(No Model.)

A. H. STETSON.

LATHE CHUCK.

No. 354,266. Patented Dec. 14, 1886.

Fig. 1.

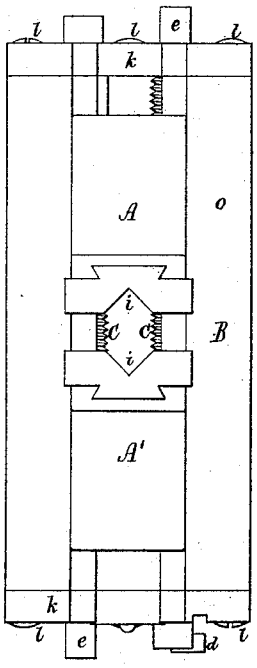


Fig. 2.

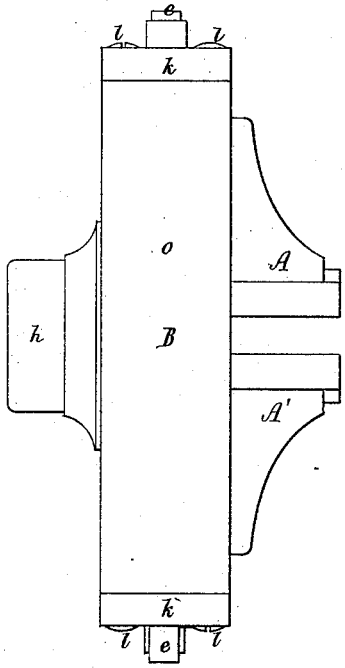


Fig. 5.

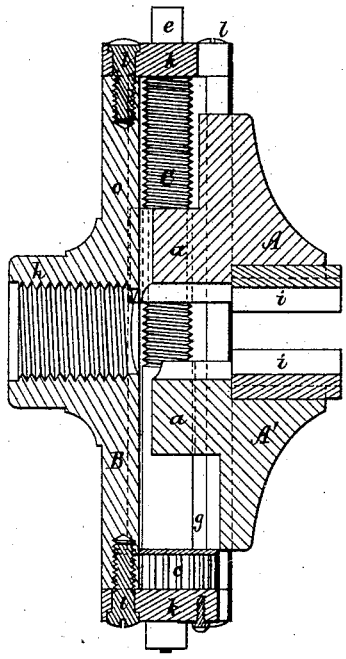


Fig. 6

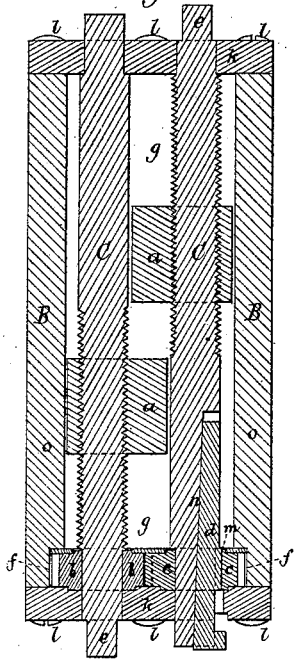


Fig. 3.

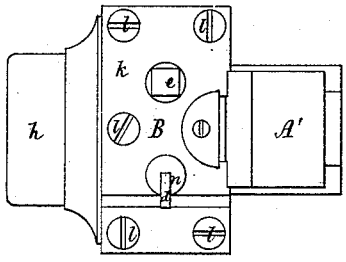


Fig. 4

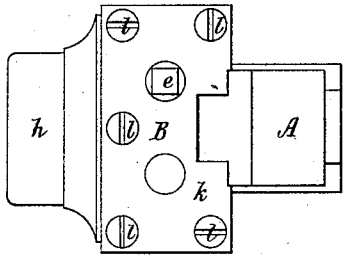


Fig. 7.

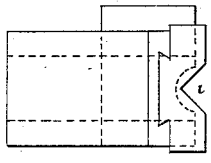


Fig. 8.

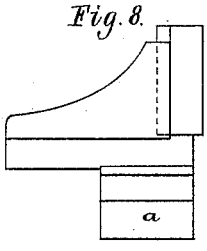
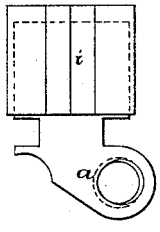


Fig. 9.



Witnesses.
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R. O. 73. Torrey

Inventor.
Amos H. Stetson.
by R. H. Eddy atty.

UNITED STATES PATENT OFFICE.

AMOS HENRY STETSON, OF BROOKLINE, MASSACHUSETTS.

LATHE-CHUCK.

SPECIFICATION forming part of Letters Patent No. 354,266, dated December 14, 1886.

Application filed September 30, 1886. Serial No. 214,947. (No model.)

To all whom it may concern:

Be it known that I, AMOS HENRY STETSON, of Brookline, in the county of Norfolk, of the Commonwealth of Massachusetts, have invented a new and useful Improvement in Lathe-Chucks; and I do hereby declare the same to be described in the following specification, and represented in the accompanying drawings, of which—

Figure 1 is a top view, Fig. 2 a side elevation, Figs. 3 and 4 opposite end views, Fig. 5 a vertical median and longitudinal section, and Fig. 6 a horizontal section, of a lathe-chuck embodying my invention, the nature of which is defined in the claims hereinafter presented. Fig. 7 is a top view, Fig. 8 a side elevation, and Fig. 9 a front end view, of one of the jaws of such chuck.

In the said drawings, A and A′ are two jaws, which, arranged as represented, are adapted to slide rectilinearly within a frame or carrier, B, properly channeled to receive them. Each of these jaws has one of two separate screws, C, for moving it, the screw screwing into and through an ear, *a*, projecting from the jaw. These screws are arranged parallel to and apart from each other and are pivoted within the frame, so as to enable each to be revoluble on its axis. On the shank of one of such screws there is fastened a spur-gear, *b*, that engages with another such gear, *c*, revoluble on the other shank, but held from revolving thereon by a key, *d*, that is inserted within the grooves *m n* in the gear and the shank, such key being removable from the shank and gear through one end of the frame. Each shank, where projecting beyond the said frame, is formed prismatic, as shown at *e*, to admit of a wrench or key being used thereon for revolving the shank. When either shank is so revolved and the gear *c* is keyed to its screw-shank, both screws will be simultaneously revolved, and the jaws will be moved either toward or away from each other, according to the direction of revolution of the shank; but on the key being withdrawn from the gear *c* and its shank either jaw may be moved independently of the other, which it is very convenient to do sometimes, especially in chucking irregular work.

The gears are arranged within a close chamber, *f*, arranged within the carrier B and entirely insulated from the groove or opening *g* in such carrier, in which the jaws move, such chamber being to prevent any chips, turnings, or borings from getting upon the gears while the chuck may be in use.

The frame or carrier B is provided at its back with a tubular extension, *h*, which is screw-threaded or grooved in its bore, in order to enable the frame or carrier to be screwed upon the mandrel of a lathe.

Each jaw has on its inner face a notch, *i*, extending down through it, such notch being right-angled in transverse section.

By having the jaw-actuating screws arranged at a distance apart from each other an article inserted between the jaws and held by them can be extended between the screws, which oftentimes is a matter of great convenience.

At each end of the frame B there is a cap or end piece, *k*, held in place by screws *l* going through it and screwed into the intermediate part, *o*, of the frame.

I claim—

1. The combination, with the two jaws and their carrier, of the two separate jaw-actuating screws arranged in such carrier and provided with connecting-gears, substantially as set forth.

2. The combination, with the two jaws and their carrier, of the two separate actuating-screws of such jaws arranged in such carrier, and having a gear fastened on the shank of one of such screws and another gear revoluble on the shank of the other screw, and held thereto by a key arranged in such gear and shank and removable therefrom, all being substantially as set forth.

3. The combination of the jaw-carrier, channeled to hold the two jaws and guide them in their rectilinear movements, and provided with the gear-insulating chamber separate from the space in which the gears work, with the said jaws arranged in such space

and projecting from such carrier, as represented, and with the two actuating-jaw screws and their connecting-gears applied to their shanks, such gears being within such insulating-chamber, and all being substantially as set forth.

4. The combination, with the jaw-carrier and with the two jaws recessed in their inner or grasping faces, as shown, of the two separate jaw-actuating screws arranged in such carrier and provided with connecting-gears, substantially as set forth.

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