R. H. Cole

Making Nuts.

No. 14,011. Patented Jan. 1, 1856.

Fig 1

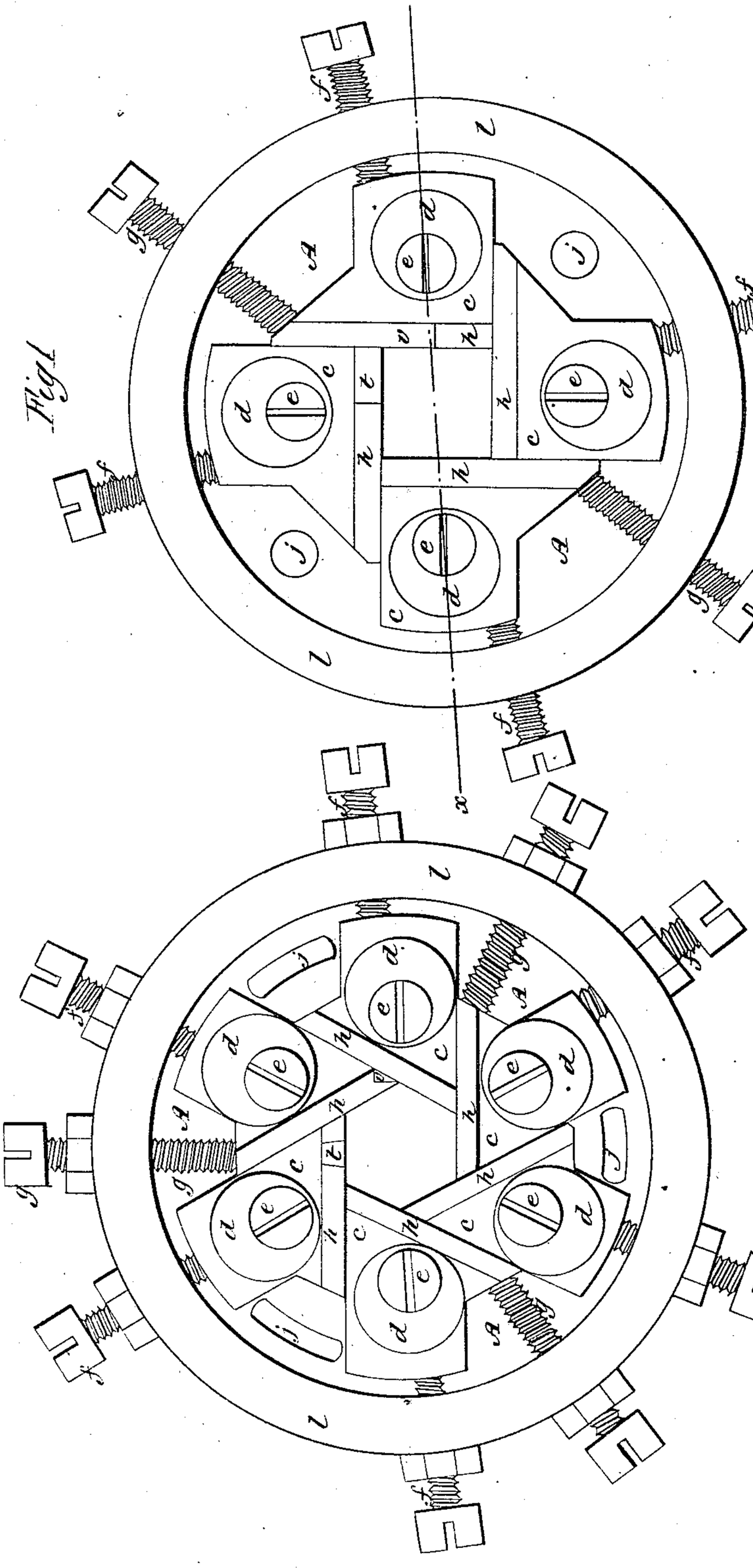

Fig 3.

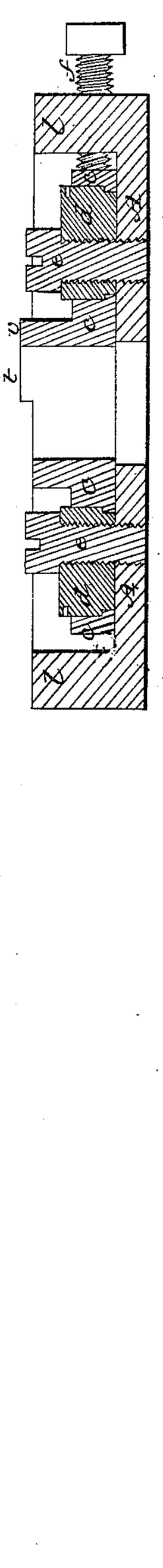

Fig 2.

UNITED STATES PATENT OFFICE.

RICHARD H. COLE, OF ST. LOUIS, MISSOURI.

NUT-BOX.

Specification of Letters Patent No. 14,011, dated January 1, 1856.

To all whom it may concern:

Be it known that I, RICHARD H. COLE, of the city and county of St. Louis, in the State of Missouri, have invented a new and Improved Adjustable Nut-Box or Die-Box for Nut-Making Machines; and I do hereby declare that the following is a full and exact description thereof, reference being had to the accompanying drawings, making a part of this specification, Figure 1 being a front view of a nut-box for forming four-sided nuts; Fig. 2, a front view of a nut-box for forming six-sided nuts, and Fig. 3 a section in the line *x*—*y* of Fig. 1.

The movable segments *c*, *c*, which form the sides of the nut box, are placed in a cup-shaped case which has a perforated bottom, A, in the accompanying drawings, indicating the bottom, and *l*, the rim of said case. The segments *c*, *c*, are adjusted and secured in any desired position within their inclosing case, by means of the eccentrics *d*, *d*, and the respective set screws *e*, *e*, *f*, *f*, and *g*, *g*, as represented in the drawings. The eccentrics *d*, *d*, are received within apertures in the segments *c*, *c*, and the set screws *e*, *e*, pass through said eccentrics and enter screw apertures in the bottom of the case. The inner ends of the set screws *f*, *f*, which pass through the rim *l*, of the case, bear against the curved outer surfaces of the segments, and the screws *g*, *g*, bear against the projecting wings of said segments. The segments *c*, *c*, have projecting flanches *h*, *h*, at their inner edges, one or all of which may be so faced with steel as to form cutting inner edges.

In the four sided nut-box for forming square nuts, the flanch of the segment on the side that the bar is fed in at, must be armed with a cutting inner edge. A portion *t*, of the flanch of the upper segment, and a portion *v*, of the right hand segment of the four sided nut-box, should project beyond the faces of the flanches of the other segments, for the purpose of grinding and directing the bar to its proper position in front of the nut box, as it is fed into the machine supplied with said box.

In the six sided nut-box, four of the flanches of the segments must be armed with cutting edges, viz: the two standing in oblique positions at the left hand side of the box, and the two flanches standing in oblique positions at the right hand side of the box. The width of the bar to be converted into six sided nuts, must be just equal to the space between any two parallel sides of the nut-box. In the six sided nut-box, *v*, is a projection from the flanch of one of the segments on the right hand side of the aperture in the box for the end of the bar to strike against when it is fed into the machine, and *t*, is a projection from the flanch of the segment at the top of the aperture in said box, which serves as a guide for the upper edge of the bar to strike against as it is fed in, opposite the mouth of the box.

It will readily be perceived that by loosening the respective set screws, the position of the eccentrics *d*, *d*, can be so varied as to enlarge or diminish the size of the aperture in either the four sided, or the six sided nut-box, and then by tightening the respective set screws, the segments *c*, *c*, can be firmly secured in the desired position. This principle can be applied in constructing nut boxes for the formation of nuts of any desired number of sides.

My improved adjustable nut box can be secured in its proper position within a machine, by means of set screws passing through the apertures *j*, *j*, into the breast plate of the machine.

Having thus fully described my improved adjustable nut-box, what I claim therein as new and desire to secure by Letters Patent, is—

The arrangement of the segments *c*, *c*, the eccentrics *d*, *d*, and the set screws *e*, *f*, and *g*, with each other and with the case A, *l*, substantially in the manner and for the purpose herein set forth.

The above specification of my improved adjustable nut-box, for nut making machines, signed and witnessed this third day of October A. D. 1855.

R. H. COLE.

Witnesses:

GEO. W. ADAMS,

ARCHIE KERR.