

(No Model.)

C. BLANCARD.

DIE FOR MAKING CLUSTER SETTINGS.

No. 376,507.

Patented Jan. 17, 1888.

Fig. 3.

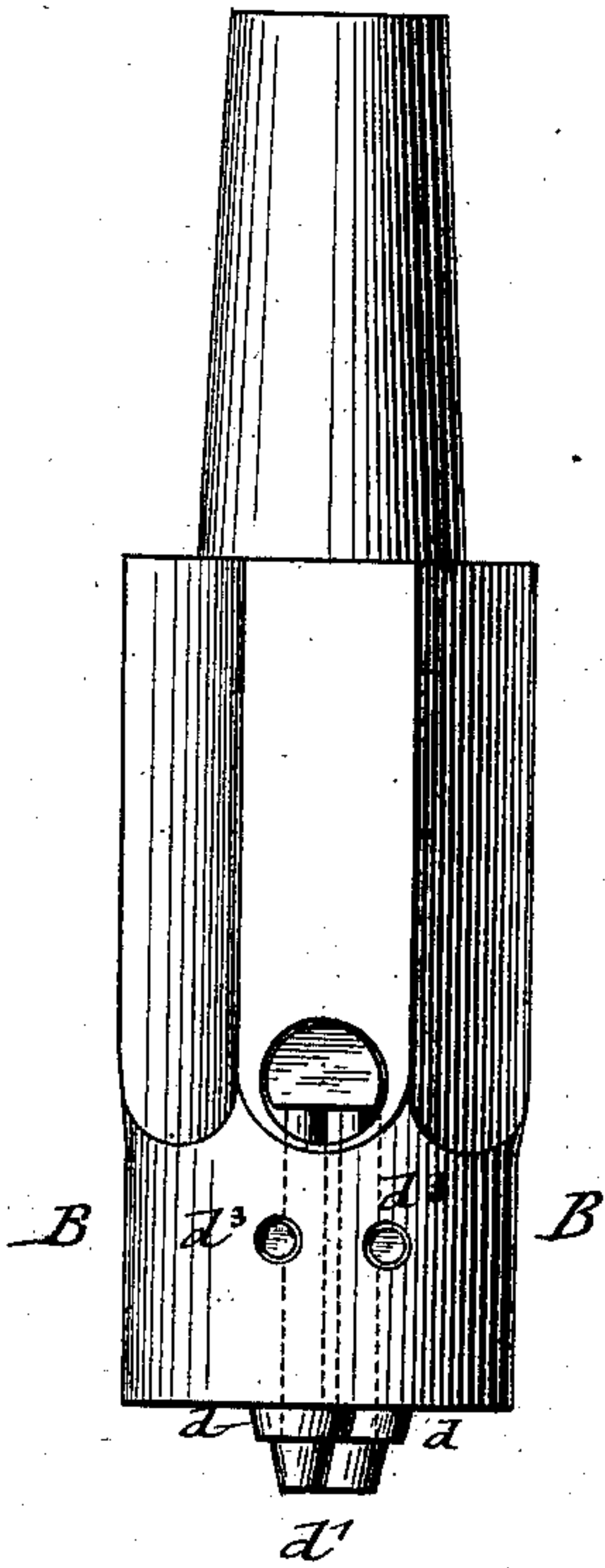


Fig. 1.

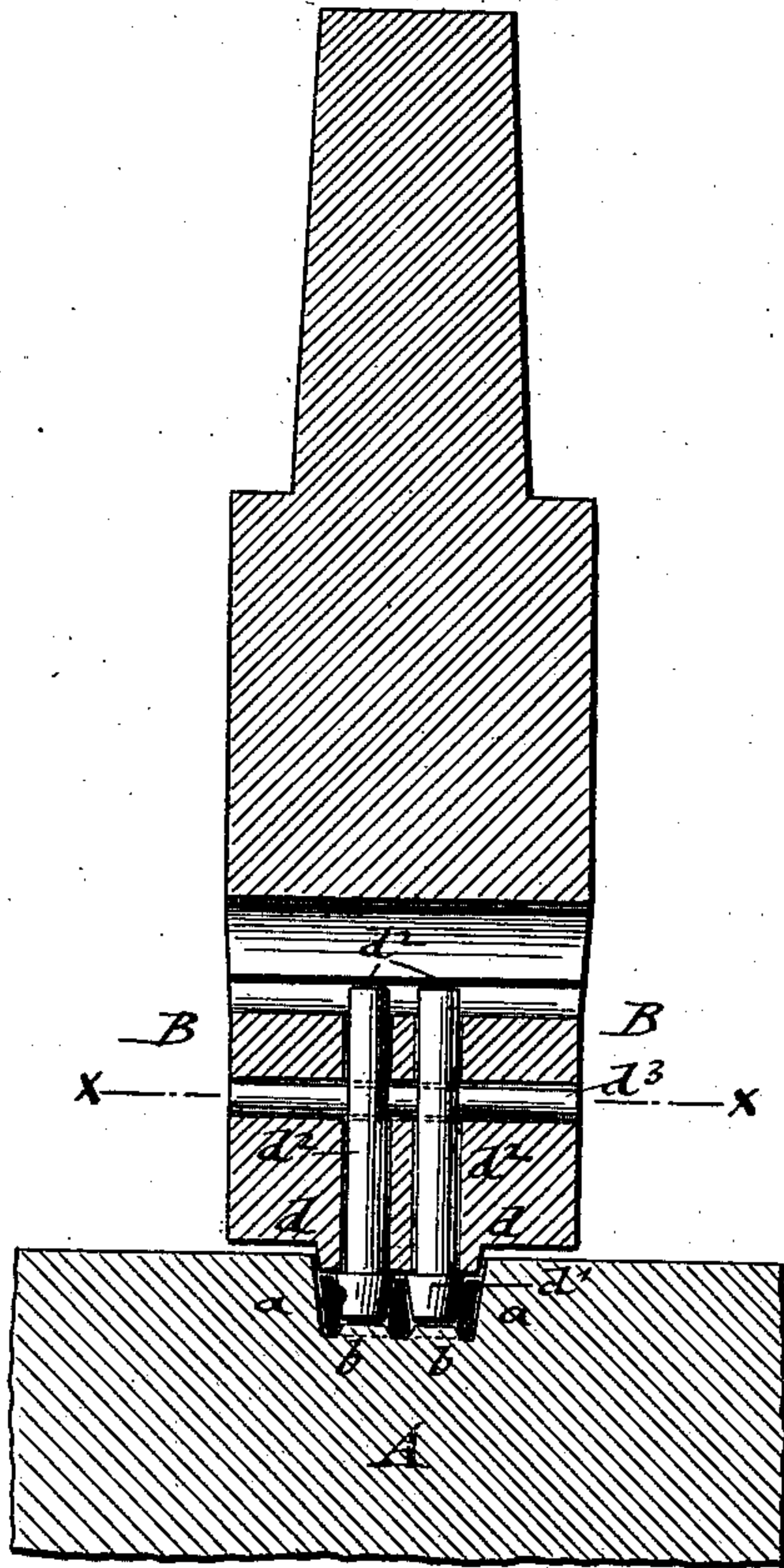


Fig. 4.

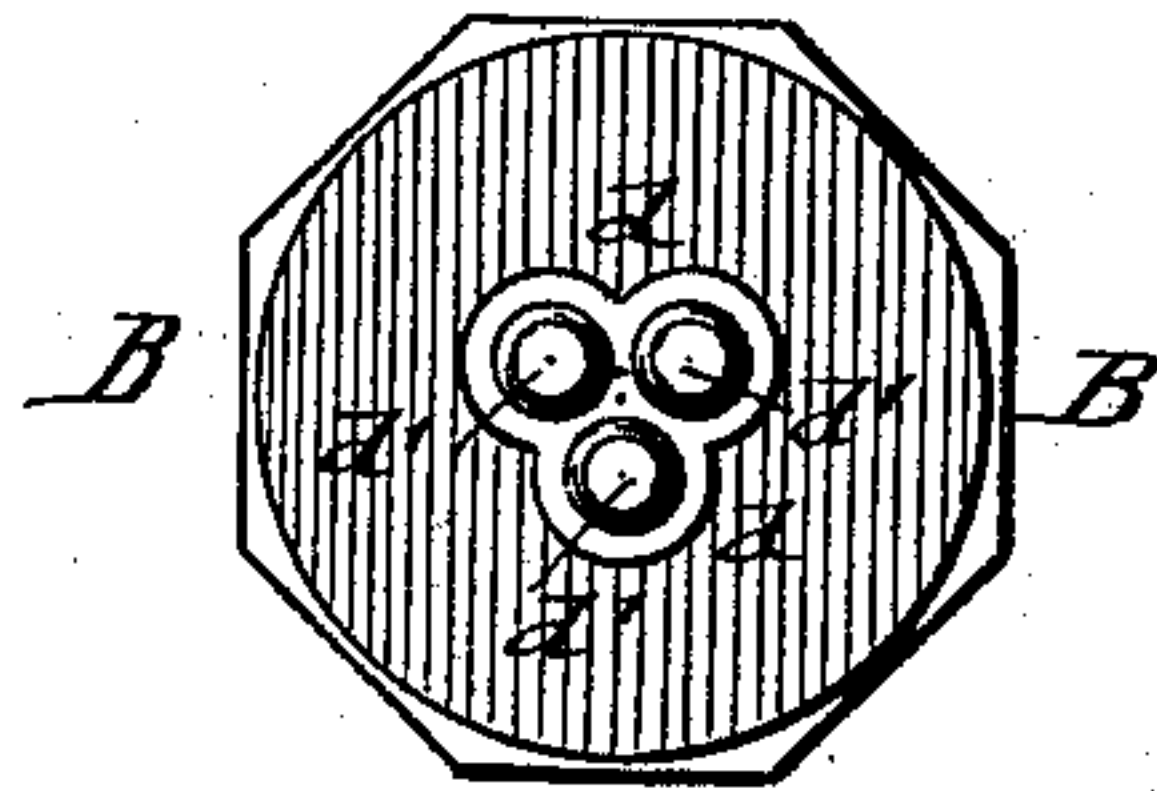


Fig. 5.

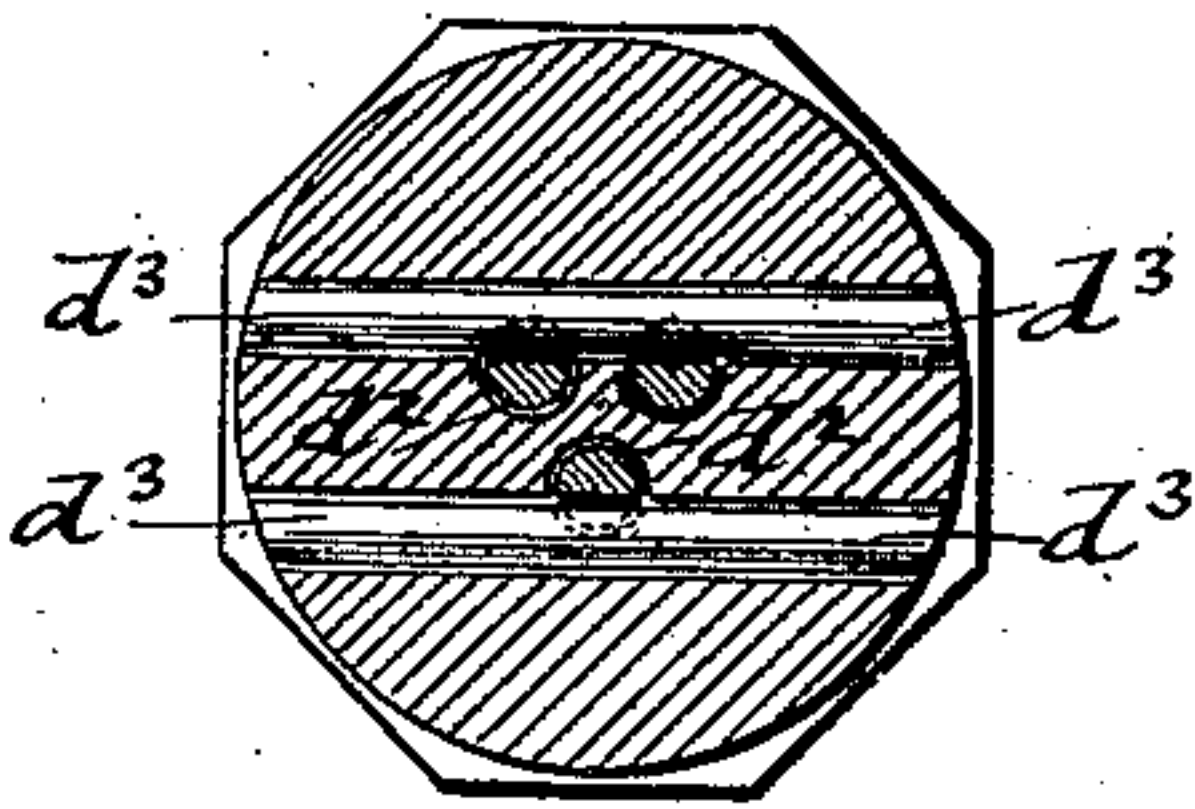


Fig. 6.



Fig. 2.

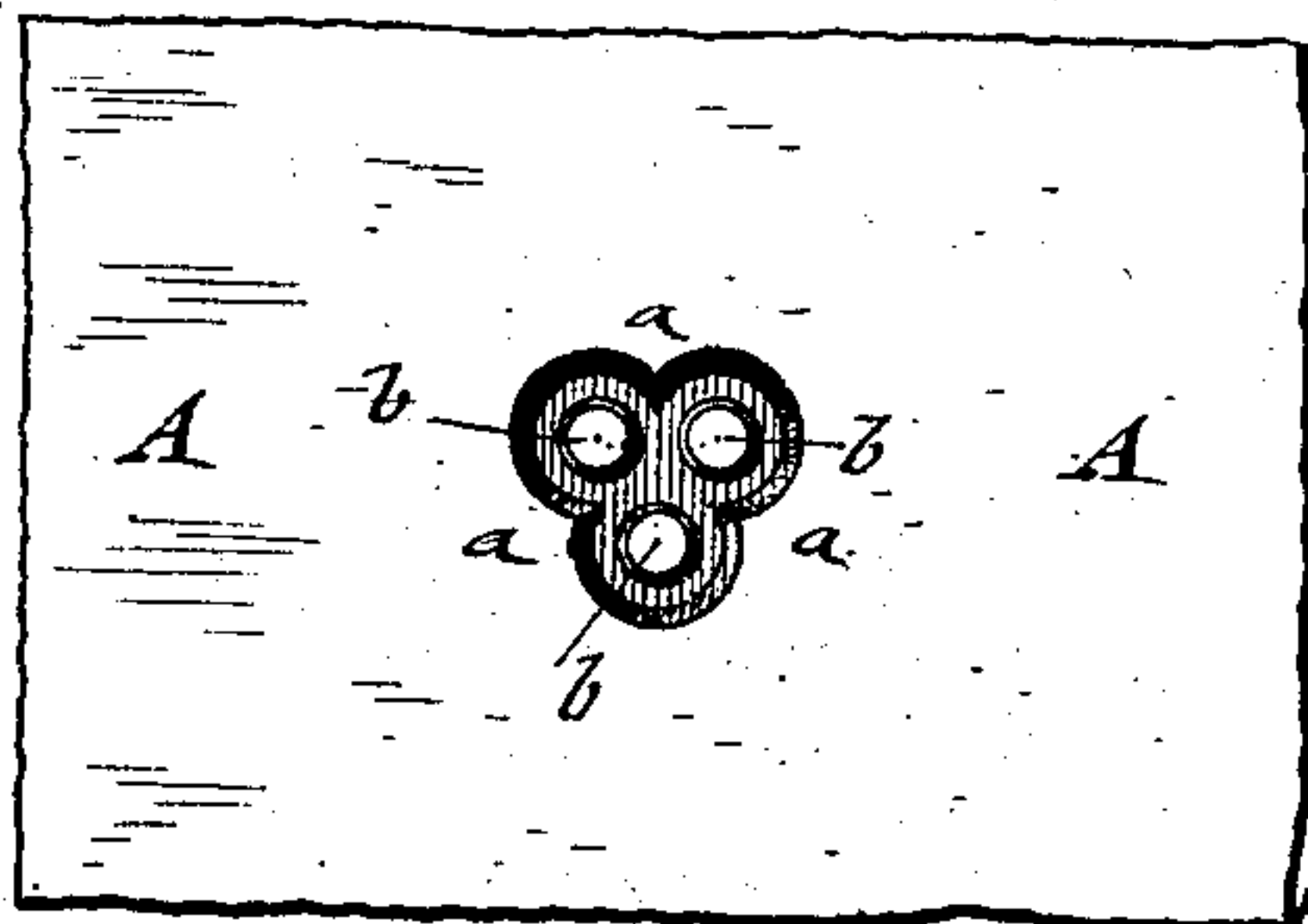
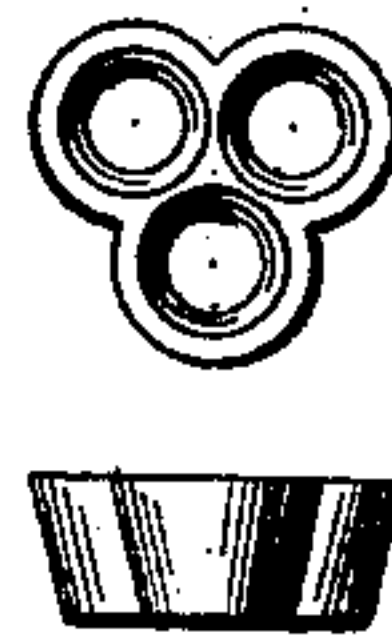


Fig. 7.



WITNESSES:

J. H. Rosenbaum.  
Carl Kapp.

INVENTOR

Christian Blancard

BY  
Goepel & Paegem  
ATTORNEYS.



# UNITED STATES PATENT OFFICE.

CHRISTIAN BLANCARD, OF NEW YORK, N. Y.

## DIE FOR MAKING CLUSTER SETTINGS.

SPECIFICATION forming part of Letters Patent No. 376,507, dated January 17, 1888.

Application filed September 16, 1887. Serial No. 249,873. (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 Cluster Settings, of which the following is a specification.

This invention relates to an improved die for making cluster settings used by jewelers for ornamenting jewelry of all kinds; and the invention consists of a die comprising a base-block provided with a conically-tapering depression and raised portions or teats in said depression, and a plunger having a conically-tapering shoulder and shaping-dies the shanks of which are locked by transverse keys to the plunger, as will appear more fully hereinafter, and finally be pointed out in the claims.

In the accompanying drawings, Figure 1 represents a vertical central section of my improved die for making cluster settings. Fig. 2 is a top view of the base-block with the female die portion. Fig. 3 is a side view of the male die or plunger. Fig. 4 is a bottom view of the same. Fig. 5 is a horizontal section of the plunger on line *xx*, Fig. 1. Fig. 6 shows a top and side view of the blank for a cluster setting, and Fig. 7 a top and side view of a finished cluster setting.

Similar letters of reference indicate corresponding parts.

In the drawings, A represents a base-block, which is provided with a female die portion formed of a conically-tapering depression, *a*, made in the shape of the cluster setting to be produced, and with conically-tapering teats *b*, of which two or more are arranged according to the shape of the cluster setting. The male die or plunger B is provided at the lower end with a conically-tapering shoulder, *d*, that fits into the upper part of the conically-tapering recess *a* of the female die, and with as many conically-tapering shaping dies *d'* as there are teats *b*. The shanks *d''* of the shaping-dies *d'* are inserted into vertical holes of the plunger B, said shanks being locked to the same by transverse pins or keys *d'''*, that engage recesses of the shanks *d''*, as shown clearly in Figs. 1, 3, and 5. The transverse locking pins or keys *d'''* hold the shaping-dies *d'* rigidly in position on the shoulder *d* of the plunger B. As many conical shaping-dies *d'* are arranged as there are openings to be formed in the cluster setting to be produced.

For making the cluster setting a blank of the general shape of the same is cut out from stock of considerably less thickness than the height of the finished setting. This blank is shown in Fig. 6, and is inserted into the depression *a*, so as to rest on the teats *b*. The plunger then descends, the shaping-dies producing tapering holes in the blank by crowding the stock in downward direction around the teats *b* and in upward direction against the shoulder *d*, so as to produce a setting of the proper height, as shown in Fig. 7. For conveniently removing the setting thus formed from the depression *a* one of the shaping-dies *d'* of the plunger B is provided with a small nick, into which the stock of the setting is crowded, as shown in Fig. 1, so that the setting adheres to the dies and is raised with the plunger, and can then be conveniently removed from the shaping-dies, while it would be connected with considerable difficulty to remove it from the depression *a* of the female die.

Cluster settings with two, three, five, or more openings can be made by means of dies of corresponding shape. They are used by jewelers as settings for precious stones in finger-rings, ear-rings, and other articles of jewelry.

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

1. A die for making cluster settings, composed of a base-block having a conically-shaped depression in the shape of the setting and teats within said depression, and a plunger having a conically-tapering shoulder at the lower end, and shaping-dies having conically-tapering heads, substantially as set forth.

2. In a die for making cluster settings, the combination, with a plunger having a conically-tapering shoulder made in the shape of the setting, of shaping-dies having conically-tapering heads and notched shanks inserted in holes of the plunger and secured in position by transverse pins or keys, 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,  
CARL KARP.