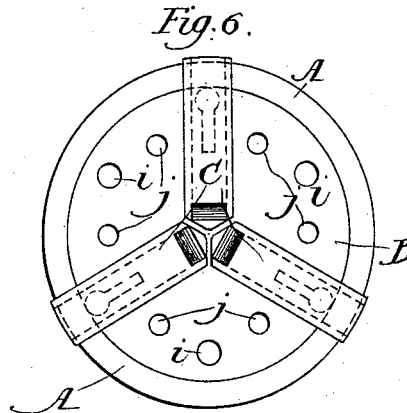
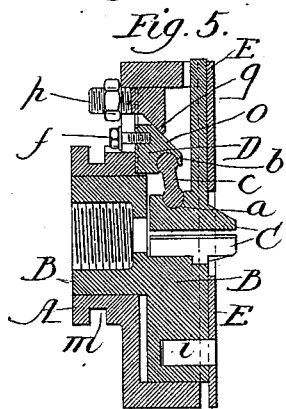
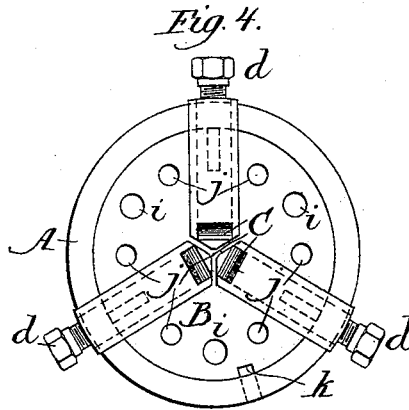
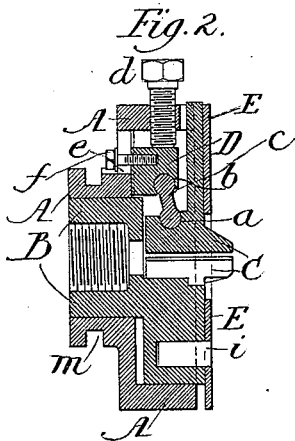
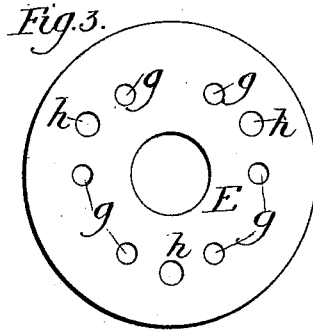
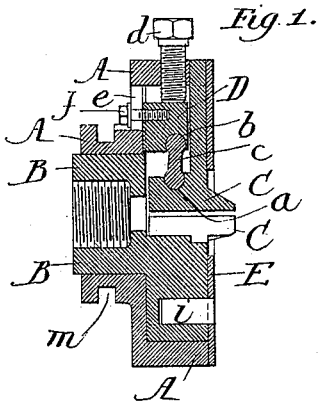


D. E. FELT.  
LATHE CHUCK.

No. 396,035.

Patented Jan. 8, 1889.



Witnesses  
*Albert H. Adams.*  
*Harry F. Jones.*

Inventor.  
*D. E. Felt.*

D. E. FELT.  
LATHE CHUCK.

No. 396,035.

Patented Jan. 8, 1889.

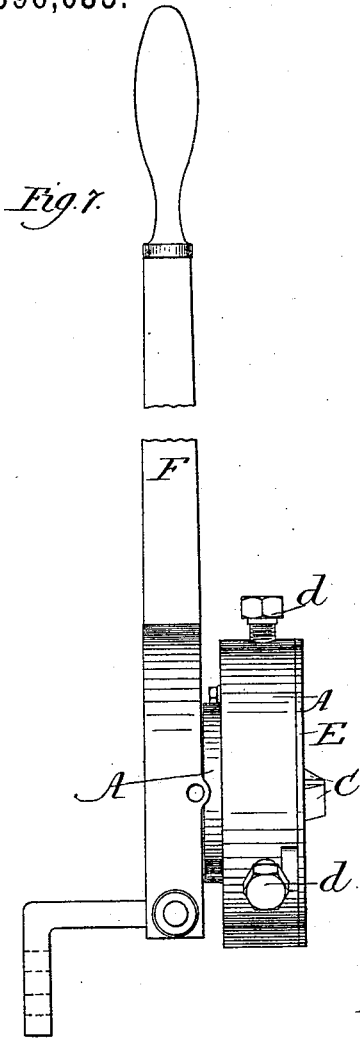


Fig. 7.

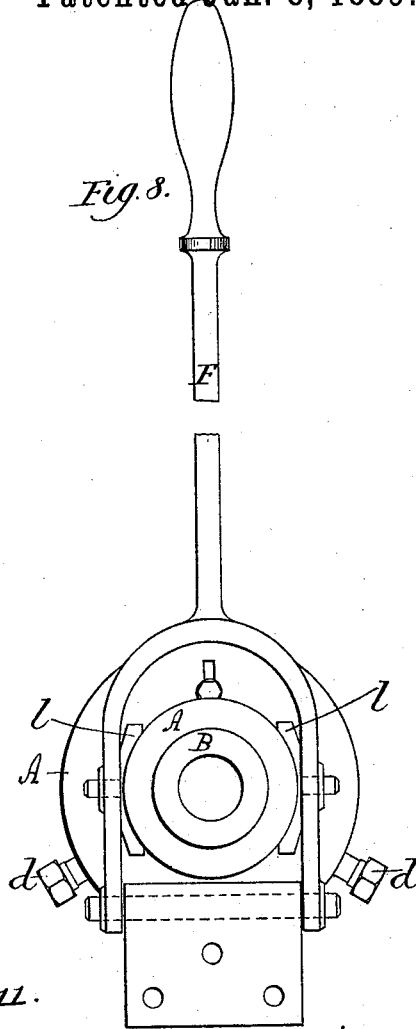


Fig. 8.

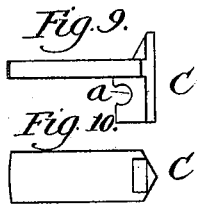


Fig. 9.

Fig. 10.

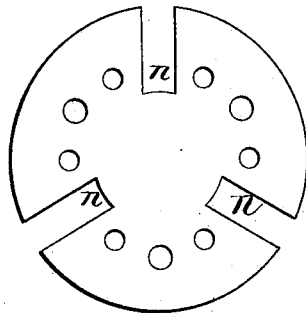


Fig. 11.

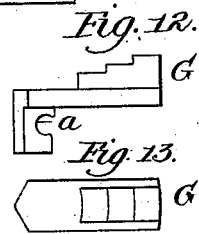


Fig. 12.

Fig. 13.

Witnesses  
*Albert H. Adams.*  
*Harry F. Jones.*

Inventor.  
*Dorr E. Felt.*

# UNITED STATES PATENT OFFICE.

DORR E. FELT, OF CHICAGO, ILLINOIS, ASSIGNOR OF ONE-FOURTH TO  
ROBERT TARRANT, OF SAME PLACE.

## LATHE-CHUCK.

SPECIFICATION forming part of Letters Patent No. 396,035, dated January 8, 1889.

Application filed June 4, 1888. Serial No. 276,049. (No model.)

*To all whom it may concern:*

Be it known that I, DORR E. FELT, residing at Chicago, in the county of Cook and State of Illinois, and a citizen of the United States, have invented a new and useful Improvement in Wire-Feed Chucks, of which the following is a specification, reference being had to the accompanying drawings, in which—

Figure 1 is a vertical central section showing the jaws in their closed position. Fig. 2 is a vertical section showing the jaws partly open. Fig. 3 is a front view of the face-plate. Fig. 4 is a front view of the chuck, the face-plate being removed. Fig. 5 is a modification showing an adjusting device different from that shown in Figs. 1 and 2. Fig. 6 is a front view of the chuck shown in Fig. 5, the face-plate being removed. Fig. 7 is a side elevation with an operating-lever attached. Fig. 8 is a rear elevation. Figs. 9 and 10 are details showing an edge view and a front view of one of the movable jaws shown in Figs. 1, 2, and 4. Fig. 11 is a front view of a face-plate which is to be applied to the chuck when disks are to be held thereby, instead of wire or small rods. Figs. 12 and 13 represent a jaw different from the jaws shown in Figs. 1, 2, and 4, and adapted to be clamped upon the edge of a disk.

My improvement relates to that class of chucks which are designed to be rotated continuously while the work is being done, and which do not have to be stopped as often as each piece has been completed.

The leading objects of my invention are to provide improved devices for clamping the article to be operated upon, which can be easily operated, and in the use of which there will be but little friction on any of the parts, which I accomplish as illustrated in the drawings, and hereinafter described.

That which I claim as new will be pointed out in the claims.

In the drawings, A represents the shell of the chuck.

B is the head or body.

C are jaws, which are fitted into grooves in the head B. There are three of these jaws.

D is a block fitted into a recess in the shell A, and it extends into a groove in the body B of the chuck. In each jaw there is a circular

groove or recess, *a*, the throat of which is contracted. In the side of each block D there is a similar groove or recess, *b*.

*c* is a toggle-link, the ends of which are formed to fit into the recesses *a b*.

*d* are adjusting-screws, one for each block D.

*e* are slots in the shell A, one for each block D.

*f* are cap-screws, one for each block D.

E is a face-plate provided with holes *g* to receive screws, by means of which the plate is fastened to the head or body B. This plate is also provided with three holes, *h*, to receive the ends of dowel-pins *i*, which are secured in the plate, and are inserted in holes in the body B.

*j* are screw-holes in the body B.

*k* is a pin, which is secured in the shell A, the inner end of which extends into a groove in the head or body B.

F is the operating-lever, arranged substantially as usual.

G, Fig. 8, are blocks which enter a groove, *m*, in the shell A, which are pivoted to the lever F.

It is common to provide two sets of jaws for chucks of this class, one to be used for holding wire and the other to be used for holding disks.

Figs. 9 and 10 represent jaws such as are shown in Figs. 1, 2, and 4, and which are designed to clamp a piece of wire or rod.

Figs. 12 and 13 show a jaw, G, adapted to be used for clamping disks. When jaws like G are used, the face-plate is to be provided with slots *n* to receive the jaws. When the jaws G are used, they are provided with recesses *a* to receive the toggle-link *c*, the same as before described, and blocks D are used in connection therewith.

In use, when the parts are in the position shown in Fig. 1, the jaws will be clamped upon the wire which is being operated upon. By moving the lever F a little the shell A can be brought into the position shown in Fig. 2, moving the blocks D back with the shell A and separating the jaws sufficient to allow the wire to be fed forward. The blocks and the jaws are connected by means of the toggle-links, so that the jaws are moved by the movements of the blocks.

The blocks and jaws can be adjusted for different sizes of wire by means of the set-

screws *d*, and when adjusted the blocks D can be secured in position by means of the cap-screws *f*.

5 In Figs. 5 and 6 I have shown a modification which relates to the manner of adjusting the blocks D, which is accomplished by bev-  
10 eling one side, *o*, of each block and by providing a screw, *p*, for each block, which screw is provided with a head, *q*, beveled on the  
15 side to engage with the bevel *o* on the block D. By changing the position of the screw *p* the block D can be raised or lowered a little, carrying with it the jaw connected therewith, and when brought to proper position the block  
20 can be secured in place by the screw *f*, as before described. This modification in no way affects the operation of the device.

The body is cut away to receive the blocks D, and is thus weakened; but the face-plate,  
25 being secured to the body by the screws and dowel-pins, materially strengthens the body.

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

1. In combination with a shell, A, and body B, jaws for holding a wire or disk, adjustable  
25 blocks D, toggle-links *c*, face-plate E, screws for adjusting the blocks D, and set-screws *f*, for holding the blocks D in their adjusted position, substantially as and for the purpose  
30 specified.

2. In a chuck, the combination of a shell, A, and body B, with holding-jaws, adjustable  
35 blocks D, toggle-links *c*, face-plate E, and dowel-pins *i*, substantially as and for the purpose specified.

DORR E. FELT.

Witnesses:

ALBERT H. ADAMS,  
HARRY T. JONES.