(No Model.)

R. WELLER.

PLANER CHUCK.

No. 416,244. Patented Dec. 3, 1889.

Fig.1.

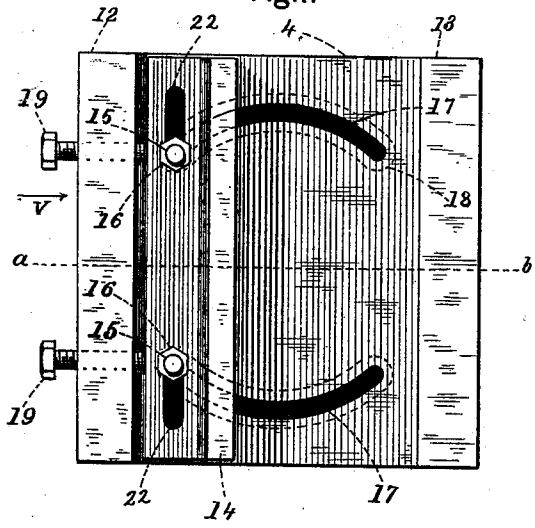


Fig.2.

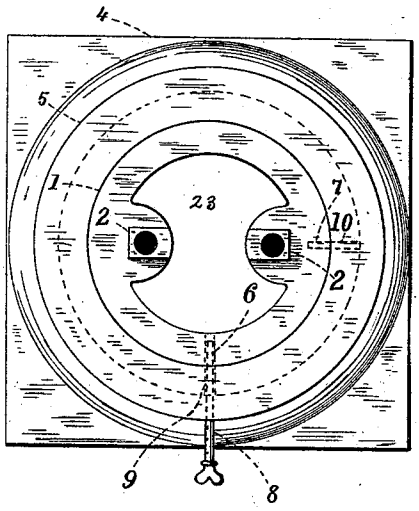


Fig.3.

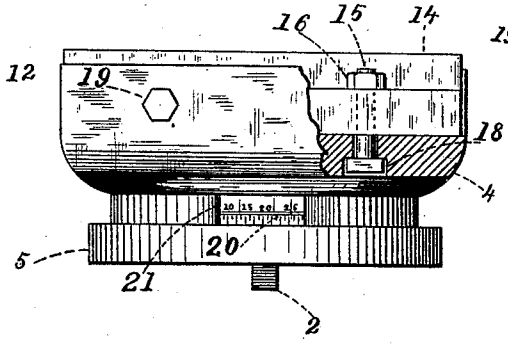
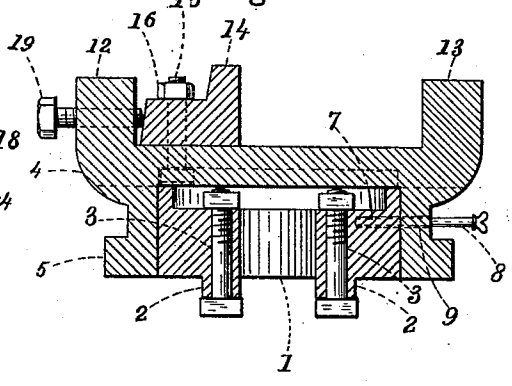


Fig.4.



Witnesses.

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UNITED STATES PATENT OFFICE.

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PLANER-CHUCK.

SPECIFICATION forming part of Letters Patent No. 416,244, dated December 3, 1889.

Application filed December 8, 1888. Serial No. 293,034. (No model.)

To all whom it may concern:

Be it known that I, RUSSELL WELLER, a citizen of the United States, residing in Buffalo, in the county of Erie and State of New York, have invented certain new and useful Improvements in Planer-Chucks, of which the following is a specification.

My invention relates to certain new and useful improvements in chucks for planers or shaping-machines, and will be fully and clearly hereinafter described and claimed, reference being had to the accompanying drawings, in which—

Figure 1 is a plan or top view; Fig. 2, a bottom view. Fig. 3 is a side elevation, looking in the direction of the arrow V, Fig. 1, a portion being broken away to show the interior construction; and Fig. 4 represents a vertical central section on line *a b*, Fig. 1.

The object of my invention is to produce a comparatively light chuck, simple in its construction and sufficiently strong and durable for the purpose for which it is adapted.

In said drawings, 1 represents a circular base, which acts as a pivotal support for the chuck proper to be turned around upon. It is provided with two downwardly-projecting lugs 2, adapted to fit in the longitudinal slots in the planer-bed to prevent it from turning, and is rigidly secured to the planer-bed in the usual way by two bolts 3, which pass through the lugs 2, as shown, so that their heads catch against the under sides of the planer-slots in the well-known way, and the whole is rigidly tightened and secured in place by the nuts at the top of the bolts 3.

The chuck-holding portion 4 is provided with a circular opening adapted to fit over the base portion 1, so that its bottom will rest upon the planer-bed, and is provided with a surrounding outwardly-projecting flange 5, by which it may be clamped in any well-known way to the planer-bed when turned and set to any desired angle. The usual clamping-bars and the means used for clamping anything to a planer-bed are so universally well-known to the machinist that a description of their construction and operation is not required here. The object of this flange 5 is to provide the means whereby the holding portion 4 may be clamped by the usual means to a planer-bed without in any way disturbing the base portion 1, upon which it turns.

In the base 1 is two holes 6 and 7, (shown by dotted lines in Figs. 2 and 4,) placed as nearly as possible at right angles to each other, into which the pin 8 (made preferably tapering) is adapted to fit, and through the side of the chuck or holding-piece 4 is a hole 9, (shown by dotted lines in Figs. 2 and 4,) adapted to come exactly in a line with the holes 6 or 7. The object of this construction is to provide the means for planing in one direction and a convenient and ready means for adjusting the chuck so as to plane exactly at right angles thereto, when desired, which is done by removing the pin 8 and turning the chuck around until the hole 9 is in the position shown by the dotted lines 10 in Fig. 2, opposite the hole 7, and then inserting the pin 8.

The top of the chuck portion is square, as shown, and is provided with two stationary jaws 12 and 13 and a movable jaw 14. The movable jaw 14 is held down to the chuck by means of the bolts 15 and nuts 16. The bolts 15 pass down in through the curved slots 17, which slots or openings pass through the top of the chuck and are enlarged sufficiently to receive the heads of the bolts, as shown at the point 18, Fig. 3, and by dotted lines 18, Fig. 1. The bolts 19 shown in Figs. 1, 3, and 4 are used to force the movable jaw up against the object to be secured between it and the stationary jaw 13.

When the object to be secured (and planed) is very small or narrow, so that the screw-bolts 19 are not of sufficient length to push the jaw 14 up to hold it, a plate of the required thickness (or number of plates) may be interposed between the back of the movable jaw and the ends of the bolts 19 in the ordinary way.

It will be noticed that the top of the base 1 is provided with a recess or depression sufficiently deep to leave room between it and the under side of the chuck for the nuts on the bolts 3. (See Fig. 4.)

Around the periphery of the base 1 is an index 20 for indicating the degrees to which the chuck may be set, and an opening 21 through the side of the chuck is made sufficiently large to show it. The opening 21 is

a rectangular opening, as shown in Fig. 3, and is cut through the side of the holding portion 4 just above the flange 5, and the index is placed upon the side of the stationary or base portion 1, so that when the portion 4 is turned around or adjusted to any desired point the edge of the opening, as at 21, will pass the index-marks as it is being turned, and thus indicate the angle to which the portion 4 may be adjusted.

In operating with this device on a planer the base 1 is rigidly secured, as hereinbefore mentioned, to the planer-bed and the chuck put on and turned and set to any desired position. It is then rigidly secured by clamping the flange down to the planer-bed. When the chuck is used for planing any given angles, and where it is required to make the changes rapidly, the pin 8 may be used and two or more holes 9 may be put in the base portion 1, so that the different positions of the chuck may be quickly made and then secured by the pin 8, as above mentioned. The bolts 15 pass through slots 22, made sufficiently long to permit the bolts 15 to move in the curved slots 17 as the jaw 14 is being moved to or from the stationary jaws.

The base 1, it will be noticed, is provided with an opening 23 through the center, the object of which is to permit the shavings made during the operation of planing (which pass down through the curved slots or openings 17) to pass down through the opening 23 onto the planer-bed.

I claim as my invention—

In a planer-chuck, the combination of a cylindrical base having downwardly-projecting lugs 2, constructed for rigid attachment to a planer-bed, a holding portion having stationary jaws 12 and 13, a movable jaw and bolts for moving and holding it, and a hollow cylindrical base portion adapted to fit over the base-piece 1 and turn thereon, and having a flange 5, by which it may be rigidly fixed or clamped to a planer-bed when adjusted substantially as described.

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Witnesses:

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