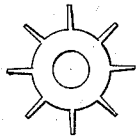
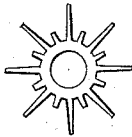


C. BLANCARD.  
 Dies for Manufacturing Jewelers' Settings.  
 No. 219,202.                      Patented Sept. 2, 1879.

*Fig: 1.*



*Fig: 2.*



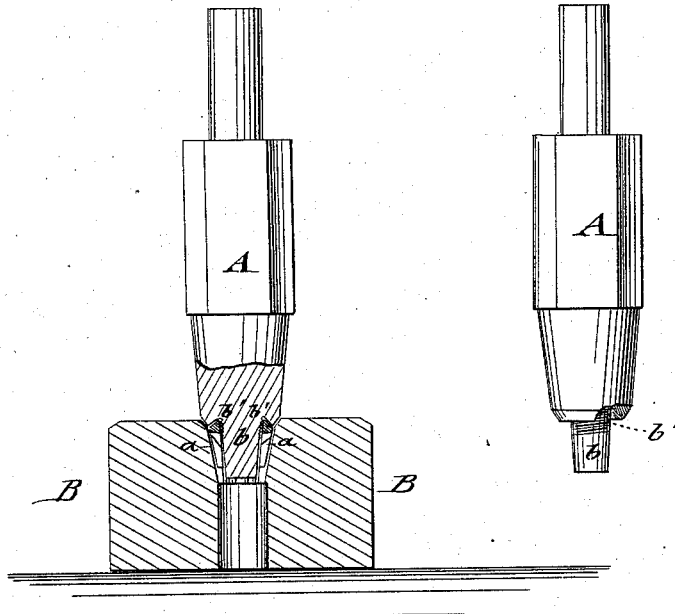
*Fig: 3.*



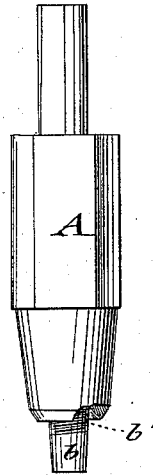
*Fig: 4.*



*Fig: 5.*



*Fig: 6.*



*Fig: 7.*



Witnesses:

*Carl Karp.*  
*Otto Bischof.*

Inventor:

*Christian Blancard*  
*by Paul Gospe*  
*Attorney.*

# UNITED STATES PATENT OFFICE.

CHRISTIAN BLANCARD, OF JERSEY CITY HEIGHTS, NEW JERSEY.

## IMPROVEMENT IN DIES FOR MANUFACTURING JEWELERS' SETTINGS.

Specification forming part of Letters Patent No. 219,202, dated September 2, 1879; application filed May 19, 1879.

### *To all whom it may concern:*

Be it known that I, CHRISTIAN BLANCARD, of Jersey City Heights, county of Hudson, and State of New Jersey, have invented certain new and useful Improvements in Dies for Manufacturing Jewelers' Settings, of which the following is a specification.

In the accompanying drawings, Figures 1, 2, 3, 4, and 7 represent the different shapes of a jeweler's setting as obtained by the passage through the dies, from the blank to the finished article. Fig. 5 represents a vertical transverse section of the dies for giving the final shape to the setting, and Fig. 6 is a side view of the male die of the same.

Similar letters of reference indicate corresponding parts.

In the manufacture of jewelers' fancy settings for diamonds and other precious stones, the settings were heretofore made entirely by hand, which required a great deal of time and labor, and made them rather expensive. Furthermore, the angles of the stays or cramps could not be set up evenly by hand in such a regular manner that the stone was securely and reliably held thereby.

Cheaper kinds of settings have been manufactured by the use of dies; but the peculiar shape of the better class of settings could not be made thereby, as the proper inward angle of inclination of the cramps to the base could not be set up by dies, owing to the fact that the setting could not be removed from the female die, by which the final shape was given.

The object of my invention is to complete jewelers' fancy settings entirely by dies, so as to turn them out with perfectly uniform angles, and dispense entirely with hand-work, except in giving them their final ornamentation.

To accomplish this I arrange the tapering center portion of the male die, by which the final shape is given to the setting, with a screw-thread, around which the stock of the base of the setting is crowded, so that the setting is lifted with the male die from the female die, and then readily removed from the former by unscrewing it from the threaded center portion of the die.

Referring to the drawings, A represents the male, and B the female, die, by which the final shape is given to the setting *a*. In Figs.

1, 2, 3, 4, and 7 are represented the different shapes which the setting receives in the passage through the shaping-dies.

The blank is first punched from a metal strip with its radial stays, then passed through a second set of dies for cutting the inner and shorter spurs, (shown in Fig. 2,) then placed into a set of dies, that bend up the stays or cramps, giving them a slight outward angle of inclination to the base, as in Fig. 3, and finally placed in reversed position into the finishing pair of dies A B, as in Figs. 4 and 5, for receiving the inward angle of inclination.

The slightly-tapering center portion, *b*, of the male die A is provided at its upper end, adjoining the annular concavity for the base of the setting, with a screw-thread, *b'*, around which the base of the setting is crowded by the force of the downward stroke.

The setting forms a screw-connection with the center portion, *b*, and enables the male die to lift it thereby bodily from the female die on the upward motion of the same. The setting may then be readily removed from the male die by being unscrewed therefrom, being then finished by turning off the thread formed at the inner circumference of the base portion. It is then ready for use, and may be ornamented in any suitable manner by hand.

The angle of all the stays is uniform, so that a superior support is obtained for the stones.

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

1. The male die shown in Fig. 3, having a screw-thread at the upper part of its center portion, for the purpose described.

2. The combination of a female shaping-die with a male die whose center portion has a screw-thread at its upper part for lifting the setting from the female die, substantially as set forth.

In testimony that I claim the foregoing as my invention I have signed my name, in presence of two witnesses, this 16th day of May, 1879.

CHRISTIAN BLANCARD.

Witnesses:

PAUL GOEPEL,  
CARL KARP.