

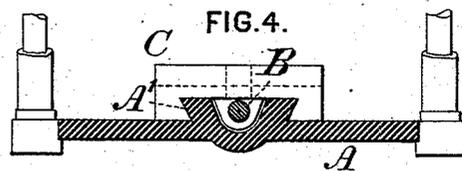
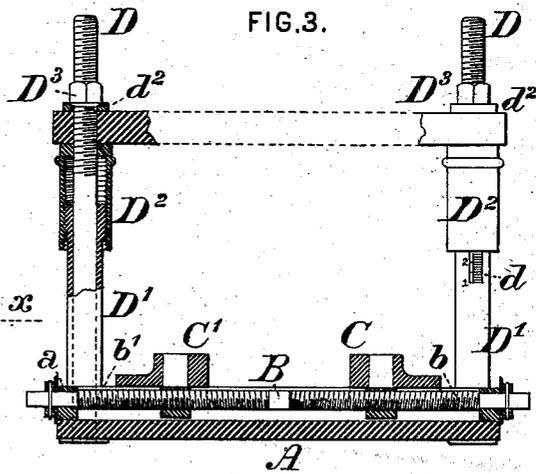
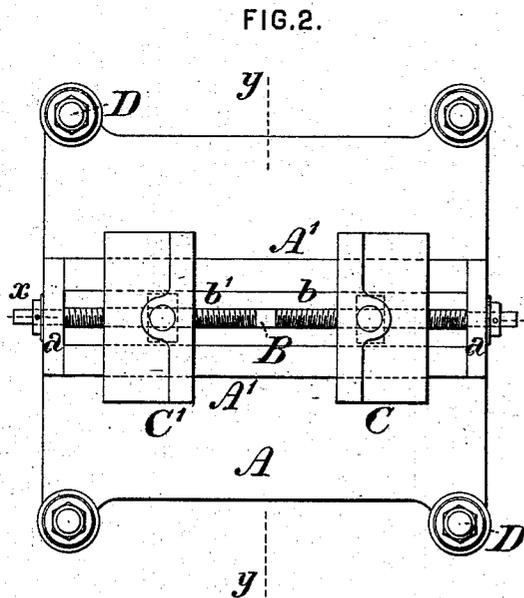
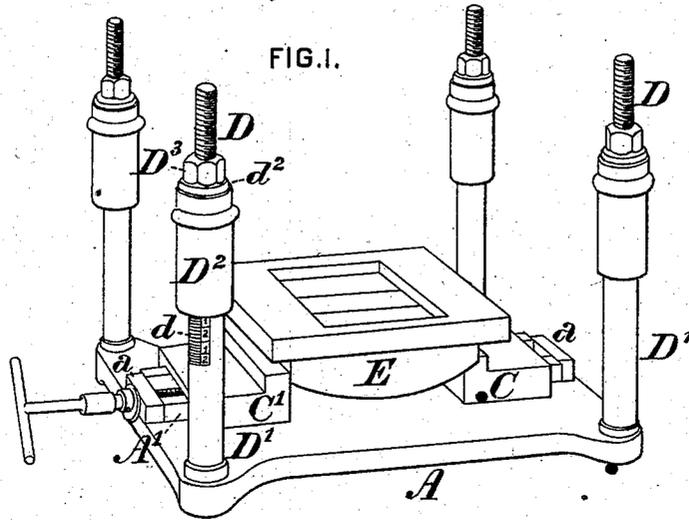
(No Model.)

D. W. PEDRICK.

CHUCK FOR PLANING VALVES.

No. 284,227.

Patented Sept. 4, 1883.



WITNESSES:

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UNITED STATES PATENT OFFICE.

DANIEL W. PEDRICK, OF PHILADELPHIA, PENNSYLVANIA.

CHUCK FOR PLANING VALVES.

SPECIFICATION forming part of Letters Patent No. 284,227, dated September 4, 1883.

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

To all whom it may concern:

Be it known that I, DANIEL W. PEDRICK, of the city and county of Philadelphia, in the State of Pennsylvania, have invented certain new and useful Improvements in Chucks for Planing Valves, &c., of which improvements the following is a specification.

The object of my invention is to provide convenient and effective means for adjusting and securing slide-valves of locomotive and other steam engines, or other objects of analogous form, in proper position to be acted upon by the tool of a portable planing-machine, and thereby to facilitate repairs to said engines, particularly in roundhouses, or in locations where a fixed planing-machine is not readily accessible or cannot be used economically for the purpose.

To this end my improvements consist in certain novel devices and combinations, including a base-plate, a series of planer-supports connected thereto, a valve-clamp which is adjustable longitudinally upon the base-plate, and mechanism for adjusting and supporting a planer parallel to and at required distance from the base-plate; also, a base-plate having one or more guides or ways fixed thereto, a pair of clamping-jaws fitted to move longitudinally on said guides, and an adjusting-screw adapted to rotate in bearings on the base-plate, and having right and left hand threads, which respectively engage the clamping-jaws.

The improvements claimed are hereinafter more fully set forth.

In the accompanying drawings, Figure 1 is a view in perspective of a chuck for planing valves embodying my invention; Fig. 2, a plan or top view of the same; and Figs. 3 and 4, longitudinal and transverse sections, respectively, through the same, taken at the lines *x x* and *y y*, respectively, of Fig. 2.

In the practice of my invention I form, preferably of cast-iron, a stout bed or base plate, A, having a support for a portable planing-machine, as presently to be described, located at or adjacent to each of its corners. A pair of dovetailed or inclined sided guides or ways, A', are cast upon and extend centrally and longitudinally across the base-plate. A clamping-screw, B, having a right-hand thread, *b*, and a left-hand thread, *b'*, each ex-

tending from its middle portion to a journal formed at or near one of its ends, is fitted to rotate between the guides A' in bearings *a* on the base-plate at the ends of said guides, and a pair of clamping-jaws, C C', having nuts on their under sides, which engage, respectively, the threads *b* and *b'*, and are mounted and adapted to slide freely upon the guides A', so as to be movable toward and from the center of the base-plate by the rotation of the clamping-screw in one or the other direction, such rotation being effected by the application of a crank or socket wrench to one of the squared ends of the screw.

In the instance shown, each of the supports for the planer is composed of a stud, D, secured in and projecting vertically from the base-plate at or near one of its corners, and a sleeve or tubular standard, D', which fits around the stud D and rests upon the base-plate, said sleeve having an external thread at and adjacent to its upper end, and an index or series of graduations, *d*, marked upon its exterior below said thread. A supporting-nut, D², engages the thread of the sleeve D', the upper surface of said nut being faced off truly to afford a proper bearing, and having a central opening, through which the stud D passes freely. The frame of the planer is clamped between the supporting-nuts D² and washers *d'*, which are tightened against its upper face by clamping-nuts D³ engaging threads on the studs D, and to provide a firmer and more accurate bearing the washers *d'* are dished or made concave at top, and the nuts D³ similarly convex at bottom.

In operation, the valve E, which is to be planed, is placed between the jaws C C' of the clamp, and by the rotation of the screw B said jaws are moved against and firmly hold the valve in the central position proper to receive the action of the planing-tool. By means of the supporting-nuts the frame of the planer is adjusted and held in position, at any desired distance from the base-plate within a given range, and the graduations upon the sleeves D' enable the planer-frame to be set accurately parallel with the base-plate.

It will be obvious that in lieu of using a stud and a separate sleeve, as described and shown, said members may, if preferred, be

formed in a single piece—that is to say, a rod or bolt of sufficient diameter to receive the nut D², fitted at one end to the base-plate, and having a thread of smaller diameter to receive the clamping-nut D³.

The planer, which may be of any approved construction, does not constitute part of my present invention, and need not therefore be herein described. As an example of a structure suitable for the purpose, reference may be had to the patent of J. T. Kichner and W. H. Odenatt, No. 143,080, dated September 23, 1873.

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

1. The combination, substantially as set forth, of a base-plate, a series of vertical planer-supports connected thereto, guides or ways located upon the base-plate in a plane at right angles to said supports, and a valve-clamp fitting said guides, and movable and adjustable thereon.

2. The combination, substantially as set forth, of a base-plate, a series of planer-supports, each having an external thread engaging a supporting-nut, and an index or series of graduations below said thread, and a series of clamping-nuts engaging threads on the supports above the threads of the supporting-nuts.

3. The combination of a base-plate, a series of vertical planer-supports connected thereto, guides or ways located upon the base-plate in a plane at right angles to said supports, a pair of valve-clamping jaws fitted to move longitudinally on said guides, and a clamping-screw mounted in bearings on the base-plate, and having two threads of opposite lead, respectively, each of which engages a corresponding nut upon one of the clamping-jaws, substantially as set forth.

DANIEL W. PEDRICK.

Witnesses:

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