

H. H. BAKER.

CUTTER-HEAD FOR PLANING-MACHINES.

No. 170,802.

Patented Dec. 7, 1875.

FIG. 1.

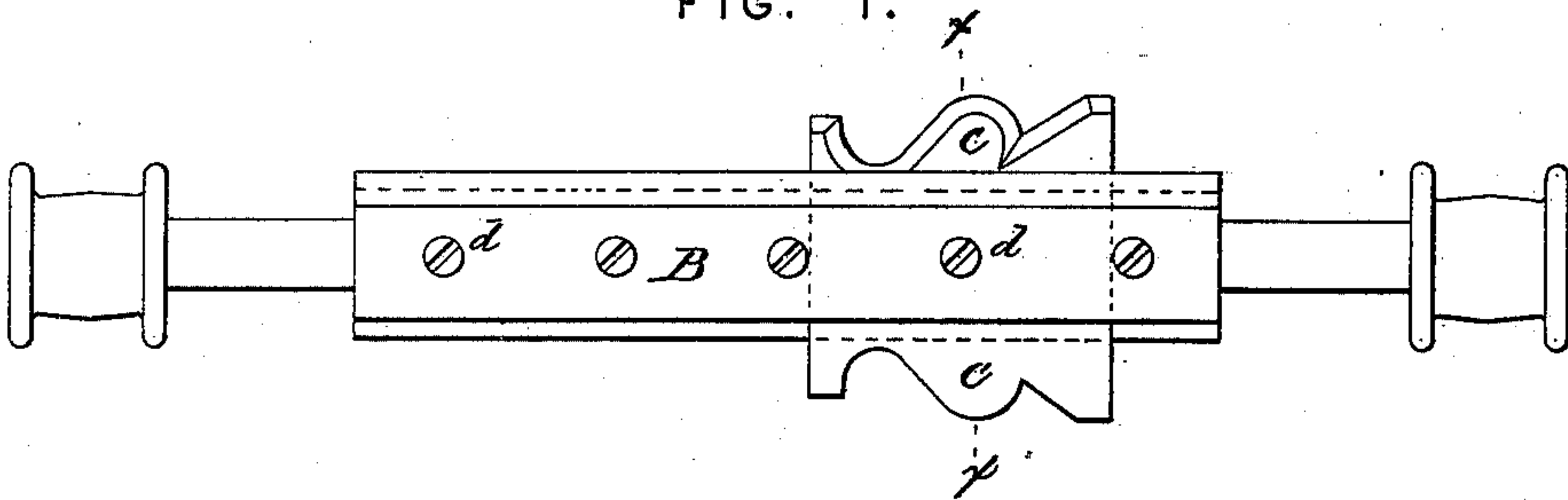


FIG. 2.

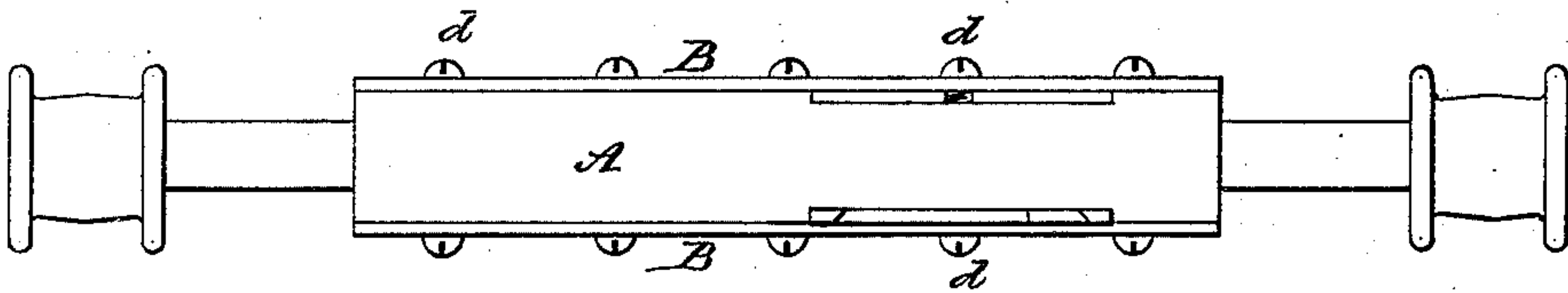


FIG. 3.

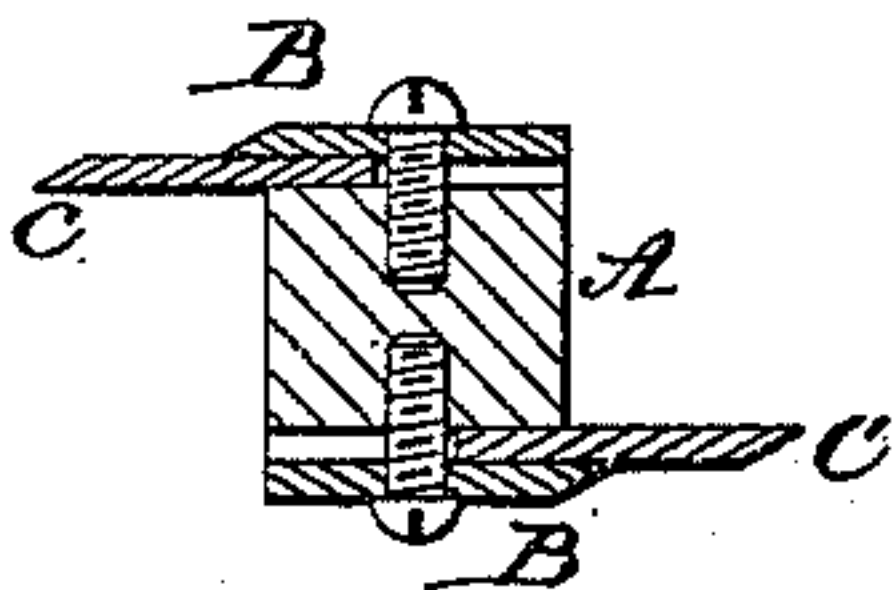
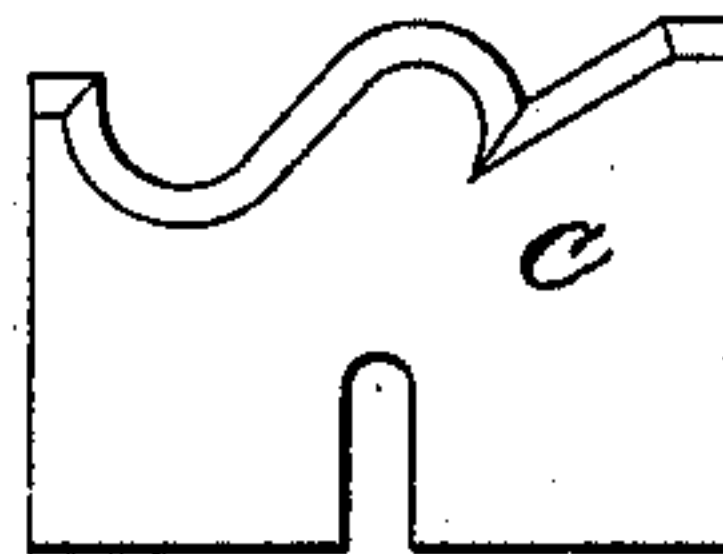


FIG. 4.



WITNESSES.

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IMPROVEMENT IN CUTTER-HEADS FOR PLANING-MACHINES.

Specification forming part of Letters Patent No. **170,802**, dated December 7, 1875; application filed November 10, 1875.

To all whom it may concern:

Be it known that I, HALSEY H. BAKER, of Plainfield, in Union county and State of New Jersey, have invented an Improvement in Cutter-Heads for Planing-Machines, of which the following is a specification:

The object of my invention is to so construct the cutter-head of a planer and matcher that the same machine may be used as a one, two, or three sided molding-machine, a broad-band molding-machine, or a rabbeting-machine, without removing the surfacing-cutters, thus saving much time in making the change, and whereby, also, surfacing-cutters of about eight or ten inches in length may be used for dressing flooring and the like narrow stuff, thus saving the wear on a portion only of the long and heavy cutters, and the consequent great amount of grinding necessary to keep them in order, also saving the expense of a separate machine for running moldings and narrow stuff, besides the additional amount of shop-room required for each additional machine; and it consists in providing a recess at or near one end of the cutter-head, on its two opposite sides, and under the surfacing-cutter, for the reception of the molding or narrow straight cutters, which recesses, when not occupied by such cutters, are filled with closely-fitting blanks, to preserve the stability of the main surfacing-cutters, and the even balance of the head.

Referring to the accompanying drawings, Figure 1 represents a cutter-head, showing the flat side of the cutters attached. Fig. 2 is the same, showing the back and edge of the cutters on opposite sides of the head. Fig. 3 is a cross-section on the line *xx* on Fig. 1. Fig. 4 is a plan of one of the molding-cutters detached.

The same letters of reference occurring on the several figures indicate like parts.

A represents the cutter-head; B, the surfacing-cutters, and C the molding-cutter. The cutter-head is mainly of the same form and proportions as in an ordinary surfacing-machine, but having a recess at or near one end, and on two opposite sides of the head. These recesses are from eight to ten inches in width, and about three-eighths of an inch deep, in which the molding or straight cutters, or cutters and blanks, exactly fit. I also pro-

vide blanks to fill these recesses, to be inserted therein when the molding or short surfacing cutters are not used, and upon which the cutters B are screwed down solid when the machine is to be used for surfacing broad stuff.

When it is desired to convert it into a molding-machine it is only necessary to loosen one or more of the screws *d* on each side of the head A, remove the blanks, and insert the molding-cutters C in the recesses, so that they project beyond the edge of the surfacing-cutters, and secure them there by tightening the screws *d*, the surfacing-cutters serving as caps to the molding-cutters. The same remarks will apply when the short surfacing-cutters are to be used.

When it is desired to dress the edges of the molding the matching-heads may be removed from their spindles, and molding-heads with plain cutters, or cutters of any desired form, may be substituted therefor, thus converting the planer and matcher into a one, two, or three sided molding-machine in a very short space of time.

It will thus be seen that a machine with a cutter-head so constructed is capable of working broad or narrow flat surfaces, simple moldings, broad-band moldings, or rabbeted stuff of any desired width, the long surfacing-cutters working the band, while the short ones work the molding or rabbet, as the case may be, and the edge cutters determine the width of the finished stuff.

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

1. A planing-machine cutter-head constructed with a recess or recesses under the main cutters, for the insertion or reception of the molding or short surfacing cutters, substantially as shown and described.

2. The combination of the molding or minor straight cutters C with the surfacing-cutters B, serving as caps thereto, and the recessed cutter-head, substantially as and for the purpose specified.

H. H. BAKER.

Witnesses:

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