## M. BUCK.

## CUTTER-HEADS.

No. 180,320.

Patented July 25, 1876.

Fig. 1

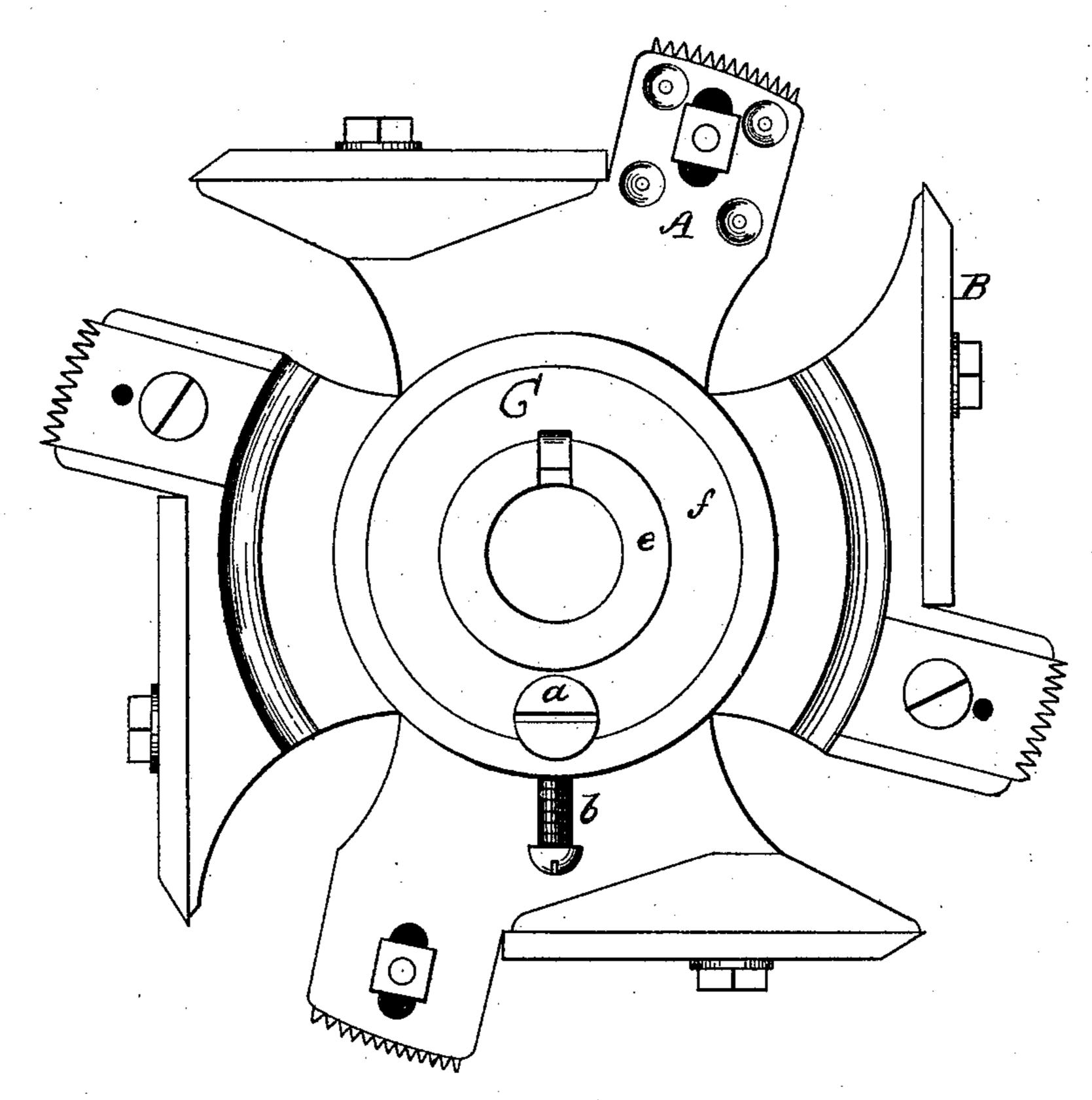
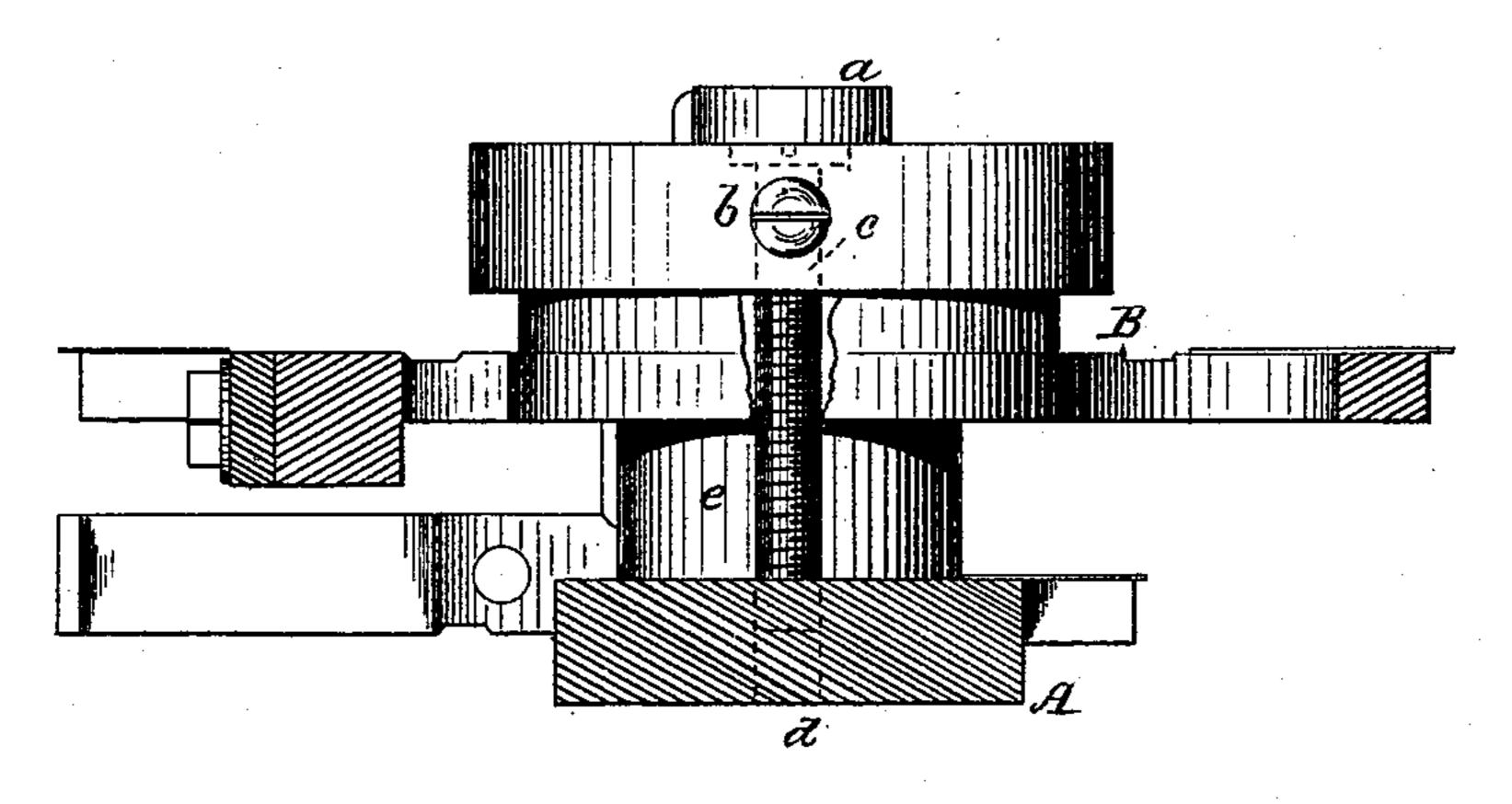


Fig.R



WITNESSES

Sat. E. Oliphant Sec. Ros Porter INVENTOR

Martin Buck a. H. Cragn. Atty.

## UNITED STATES PATENT OFFICE.

MARTIN BUCK, OF LEBANON, NEW HAMPSHIRE.

## IMPROVEMENT IN CUTTER-HEADS.

Specification forming part of Letters Patent No. 180,320, dated July 25, 1876; application filed July 19, 1876.

To all whom it may concern:

Be it known that I, MARTIN BUCK, of Lebanon, in the county of Grafton and State of New Hampshire, have invented certain Improvements in Cutter Heads, of which the fol-

lowing is a specification:

My invention relates to cutter-heads of machines for cutting grooves, slots, or mortises, and it consists in a novel construction, combination, and arrangement of parts, the object of which is to render the cutter-head readily and easily adjustable or expansible for cutting grooves, slots, or mortises of different widths, as will hereafter be fully set forth.

Figure 1 is a front view of the cutter-head. Fig. 2 is a side elevation, partly in section, showing the manner of adjusting the two

parts of the cutter-head.

The cutter-head is constructed in two parts, each carrying a convenient number of cutters and scorers, the cutter-head being revolved by a shaft, not shown. The adjustment is accomplished by means of a long screw passing through the hub of one part of the cutter-head, and entering a suitable hole or nut tapped in the other. The said screw is held fast by a set-screw when the desired distance between the two parts of the cutter-head is ascertained. All of the parts of the cutter-head do not need description here, as they are mainly the same as shown in Letters Patent granted to me April 27, 1875, No. 162,526.

A represents the rear part of the cutterhead. B represents the front part. C is the hub of the front part B. The rear portion has a central tubular-shaped projection,  $\hat{e}$ , which enters a correspondingly-shaped recess,

f, in the front part B of the cutter-head, thus allowing the two parts to slide to or from each other. In the hub of the front part B is formed a hole, c, for the passage of the longitudinal screw a, said screw passing entirely through the hub of the front part of the cutter-head and entering a hole or nut tapped in the rear part A. In the hub of part B there is placed a set screw, b, at right angles to the longitudinal screw a, for the purpose of holding the latter fast in place when the desired adjustment is made.

It is seen from the foregoing that the two portions of the cutter-head may be moved to or from each other and held fast at the wishedfor place of adjustment by means of the longitudinal screw a and the set-screw b.

I have shown the screw a as entering the hub of the front part B of the cutter - head, but the said screw may be inserted in the rear part A with the same results, as will be seen from an inspection of the model.

I claim as my invention—

1. The combination of the two parts A and and B with the longitudinally-moving adjusting-screw a, substantially as and for the purpose specified.

2. The combination of the part A, having the tubular spindle e, with the part B, having the hub C, the adjusting-screw a, and the setting device for the screw a, substantially as and for the purpose specified.

MARTIN BUCK.

Witnesses:

M. M. LISCOMB, C. H. CLOUGH.