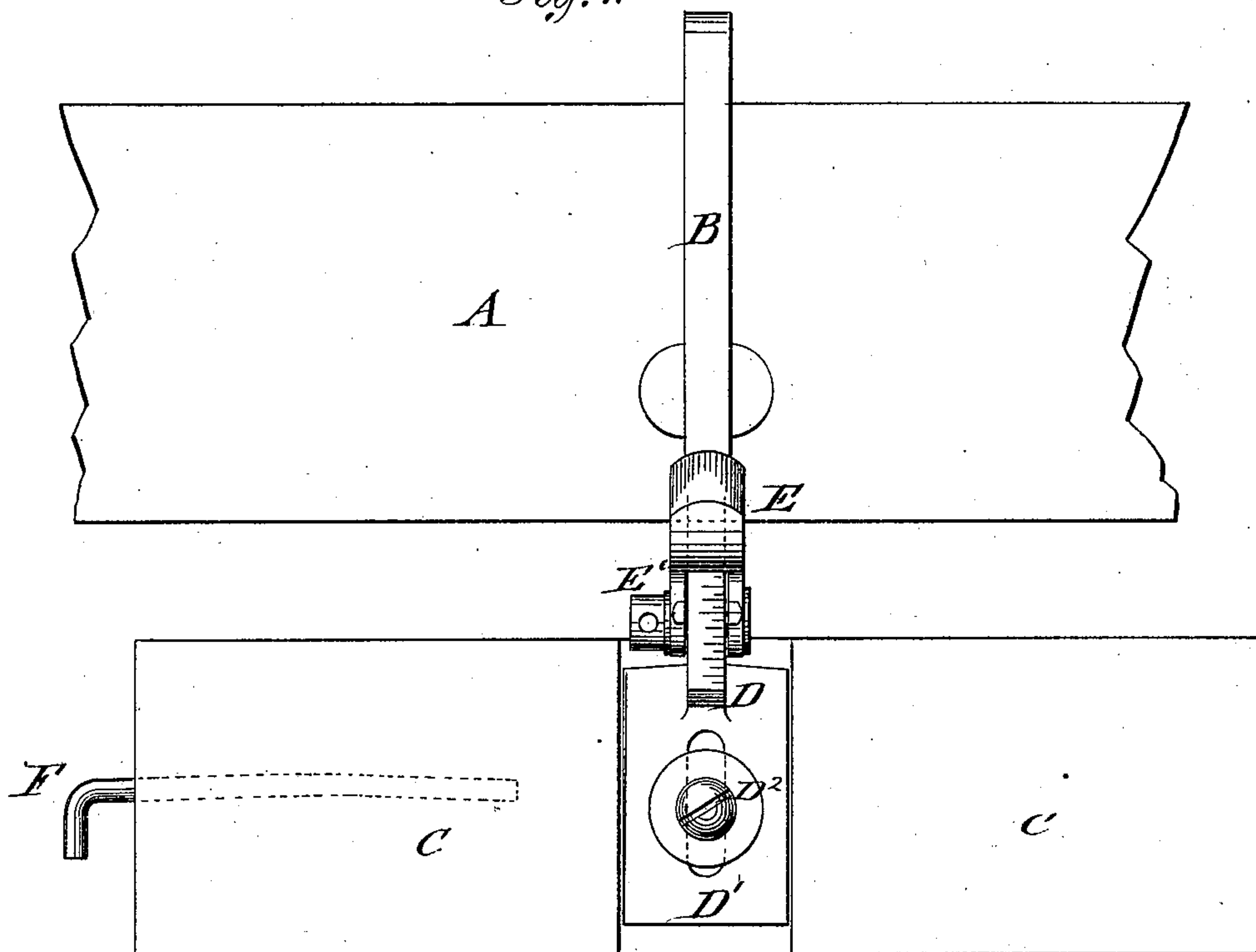


W. S. SHIPE.  
Plane-Guide.

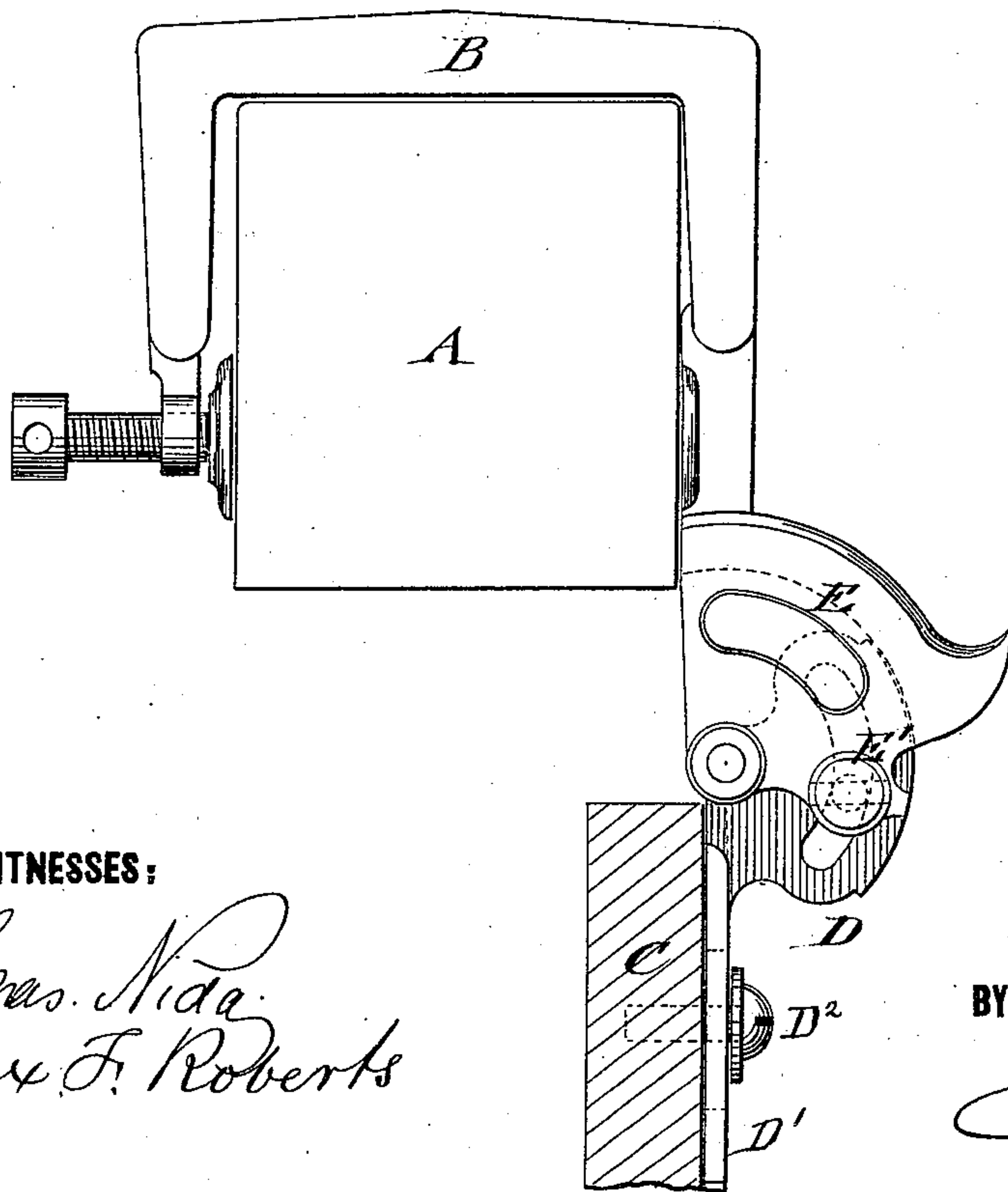
No. 167,943.

Patented Sept. 21, 1875.

*Fig: 1.*



*Fig: 2.*



WITNESSES:

*Mrs. Ada  
Alex F. Roberts*

INVENTOR:

*W. S. Shipe*  
BY *Mumford*

ATTORNEYS.

# UNITED STATES PATENT OFFICE.

WALTER S. SHIPE, OF MINERVA, OHIO.

## IMPROVEMENT IN PLANE-GUIDES.

Specification forming part of Letters Patent No. **167,943**, dated September 21, 1875; application filed August 14, 1875.

*To all whom it may concern:*

Be it known that I, WALTER S. SHIPE, of Minerva, in the county of Stark and State of Ohio, have invented an Improvement in Plane-Guides, of which the following is a specification:

In the accompanying drawing, Figure 1 represents an end view of my improved plane-guide, and Fig. 2 a side view of the same.

Similar letters of reference indicate corresponding parts.

My invention has for its object to so improve the plane-guide for which a patent has been granted to me under date of January 6, 1874, and numbered 146,208, that it will work more steadily and accurately, and be readily set to any desired angle.

The invention consists, mainly, of a recessed handle-extension of the yoke part in connection with a slotted arc-piece of the guide-strip-connecting plate, the arc-piece being pivoted to the yoke, and set by a clamp-screw thereto. A wire key with bent end is inserted into a hole of the guide-strip for being readily available for turning the clamping-screw nuts.

In the drawing, A represents a plane, to which the yoke B is attached in the customary manner by a clamping-screw at one end, and flanged side extensions at the opposite end. The yoke B is cast at the end below the flanges with a handle-extension, E, that is centrally recessed for the slotted arc-piece D, which forms, with its guide-plate D<sup>1</sup>, the connection with the guide-strip C. The slotted arc D extends at right angles from guide-plate D<sup>1</sup>, and is inserted and pivoted at its center in the handle-extension E. A set-screw, E', passes

through the perforations of the handle E and the slot of the arc-piece for the purpose adjusting the sliding arc to any required angle. The outer circumference of the arc-piece D is graduated, so that the same may be directly set with the guide-strip C to any required degree of inclination toward the plane. The guide-plate D<sup>1</sup> is slotted and adjusted in a recess of the guide-strip C, nearer to, or farther from, the plane by a set-screw, D<sup>2</sup>. A key, F, of strong wire, with bent end is inserted into a socket-hole of guide-strip C, being slightly curved at its longer part to be retained therein with a certain tension without falling out, the shorter bent end serving as handle to withdraw it from the guide-strip. The wire key F is inserted into perforations of the heads of the set-screws, so that they can be easily loosened or tightened, while the key may be securely put away into the socket-hole of the guide-strip without getting lost. The key is thus always at hand for use for setting the plane-guide, which is steadily and firmly adjusted in the handle-extension or socket-piece of the yoke.

Having thus described my invention, I claim as new and desire to secure by Letters Patent—

The combination, with a guide-strip, C, of plane-clamping yoke B, having recessed extension E, the pivotted slotted arc-piece D, and the clamp-screw E', as and for the purpose specified.

WALTER S. SHIPE.

Witnesses:

JOHN BREIDENSTEIN,  
A. N. BOORY.