

[54] APERTURE SETTING DEVICE
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 [21] Appl. No.: 361,649
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3,859,728 1/1975 Shutt 33/180 R
 4,041,766 8/1977 Johnson et al. 29/753

FOREIGN PATENT DOCUMENTS

87474 1/1958 Netherlands 33/1 B

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Related U.S. Application Data

[62] Division of Ser. No. 172,305, Jul. 25, 1980, abandoned.
 [51] Int. Cl.³ G01B 5/00; B23P 19/00
 [52] U.S. Cl. 33/180 R; 29/751
 [58] Field of Search 33/178 R, 180 R, 181 R, 33/DIG. 7; 29/751, 753

References Cited

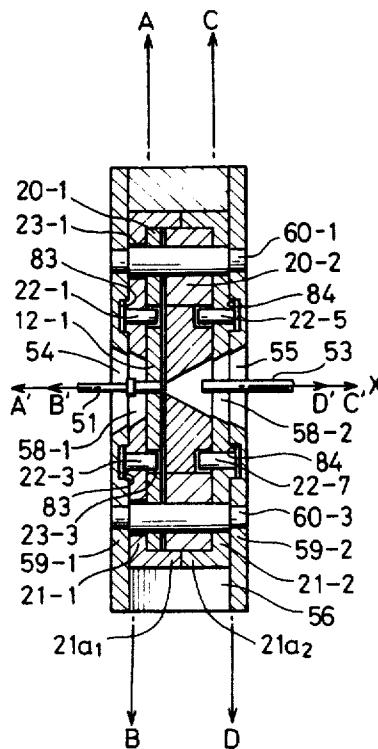
U.S. PATENT DOCUMENTS

1,576,346 3/1926 Mendell 33/178 R
 1,878,296 9/1932 Schmidt et al. 33/180 R
 2,638,676 5/1953 Callahan 33/180 R
 2,827,941 3/1958 Stoltz 29/753
 3,325,885 6/1967 Ziegler, Jr. et al. 29/751

[57] ABSTRACT

An aperture setting device for use in a drawing die, a chuck and so forth, in which at least three or more substantially triangular movable pieces are sequentially arranged in the form of a ring, an aperture is formed by one end portion of an inner side of each movable piece and the movable piece is movable along a side opposite its vertical angle on the side of the aperture, together with the other movable pieces. The movable pieces are disposed in a frame. By the movement of the movable pieces, the aperture can be varied in size without being changed in configuration.

7 Claims, 18 Drawing Figures



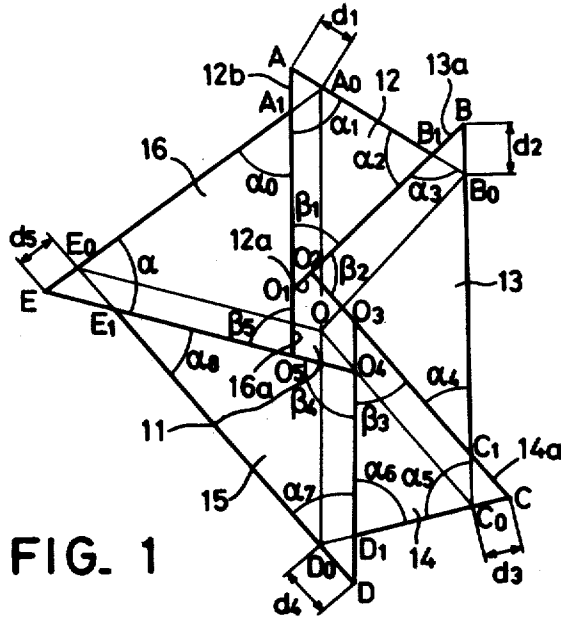


FIG. 1

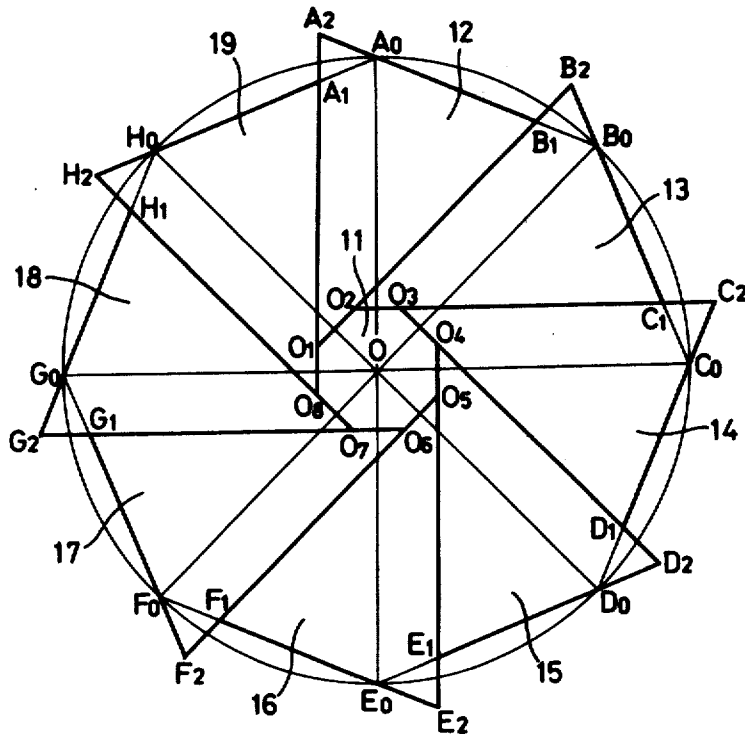
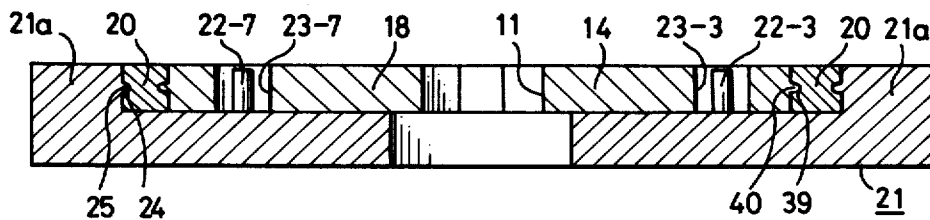
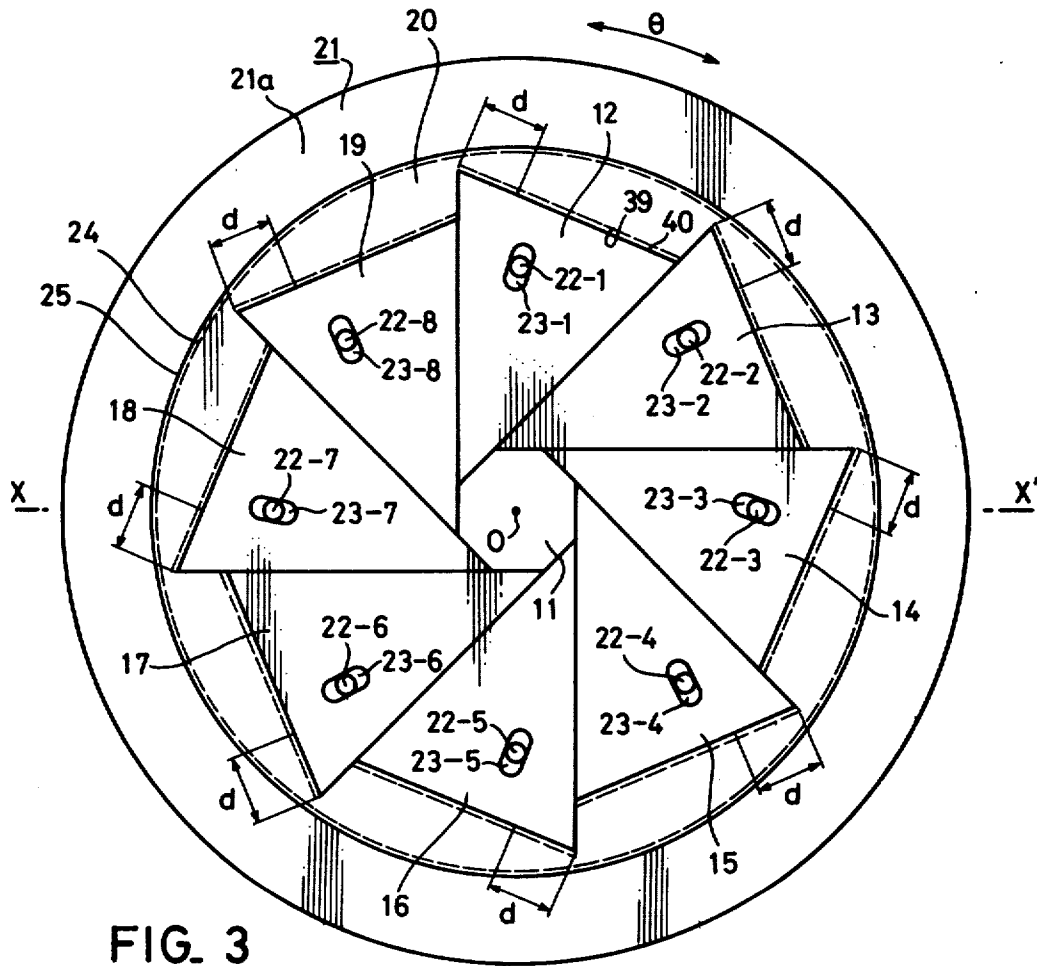


FIG. 2



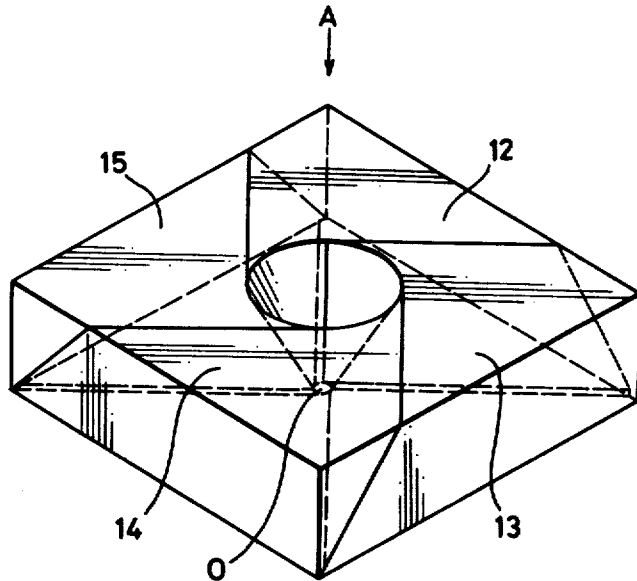


FIG. 4(a)

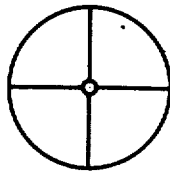


FIG. 4(b)

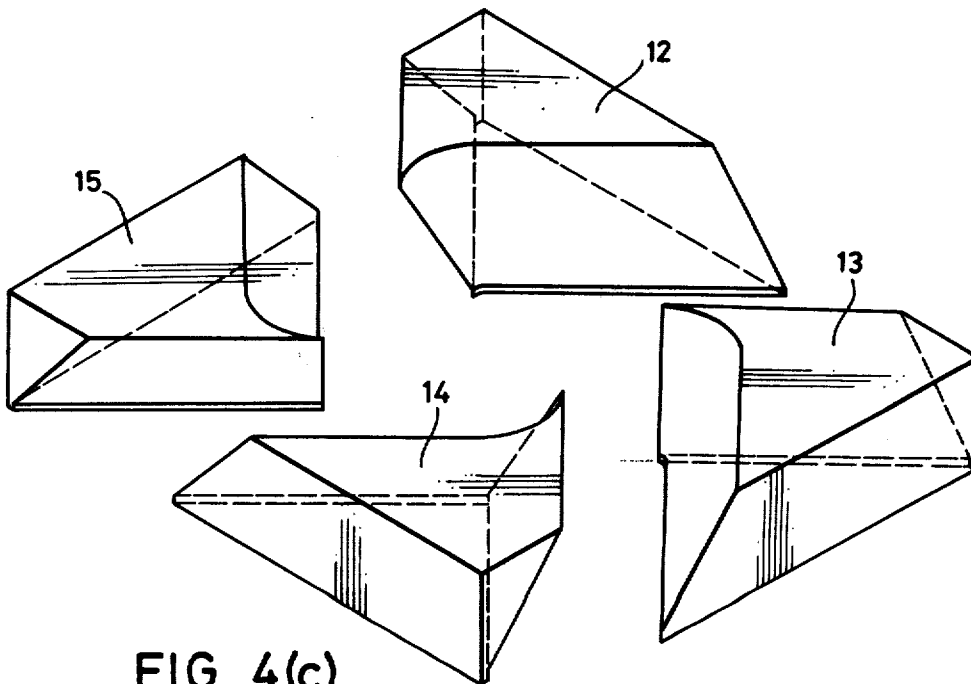


FIG. 4(c)

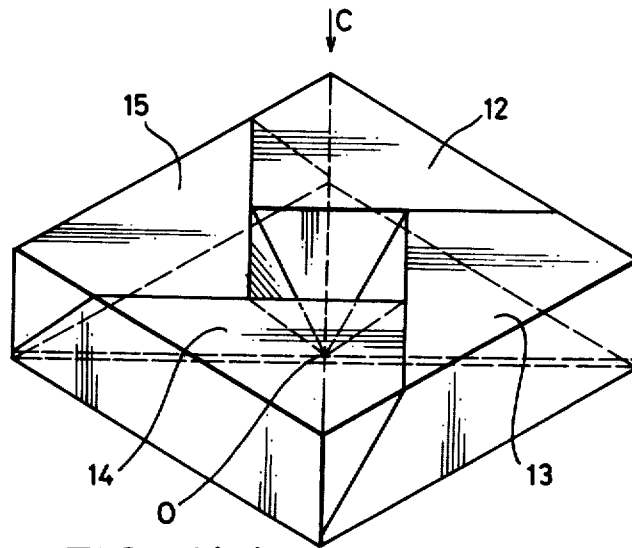


FIG. 5(a)

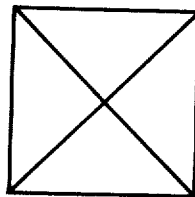


FIG. 5(b)

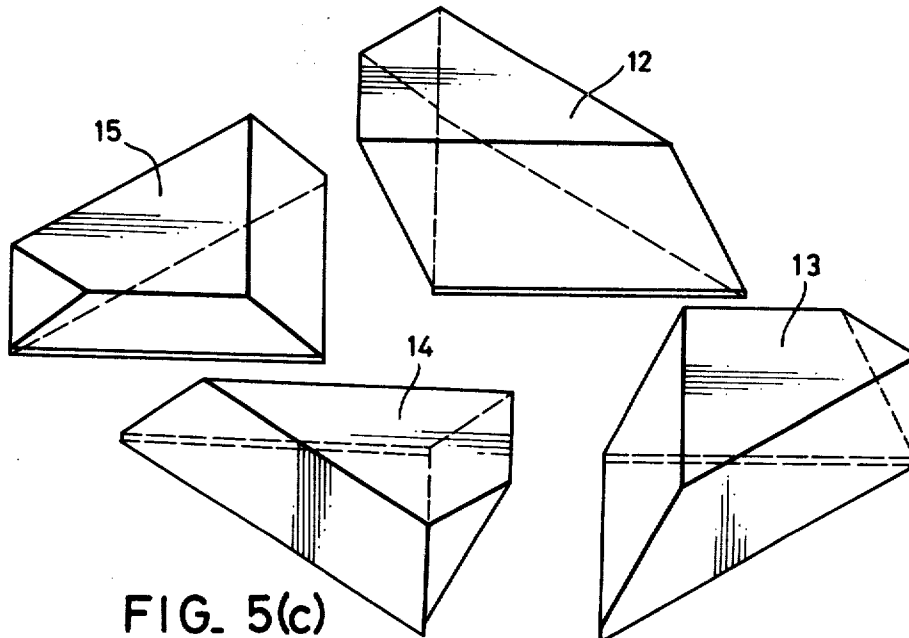


FIG. 5(c)

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