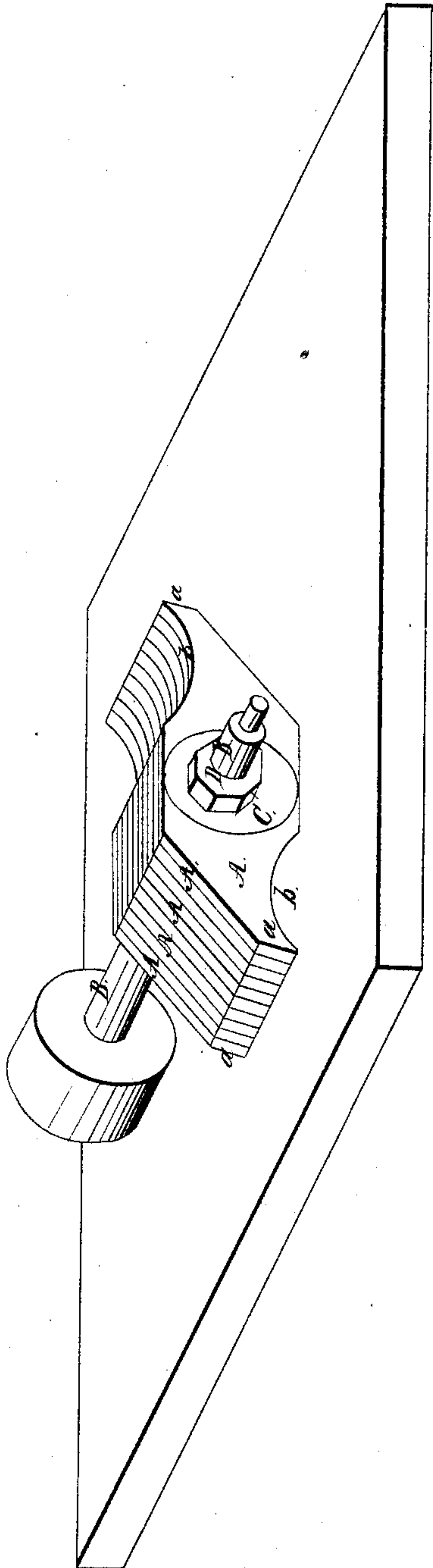


*J. Snerry,  
Cutter Head,*

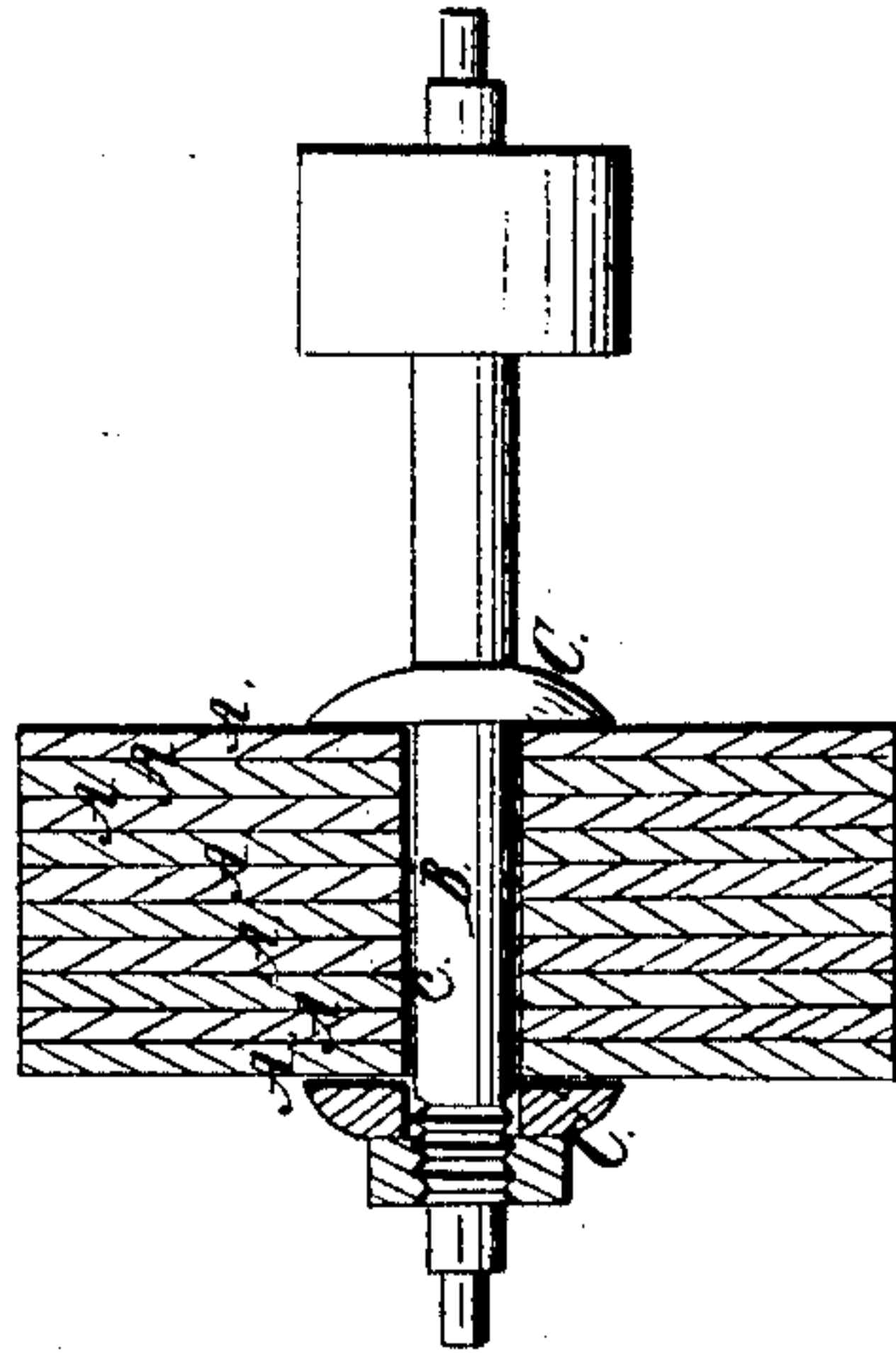
*Nº 21,782,*

*Patented Oct. 12, 1858.*

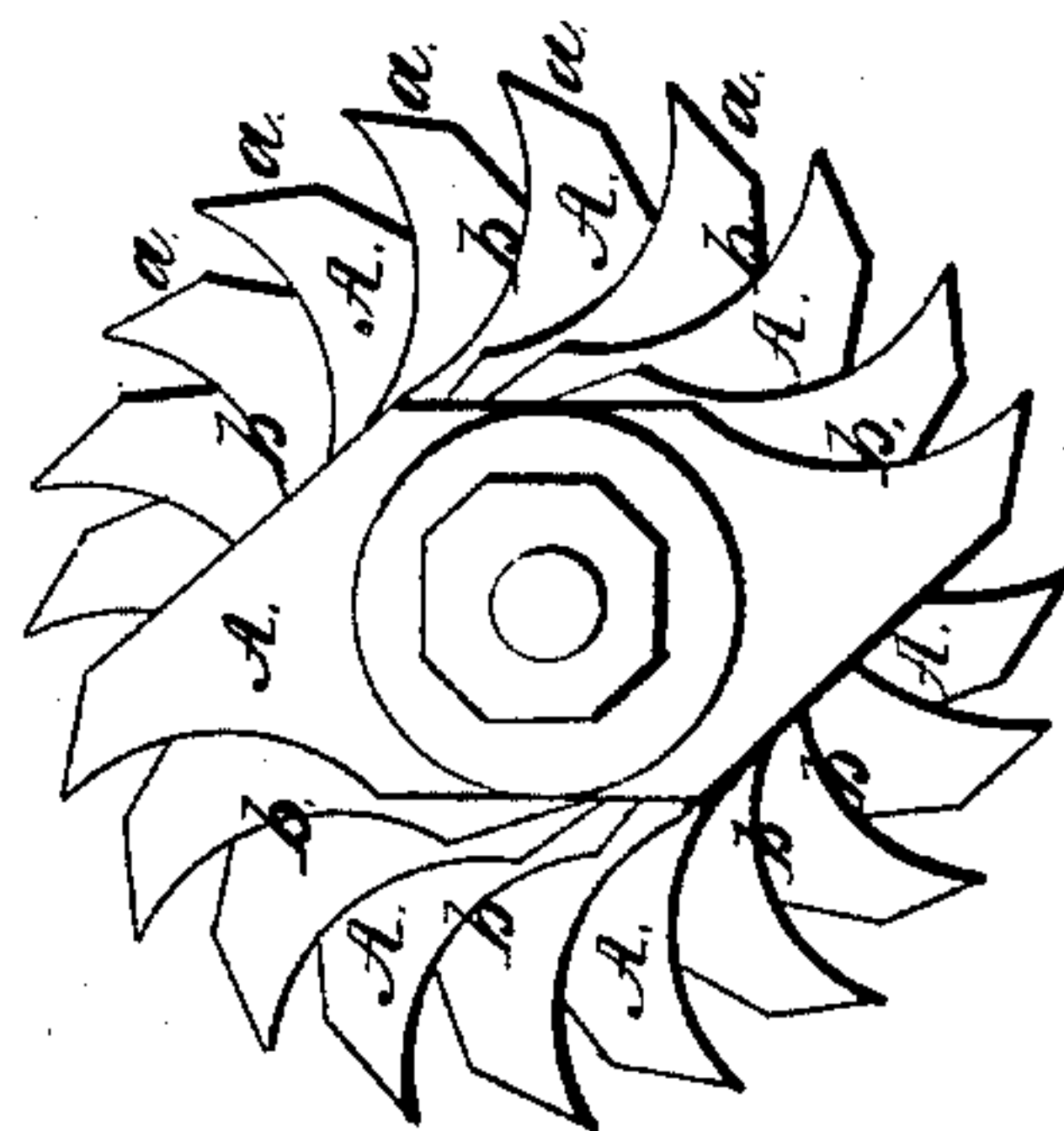
*Fig. 1.*



*Fig. 2.*



*Fig. 3.*



# UNITED STATES PATENT OFFICE.

JOHN SPERRY, OF NEW YORK, N. Y.

## ROTARY PLANING-CUTTER.

Specification of Letters Patent No. 21,782, dated October 12, 1858.

*To all whom it may concern:*

Be it known that I, JOHN SPERRY, of the city, county, and State of New York, have invented a new and useful Improvement in  
5 Sectional Rotary Planes; and I do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the accompanying drawings, forming a part of this specification, in  
10 which—

Figure 1, is a perspective view of my improved sectional rotary plane adjusted for sharpening. Fig. 2, is a vertical central section of the same in the line of its axis.  
15 Fig. 3, is an end view of the same adjusted for use.

Similar letters of reference in each of the several figures indicate corresponding parts.

The nature of my invention consists, 1st,  
20 in a plane formed of a series of thin plates, said plates being in form of a cima reversa or other form approximating thereto, and placed side by side of one another on a revolving axis or shaft and confined in place  
25 by means of a screw nut. By thus constructing a plane in sections, I am always enabled to have one end of the plane balance the other, as all the sections are made after one form or pattern, and each of its  
30 sections can be adjusted so as to succeed one another in their cutting operation and thus allow of a heavy shaving being removed without great resistance being offered to the progress of the plane.

35 My invention consists 2nd, in having the central portion of the several sections of the plane, at back and front, run at right angles to the axis of the plane, so that by placing said portions upon a flat even surface, all  
40 the cutting points or edges of the several sections may be brought exactly in line with one another and thus all be in condition for being sharpened, or having any desired configuration imparted to them at the same  
45 time and by the same instrument.

To enable others, skilled in the art, to make and use my invention, I will proceed to describe its construction and operation.

50 A, A, represent the several sections constituting my plane. Each section resembles in form a cima-reversa, and has its two extremities brought to a planing edge, and made so as to be perfectly balanced, by leveling the same in opposite directions nearly  
55 at right angles to the axis on which they are arranged, as shown at *a, a*, and by hollowing

out the sections from their extremities at back and front to within a short distance of their axis, as shown at *b, b*. The sections A, A, have a circular hole *c*, through their  
60 center so as to be fitted snugly on the axle or shaft B, as shown in Fig. 3. C, C, are collars on the shaft B; the collar C, is fast on the shaft and C', is loose so as to be removed and allow the sections of cutter to  
65 be placed on the shaft.

D, is a clamping nut screwing onto the screw end of the shaft and jamming against the loose collar in a manner to confine the sections of the plane between the fast and  
70 loose collar and to hold them immovably alongside one another while they are performing the planing operation.

By examining the drawing, it will be observed that the central portion of each  
75 section of the plane at back and front is at right angles to the shaft B, and consequently the planing edges of all the sections of the plane, will, after having been adjusted, as shown in Fig. 3, if the plane is laid with  
80 its back or front, as shown in Fig. 1, resting upon a flat level surface, and pressure applied to all the sections, be caused to assume a position exactly in line with each other and thus be in condition for being sharpened  
85 or shaped so as to plane the timber with any desired configuration.

In Fig. 2, the plane is shown adjusted for use; the sections being set in the line of a screw thread, but so that each shall plane  
90 in a direction at right angles with its axis, and one succeed the other in its planing operation, not in the same line however; facilities are also afforded for multiplying the number of sections of the plane so as to  
95 plane lumber of the greatest desirable width. Facilities are also afforded, in case one or more sections of the planes become marred or broken, for removing and replacing the same by perfect ones at a slight cost, instead  
100 of being compelled, as is often the case, to throw aside at a considerable loss, a complete plane which has only one of its corners or a portion of it broken away, and substitute therefor a perfect one or wait until the  
105 injured plane, and also its fellow, are ground down to a balancing-operative condition.

In order to be able to multiply the sections of the plane so as to produce a plane suitable for planing the greatest desirable  
110 width of lumber, I propose to have both collars loose and use two jamb nuts, as this



arrangement will allow of additional planes being slipped on each end of the shaft and thus always have the plane balanced on both sides of the center of the bed.

5 What I claim as my invention and desire to secure by Letters Patent, is—

1. A plane formed of a series of thin plates, said plates being in form of a cim-  
10 to, and placed side by side one another on a revolving axis or shaft, and confined in

place by means of a screw nut, substantially as and for the purposes set forth.

2. Having the central portion of the sev-  
eral sections of the plane, at back and front, 15  
run at right angles to the axis of the plane,  
substantially as for the purposes set forth.

JOHN SPERRY.

Witnesses:

G. YORKE AT LEE,  
EDM. F. BROWN.