

(No Model.)

F. A. PRATT.
Metal Planing Machine.

No. 241,563.

Patented May 17, 1881.

Fig. 2.

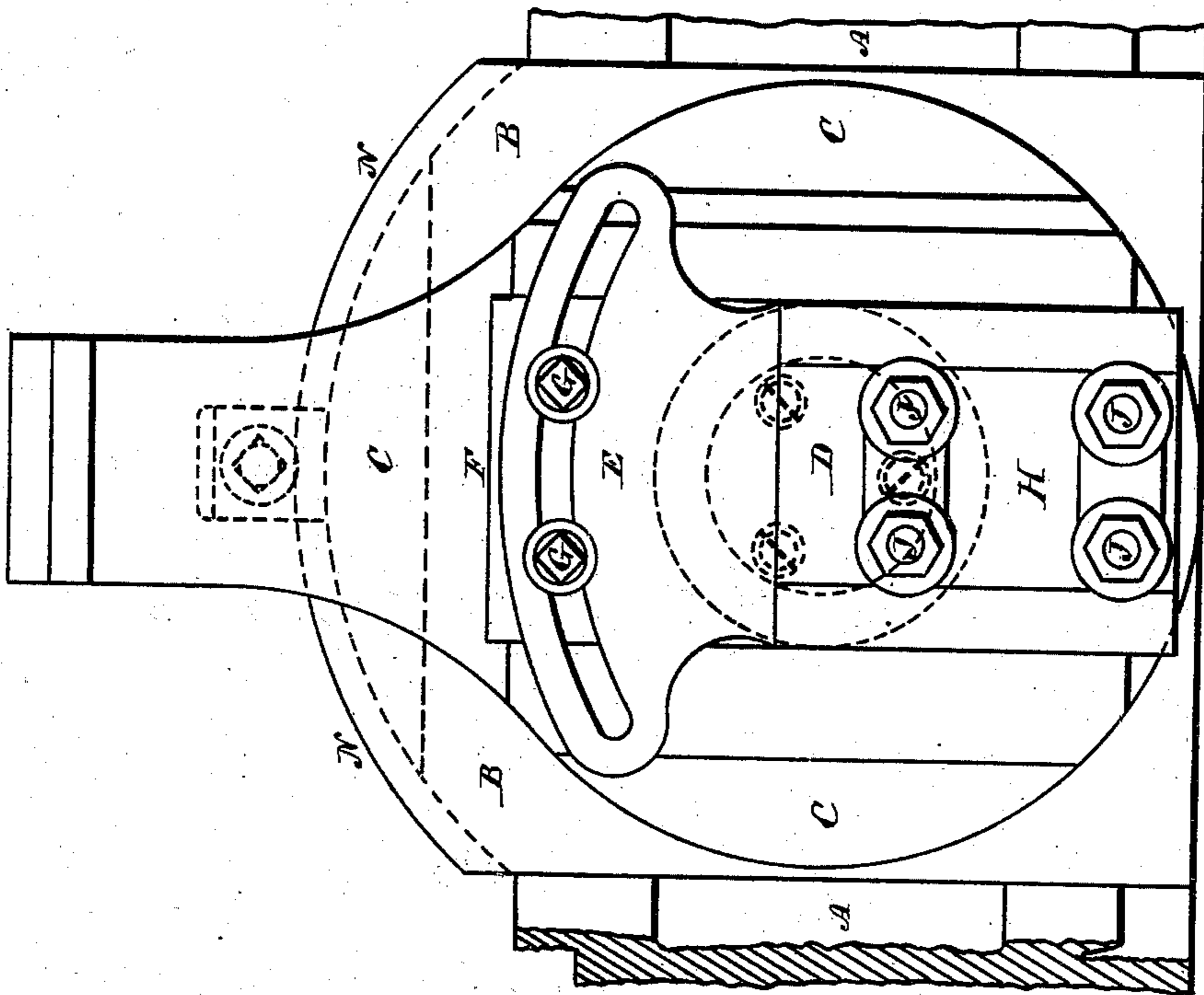
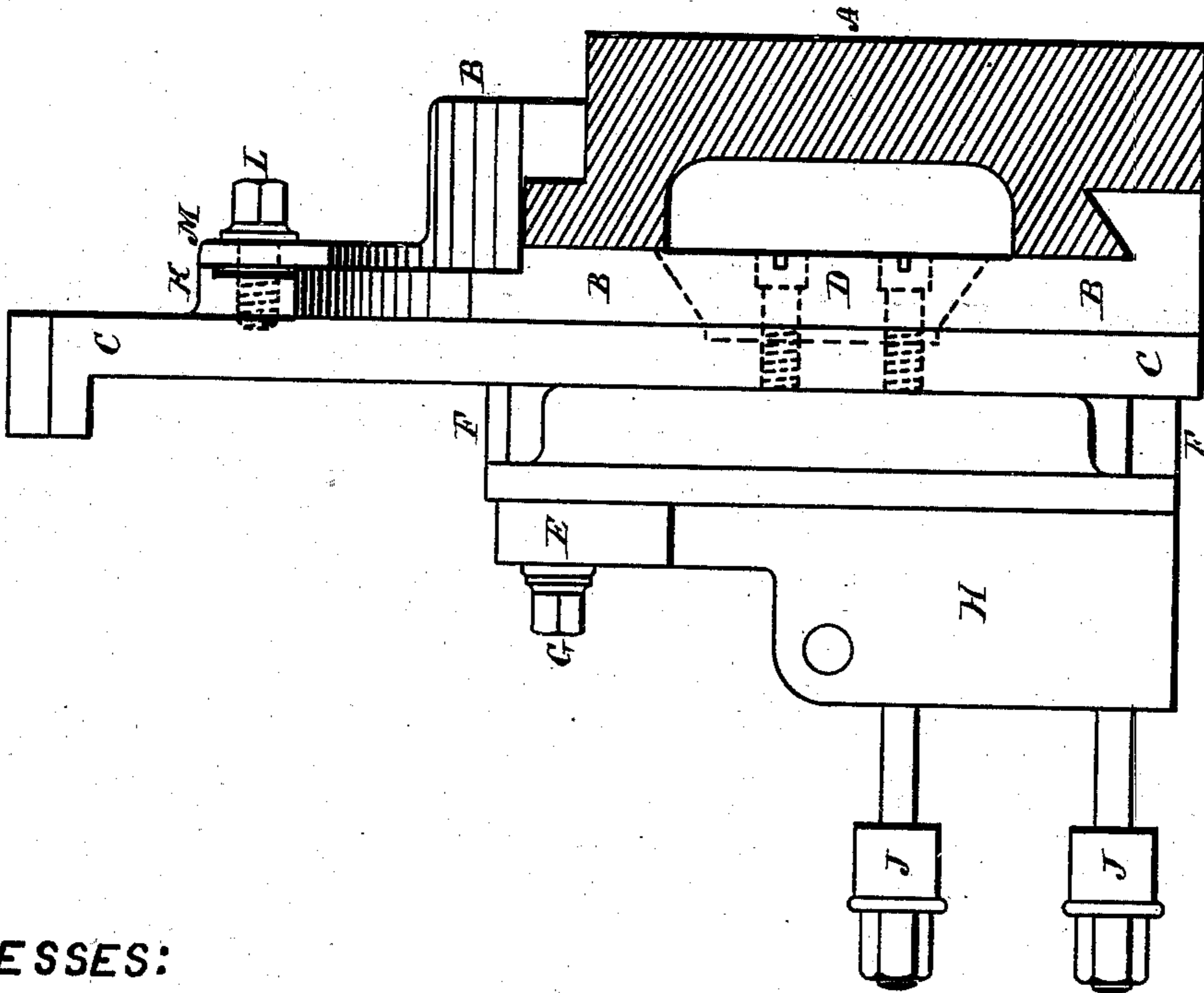


Fig. 1.



WITNESSES:

Russell B. Curtis

Henry W. Ayres

INVENTOR:

Francis A. Pratt
by Theo. G. Ellis, Attorney.

UNITED STATES PATENT OFFICE.

FRANCIS A. PRATT, OF HARTFORD, CONNECTICUT, ASSIGNOR TO THE PRATT
& WHITNEY COMPANY, OF SAME PLACE.

METAL-PLANING MACHINE.

SPECIFICATION forming part of Letters Patent No. 241,563, dated May 17, 1881.

Application filed March 25, 1881. (No model.)

To all whom it may concern:

Be it known that I, FRANCIS A. PRATT, of Hartford, in the county of Hartford and State of Connecticut, have invented certain new and useful Improvements in Planing-Machines; and I do hereby declare that the following is a full, clear, and exact description thereof, whereby a person skilled in the art can make and use the same, reference being had to the accompanying drawings, and to the letters of reference marked thereon.

Like letters in the figures indicate the same parts.

My improvement relates to the construction of the tool-head which traverses the cross-slide between the standards of a metal-planing machine.

The object of my invention is to provide a better and stronger method of attaching the plate, which turns in a vertical plane, to the slide-rest, and a better method of adjusting and clamping the same in any inclined position.

In the accompanying drawings, illustrating my invention, Figure 1 shows a side view of a tool-head having my improvement, and a cross-section of the cross-slide upon which it moves. Fig. 2 is a front view of the tool-head and a part of the cross-slide, showing my improvements.

A is the cross-slide between the standards of a planing-machine.

B is the slide-rest or slide-block, which moves across the table of the planer upon the cross-slide.

C is the plate, which rests against the face of the block B and turns in a vertical plane upon the center D.

E is the tool-carrier, which is attached by a center-pin to the vertical slide F, moving in a grooved socket in the plate C. The tool-carrier turns upon the slide F to any required angle, and is held in place by the clamp-screws G.

H is the tool-holder, in which the tool is held by the bolts J.

The foregoing parts are of the ordinary construction, except as hereinafter described.

My improvement consists in the construction of the plate C and its attachments to the block B. As commonly constructed, the plate C has two curved slots in its sides, one on each side of the tool-carrier, through which bolts pass into the block B, which are clamped tight when the plate is set to the proper angle. In my improved construction the top of the block B is cut to the curve of a part of a circular arc, of which the bearing D is the center. The top of the plate C is carried up above the block B, and is provided with the projection K, through which passes the clamp-screw L.

M is a small plate which rests upon the outer edge of the projection K and upon the circular flange N at the top of the block B. The screw L passes through this plate, and, when turned inward, binds the plate M, so that it firmly clamps and holds the plate C to the block B.

By means of my invention the plate C can be more quickly and readily set in place at the desired angle, on account of there being but one screw to be operated, and this is where it can be reached from either side of the machine, whereas with the common construction it is necessary to pass around the planer to set the screws on the two opposite sides. My construction is also much stronger and stiffer than the ordinary set-screws, as it gives a bearing at a higher point and at a greater leverage from the tool than is commonly used.

What I claim as my invention is—

1. In the tool-head of a planing-machine, the combination of the sliding block B, having the circular arc N, the plate C, having the projection K, the screw L, and the clamping-plate M, substantially as described.

2. In the tool-head of a planing-machine, the single clamp-screw L, situated at the top of the plate C, whereby the said plate is clamped to the block B, substantially as described.

FRANCIS A. PRATT.

Witnesses:

THEO. G. ELLIS,

WENDELL R. CURTIS.