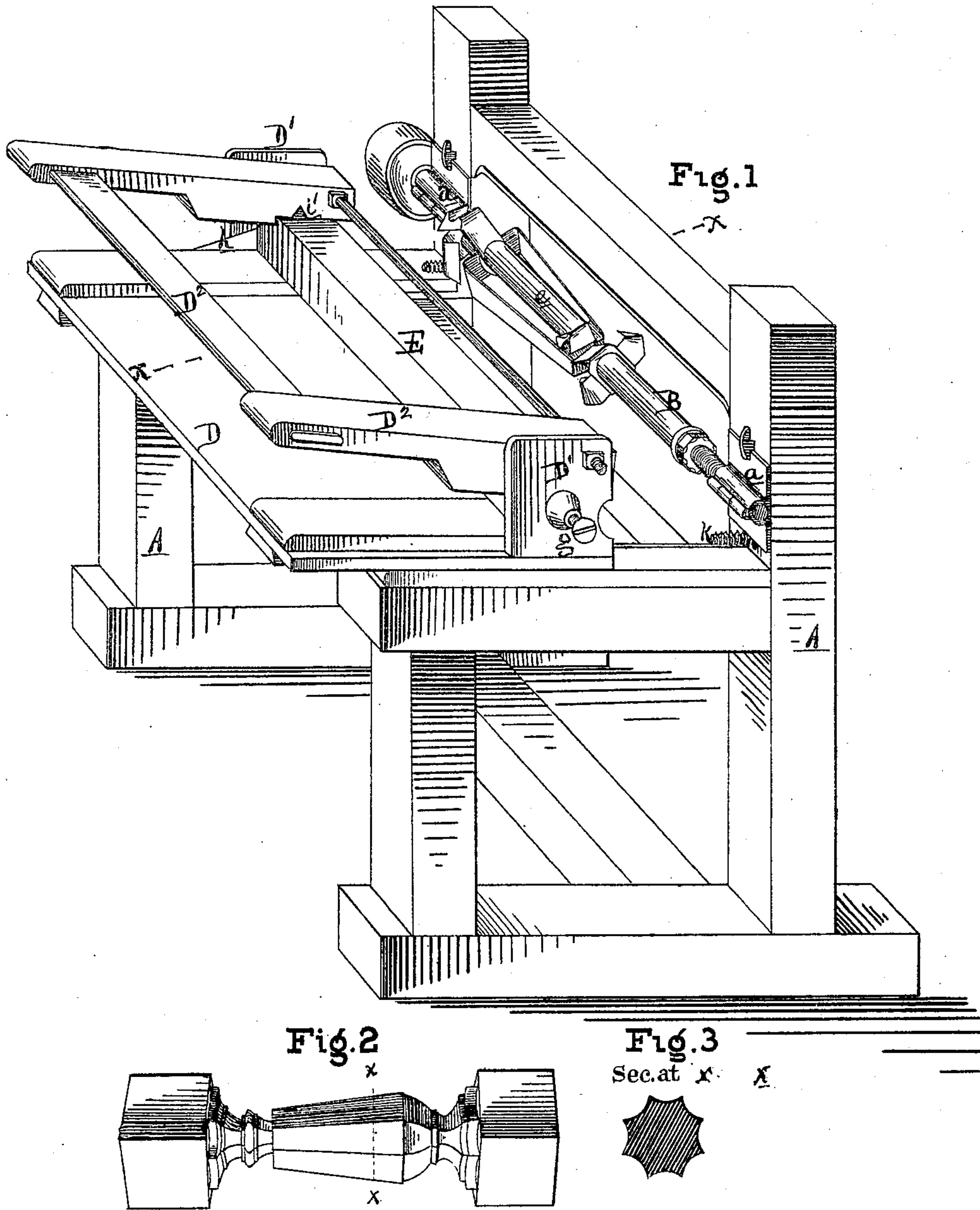


P. J. FRANTZE, M. TILLESSEN & J. A. GREGERSEN.
Machines for Cutting Balusters.

No. 141,214.

Patented July 29, 1873.



Attest.
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Fig. 4

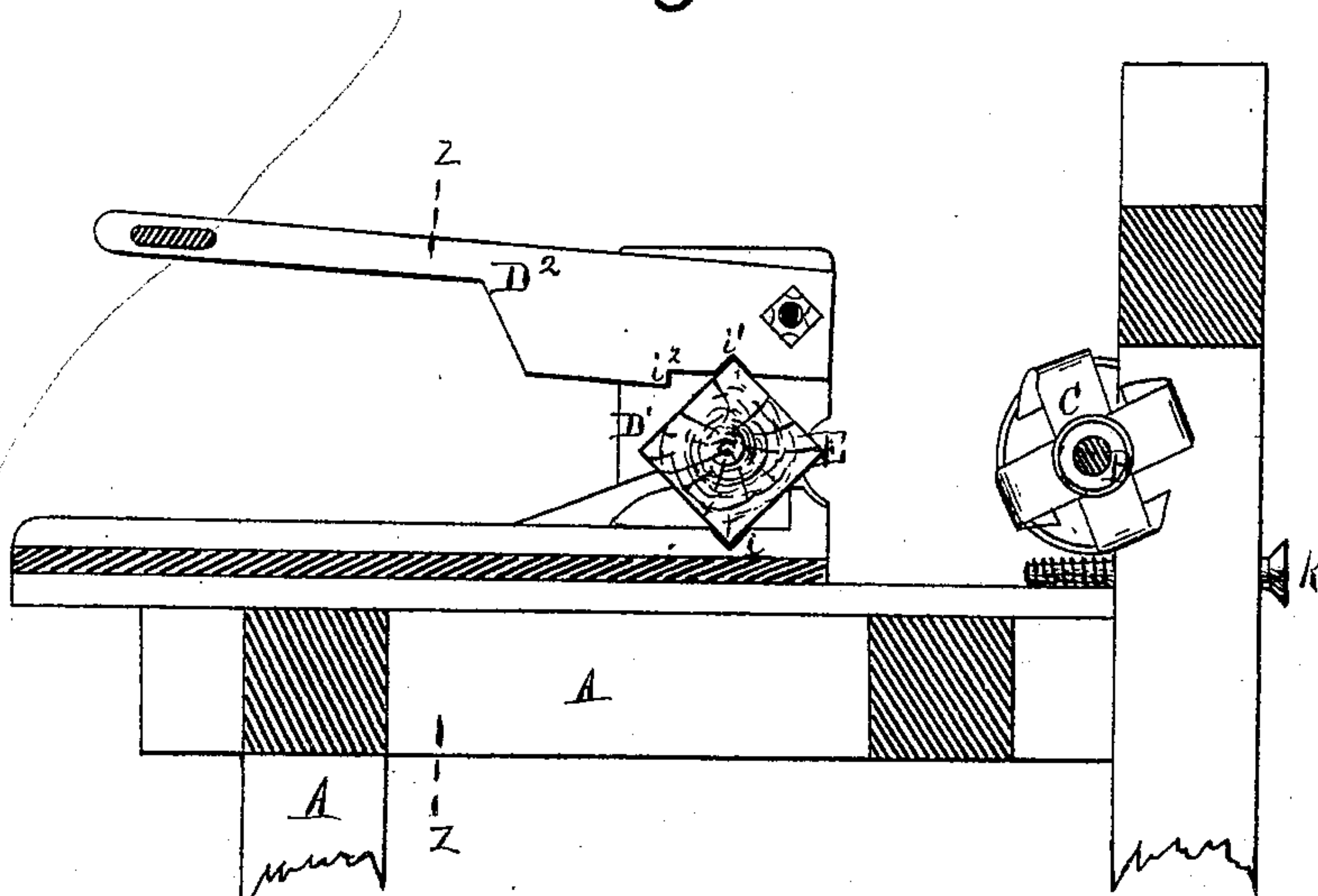


Fig. 6

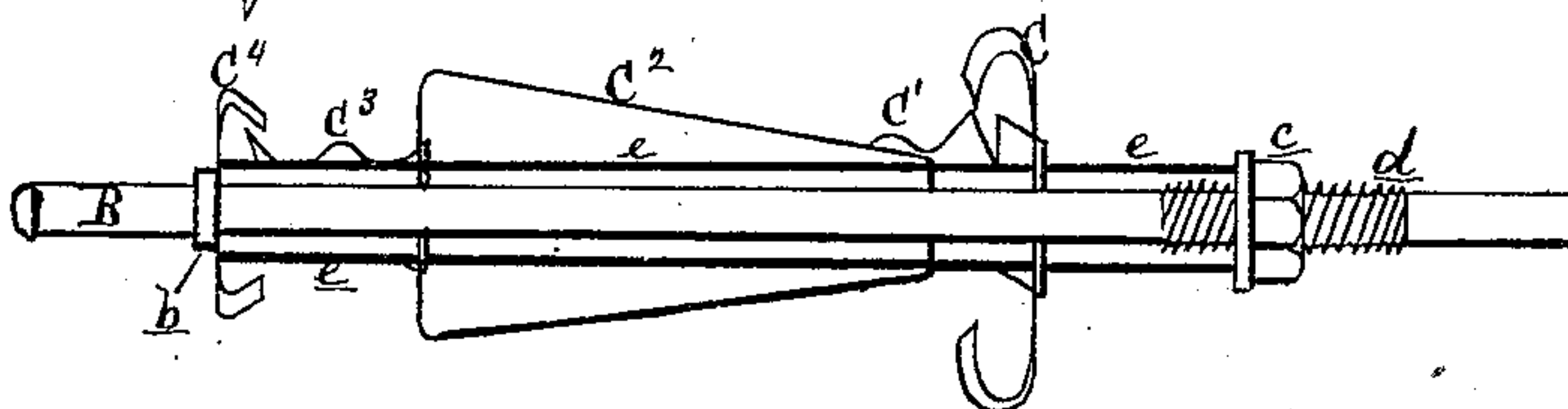
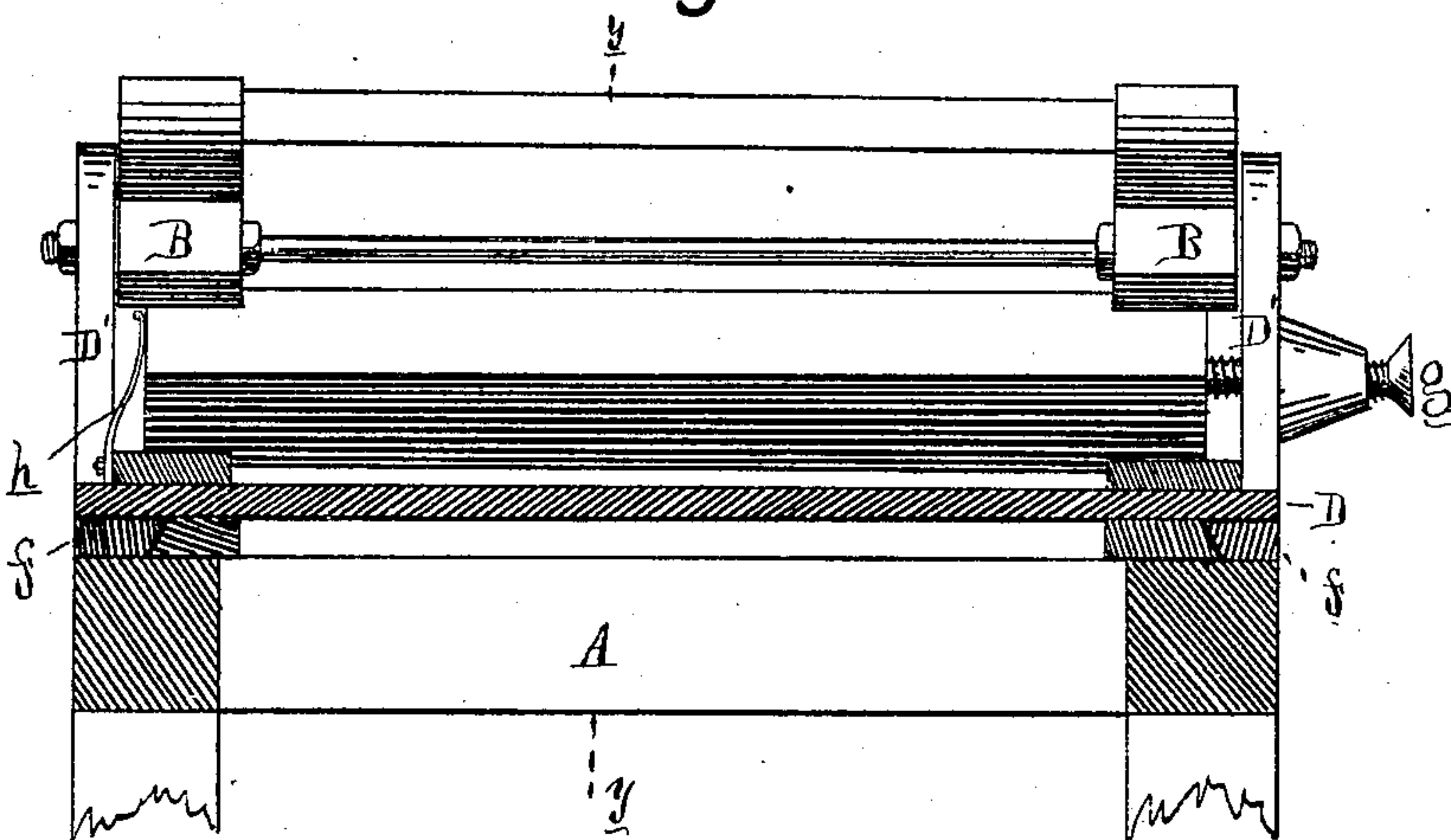


Fig. 5



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UNITED STATES PATENT OFFICE.

PETTER J. FRANTZE, MARTINIUS TILLESSEN, AND JOHN A. GREGERSEN,
OF CHICAGO, ILLINOIS.

IMPROVEMENT IN MACHINES FOR CUTTING BALUSTERS.

Specification forming part of Letters Patent No. **141,214**, dated July 29, 1873; application filed
June 2, 1873.

To all whom it may concern:

Be it known that we, PETTER J. FRANTZE, MARTINIUS TILLESSEN, and JOHN A. GREGERSEN, of Chicago, in the county of Cook and State of Illinois, have invented a new and useful Improvement in a Machine for Cutting Balusters; and we do declare that the following is a true and accurate description thereof, reference being had to the accompanying drawings and to the letters of reference marked thereon, and being a part of this specification, in which—

Figure 1, Sheet 1, is a perspective view of our machine. Fig. 2 is a side elevation of an octagonal baluster made in our machine. Fig. 3 is a cross-section at *xx*, Fig. 2. Fig. 4, Sheet 2, is a cross-section at *yy* in Fig. 5, which is a transverse vertical section at *zz* in Fig. 4. Fig. 6 is a longitudinal section of the cutter-spindle.

Like letters refer to like parts in the several figures.

The nature of this invention relates to a machine for cutting and shaping octagonal or polygonal balusters in an easy and expeditious manner; and it consists in the general arrangement of the various parts, as more fully hereinafter set forth.

In the drawing, A represents the frame of our machine, the rear posts of which are carried up above the plane of the table, with hinged boxes *a*, in which the cutter-head spindle B is journaled with a pulley on its end, by which it is driven, carrying the cutters C, C¹, C², &c., of the peculiar form shown, held in place on the spindle between a stop-collar, *b*, near one end, and a nut, *c*, threaded on a screw, *d*, cut on the other part of the spindle by several intermediate sleeves, *e*, placed between the several cutters and the nut. D is a table sliding in the dovetail ways *f* at the top of the frame, carrying a pair of standards, D¹, at its rear corners, in which is pivoted a

frame, D², to hold the wooden blank E compressed between it and the table. The blank is centered at one end on a pointed screw-center, *g*, through one of the standards D¹, while a leaf-spring, *h*, presses against its other end to keep it central. Directly under the center a V-groove or notch, *i*, is cut in a raised rib on the table, in which one corner of the square blank drops. A similar notch, *i*¹, is formed in the under side of the holder D², which grasps the upper corner of the blank, which is thus prevented from turning from the position shown in Fig. 4, when the table may be pushed forward to have the cutters remove a portion of the wood until the forward movement of the table is arrested by the stop-screws *k*, thus shaping one face. The four angles of the blank are successively shaped in this way. The remaining four are shaped by turning the block on its flat sides, on the raised ribs, when a second pair of notches, *i*², in the holder, formed by placing a shoulder-piece on each side-bar thereof, grasp the rear sides of the blank and push it forward. The depth of cut of the knives, and consequently the diameter of the finished baluster, is governed by the adjusting-screws *k*.

The knives may be changed for others, which will give a different form to the baluster.

What we claim as our invention, and desire to secure by Letters Patent, is—

The arrangement of the cutter-spindle B, constructed as described, the table D, standards D¹, holder D², and adjustable stops *k k*, with relation to the frame, substantially as and for the purpose set forth.

PETTER J. FRANTZE.
MARTINIUS TILLESSEN.
JOHN A. GREGERSEN.

Witnesses:

WM. H. LOTZ,
THM. KARLS.