D. Kelly,

Centerer.

No. 100,772. Patented Mar. 15, 1870.

Fig. 1.

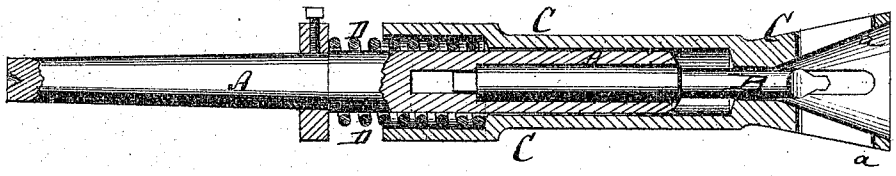
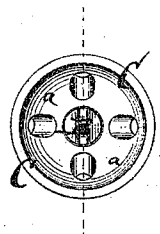


Fig. 2.



Witnesses:

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DANIEL KELLY, OF PHILADELPHIA, PENNSYLVANIA, ASSIGNOR TO HIMSELF AND WALTER K. LUDWIG, OF SAME PLACE.

Letters Patent No. 100,772, *dated March* 15, 1870.

IMPROVED CENTERING-ATTACHMENT FOR LATHE.

The Schedule referred to in these Letters Patent and making part of the same.

To all whom it may concern:

Be it known that I, DANIEL KELLY, of Philadelphia, in the county of Philadelphia, and State of Pennsylvania, have invented a new and improved Centering-Attachment to Lathes; and I do hereby declare that the following is a full, clear, and exact description thereof, which will enable others skilled in the art to make and use the same, reference being had to the accompanying drawing forming part of this specification, in which—

Figure 1 represents a longitudinal section of my improved centering-attachment.

Figure 2 is an end view of the same.

Similar letters of reference indicate corresponding parts.

This invention relates to centering-attachments for drills, and consists in an improvement thereon which will be specified hereinafter.

A, in the drawing, represents the drill-socket, arranged in the revolving spindle of a lathe in the ordinary manner.

B is the bit secured in the drill-socket A.

Upon the drill-socket is loosely fitted a slide sleeve, C, which has a funnel-shaped inner end, *a*, that embraces the end of the bit, as is clearly shown in fig. 1. The sleeve can slide on the drill-socket.

A spring, D, bearing against the outer end of the sleeve, holds it forward on the spindle by acting on an adjustable collar of the drill-socket.

It will be seen that when the end of a shaft or other article is fitted against the end of the bit, it will at the same time enter the funnel, and will in the same be centered and held so as long as the bit is in contact with the shaft, while, during the operation of drilling, the shaft or other article is fed forward, the sleeve will gradually be forced outward, contracting the spring, but during these changed positions it will always keep the shaft properly centered.

The operation can remain effective only as long as the spring allows of further contraction, consequently it can be gauged to drill any required depth. The funnel may be perforated, as shown, to allow the discharge of the borings, and to permit of oiling the drill point.

Having thus described my invention,

I claim as new, and desire to secure by Letters Patent—

The improved self-centering drill attachment, above described, consisting of the socketed spindle A and sleeve C, having the perforated funnel *a* at one end and tubular enlargement and spring at the other, all constructed and arranged as and for the purpose specified.

DANIEL KELLY.

Witnesses:

WALTER K. LUDWIG,

THEODORE F. CONOVER.