

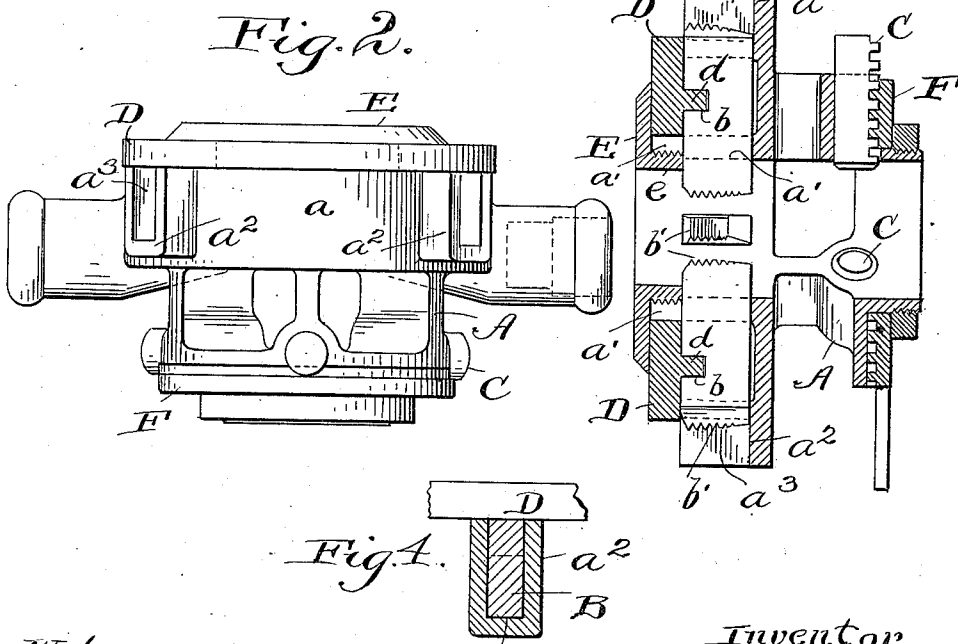
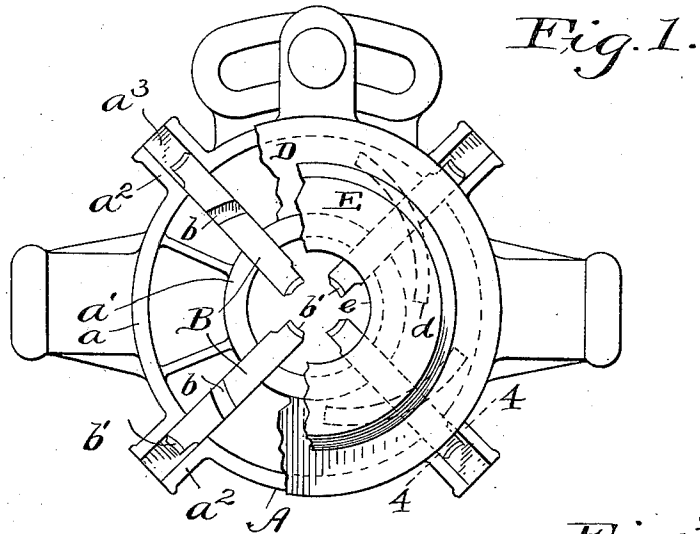
H. W. OSTER.

DIE STOCK.

APPLICATION FILED APR. 10, 1912.

1,044,809.

Patented Nov. 19, 1912.



Witnesses
E. B. Gilchrist.
H. B. Sullivan

Inventor
Herman W. Oster
by Thurston & Kins
Attorney

UNITED STATES PATENT OFFICE.

HERMAN W. OSTER, OF CLEVELAND, OHIO, ASSIGNOR TO THE OSTER MANUFACTURING COMPANY, OF CLEVELAND, OHIO, A CORPORATION OF OHIO.

DIE-STOCK.

1,044,809.

Specification of Letters Patent.

Patented Nov. 19, 1912.

Application filed April 10, 1912. Serial No. 689,917.

To all whom it may concern:

Be it known that I, HERMAN W. OSTER, a citizen of the United States, residing at Cleveland, in the county of Cuyahoga and State of Ohio, have invented a certain new and useful Improvement in Die-Stocks, of which the following is a full, clear, and exact description.

This invention has for its object to produce a die stock having adjustable double ended dies or chasers, wherein the outer ends of said dies are always so protected that they cannot be injured, and cannot accidentally cut the hands of the user.

The invention consists in the construction and combination of parts which are shown in the drawing and hereinafter described and pointed out definitely in the claims.

In the drawing, Figure 1 is an end view of a die stock embodying the invention, with parts of the cam plate and retaining plate broken away; Fig. 2 is a side elevation of the said die stock; Fig. 3 is a central longitudinal section thereof; and Fig. 4 is a sectional view in the plane of line 4—4 on Fig. 1.

Referring to the parts by letters, A represents the body member of the die stock. As usual it is tubular so that the work to be threaded may pass through it from the rear end up to the dies. In the rear end there are the usual centering pins C which may be simultaneously adjusted by means of a rotatable cam plate F of familiar construction. At the front end of the body are two concentric annular flanges a and a' through which aligned radial grooves are cut to form guideways for the dies B. Integral with the outer cylindrical flange a , and projecting radially outward therefrom, are the bosses a^2 , in which are continuations a^3 of said radial guideways.

D represents the cam plate which is rotatably mounted upon the flange a' , whereon it is held by the end plate E which has a tubular portion e which screws into the flange a' . The cam plate has on its inner face the cam ribs or scrolls d which enter notches b in the edges of the dies, wherefore, by turning the cam plate, these dies are all simultaneously moved inward or outward for the purpose of adjusting them to the size of the work, or for withdrawing them from engagement with the work after the same has been threaded.

The dies are double ended. That is to say, they have threaded cutting teeth b' at both the inner and outer ends thereof. Sometimes it is desirable to use the cutting teeth at one end of these dies. Sometimes it is desirable to use the cutting teeth at the other ends. If the dies be removed from the guideways and turned end for end and returned to the guideways in the member B, the cam ribs d will fit in the grooves b , as before. The length of these dies, and the distance which the bosses a^2 project radially outward from the flange a are relatively such that the outer ends of the dies will always lie within the grooves a^3 in said bosses, even though the dies are drawn outward as far as they can be drawn by the cam plate. In other words, the outer ends of these dies never can project out beyond the ends of the bosses a^2 so long as the device is in working condition. These outer ends of the dies therefore are not liable to injury, and are not liable to be struck by the workman so that his hands will be cut thereby.

It is to be noted that the cam plate does not cover the grooves a^3 in the bosses a^2 . This is of some importance because when it is desired to remove the dies for the purpose of turning them or for any other purpose, the cam plate will be turned in the direction to draw the dies outward, and the turning in this direction will be continued until the scrolls d pass out of the grooves. Then the dies may be easily withdrawn by one who can reach them for this purpose through the uncovered tops of the grooves a^3 .

Having thus described my invention, what I claim is:

1. In a die stock, the combination of a cylindrical tubular die supporting member having a plurality of outwardly projecting bosses and having also a plurality of radial guideways which are continued outward through said bosses, double ended dies which are radially movable in said guideways, and a cam plate rotatably mounted on said die holding member and having cam scrolls on its inner face which engage with said dies,—said dies and outwardly extended bosses being of such relative lengths that when the dies are engaged by said cam scrolls, their outer ends do not project outward beyond the ends of said bosses.

2. In a die stock, the combination of a cylindrical tubular body member having at

one end two concentric cylindrical flanges wherein are radial guideways and having also outwardly projecting bosses which are integral with the outer flange and in which
5 said radial guideways are extended radially outward, double ended dies which are radially movable in said guideways, a cam plate which is rotatably mounted upon the inner cylindrical flange and which rests
10 against the end of the outer cylindrical flange but does not extend outward far

enough to cover the guideways in said bosses, said cam plate having cam scrolls on its inner face which engage with said dies, and means for holding said cam plate in 15 working position.

In testimony whereof, I hereunto affix my signature in the presence of two witnesses.

HERMAN W. OSTER.

Witnesses:

H. R. SULLIVAN,
E. L. THURSTON.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."