(Model.)

C. GAGE.

CENTERING GAGE.

No. 390,658. Patented Oct. 9, 1888.

Fig 1

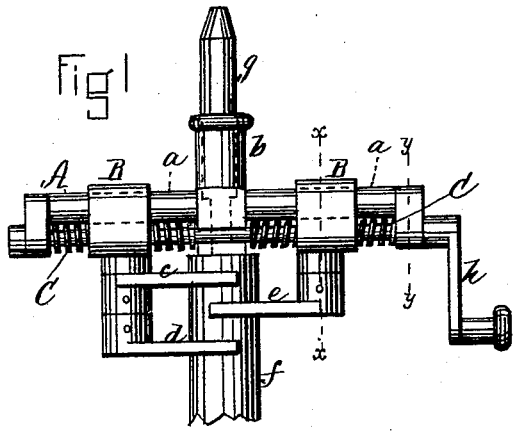


Fig 2

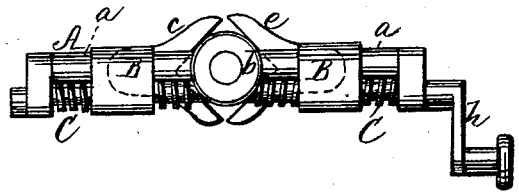


Fig 3

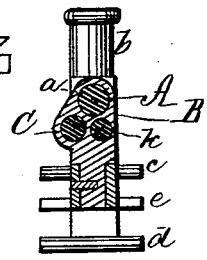
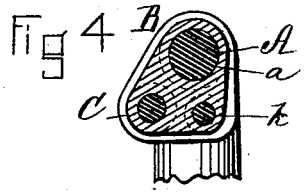


Fig 4



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CENTERING-GAGE.

SPECIFICATION forming part of Letters Patent No. 390,658, dated October 9, 1888.

Application filed June 4, 1888. Serial No. 276,060. (Model.)

To all whom it may concern:

Be it known that I, CHARLES GAGE, a citizen of the United States, residing at Winchester, in the county of Middlesex and State of Massachusetts, have invented certain new and useful Improvements in Centering Gages, of which the following is a full, clear, and exact description, reference being had to the accompanying drawings, forming part of this specification, in which—

Figure 1 is a front elevation of my centering-gage. Fig. 2 is a plan of the same. Fig. 3 is a vertical section through the same on the line *x x* of Fig. 1. Fig. 4 is a vertical section on the line *y y* of Fig. 1, enlarged.

This invention has for its object to provide a cheap, simple, and effective tool or gage for centering work to be performed on a lathe or other machine; and it consists in certain details of construction, and combination and arrangement of parts, as will be hereinafter more particularly described and specifically claimed.

In the drawings, A represents the frame or support of my improved tool, which is in the form of an inverted-T shape. On the horizontal portion *a* of the T-shaped frame slides two heads, B, each having downward projections made integral therewith, as seen in Fig. 3, one on each side of the vertical portion *b* of the frame A. One of these projections carries two right-angled forked arms, *c d*, and the other one right-angled forked arm, *e*, midway between the other two for the purpose of grasping and holding a piece of metal or wood, *f*, of any form in cross-section, and centering the same, a blow being struck upon the end of a suitable punch, *g*, which forms the indentation in the end of the piece of metal or wood *f*. The two heads B are moved toward or from each other by means of a right-and-left-hand screw, C, operated by means of a hand-crank, *h*.

k are guide-rods, one on each side of the vertical portion *b*, into which they are screwed, and which pass through the heads B, as seen in Fig. 3, into the ends of the frame A. These rods serve the purpose of forming an additional guide for the heads B, and also greatly stiffen and strengthen the heads with their projections and forked arms and prevent them from springing and thus throwing the work to be centered out of a true line.

A tool constructed as above described is simple, strong, and durable and comparatively inexpensive, and by its use work can be quickly and accurately centered, thus saving time and labor.

What I claim as my invention is as follows:

1. In a centering-tool, the frame A, in combination with the heads B, with their projections and arms, the right-and-left screw C, all constructed to operate substantially as described.

2. In a centering-tool, the frame A, in combination with the heads B, with their projections and arms, the right and-left screw, and guide-rods *k*, all constructed to operate substantially as described.

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