May 10, 1949. G. BRAUN 2,469,630

FACE PLATE FOR WOOD LATHES

Filed Aug. 16, 1944 2 Sheets-Sheet 1

Fig. 1.

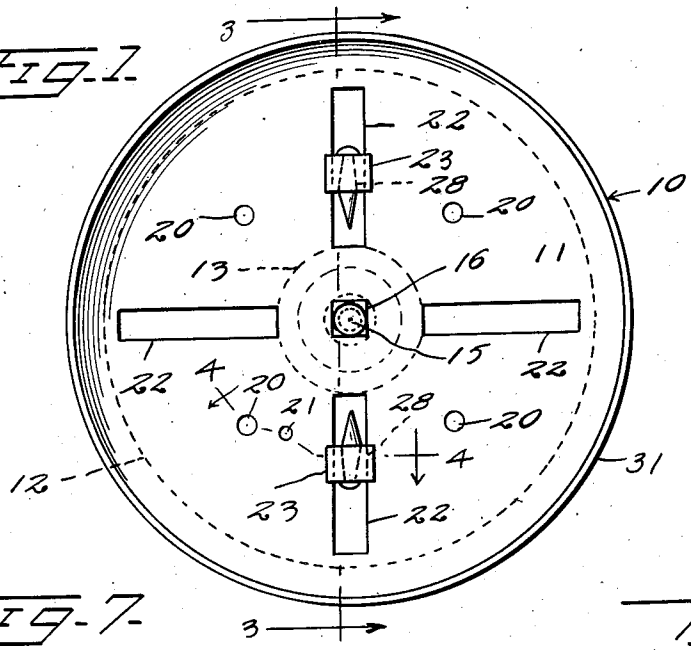


Fig. 7.

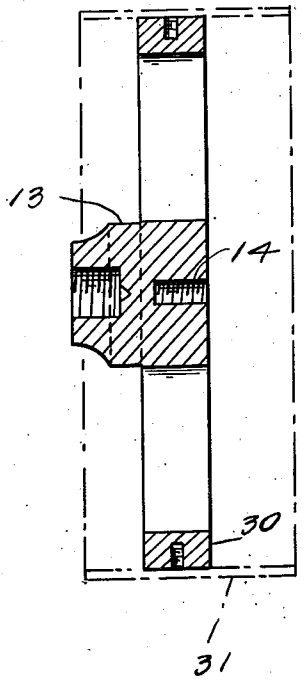
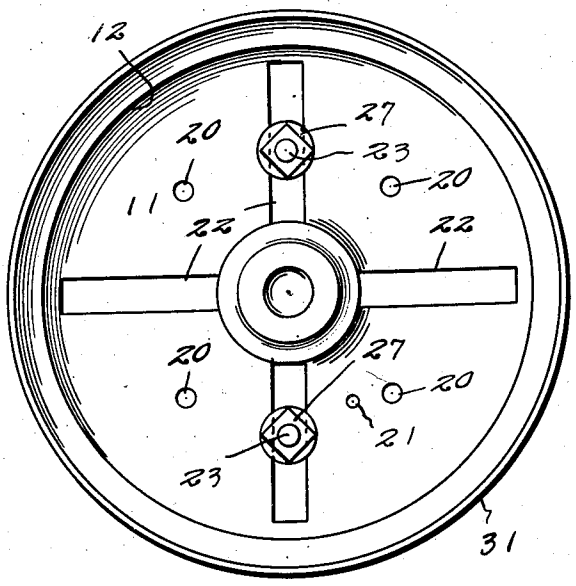


Fig. 2.



Inventor

Gideon Braun

By L. F. Randolph

Attorney

May 10, 1949. G. BRAUN 2,469,630

FACE PLATE FOR WOOD LATHES

Filed Aug. 16, 1944 2 Sheets-Sheet 2

Fig. 3.

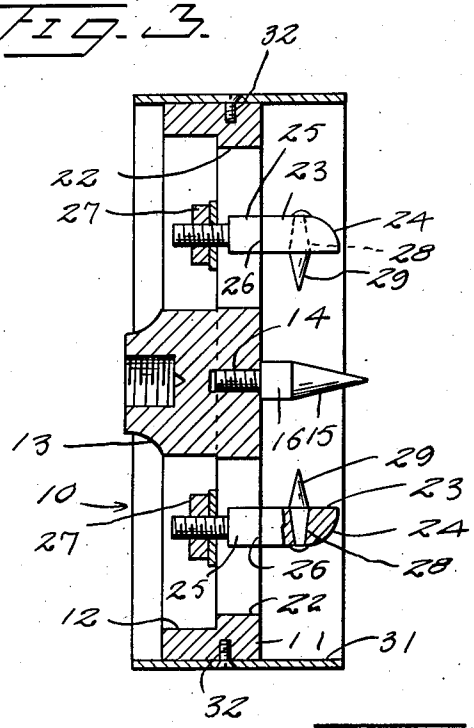


Fig. 4.

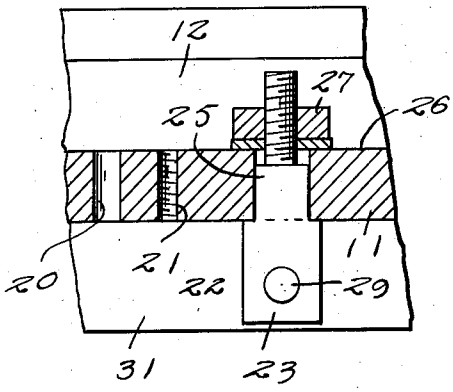


Fig. 5.

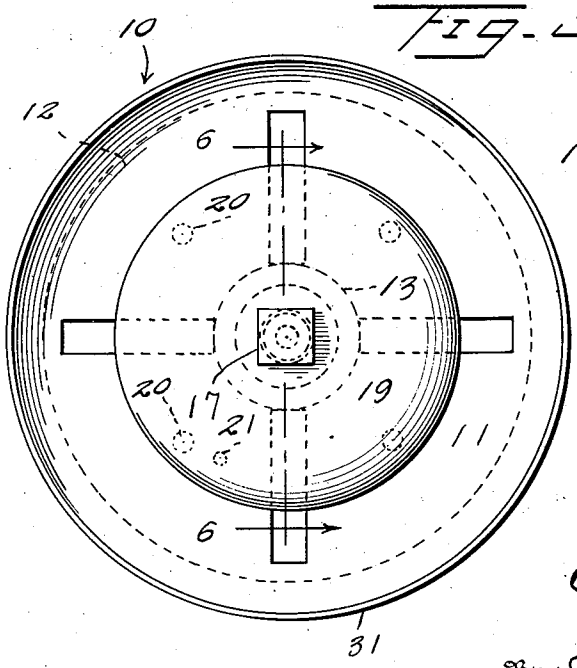
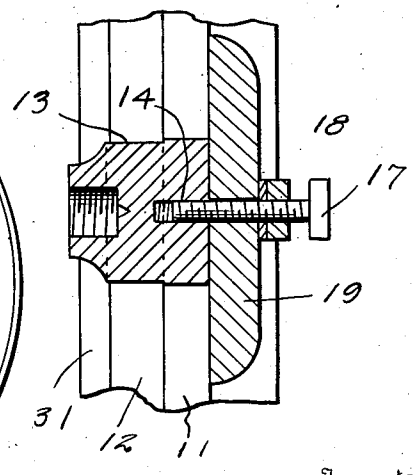


Fig. 6.



Inventor

Gideon Braun

By L. F. Randolph

Attorney

Patented May 10, 1949 2,469,630

UNITED STATES PATENT OFFICE

2,469,630

FACEPLATE FOR WOOD LATHES

Gideon Braun, Columbus, Nebr.

Application August 16, 1944, Serial No. 549,758

1 Claim. (Cl. 142—52)

1

This invention relates to improvements in face plates for wood lathes and more particularly to a face plate of new and improved design and having new and improved means for securing the work to the face plate whereby the performance of different kinds of operations on work of various sizes and shapes is facilitated and the safety of the operator in performing such operations is promoted.

Still other objects and advantages of the invention will become more clearly apparent from the following detailed description thereof taken in connection with the accompanying drawings in which:

Figure 1 is a front elevational view of a face plate according to a preferred embodiment of the invention,

Figure 2 is a rear elevational view of the face plate shown in Figure 1,

Figure 3 is a sectional view taken along the line 3—3 of Figure 1,

Figure 4 is a fragmentary sectional view of the face plate as viewed along the line 4—4 of Figure 1,

Figure 5 is a front elevational view of the face plate illustrating the manner of securing a particular piece of work thereto,

Figure 6 is a fragmentary sectional view taken along the line 6—6 of Figure 5, and

Figure 7 is a sectional view taken through the center of an alternate form of the face plate.

Referring now to the drawings for a more complete understanding of the invention, the numeral 10 generally designates a face plate according to a preferred embodiment thereof in which 11 designates the face plate proper. The face plate 11 may take the form of a casting, if desired, but preferably is in the form of a steel plate of cylindrical configuration having an annular flange 12 and an internally threaded hub portion 13 by means of which the face plate is adapted to be fastened to the lathe drive shaft, it being understood that any other conventional fastening means such, for example, as set screws or the Morse taper shank may be employed if desired.

The hub portion 13 also is internally threaded concentrically of the face plate as at 14 to receive a tapered center point 15, having a squared portion 16 to receive a wrench or suitable tool, or the hub at 14 selectively may be used to receive a bolt 17 which carries an adjustable nut or burr 18 by means of which a piece of work such, for example, as a lamp base, indicated at 19 in Figures 5 and 6, may be secured to the face plate for

2

a re-polishing, re-touching, or other minor operation thereon without damaging either the polish or finish previously applied to the work.

The face plate 11 is provided with a plurality of holes 20 which are equally spaced about a common circle and may be bored or cast within the face plate, as the case may be. The holes 20 are adapted to receive suitable screws or the like for fastening the work to the face plate, an off-set tapped hole 21 being provided for receiving a punch or a screw, thereby to make a mark in the work whereby a particular centering thereof on the face plate may be established and restored in the event that the work is removed temporarily.

The face plate also is provided with a plurality of radially disposed slots 22 for receiving a plurality of rectangularly shaped hooks 23 respectively. Each of hooks 23 is rounded at 24 to remove sharp corners and is reduced in cross-section at 25 to be received slidably, but non-rotatively, in slots 22 and to form a shoulder thereon as at 26 whereby each hook is rigidly supported in a radially adjusted position on the face plate when a nut or burr 27, carried on the threaded end portion of each hook, is drawn up tight.

Each of the hooks is provided with a radially extending tapered hole or aperture 28 for receiving a double-tapered pin 29, the small opening in tapered holes 28 being on the rounded side of hooks 23 whereby the pins 29 are directed toward the axis of the face plate when the hooks are properly assembled on the face plate, substantially as shown in Figures 1 and 3.

In clamping a piece of work to the face plate by means of hooks 23, the work, which may be rough, unfinished wood of irregular or unsymmetrical shape, is first centered on point 15 and the hooks 23 thereafter are adjusted along the slots 22 and engaged selectively with the work in a position therewith affording the greatest advantage with respect to clamping the work to the face plate. The pins 29 are then driven well into the work by means of a hammer, for example, the blows preferably directed on the pins whereby the pins are riveted to the hooks, thus obviating the need for any other fastening means therebetween. This arrangement for securing the pins to the hooks obviously provides an advantage in that the pins readily may be replaced when the points thereof wear down and the pins are wedged into the hooks whereby all lost motion between the work and face plate is taken up as the burrs 27 are tightened and the hooks become securely fixed on the face plate

thereby insuring that the work will not fly off the face plate notwithstanding that the operator may become careless or reckless in performing operations thereon. The pins **29** also tend to urge the work toward the face plate as the pins are driven into the work by reason of the tapered points thereon. It will be understood, of course, that when desired, screws or bolts carried by holes **20** may be employed in addition to the hooks in securing the work to the face plate.

In Figure 7 a simplified form of face plate is shown in that the face plate proper, designated **30**, is not provided with an annular flange, the face plate otherwise being the same as face plate **11**. The flange **12** is preferred in that it generally strengthens the face plate and provides a wider seat for a ring or band shaped safety guard **31** which is secured to either of the face plates **11** or **30** by means of countersunk machine screws **32** carried thereby.

The safety guard **31** preferably is arranged to project beyond all moving parts on either side of the face plate thereby to prevent injury to the operator as a result of moving the cutting tools too close to such parts. Moreover, it is well known that splinters in breaking from wood being worked invariably tear back to the face plate and then fly toward the operator. When a safety guard **31** is employed, however, the guard breaks the force of the flying splinter, thus obviating the danger to the operator.

While the invention has been described in particularity with respect to an example thereof which gives satisfactory results, it will be apparent to those skilled in the art to which the invention appertains that several additions, deletions, variations, and modifications thereof will suggest themselves without departing from the spirit and scope of the invention as defined by the appended claim.

I claim as my invention

In a lathe, a face plate, having a plurality of radially disposed slots, said plate being provided with a hub construction having means for attachment to a drive shaft, said hub projecting in one direction, a center point on the plate projecting in the opposite direction from the hub construction, a plurality of slide fingers, each of said fingers having one end slidably disposed in a corresponding slot, said ends of the fingers being provided with threaded extensions extending through the slots and beyond the face plate at its side opposite from the major portion of the fingers, said fingers being provided with shoulders thereon for engaging one side of the plate, nuts on the threaded extensions adapted to be fed against the opposite side of the plate to secure the fingers in fixed adjusted position with respect to the slots, said fingers being adjustable in the slots by loosening and tightening of said nuts.

GIDEON BRAUN.

REFERENCES CITED

The following references are of record in the file of this patent:

UNITED STATES PATENTS

Number	Name	Date
298,529	Weisse	May 13, 1884
321,762	Smith et al.	July 7, 1885
375,771	Rivett	Jan. 3, 1888
427,037	Bright	May 6, 1890
1,124,172	Reynolds	Jan. 5, 1915
1,232,325	Keichel	July 3, 1917
1,361,120	Weatherby	Dec. 7, 1920
1,382,949	Bloomfield	June 28, 1921
1,399,969	Kurkjian	Dec. 13, 1921

FOREIGN PATENTS

Number	Country	Date
5,441	Great Britain	Apr. 20, 1886
182,225	Germany	Mar. 12, 1907
55,992	Switzerland	Mar. 30, 1911