(No Model.)

W. PORTER.

PLANER CHUCK.

No. 287,160. Patented Oct. 23, 1883.

Fig. 1.

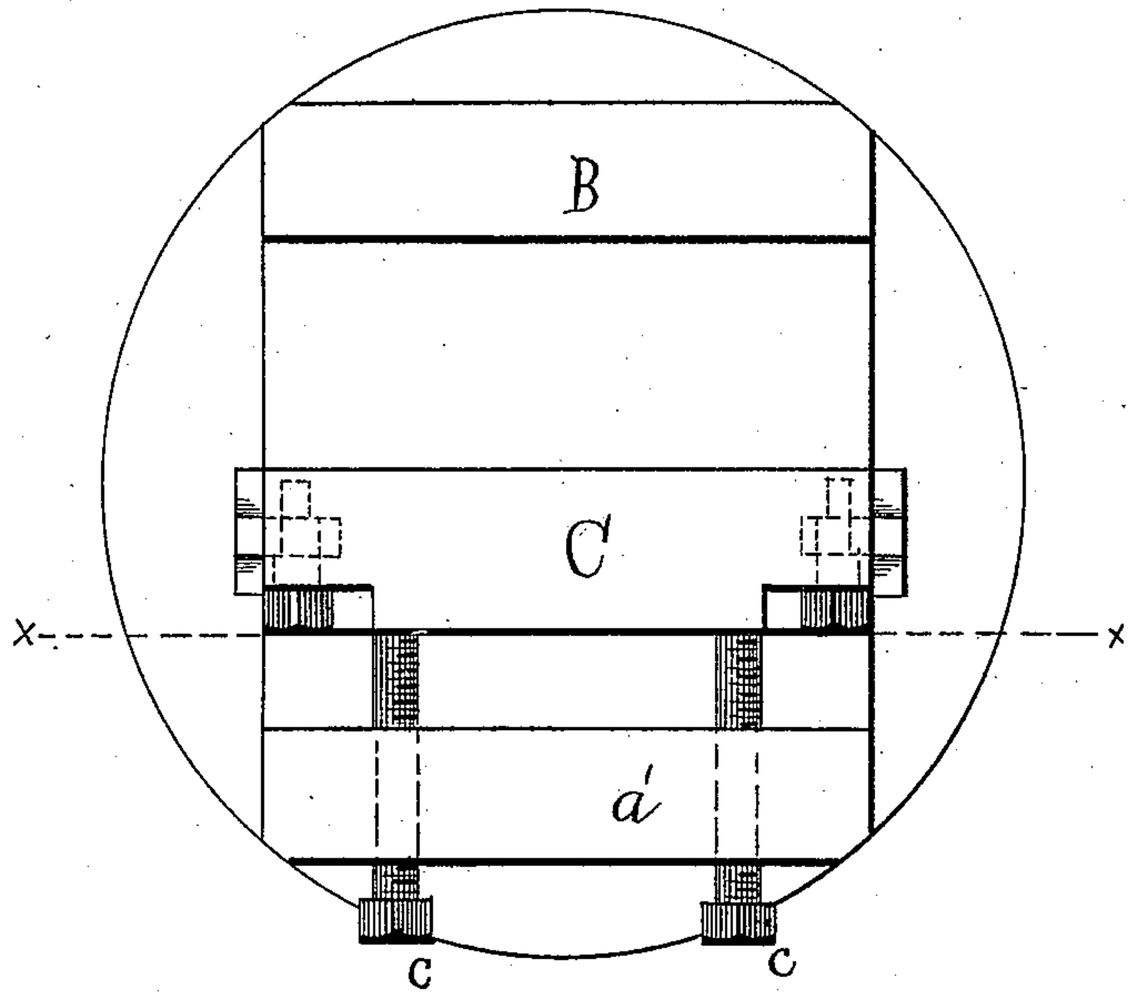


Fig. 2.

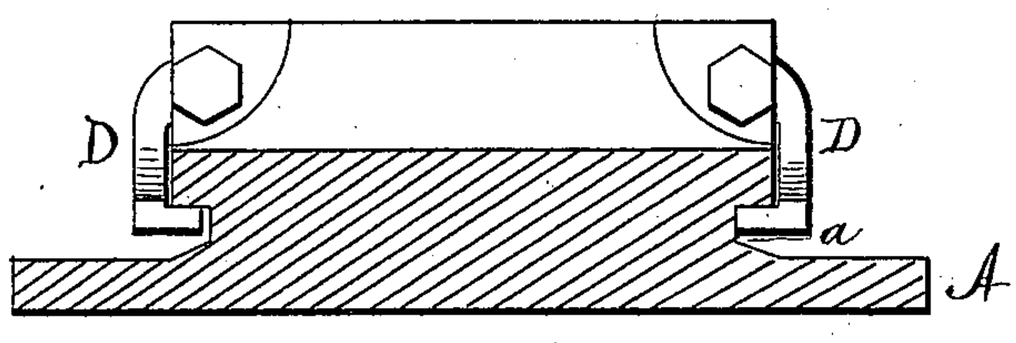


Fig. 3.

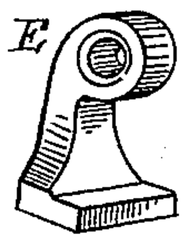


Fig. 4.

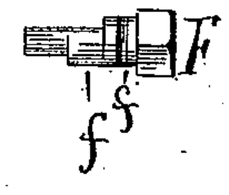
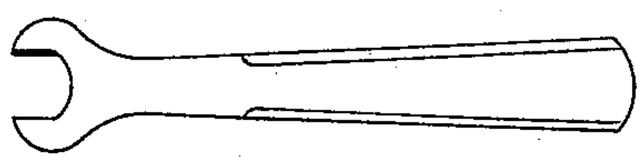


Fig. 5.



Witnesses.
George L. Barnes.
Daniel S. Glenny Jr.

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UNITED STATES PATENT OFFICE.

WALLACE PORTER, OF NEW HAVEN, CONNECTICUT.

PLANER-CHUCK.

SPECIFICATION forming part of Letters Patent No. 287,160, dated October 23, 1883.

Application filed May 26, 1883. (No model.)

To all whom it may concern:

Be it known that I, WALLACE PORTER, a citizen of the United States of America, residing at New Haven, in the county of New Haven and State of Connecticut, have invented certain new and useful Improvements in Planer-Chucks, of which the following is a specification, reference being had therein to the accompanying drawings.

My invention relates to improvements in planer-chucks; and its object is to provide improved means for clamping the movable jaw to the base of the chuck.

My invention consists in the hereinafter-described means for attaining said object.

In the drawings, Figure 1 represents a top plan view of a planer-chuck with my improvement attached thereto; Fig. 2, a transverse vertical section on line *x x*, Fig. 1; Fig. 3, a detail view of one of the clamps, with its eccentric bushing; Fig. 4, a like view of the eccentric bolt, and Fig. 5 a view of the wrench used in operating the bolts and screws.

Similar letters of reference indicate corresponding parts throughout the different views.

A represents the base of the chuck, provided with the ordinary clamping-shoulders, *a*.

B is the fixed, and C the movable, jaw of the chuck. Said movable jaw rests and slides upon the base A, and is held against the object planed by means of the screws *c*, which work through threaded bearings formed in an elevation, *a'*, of said base A, and rest against the back of said movable jaw. Said jaw is secured to the base A by means of the clamps D, said clamps being pivoted to said movable jaw and extended downward and under the shoulders *a*. The means for pivoting said clamps to the movable jaws, which consist, essentially, in the peculiar form of the bolts F and the clamps provided with the eccentric bushings E, form the gist of my invention. Each of said bushings E is, as has been said, eccentric in shape, and the object of this eccentricity is to allow for wear in the bearings of the bolts. In other words, the principal friction of the bolts upon the bearings is confined to certain spots. By the use of these eccentric bushings, when the bearings of the bolts become worn the bushing may be turned, and thus present a new wearing-surface. By this means the necessity for constant change of the bearings is avoided. Moreover, by the use of these bushings a considerable saving is had on account of the comparative smallness of expense in replacing the entire bearing. The bolts F, about midway of their length, are provided with eccentrics *f*, designed to fit into the aforementioned bushing E. The shanks of the bolts, near their heads, are of considerably greater diameter than from their eccentrics to their extremities. The purpose of this is to enable the end of the bolt to pass through the bearing in the aforesaid bushing E, while at the same time the part near the head is of such size as to allow for a circumferential groove, *f'*. The purpose of said groove is to allow passage between its sides of the pin which locks the bolt to the movable jaw.

By the aforegoing construction it will be seen that when the bolts F are turned the eccentrics *f* will elevate the clamps D, and thus secure the movable jaws to the chuck-base.

The operation of my invention is as follows: The article to be planed having been placed between the jaws B C, the said jaw C is moved forward and forced against said article by means of the screws *c*. The bolts F are then turned until the eccentrics have raised the lower ends of the clamps sufficiently to fix the movable jaw firmly to the base. The planing is then proceeded with.

Having thus described my invention, what I claim is—

1. In a planer-chuck, the bolt F, provided upon its shank with eccentric *f*, said bolt adapted to connect the clamp with the movable jaw, and said eccentric adapted to elevate said clamp, in the manner and for the purpose set forth.

2. In a planer-chuck, the combination, with the movable jaw, the clamps, and the bolts F, of the eccentric bushings E, substantially as and for the purposes described.

In testimony whereof I affix my signature in presence of two witnesses.

WALLACE PORTER.

Witnesses:

GEORGE TERRY,

DANIEL S. GLENNEY, Jr.