(No Model.)

C. BLANCARD.

DIE FOR MAKING DIAMOND SETTINGS.

No. 376,508. Patented Jan. 17, 1888.

Fig. 3.

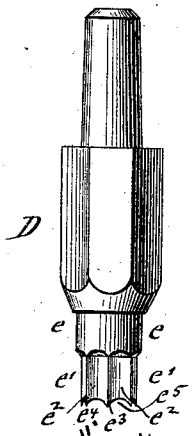


Fig. 4.

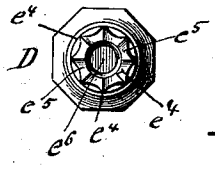


Fig. 1.

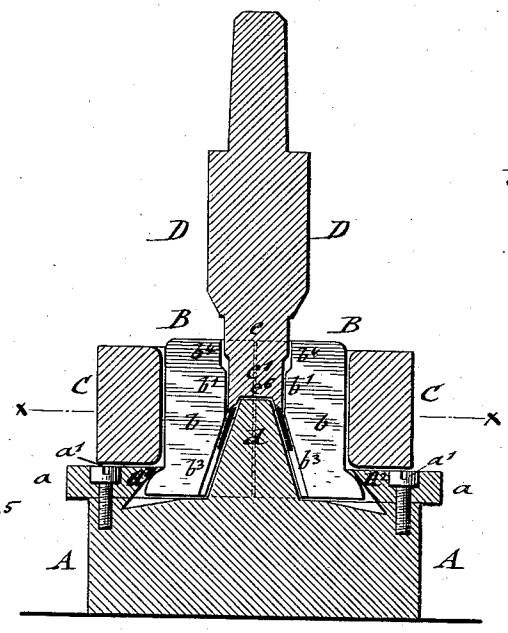


Fig. 5.

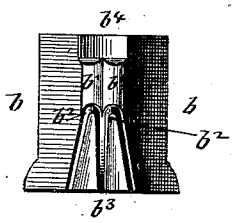


Fig. 6.

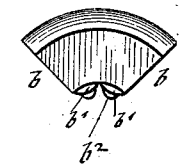


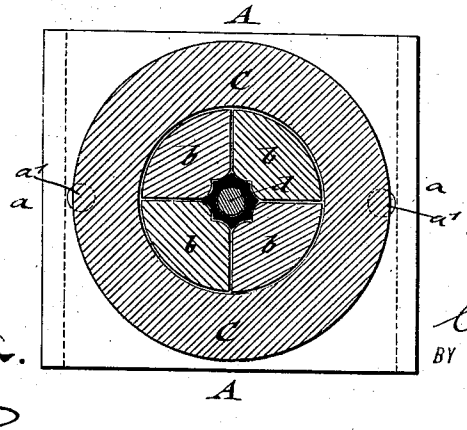
Fig. 7.



Fig. 8.



Fig. 2.



WITNESSES:

F. W. Rosenbaum.

Carl Karp

INVENTOR

Christian Blancard

BY

Lepper & Raegener

ATTORNEYS.

N. PETERS. Photo-Lithographer. Washington, D. C.

UNITED STATES PATENT OFFICE.

CHRISTIAN BLANCARD, OF NEW YORK, N. Y.

DIE FOR MAKING DIAMOND-SETTINGS.

SPECIFICATION forming part of Letters Patent No. 376,508, dated January 17, 1888.

Application filed September 16, 1887. Serial No. 249,874. (No model.)

To all whom it may concern:

Be it known that I, CHRISTIAN BLANCARD, of the city, county, and State of New York, have invented certain new and useful Improvements in Dies for Diamond-Settings, of which the following is a specification.

This invention relates to an improved die for making that class of diamond-settings which are provided with outwardly-flaring scallops at the base, the scallops being produced by the action of the die instead of being made by hand, as heretofore; and the invention consists of a die for making diamond-settings with outwardly-flaring base-scallops, comprising a base-block having a fixed center cone, female die-sections provided with grooved and conically-flaring faces at the lower parts, and with ribbed cylindrical faces at the upper parts, a ring for locking said die-sections, and a plunger or male die provided with a cylindrical portion having channels and ribs with pointed and scalloped ends, by which the outwardly-flaring scallops at the base of the setting is produced.

In the accompanying drawings, Figure 1 represents a vertical central section of my improved die for making scalloped diamond-settings. Fig. 2 is a horizontal section of the same on line *x x*, Fig. 1. Fig. 3 is a side elevation of the male or plunger die; Fig. 4, a bottom view of the same. Fig. 5 is an elevation of one of the sections of the female die, shown from the inside. Fig. 6 is a top view of the same; and Figs. 7 and 8 are side views of the setting, showing it, respectively, before and after the same is acted upon by my improved die.

Similar letters of reference indicate corresponding parts.

In the drawings, A represents the base-block of my improved die for making scalloped diamond-settings. The base-block A is provided with a top plate, *a*, that is attached thereto by screws *a'*, and provided with a beveled inner edge, a^2, that serves to retain the exteriorly-rimmed base of the female die B, as shown clearly in Fig. 1. At the center of the base-block A is arranged a fixed cone, *d*, that is made integral with said block.

The female die B is composed of four quadrantal die-sections, *b b*, the inner faces of which are made conically flaring at their lower parts, so as to correspond to the inclination of the cone *d* of the base-block A. The upper parts of the faces of the die-sections *b b*, above the flat head of the cone *d*, are made cylindrical and provided with convex ribs *b'*, which ribs communicate, by rounded-off portions b^2, with the conically-flaring lower part of the die-sections *b b*, each of which is provided with a longitudinal center groove or depression, b^3, as shown clearly in Fig. 5. Above the ribs *b'* of each female die-section *b* is arranged a smooth cylindrical portion, b^4. The female die-sections *b b* are rigidly secured in position on the base-block A by means of a locking-ring, C, which encircles the upper cylindrical parts of the die-sections *b b*, while the rimmed lower part is retained by the undercut top plate, *a*, of the base-block A.

The male die or plunger D is provided with a smooth cylindrical portion, *e*, that fits into the smooth cylindrical portion b^4 of the female die-sections *b b*, and a lower part, *e'*, provided with concave channels e^2 and ribs e^3, the latter terminating in points e^4 and scallops e^5, as shown clearly in Figs. 3 and 4. The lower end of the part *e'* is provided with a depression, e^6, that fits over the flat head of the cone *d* of the base-block A.

After the setting has been produced with a smooth base in the form shown in Fig. 7, by cutting first a star-shaped blank from a flat plate and shaping it by dies, the setting is introduced in inverted state with the cramps downward over the cone *d*, as shown in Fig. 1. The female die-sections *b b* are then placed in position around the same and locked in position by the locking-ring C. The male die or plunger then descends and produces by its lower scalloped and pointed end, in connection with the ribbed and flaring face portions of the female die-sections, a setting having outwardly-flaring scallops at its lower part or base, as shown in Fig. 8. The plunger D is then raised and the locking-ring C and the female die-sections *b b* removed, so that the finished setting may be readily removed from the fixed cone of the base-block.

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

1. A die for making scalloped diamond-set-

tings, composed of a base-block having a fixed center cone, female die-sections having grooved and flaring lower faces and ribbed upper faces, means for locking said female die-sections to the cone and base-block, and a male die or plunger having a channeled lower part with a scalloped lower end fitting into the correspondingly-shaped upper faces of the female die-sections, substantially as set forth.

2. The combination, with a base-block having a fixed center cone, a top plate having an inner beveled edge attached to the block, female die-sections having an exteriorly-rimmed base, a conically-flaring and grooved lower face portion, a ribbed upper face portion, and a smooth cylindrical portion above the ribbed portion, a locking-ring embracing said female die-sections, and a plunger provided with a smooth cylindrical portion and a channeled portion below the same, said channeled portion having a scalloped end, and a depression fitting over the head of the cone of the base-block, substantially as set forth.

3. The combination of a base-block having a fixed center cone, a top plate having a beveled inner edge attached to said block, detachable female die-sections having an exteriorly-rimmed base and conically-flaring faces, and a ring for locking said die-sections to the cone and block, substantially as set forth.

4. The male die or plunger D, having a ribbed and channeled portion, e', and a scalloped lower end, substantially as set forth.

5. The male die or plunger D, having a smooth cylindrical portion, e, a ribbed and channeled portion, e', having a scalloped end, and a central depression, e^6, substantially as set forth.

In testimony that I claim the foregoing as my invention I have signed my name in presence of two subscribing witnesses.

CHRISTIAN BLANCARD.

Witnesses:
PAUL GOEPEL,
SIDNEY MANN.