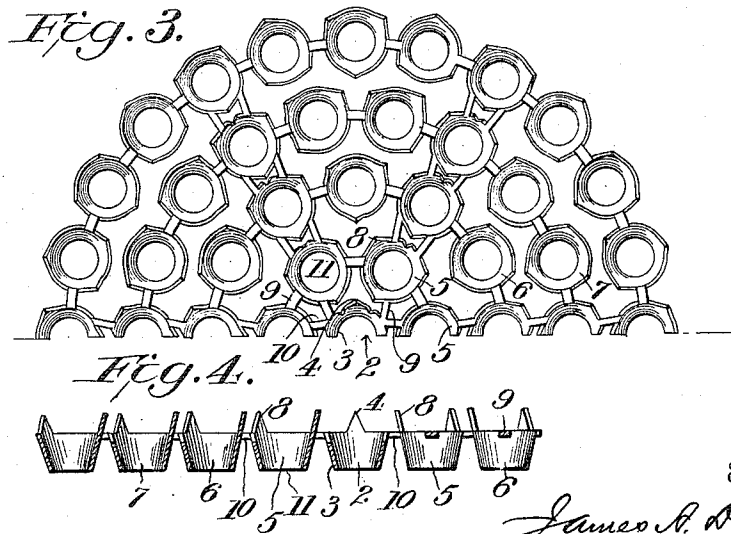
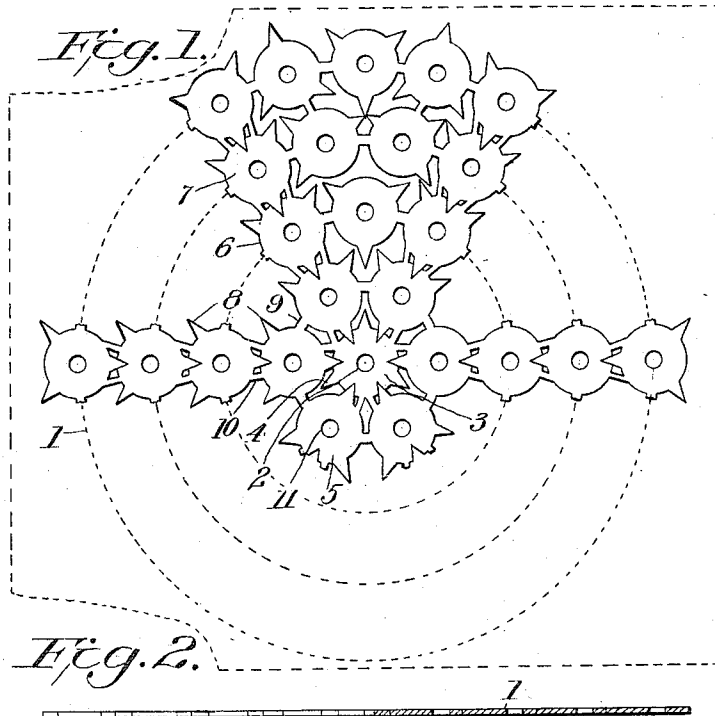


J. A. DORAN.
CLUSTER SETTING FOR JEWELRY.
APPLICATION FILED FEB. 19, 1910.

964,625.

Patented July 19, 1910.



Witnesses

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UNITED STATES PATENT OFFICE.

JAMES A. DORAN, OF PROVIDENCE, RHODE ISLAND.

CLUSTER-SETTING FOR JEWELRY.

964,625.

Specification of Letters Patent. Patented July 19, 1910.

Application filed February 19, 1910. Serial No. 544,844.

To all whom it may concern:

Be it known that I, JAMES A. DORAN, a citizen of the United States, residing at Providence, in the county of Providence and State of Rhode Island, have invented a certain new and useful Improvement in Cluster-Settings for Jewelry, of which the following is a full, clear, and exact description.

The object of this invention is to produce economically a circular cluster setting for jewels, such as stones, gems, or other ornaments, which may be given a variety of shapes, and will retain the jewels firmly in place, without the use of solder, or other extraneous means, for connecting the several settings constituting the cluster.

The cluster setting of this invention comprises a metal sheet, so cut and cupped or drawn as to produce a series of connected settings, the connections being as well inconspicuous and secure, so that the settings as a whole, in cluster form, may be given a variety of shapes, to produce pin-heads, hat-ornaments, and a great variety of articles, both utilitarian and ornamental, all as I will proceed now more particularly to set forth and finally claim.

In the accompanying drawings, illustrating the invention, in the several figures of which like parts are similarly designated, Figure 1 is a plan view. Fig. 2 is a partial section. Fig. 3 is a plan view of a sheet similar to Fig. 1, but cupped to form the seats or bearings for the jewels. Fig. 4 is a cross-section and partial elevation of the finished product shown in Fig. 3.

It will be understood that the term "jewel," herein used, includes any material or substance, such as a stone, or gem, or other ornamental article held in the setting.

In the manufacture of cluster settings, it is desirable to minimize the waste of metal and to arrange the individual settings in such cluster relation as to avoid any considerable gaps between them, and so as to obtain a cluster setting where the jewels are massed closely and with symmetrical and uniform spacing. It is also desirable to connect these several settings comprising the cluster in a secure and yet inconspicuous way, so as to avoid all soldering of the individual settings to each other, and to avoid the necessity of relying upon the workman's eye and hand for the location and arrangement of the in-

dividual settings comprising the cluster. Attempts have been made to accomplish these objects, but so far as I am aware, with indifferent results.

My invention affords a practical arrangement for accomplishing the desirable ends above referred to.

A piece of flat stock 1 is provided with a central hole 2, and sufficient area is allowed around this central hole to produce a central setting 3 and its prongs 4. Arranged in the circle around this central setting are six individual settings 5, and around this first circle of settings is arranged another circle of settings comprising twelve individual settings 6, and around this last mentioned circle of settings is arranged another circle of settings containing eighteen individual settings 7, and so on with any desired number of circles of settings. Between the several circles of settings enough metal is left to form the prongs 8, and also leave the connecting bars 9 and 10, which serve to connect the central setting with the first circle and the constituent settings of the first circle with one another and with the settings of the second circle, and the settings of the second circle with the settings of the third circle and with one another, and so on; all of the remainder of the metal being cut away as waste, and there being very little such waste. It will be observed that in some instances the collocation of prongs may make it necessary to cut portions of some prongs from the metal of the setting of adjacent settings, and this is particularly illustrated as happening in the case of the central setting and its first surrounding circle of settings. The arrangement of the prongs depends somewhat upon their number and this may be varied in accordance with the use to which the setting is to be put. After the blank has been cut as just above described, the metal is cupped as indicated in Figs. 3 and 4, so as to form a series of frusto-conical bearings or seats for the reception of the jewels, and on the edges of these bearings or seats the prongs stand up in position for use in grasping the jewels. Each of the individual settings of each circle of settings also has a central hole 11, corresponding to the hole 2; and these holes 2 and 11 serve as centers in drawing down the jewel bearings or seats; although it is possible to draw such bearings or seats without the use of a cen-

tral hole. The blank thus formed may be used and is designed as jewelers' stock, and it is capable of being bent into a great variety of shapes either before or after the drawing down of the seats.

The present invention comprises features in common with the invention forming the subject of my contemporaneous case filed of even date herewith, Serial No. 544,843, and also in common with it has similar advantages, among which are, first, a cluster setting of any number of self-connected, individual jewel settings may be economically produced, and without the use of solder or other extraneously applied connections; and, second, it is possible to arrange the individual settings of the cluster in very close proximity, whereby the brilliancy and effectiveness of the cluster setting are enhanced.

In accordance with former practice in making cluster settings, the work depended upon the correctness of the workman's eye and the steadiness of his hand to secure regular or uniform spacing, whereas by my invention absolute regularity and uniformity are secured, and the symmetry of the product assured. Furthermore, where individual settings are used, it often happens that some of them are not thoroughly soldered, and consequently soon fall off either in handling or in use.

As compared with the invention of my contemporaneous case, it will be noticed that this present invention avoids the necessity

of the preliminary coning of the blank and the cross-slotting.

What I claim is:—

1. Circular cluster setting stock, comprising a sheet of metal having a plurality of pronged bearings or seats arranged in any number of circles around a central bearing or seat, and integral connecting bars between the individual bearings or seats.

2. Circular cluster setting stock, having bearings or seats to receive the jewels, prongs on such bearings or seats, and bars connecting the central bearing or seat with its surrounding circle of bearings or seats, and bars connecting the bearings or seats of the circle of bearings or seats, all of said bars being integral with the bearings or seats.

3. A cluster setting for jewelry, comprising a central bearing or seat, and a suitable number of concentric circles of individual bearings or seats surrounding the central bearing or seat, and bars connecting the central bearing or seat and the surrounding bearings or seats, and other bars connecting the bearings or seats of the surrounding circle of bearings or seats, and all of said bars integral with the bearings or seats.

In testimony whereof I have hereunto set my hand this 17th day of February A. D. 1910.

JAMES A. DORAN.

Witnesses:

FRANCES A. DORAN,
MARY H. GIBLIN.