(No Model.) 2 Sheets—Sheet 1.

C. MADUELL.

REVERSIBLE CHUCK JAW.

No. 258,783. Patented May 30, 1882.

Fig. 1.

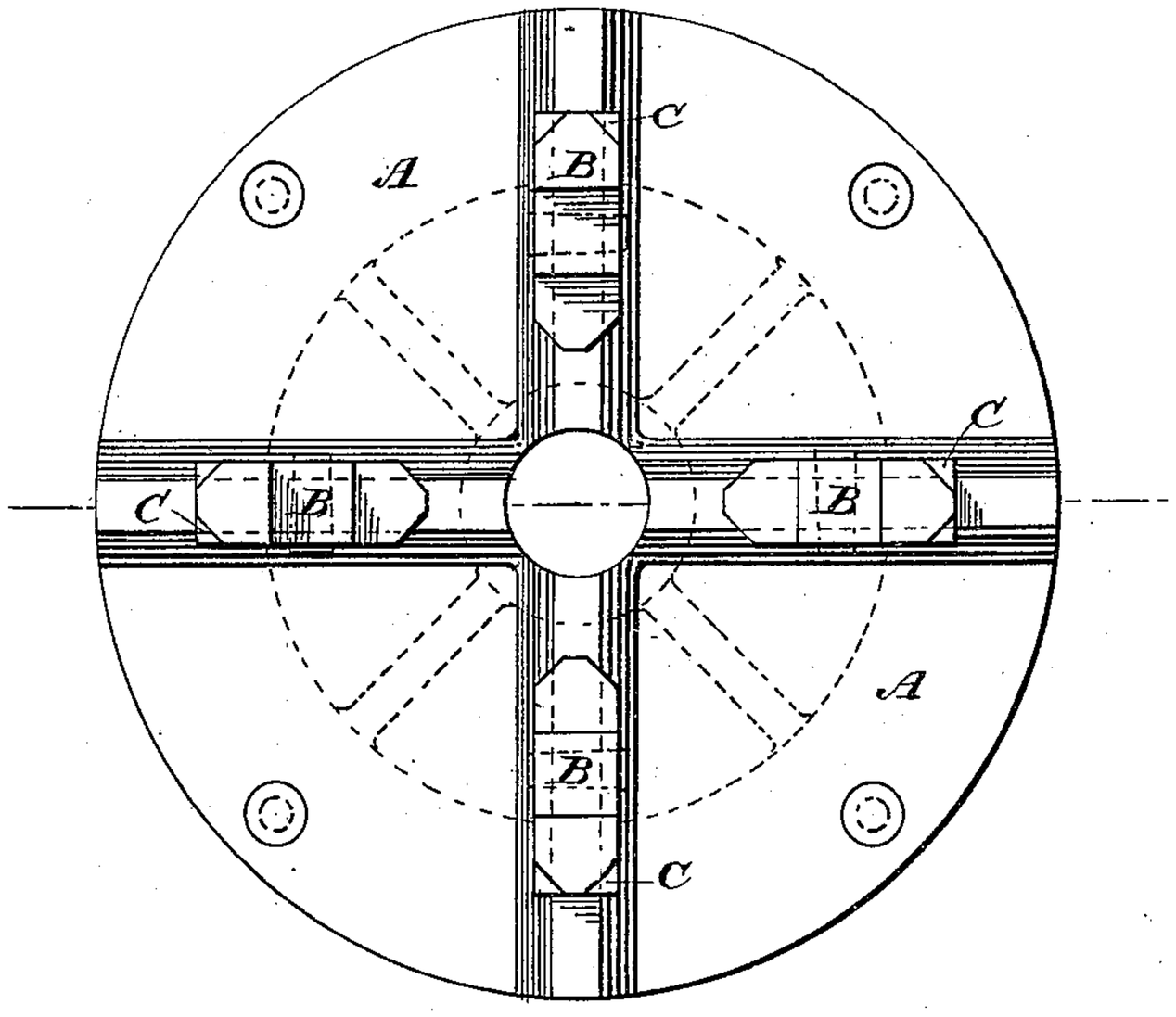


Fig. 2.

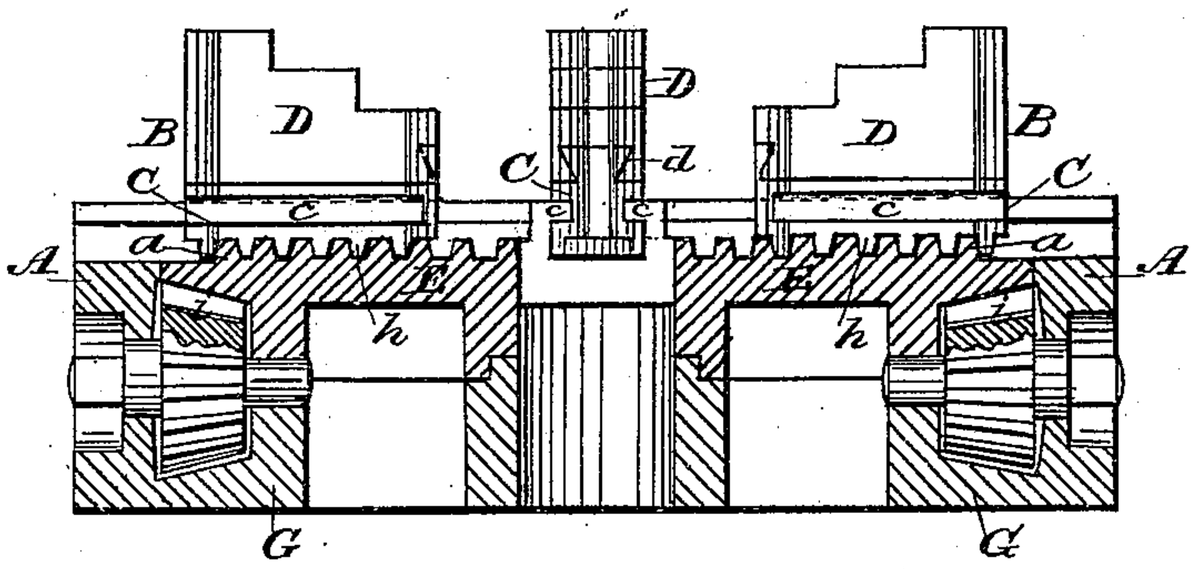
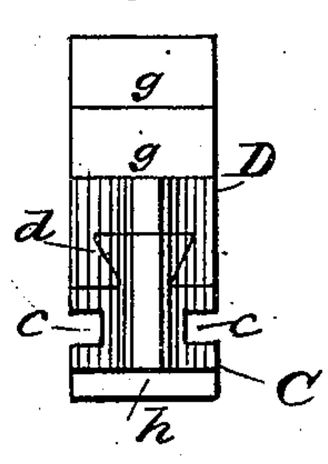


Fig. 3.



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(No Model.) 2 Sheets—Sheet 2.

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Fig. 4.

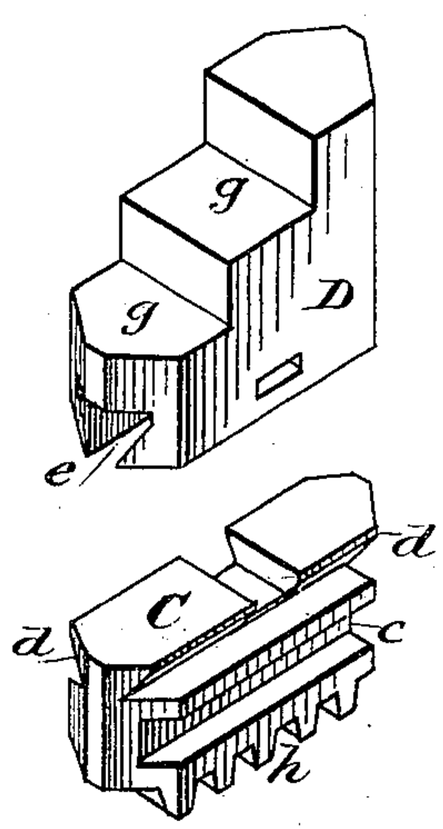


Fig. 5.

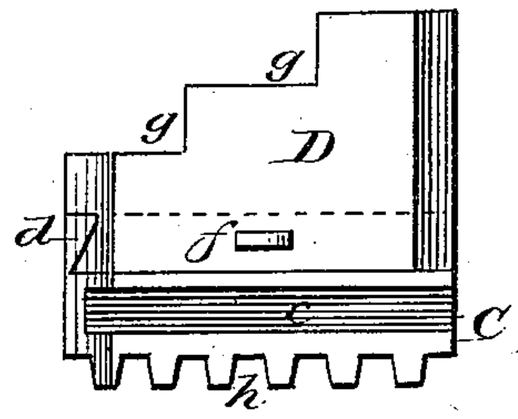


Fig. 6.

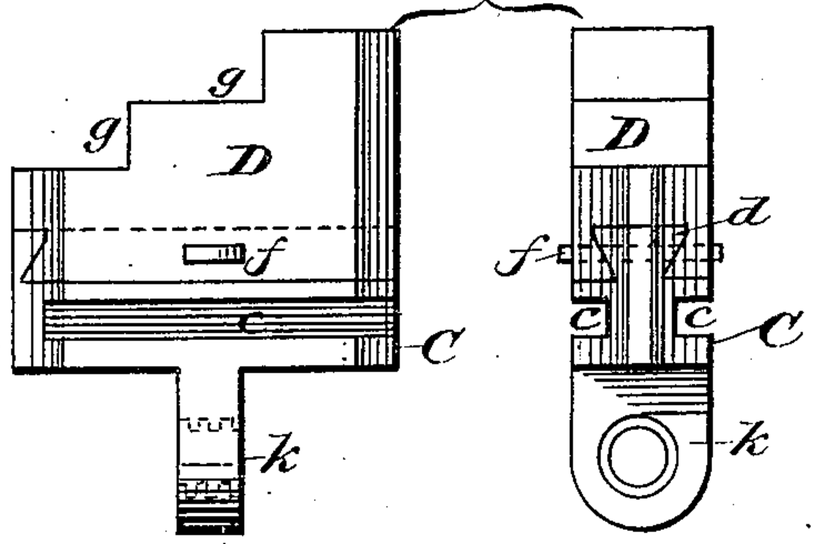
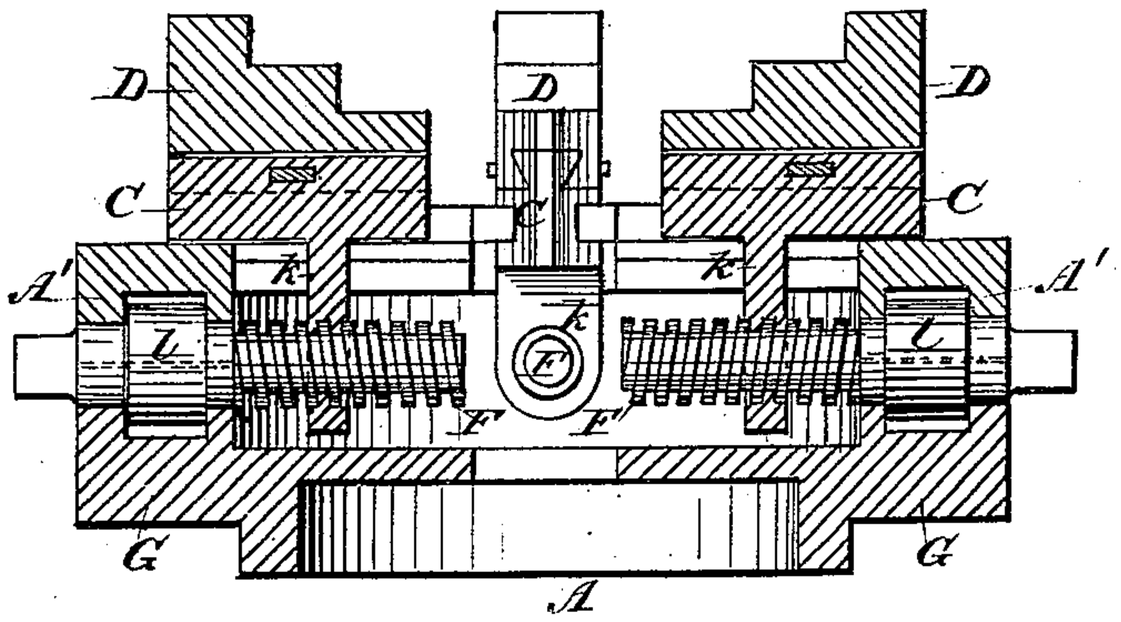


Fig. 7.



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UNITED STATES PATENT OFFICE.

CÁRLOS MADUELL, OF NEW ORLEANS, LOUISIANA.

REVERSIBLE CHUCK-JAW.

SPECIFICATION forming part of Letters Patent No. 258,783, dated May 30, 1882.

Application filed February 16, 1882. (No model.)

To all whom it may concern:

Be it known that I, CÁRLOS MADUELL, a citizen of Spain, residing at New Orleans, in the parish of Orleans and State of Louisiana, have invented certain new and useful Improvements in Reversible Chuck-Jaws; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

My invention relates to improvements in reversible chuck-jaws for lathes; and the object is to construct such jaws so that they can be readily and easily reversed for the purpose of holding objects of varying diameter in the same chuck-plate.

The invention consists in the construction and arrangement of the parts of a chuck-jaw, as will be more fully described hereinafter, reference being had to the accompanying drawings and the letters of reference marked thereon.

In the drawings like letters refer to like parts; and in the said drawings, Figure 1 represents a plan view of a chuck-plate with my improved jaws attached. Fig. 2 is a vertical cross-section of Fig. 1. Fig. 3 is an end view of the jaw, the parts being secured together. Fig. 4 is a perspective view of the jaw with the two parts detached. Fig. 5 is a side view of a jaw, showing the upper part reversed in dotted lines. Fig. 6 is a side and end view of a modified form of reversible chuck-jaws. Fig. 7 is a vertical cross-section of a modified form of chuck plate and jaws in position.

In the drawings, A represents the chuck-plate, in this instance what is termed a "scroll" chuck-plate, although my improved chuck-jaw can be readily applied to any of the well-known styles of other chuck-plates. This chuck-plate is provided with the usual teeth, *a*, with which the teeth *h* of the lower part, C, of the reversible jaw B engage. The jaw is composed of the lower part, C, and the upper part, D. The lower part, C, has on each side a groove, *c c*, which engages with the ordinary ways or guides on the plate A. On its upper side the part C has a dovetail tongue, *d*, which fits into the groove *e* in the upper part, D. The two parts C D are secured together by a transverse key, *f*, which passes through the dovetail tongue and groove. On the upper face of the part D are arranged the usual steps *g* to embrace the object to be turned. The lower part, C, is further provided with teeth *h*, which mesh with teeth *i* on the back of a bevel-wheel, E. The jaws are in this instance operated by the bevel-wheel E, arranged in the rear side of the chuck-plate A, and into said wheel one or more bevel-pinions mesh, which can be operated by a proper key to engage with the square ends on the pinion-shafts. Instead of this arrangement the jaws may, however, be provided with lugs *k* on the part C instead of the teeth. Said lugs are then tapped to receive screws F, which are supported in the recessed rim A′ of the chuck-plate. The back G is in this instance, as well as in the first case, made removable, so that the screws, with their collars *l*, or the bevel-pinions, can be placed in position, as shown in Figs. 7 and 2.

These jaws may be made complete to suit different styles and sizes of chuck-plates, and sold in the market as a new article of manufacture.

Many other methods of operating the jaws would suggest themselves to those skilled in the art; but I do not claim such arrangements, as my invention relates to the reversibility of the chuck-jaws for any kind of chuck-plate.

To operate or use the jaws it is only necessary to take out the key, slide the upper part off from the lower part, reverse it, and then replace the upper part and key.

It will be thus seen that objects of greatly varying size and diameter can be readily and quickly clamped or held in position on the chuck-plate.

I am aware that chuck-jaws have been made in two parts, which were provided with dovetail grooves and tongues arranged at right angles to the adjusting-screws; but these are not reversible, as the screw-threads will not permit the reversing of the parts.

I am also aware that chuck-jaws have been made reversible and provided with a mortise and tenon and held together by dowel-pins, and I therefore disclaim such constructions; but,

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

1. The combination, with a chuck-plate, of the reversible chuck-jaws B, consisting of the

parts C D, provided with radial grooves *c*, and tongues *d* of dovetail shape, and secured together by means of keys *f*, all constructed and arranged substantially as shown and specified.

2. The combination, with a chuck-plate, of the reversible chuck-jaws B, consisting of the parts C D, having dovetailed shape grooves *c*, and tongues *d*, arranged radially on the parts C D, secured together by keys *f*, and means for adjustment, all arranged substantially as and for the purpose set forth.

In testimony whereof I hereby affix my signature in presence of two witnesses.

CÁRLOS MADUELL.

Witnesses:
PAUL GUNEA,
JAMES P. MAGI.