

J. Dixon,
Wood Plane Attachment.
No 54,511. Patented May 8, 1866.

Fig.1.

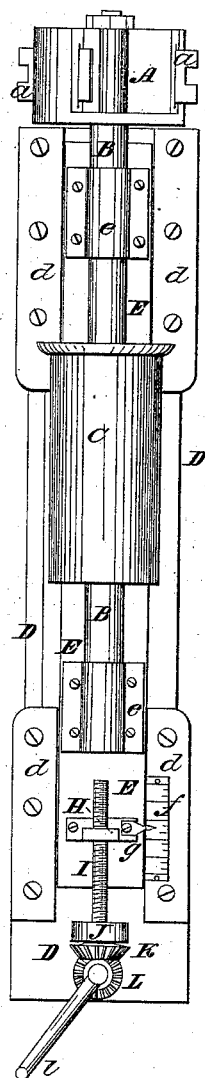
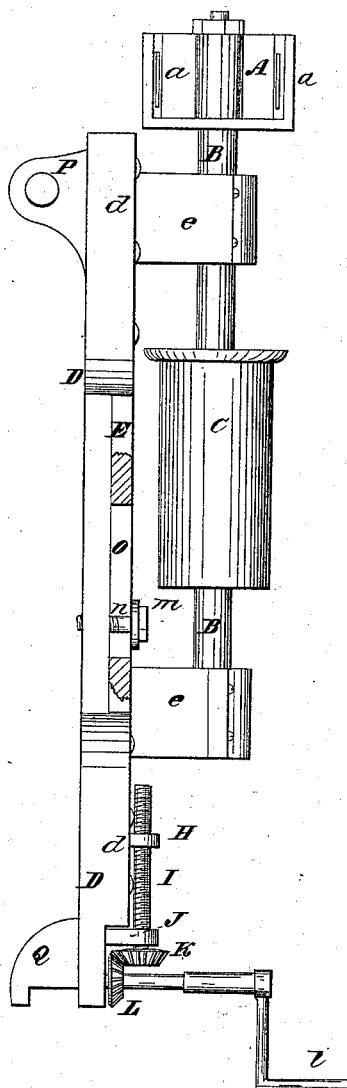


Fig.2.



Witnesses:
Wm. Frey
J. M. Lym

Inventor:
Joseph Dixon.
per *inundolo*
Attorneys.

UNITED STATES PATENT OFFICE.

JOSEPH DIXON, OF NEW YORK, N. Y.

IMPROVEMENT IN PLANING-MACHINES.

Specification forming part of Letters Patent No. **54,511**, dated May 8, 1866.

To all whom it may concern:

Be it known that I, JOSEPH DIXON, of 761 Second avenue, in the city, county, and State of New York, have invented a new and Improved Matching Attachment for Planers; and I do hereby declare that the following is a full, clear, and exact description thereof, which will enable others skilled in the art to make and use the same, reference being had to the accompanying drawings, forming part of this specification, in which—

Figure 1 is a front view, and Fig. 2 is a side view, of my improved attachment.

Similar letters of reference indicate like parts.

This invention relates to an improved method or device for regulating the vertical set of tonguing and grooving attachments in planing-machines, and which gives several desirable advantages over the present devices used for that purpose.

My invention consists in fixing the knife-holding head rigidly to its shaft and supporting the shaft on an adjustable or sliding bed-plate, so that the adjustment of the knives or cutters may be made expeditiously and while the machine is in full motion by adjusting the said bed-plate, and which also admits of securing the knife-holding head to its shaft in a fixed manner, so as to be beyond liability of displacement by encountering knots, &c., and, further, allows the matching-knives to be promptly removed out of the way when the planer is to be used for surfacing by dropping them below the surface of the planing-bed.

Having described the nature of my invention, I will proceed to describe its construction and operation.

The main bed D D, Fig. 2, of the attachment is secured to the side of the planer so as not to project above the surface of the planing-bed by a set-screw which passes through the nut P, and the attachment is adjusted laterally for different widths of boards by the said screw and nut P, the foot Q sliding on a guide when such lateral adjustment is made.

D D is the main bed of the attachment, and E E is the adjustable bed-plate, which slides in a dovetail groove formed by the projecting parts *d d* of the main bed D.

A is the knife-holding head, and is rigidly fixed to its shaft B B. The shaft B is supported on the adjustable bed-plate E by the standards *e e*. C is a belt-pulley by which the cutter-shaft B is driven.

The vertical adjustment of the knives is made or effected by a screw, I, which is held by a collar in a fixed standard, J, and engages with a stud, H, which projects from the sliding bed-plate, and is operated by the gears K L and crank *l*.

The adjustable bed-plate E, Fig. 1, is provided with an index or pointer, *g*, which travels over the face of a fixed graduated plate, *f*, and indicates the vertical set or position of the cutters *a a*.

n m, Fig. 2, is a set-screw for clamping the adjustable bed-plate E firmly in position, and occupies a slot, *o*, in the plate E. By these means the vertical set of the cutters is easily regulated for different thicknesses of stuff or boards without stopping the machine, and the cutters are held to their work in a reliable manner, displacement of the same being impossible without breaking of parts.

When the planer is to be used for surfacing or planing only the cutter-head A is run down by the crank *l*, so as to be dropped below the surface of the planing-bed.

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

The combination of cutter-head A, shaft B, adjustable bed E, indicator *g f*, and adjusting-screw I, substantially in the manner and for the purpose set forth.

The above specification of my invention signed by me this 2d day of December, 1865.

JOSEPH DIXON.

Witnesses:

JOHN COCHRANE,
ANDREW J. TODD.