

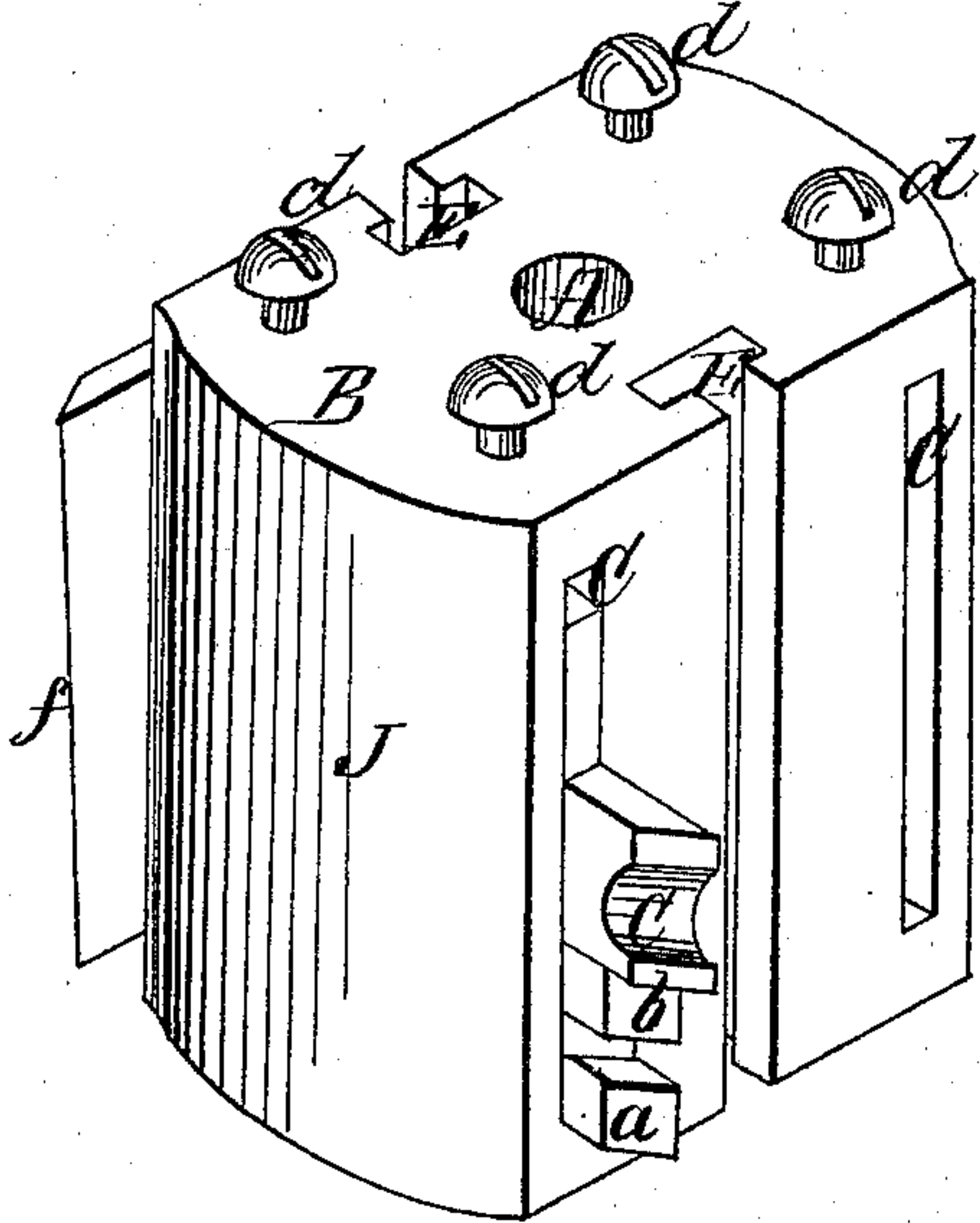
*H. A. Lee,*

*Cutter Head.*

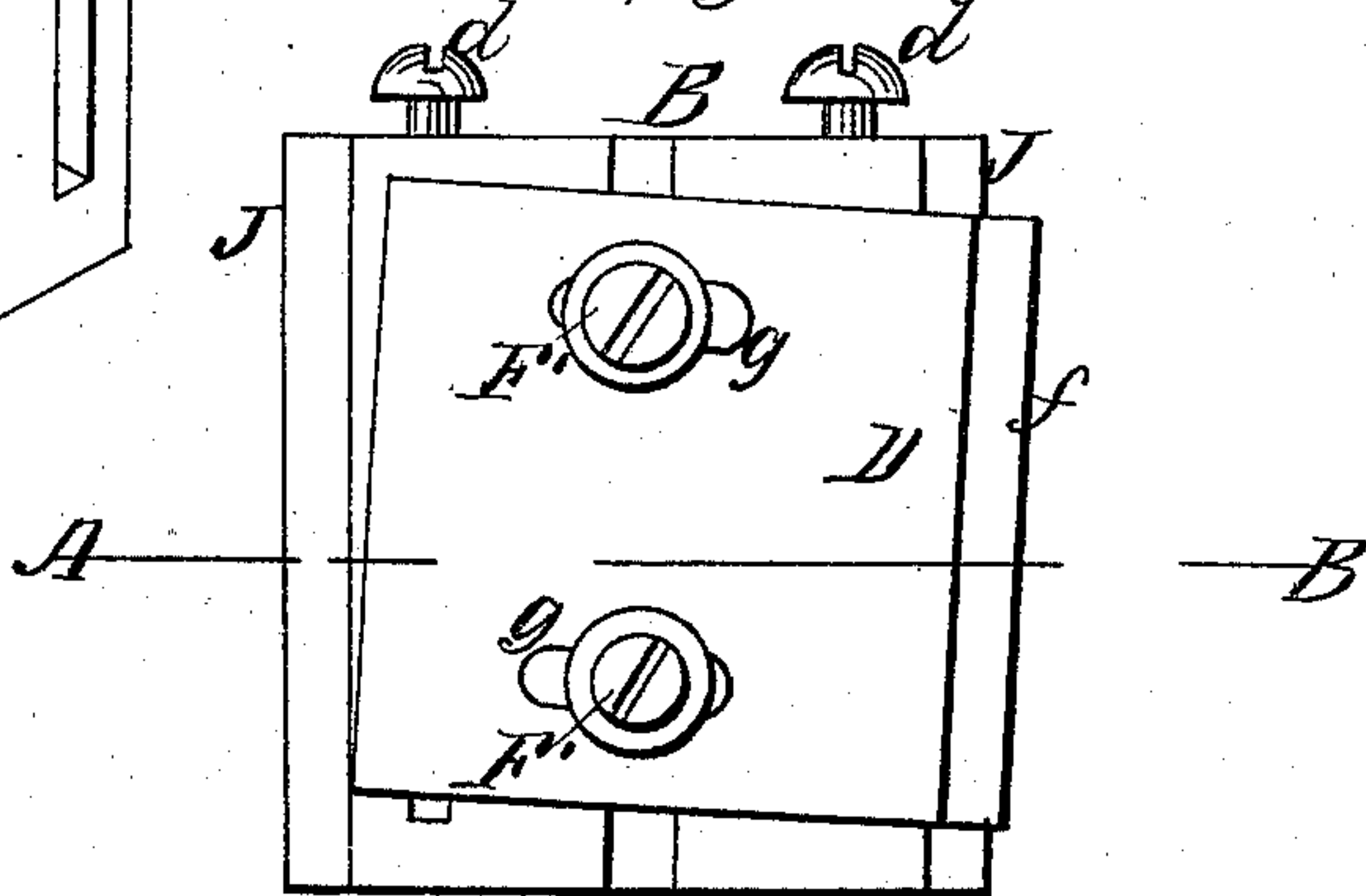
*N<sup>o</sup> 66,719.*

*Patented July 16, 1867.*

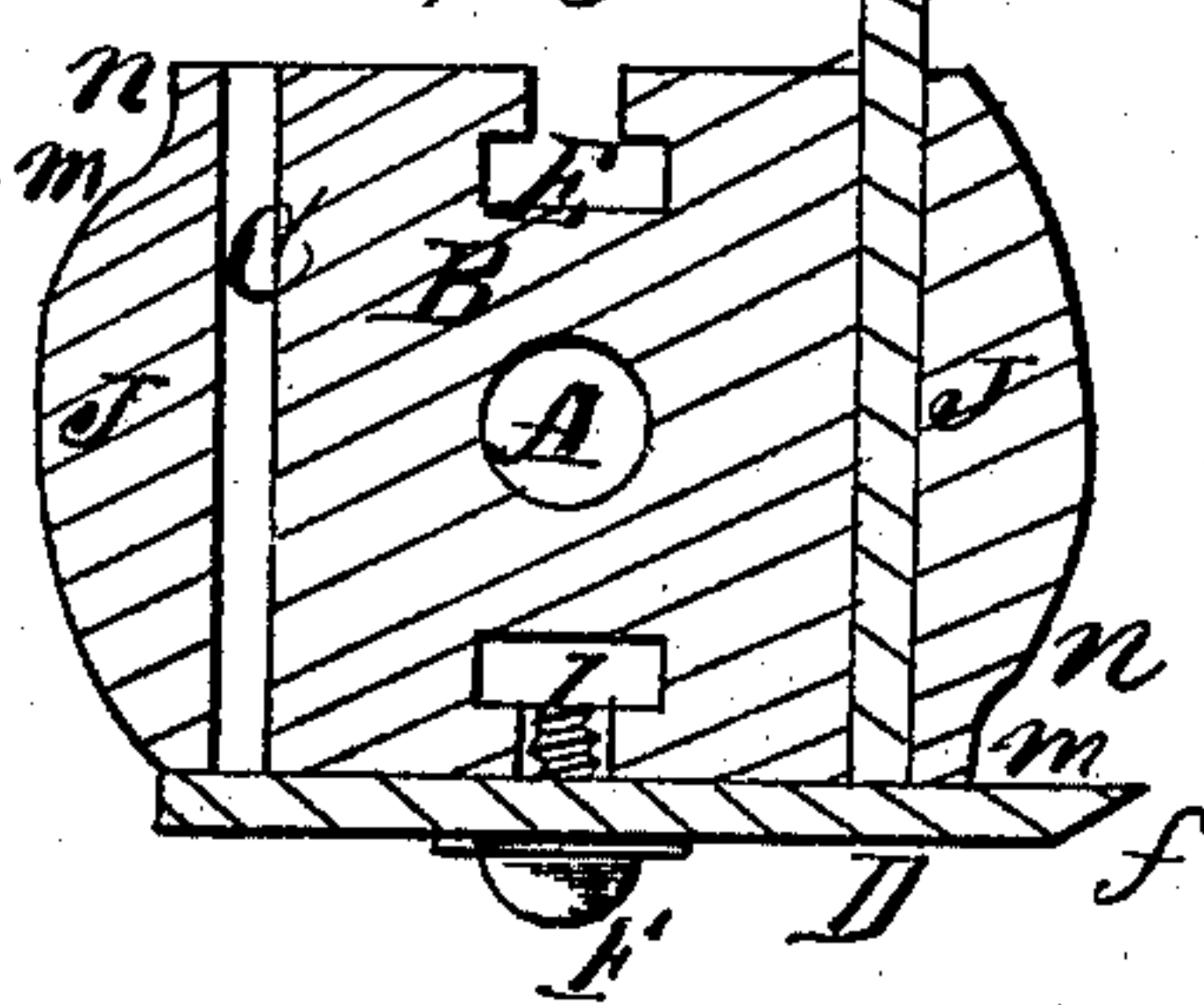
*Fig: 1.*



*Fig: 2.*



*Fig: 3.*



*Witnesses:*

*Thos H. Dodge  
D L Miller*

*Inventor  
Henry A Lee*

# United States Patent Office.

HENRY A. LEE, OF WORCESTER, MASSACHUSETTS.

*Letters Patent No. 66,719, dated July 16, 1867.*

## IMPROVEMENT IN CUTTER-HEADS FOR PLANING MACHINES.

*The Schedule referred to in these Letters Patent and making part of the same.*

### KNOW ALL MEN BY THESE PRESENTS:

That I, H. A. LEE, of the city and county of Worcester, and Commonwealth of Massachusetts, have invented certain new and useful improvements in Combined Open and Closed Matcher-Heads; and I do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the accompanying drawings, forming a part of this specification, in which—

Figure 1 represents a perspective view of my combined open and closed matcher-head.

Figure 2 represents a side view, and

Figure 3 represents a cross-section on line A B, fig. 2.

To enable those skilled in the art to which my invention belongs to make and use the same, I will proceed to describe it.

In the drawings, A is the hole through which the vertical match-spindle passes, and to which the head B is fastened in the ordinary manner. In cutting the various kinds of mouldings, it is the practice to make up the cutter by separate pieces, *a b c*, or any other desired number and shape. These sections or cutters are placed in the straight grooves or slots C C, and are held in place by the set-screws *d d*, which may bear directly upon the edge of the upper section, or upon a blank piece, *e*, when the sections do not fill the slots C C.

A matcher-head made as above described is called a closed head, since the sections of the cutter are held in close confinement in the slot C. It often happens that it is necessary to use a cutter D, having an inclined edge, *f*, as shown in fig. 2, and as the edge *f* of such a cutter, if used in the slots C C, would have to be made inclined and of the exact inclination of the form to be cut, thus necessitating the making of a new cutter, or grinding away of the edge of an old one, every time a change was desired in the form of cut, it has been the practice to have a separate head with grooves E, for the purpose of fastening on square cutters D, having slots *g g*, through which bolts F passed to screw into nuts 1, slipped into the grooves E. By this mode of construction the cutter D can be inclined, as shown in figs. 1 and 2, so as to bring the edge *f* upon any desired angle. In lieu of slots E, the bolts F may screw directly into holes bored in the head part B.

A head constructed as last above described is called an open matcher-head, and it will be seen from the foregoing explanations that neither could be made to answer for the other very conveniently, since the cutter, made up of sections, could not be safely used when fastened upon the outside. To combine the two heads in one, and that, too, without materially increasing the expense and weight of the matcher-head, was the object sought to be attained by my present invention. In addition to the slots C C and grooves E E for fastening the different cutters, the head part B is cut away at the points *m m*, so as to form clearing throats *n n* for the cutters D. In making the closed head it is necessary to have the rounded parts J J in order to give sufficient strength, and hence it becomes necessary, in order to use the head with the cutters D, to have the metal cut away to form the throats *n n*.

I do not claim an open matcher-head, nor a closed matcher-head, separately considered, nor do I claim a head for supporting cutters like that described in the patent granted to S. F. Foreman, June 29, 1858; but what I do claim as my invention, and desire to secure by Letters Patent, is—

A matcher-head constructed in the peculiar manner above described, and as shown in the drawings, so that it may be used equally well in lieu of either a closed or an open matcher-head, as and for the purposes set forth.

HENRY A. LEE.

Witnesses:

THOS. H. DODGE,

D. L. MILLER.