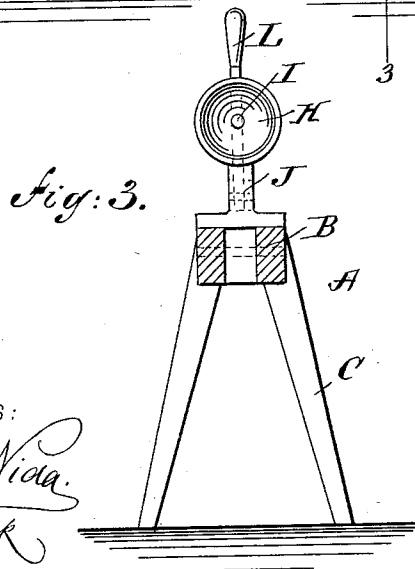
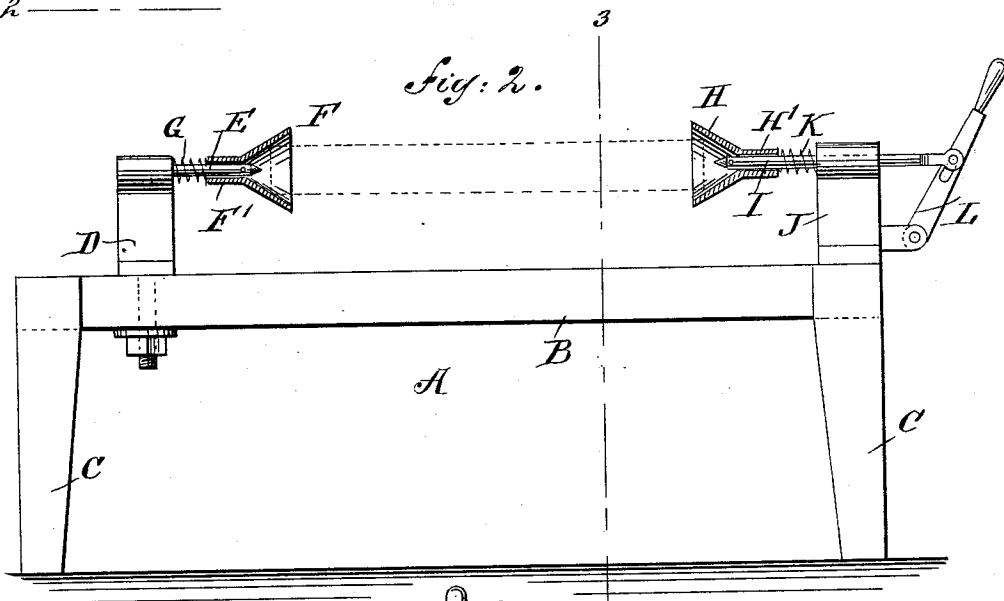
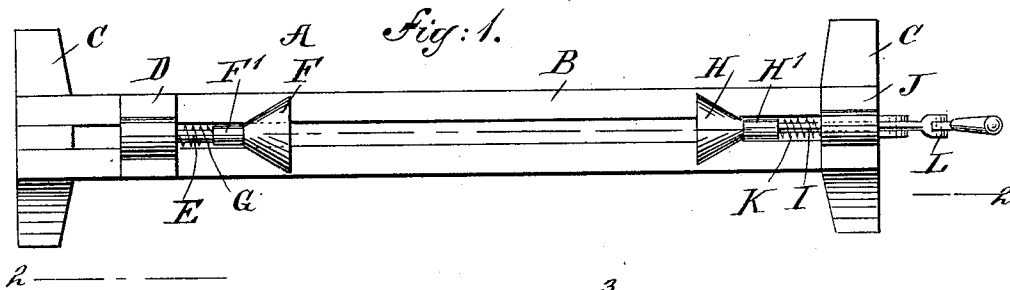


(No Model.)

F. L. CANHAM.  
CENTERING DEVICE.

No. 480,558.

Patented Aug. 9, 1892.



WITNESSES:

*Chas. Nida.*  
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ATTORNEYS

# UNITED STATES PATENT OFFICE.

FREDRICK LINCOLN CANHAM, OF LISBON FALLS, MAINE.

## CENTERING DEVICE.

SPECIFICATION forming part of Letters Patent No. 480,558, dated August 9, 1892.

Application filed December 14, 1891. Serial No. 414,965. (No model.)

*To all whom it may concern:*

Be it known that I, FREDRICK LINCOLN CANHAM, of Lisbon Falls, in the county of Androscoggin and State of Maine, have invented a new and Improved Centering Apparatus, of which the following is a full, clear, and exact description.

My invention is an improvement in the class of apparatus adapted for use in finding the center of regularly or irregularly shaped ends of pieces of wood or metal bars, &c.

The construction, arrangement, and operation of parts are as hereinafter described, the essential features constituting the invention proper being indicated in the claim.

Reference is to be had to the accompanying drawings, forming a part of this specification, in which similar letters of reference indicate corresponding parts in all the figures.

Figure 1 is a plan view of the improvement. Fig. 2 is a sectional side elevation of the same on the line 2 2 of Fig. 1, and Fig. 3 is a transverse section of the same on the line 3 3 of Fig. 2.

The improved centering device is preferably mounted on a frame A, provided with a slotted top B, supported on suitable lugs C. On the slotted top B is held longitudinally adjustable a head D, in which is fastened a center E, extending longitudinally, as is plainly illustrated in the drawings. On the pointed end of the center E is fitted to slide the hub F' of a funnel F, extending forward from the pointed end of the center, as is readily seen by reference to Fig. 2. The funnel F is held in an outermost position by a spring G, coiled on the center E and abutting with one end on the head D and pressing with its other end on the hub F'. A pin or other suitable means limits the outward-sliding motion of the funnel F on the center E. Directly opposite the latter and the funnel F is arranged a second funnel H, similar in construction to the funnel F and provided with a hub H', fitted to slide on a center I, arranged in line with the center E and secured on a head J, attached to the end of the slotted top B directly opposite the head D.

A spring K presses on the hub H' of the funnel H, so as to hold the latter in an outermost position. The center I is fitted to slide in the head J, and its outer end is pivotally connected with a lever L, fulcrumed on the head J and serving to move the center I inward, as hereinafter more fully described.

The device is used as follows: When a piece of wood, metal bar, or other article having its ends squared off is to be centered, then the head D is adjusted on the slotted top B, so that the article can pass between the two funnels F and H, as indicated in dotted lines in Fig. 2. It will be seen that by passing an article into the funnels F and H the article readily assumes a central position as the corners or edges of the squared ends engage the circular interior of the funnels. At the same time the funnels F and H hold the article in place, so that the operator after placing the article into the funnels simply moves the lever L inward, so as to cause the center I to slide to the left until it engages the right-hand end of the article, centers the same, and at the same time forces the same to the left to move it into or against the other center E, which latter thus centers the other end of the article. It is to be understood that when the operator moves the lever L to the left the funnel F yields by sliding outward on its center E, so that the latter engages the squared-off end of the article, and at the same time the other sliding center I engages the other squared-off end of the article, thus centering the same at both ends. As soon as the operator releases the pressure on the lever L the springs G and K force the funnels F and H toward each other, so as to move the article off the centers and permit the operator to remove the centered article from the funnels.

To further define my invention I will state that it is not broadly new to apply a sliding funnel and coiled spring to centering points or spindles.

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

The combination, with the slotted frame B,  
of the adjustable head D, mounted thereon,  
the center E, fixed in said head, the spring  
G, coiled on the center, and the funnel F,  
5 adapted to slide on the latter, the fixed head  
J, the center I, sliding through it, the lever L,  
pivoted to the outer end of the center I, the  
spring K, and the sliding funnel H, mounted

on such sliding center, all as shown and de-  
scribed, to operate as and for the purpose so  
specified.

FREDRICK LINCOLN CANHAM.

Witnesses:

HERBERT W. JONES,  
ELMER E. WHITE.