(No Model.) 2 Sheets—Sheet 1.

E. SHAW.

PLANER CHUCK.

No. 372,714. Patented Nov. 8, 1887.

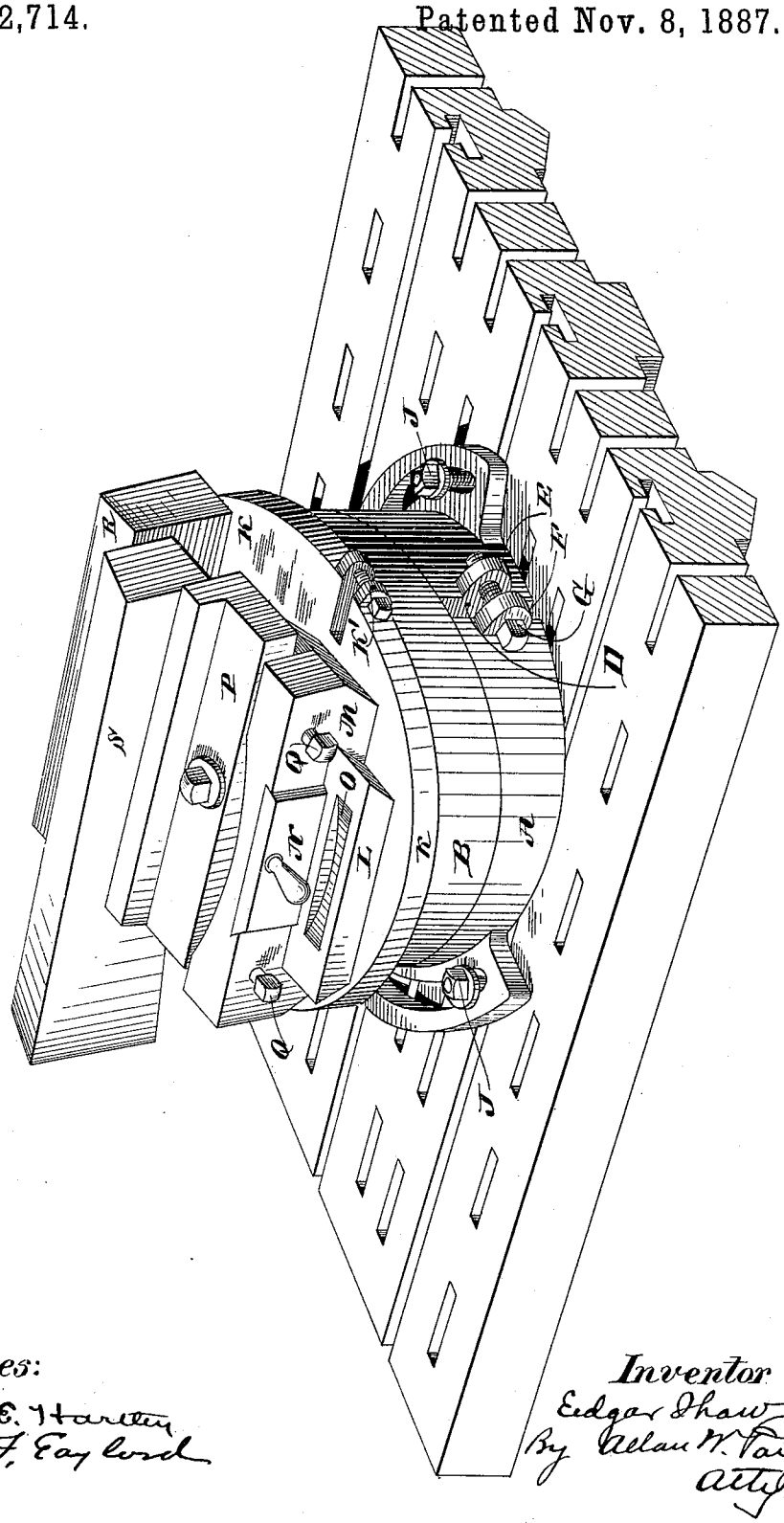


Fig. 1.

Witnesses:
Frank E. Hartley
Robt. F. Gaylord

Inventor
Edgar Shaw
By Allan W. Paige
Atty.

N. PETERS. Photo-Lithographer. Washington, D. C.

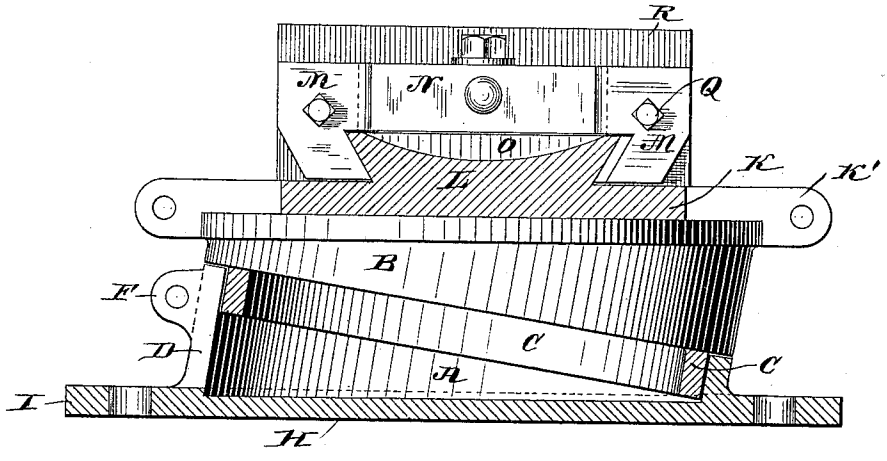
(No Model.) 2 Sheets—Sheet 2.

E. SHAW.

PLANER CHUCK.

No. 372,714. Patented Nov. 8, 1887.

Fig. 2.



Witnesses:
Robt F. Gaylord.
Frank E. Hartley

Inventor
Edgar Shaw
By Allen W. Paige
Atty

N. PETERS. Photo-Lithographer. Washington, D. C.

UNITED STATES PATENT OFFICE.

EDGAR SHAW, OF LYNN, ASSIGNOR TO THE SHAW MANUFACTURING COMPANY, OF BOSTON, MASSACHUSETTS.

PLANER-CHUCK.

SPECIFICATION forming part of Letters Patent No. 372,714, dated November 8, 1887.

Application filed March 12, 1887. Serial No. 230,611. (No model.)

To all whom it may concern:

Be it known that I, EDGAR SHAW, of Lynn, in the county of Essex and State of Massachusetts, have invented certain new and useful Improvements in Planer-Chucks, of which the following is a full, clear, and exact description, reference being had to the accompanying drawings.

This invention has for its object the adaptation to planer-chucks of the adjustable support or bearing shown and described in United States Letters Patent No. 333,261, issued to me December 29, 1885.

The invention consists of a planer-chuck composed of two pivotally-connected and independently-rotatable wedge-shaped sections, one of which sections carries clamping devices, and the other of which is provided with means for attaching the chuck to the bed-plate of the planer.

The invention also consists of, in combination with the wedge-shaped sections, a locking mechanism for fixedly securing such sections together.

In the drawings, Figure 1 is a perspective view of a planer-bed, showing my improved chuck attached thereto, Fig. 2 being a central section through the chuck, except as to the upper section.

In the views, A and B are the wedge-shaped sections composing the body of the chuck. The section B has a rim or flange, C, upon which is sleeved the section A. These parts may be slightly coned or dovetailed, so as to cause the sections to be held together. Section A is provided in its cylindrical wall with a slot, D, and on each side of which are the ears E and F. One of these ears is screw-threaded to receive the threaded end of the screw G, the other ear having a plain hole through it to receive the shank of the screw. Drawing these ears together by the screw causes the circular edge of the section A to close upon the rim C, and thereby lock the two sections firmly and fixedly together.

H is the base of the chuck, which base is provided with a flange, I, slotted, as shown in Fig. 1, or provided with bolt-holes, as shown in Fig. 2, for the purpose of securing it to the bed of the planer, the usual locking-bolts, J, being employed for this purpose.

K is a head-plate upon the upper edge of the section B. This plate is recessed, as shown in Fig. 2, and fits down over the edge of this upper section a short distance.

K′ is a locking mechanism, the same in construction as the lock E F G of the lower section, for securing this plate to the upper section. This plate carries fixed thereto the ways L, upon which moves the slide M, such slide being held at its various points of adjustment by means of a dog, N, dovetailed in the side of the slide M, so as to have vertical movement, and engaging the slots O in the ways.

P is a clamping-jaw carried by the slide M, and made adjustable thereon for firmly grasping and holding the work by means of the set-screws Q.

R is a second clamping-jaw, secured to the head-plate in any suitable manner.

S represents a piece of work of an irregularly angular form, shown as adjusted so that its upper surface is brought to the level and in position to be acted upon by the planing-tool.

By these means a wedge-shaped or other irregularly angular piece of work may be clamped by the jaws of the chuck and approximately brought to the desired position that it should occupy relatively to the planing-tool. The wedge-shaped sections may then be turned upon each other until the surface to be planed is brought to the requisite exact adjustment. In this way the difficulties of blocking up a piece of work of this kind and bringing it to the proper position for the action of the planing-tool are obviated, and the grasping and holding of such a piece in any desired position is readily and easily accomplished.

The purpose in making the head-plate movable on the upper section is to obviate the necessity, when desired, of rotating the lower section on the planer-bed, as, in order to avail of the entire range of adjustability of the sections, these sections should be independently rotatable. By making the clamping devices rotatable upon the upper section the same effect can be produced as by fixing such devices to the upper section and, for the purpose of adjustment, rotating the lower section upon its supports.

I am aware that other ways for mounting the clamping-jaws upon the wedge-shaped sections, as well as other ways for securing the chuck to the bed-plate, may be employed, and hence I do not limit myself to any special form for this purpose. So, too, other forms of locking devices for securing the sections fixedly to each other may also be employed.

What I claim as new is—

1. In a planer-chuck, the combination of two pivotally-connected and independently-rotatable wedge-shaped sections; one of said sections being provided with a clamp for holding the work, and the other of said sections having means of attachment to a planer-bed.

2. In a planer-chuck, the combination of two pivotally-connected and independently-rotatable wedge-shaped sections, one of said sections being provided with a clamp for holding the work, and the other having means of attachment to a planer-bed, and a locking mechanism for fixedly securing said sections together.

3. In combination, in a planer chuck, two pivotally-connected and independently-rotatable wedge-shaped sections, a clamp for holding the work pivotally mounted upon one of the sections, and connections whereby the chuck may be secured to the planer-bed, which are carried by the other section.

4. In combination, in a planer-chuck, the wedge-shaped sections A B, the lock E F G, and the adjustable clamping-jaws P R, pivotally mounted upon the section B.

EDGAR SHAW.

Witnesses:
HENRY E. WARNER,
JAMES J. MYERS.