

(No Model.)

D. GRAFFIN.

CUTTER HEAD.

No. 246,498.

Patented Aug. 30, 1881.

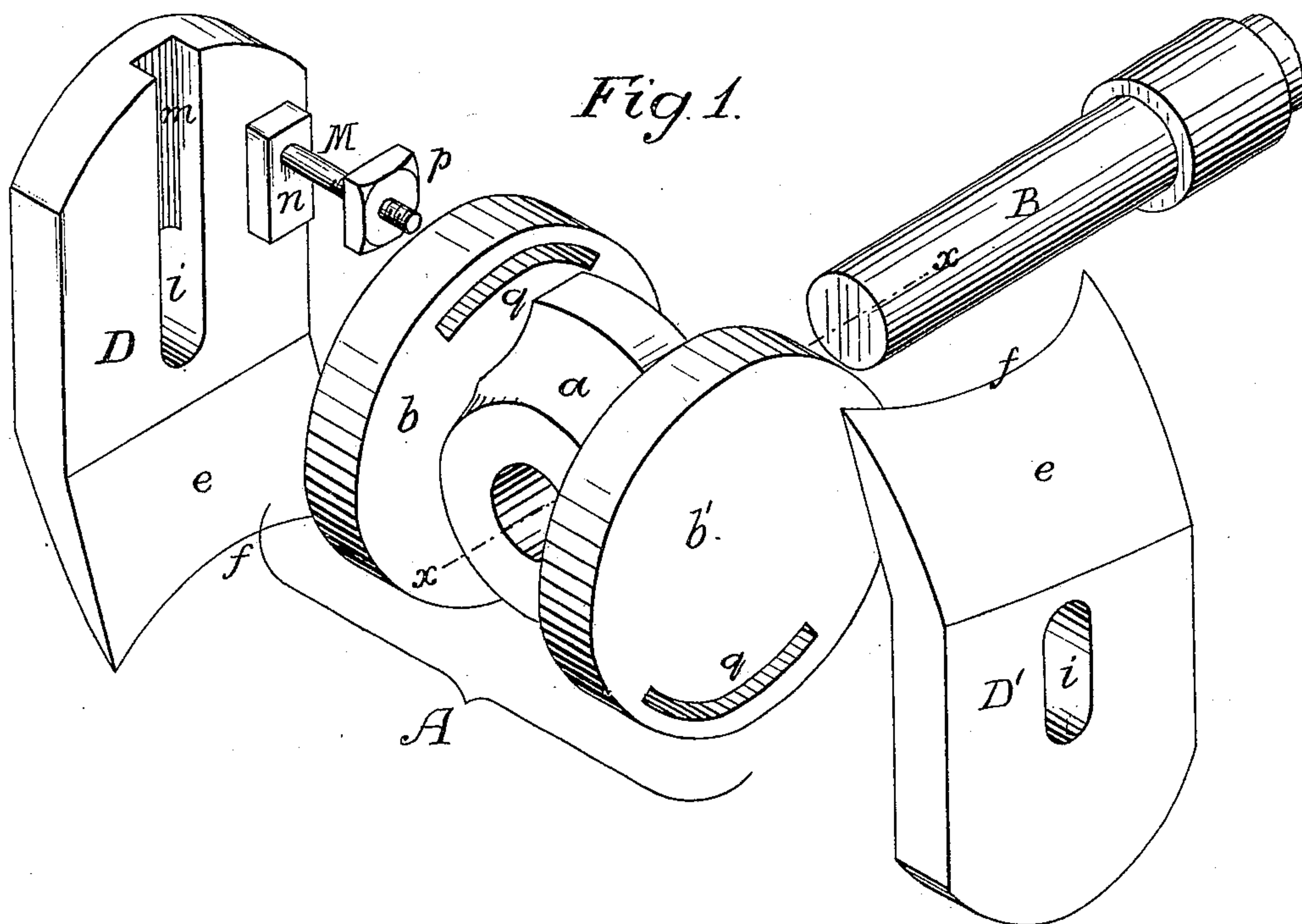
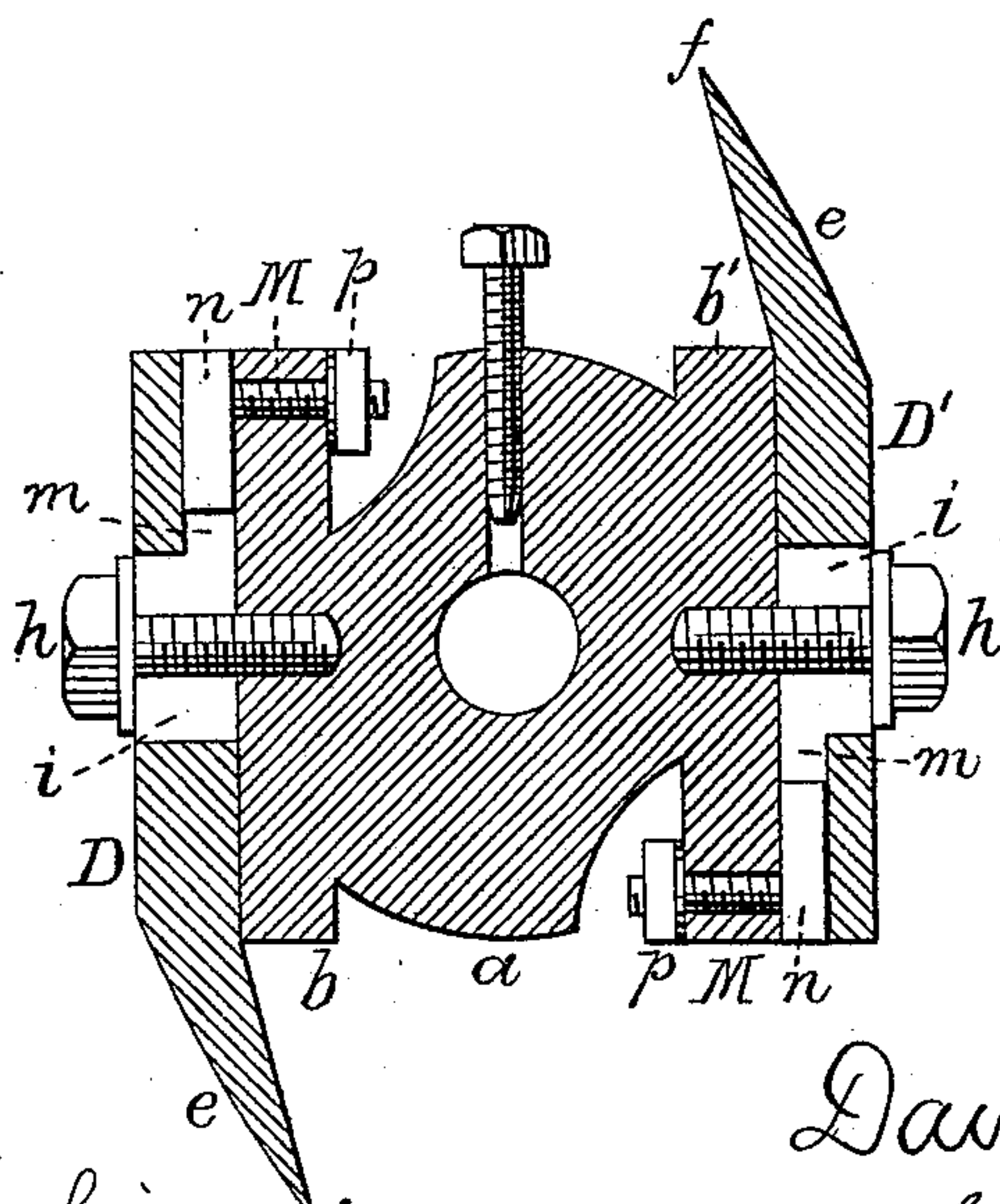


Fig. 2.



Witnesses
James F. Tobin
Harry Smith

Inventor
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by his Attorneys
Howe and How

UNITED STATES PATENT OFFICE.

DAVID GRAFFIN, OF CATASAUQUA, PENNSYLVANIA, ASSIGNOR OF ONE-HALF TO AUGUSTUS H. GILBERT AND TILGHMAN R. LAUBACH, BOTH OF SAME PLACE.

CUTTER-HEAD.

SPECIFICATION forming part of Letters Patent No. 246,498, dated August 30, 1881.

Application filed July 7, 1881. (No model.)

To all whom it may concern:

Be it known that I, DAVID GRAFFIN, a citizen of the United States, residing in Catasauqua, Lehigh county, Pennsylvania, have invented certain Improvements in Rotary Cutter-Heads, of which the following is a specification.

My invention consists of certain improvements, fully described hereinafter, in the rotary cutters for forming wooden moldings, in which the cutting-blades are made adjustable on a cutter-head.

In the accompanying drawings, Figure 1 is a perspective view, showing the cutter-head and cutters detached from each other, and Fig. 2 a transverse section of the cutter-head and cutters.

The cutter-head A consists of the hub *a* and the two disks *b b'*, the whole being preferably made of one piece of wrought iron or steel or malleable cast-iron, and being secured to the cutter-spindle B, which is adapted to bearings in a suitable frame, and is rapidly rotated by any appropriate driving appliances.

It has not been deemed necessary to illustrate or describe an organized machine of which the cutter-head and cutters form a part, as the general character of the frame-work and driving mechanism may be altered without affecting my invention.

It will be seen that the faces of the disks *b b'* are parallel with each other and with the axial line *x x* of the cutter-spindle, and it is preferable to observe this arrangement as a rule.

D and D' are the two cutters, the body of each cutter being made of flat steel, preferably of uniform thickness, and one end of the body being tapered at *e* to a sharp cutting-edge, *f*. Each cutter is secured to one of the disks of the cutter-head by a set-screw, *h*, which passes through a slot, *i*, in the body of the cutter and screws into the cutter-head, so that the cutter can be turned on the screw as a center in the

same plane as the face of the disk, and owing to the slot *i* the cutter can be adjusted so that its edge *f* shall be nearer to or farther from the center of rotation of the cutter-head. As the cutters must be held steadily on the cutter-head, I do not rely entirely on the screws *h*, but groove the body of each cutter at *m* for the admission of the head *n* of a bolt, M, which passes through a segmental slot, *q*, in the disk, and which is provided with a nut, *p*, so that after loosening this nut the cutter will be at liberty to be adjusted in either of the two directions specified above; but when the cutter has been adjusted and the nut tightened the head *n* of the bolt will prevent the cutter from turning on the face of the disk.

A great variety of moldings of different forms, demanding as many different cutters of the ordinary construction, may be made by my improved adjustable cutters, and by altering the shape of the cutting-edges a still greater variety of moldings may be produced, and moldings of a character which cannot be produced by ordinary cutters, are readily cut by my improved cutter-head.

I am aware that a cutter-head has been so made that cutters could be adjusted on planes made on the head parallel with the axis of the cutter-shaft. This, therefore, I do not claim; but

I claim as my invention—

The combination of the cutter-head A, having segmentally-slotted disks *d d* and bolts M, with the cutters D D', each slotted to receive a confining-screw, *h*, and having a groove adapted to one of the said bolts M, all being constructed substantially as set forth.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

DAVID GRAFFIN.

Witnesses:

R. CLAY HAMERSLY,
AUG. H. GILBERT.