

Specification of Letters Patent No. 24,574, dated June 28, 1859.

To all whom it may concern:

Be it known that I, CHARLES PECK, of the city and county of New Haven, in the State of Connecticut, have invented a new and Improved Tool-Holder for Slide-Rest Lathes; and I do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the accompanying drawings and to the letters of reference marked thereon.

What is known to mechanics as a tool holder for slide rest lathes is an instrument firmly attached to and forming a part of the slide rest to hold the tool or cutting instrument for heavy turning.

The nature of my invention consists in so constructing this tool holder as to allow the cutting edge or point of the tool to be turned to any angle horizontally and at the same time to elevate or depress the point of the tool to suit the size of the material operated upon, thus giving to the gib lathe the same facility of directing the cutting tool which is now only attained by the weighted lathe.

I will now proceed to describe the construction and mode of operation of my improved tool holder.

Figure 1 in the drawings hereto attached is a perspective view of the improved tool holder complete. Fig. 2 is a sectional view cut through the line of *a*, *a*, Fig. 1. Fig. 3 is a ground plan or view looking directly down upon the holder.

The bed plate *b* is made with a T slot with the sides at equal distances as shown in Figs. 1 and 2. The form of the slot is shown at *c*, *c*, &c. The tool posts *d*, *d*, are made in the ordinary form with a button or head *e*, *e*, of such a size as to work freely in the T slot of the bed plate. The slots in these tool posts reach from *f f*, to *f′ f′*, Fig. 2.

The tool rest *g*, which connects the tool posts is slotted and made with a bearing at *h*, upon which the segment of a circle *i* carefully fitted to the bearing at *h*. This segment *i* must be of such a width as to move freely in the slots of the tool posts and tool rest *g* and high enough to allow the cutting tool placed upon the segment *i* to be elevated or depressed as far as the nature of the work requires.

The operation of my improved holder is as follows—the tool posts *d*, *d*, being slipped into the T slot of the bed plate at *j* and the tool rest *g* with the posts passing through placed on the bed plate as shown in Fig. 1, the segment is then passed through the slots of the tool rest and the tool posts into the position shown in Figs. 1 and 2. The cutting tool *k* being passed through the upper part of the tool posts and resting upon the segment *i* the holder is ready for use. The buttons or heads of the tool posts sliding freely in the T slot of the bed plate allow the cutting tool to be placed at any required angle horizontally while the tool *k* resting on the segment *i*, can be elevated or depressed as the material operated upon requires. When the cutting tool is in the desired position it is secured by the set screws *m*, *m*.

The bed plate being firmly secured to the slide rest of the lathe has of course the usual motions longitudinally and transversely and the cutting tool can operate in either direction as well those before described.

I do not claim the combination of a tool post or two tool posts operating independently of each other with the T slot these having been long used but

What I do claim as my invention and desire to secure by Letters Patent is—

1. The combination of the tool rest *g* with the segment *i* or their mechanical equivalents so as to elevate or depress the cutting instrument when arranged substantially in the manner and for the purpose described.

2. I claim the T slotted bed plate with the tool rest *g* connecting the tool posts *d*, *d*, when combined substantially in the manner described so as to allow the cutting tool to be placed at any required angle horizontally.

CHARLES PECK.

In presence of—
MILO PECK,
LUCIUS G. PECK.