

No. 677,075.

Patented June 25, 1901.

R. FUCHS.
CLUSTER SETTING.

(Application filed Mar. 11, 1901.)

(No Model.)

Fig. 1.

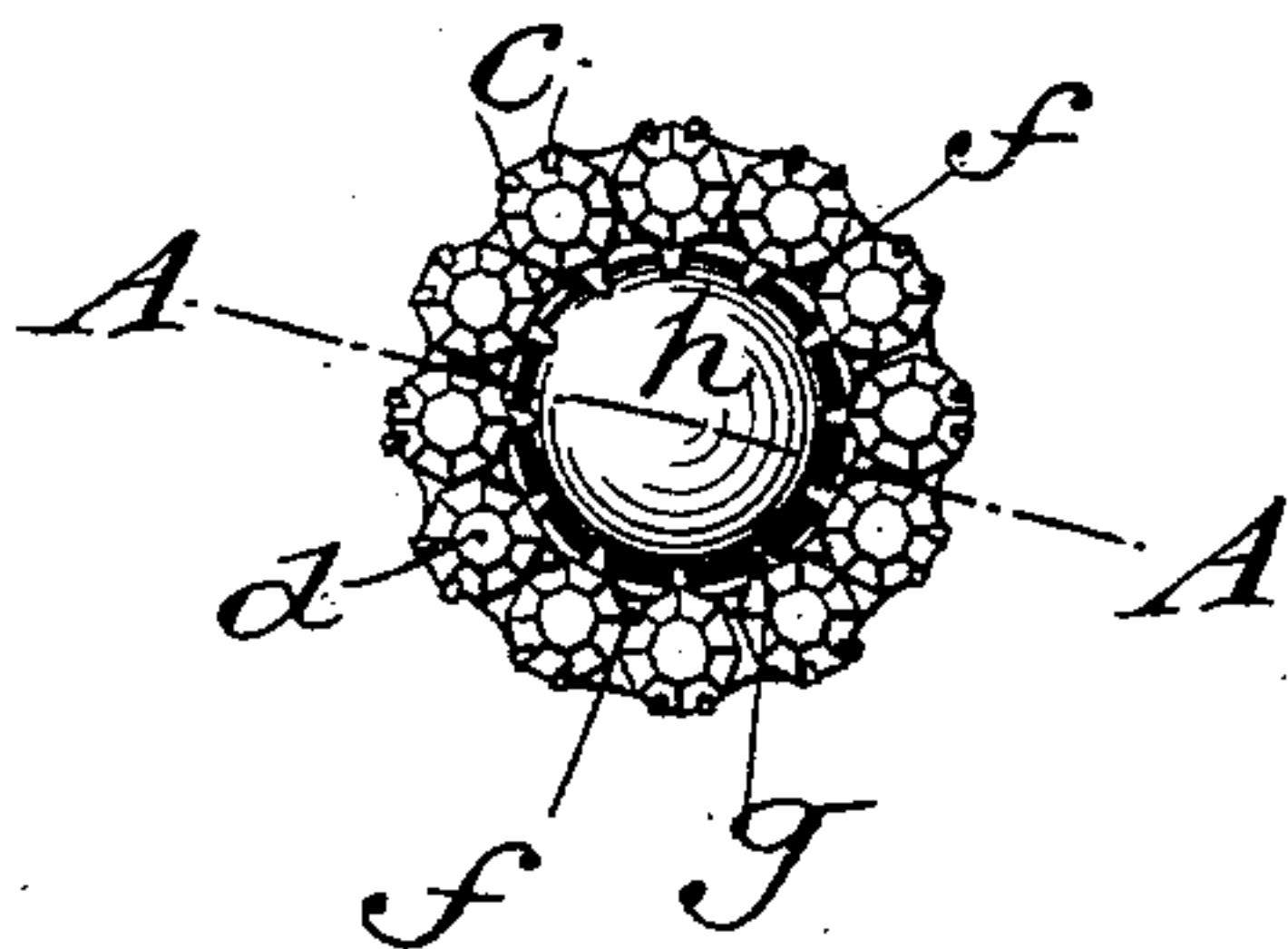


Fig. 2.

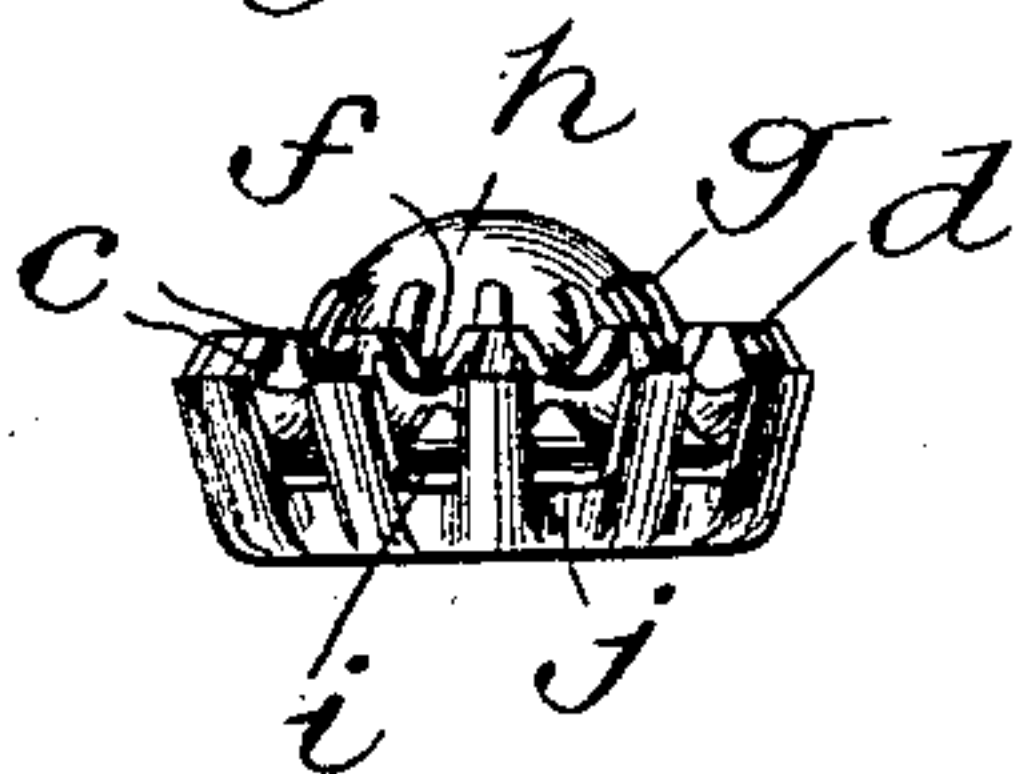


Fig. 4.

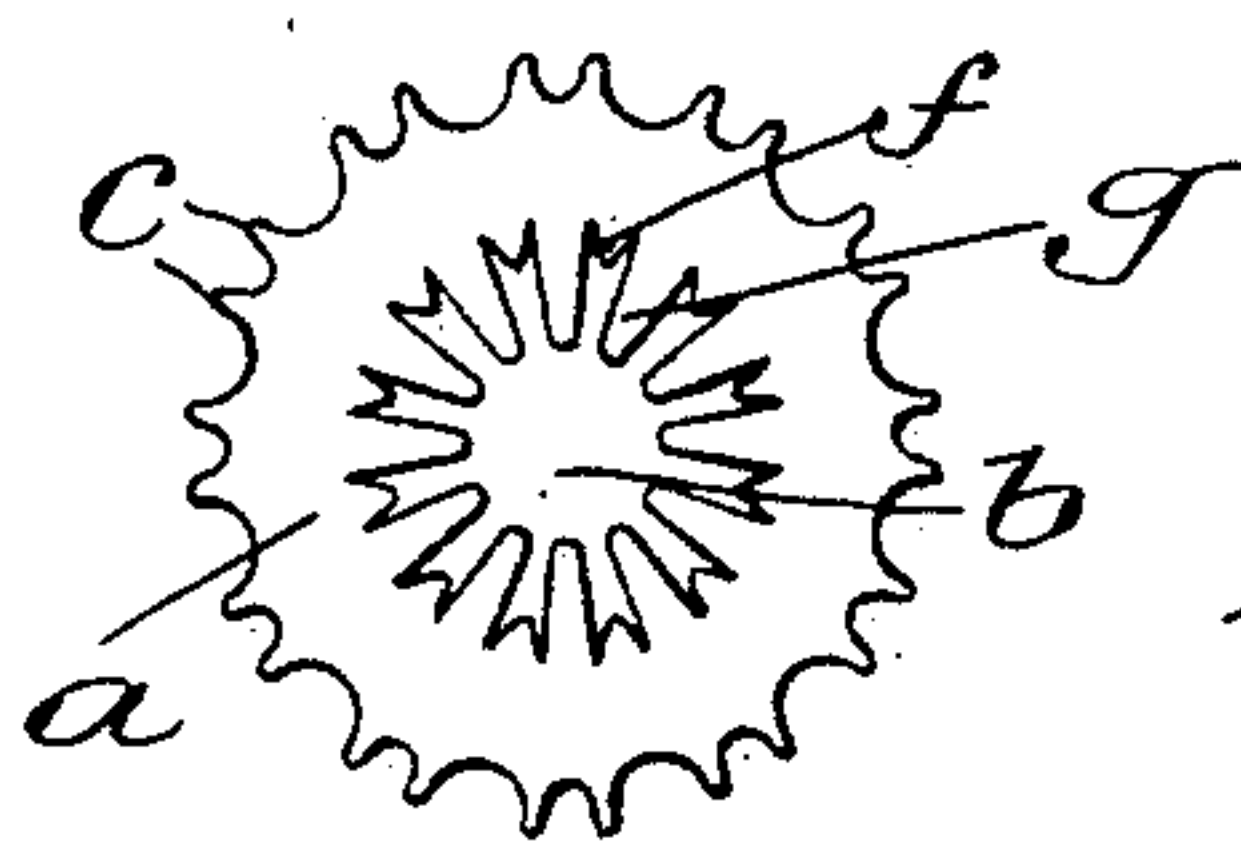


Fig. 5.

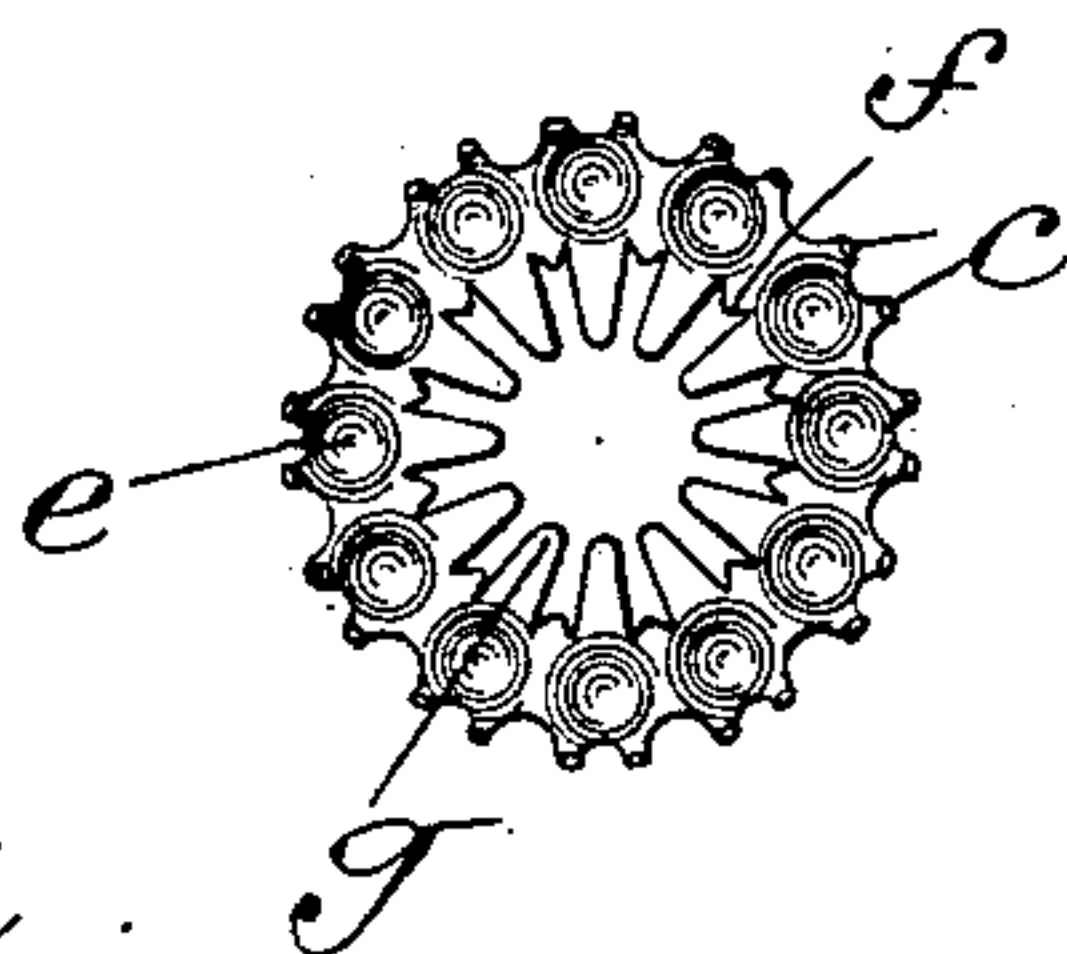


Fig. 3.

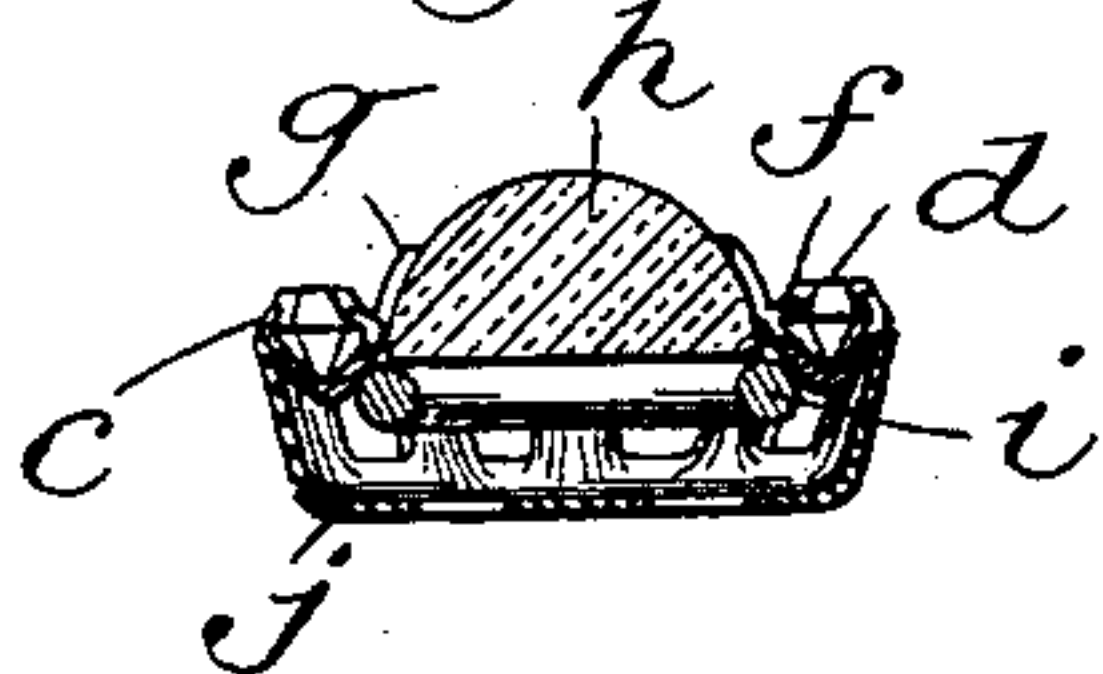


Fig. 6.

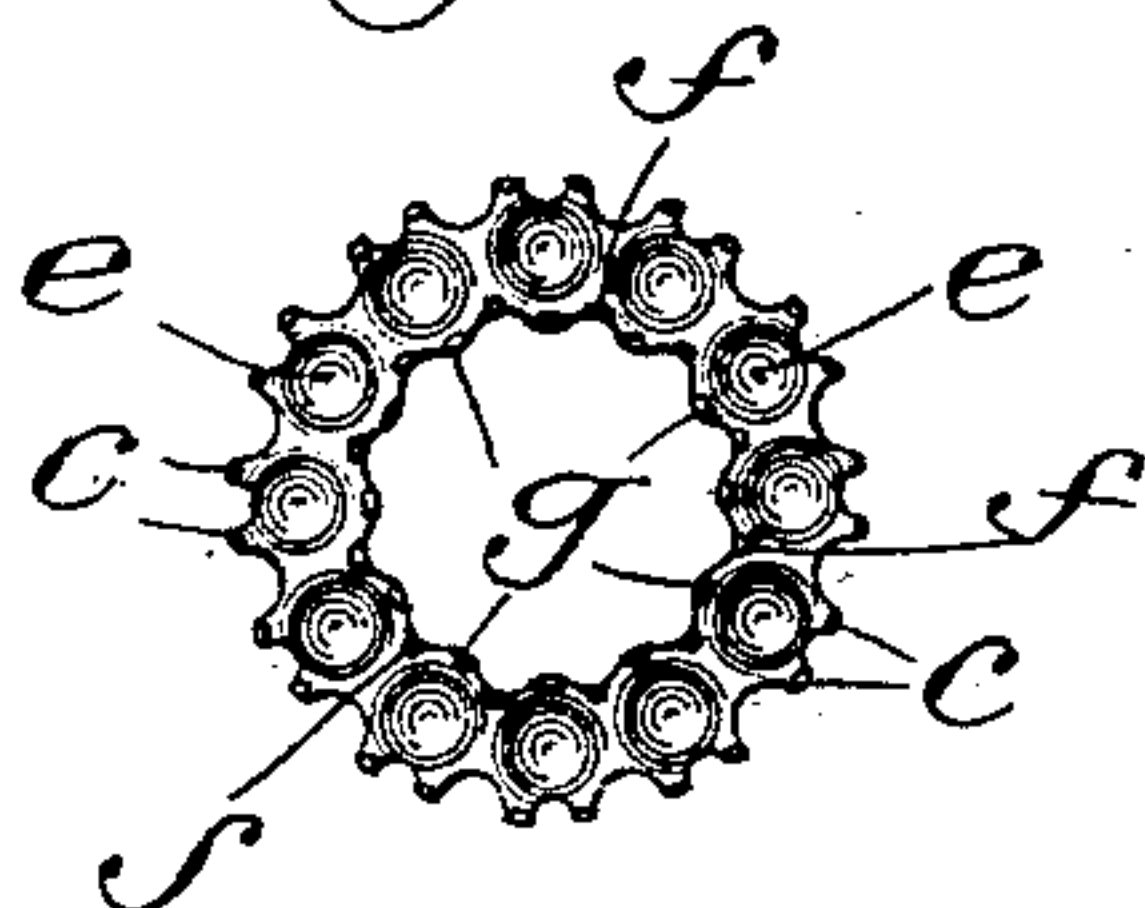


Fig. 7.

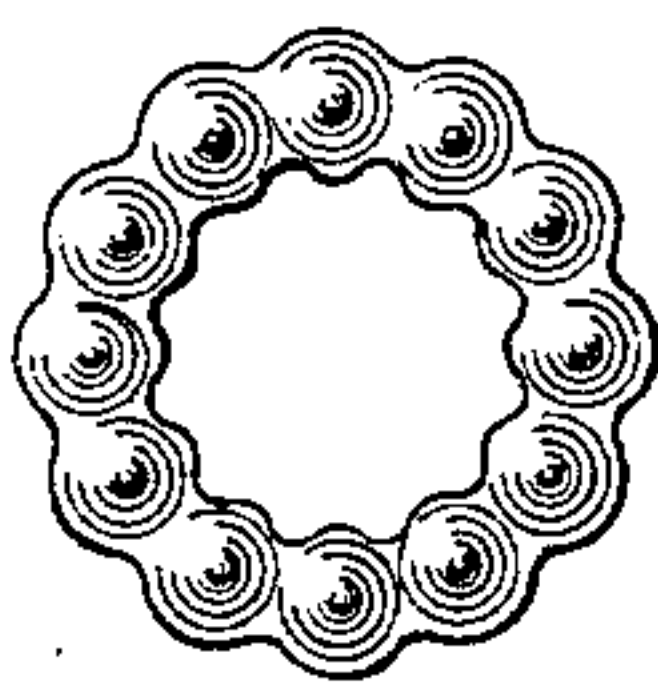
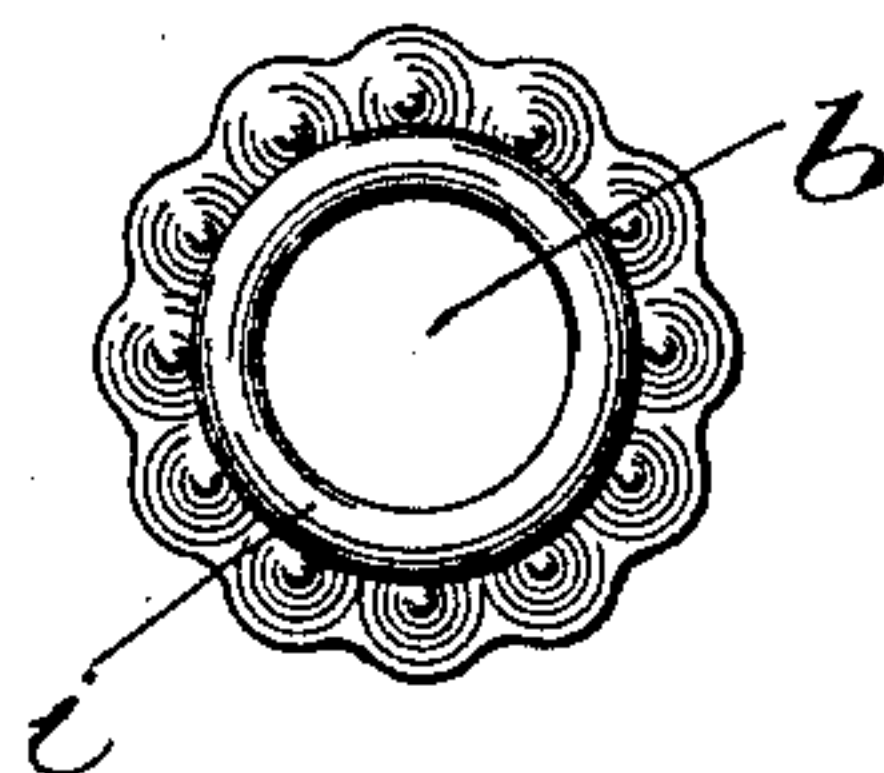


Fig. 8.



Witnesses:-
George Barry Jr.
Henry Thieme.

Inventor:-
Rudolph Fuchs
by attorneys
Brown & Luard

UNITED STATES PATENT OFFICE.

RUDOLPH FUCHS, OF NEW YORK, N. Y.

CLUSTER-SETTING.

SPECIFICATION forming part of Letters Patent No. 677,075, dated June 25, 1901.

Application filed March 11, 1901. Serial No. 50,620. (No model.)

To all whom it may concern:

Be it known that I, RUDOLPH FUCHS, a subject of the Emperor of Russia, and a resident of the borough of Manhattan, in the city and State of New York, have invented a new and useful Improvement in Cluster-Settings, of which the following is a specification.

My invention relates to an improvement in cluster-settings, and has for one object to provide a very simple and effective setting in which the cluster-stones may be held rigidly in their seats and the central stone held rigidly in its seat.

A further object is to provide a setting of the above character at a small cost.

A practical embodiment of my invention is represented in the accompanying drawings, in which—

Figure 1 represents a top plan view of the cluster-setting with the stones in position therein. Fig. 2 is a side view of the same. Fig. 3 is a central section taken in the plane of the line A A of Fig. 1. Fig. 4 is a plan view of the cluster-ring blank. Fig. 5 is a view of the ring after the cluster-stone sockets have been formed therein and the annular series of exterior prongs have been bent upwardly. Fig. 6 is a view of the ring after the annular series of interior long and short prongs have been bent upwardly. Fig. 7 is a bottom view of the ring, and Fig. 8 is a bottom view of the ring with the center-stone ring-seat in its position with respect to the cluster-ring.

The body portion of the cluster-ring is denoted by *a* and the central hole therethrough by *b*, which ring is made of some suitable sheet metal. The ring is provided with an annular series of exterior prongs *c*, arranged in pairs, each pair of prongs being adapted to engage the outer and upper portion of one of the cluster-stones *d*. The ring is further provided with an annular series of sockets *e*, arranged to receive the bottoms of the cluster-stones *d* therein. An annular series of interior short prongs *f* are provided, the said short prongs alternating with an annular series of interior long prongs *g*. Each of the short interior prongs *f* is arranged in position to be bent up into engagement with two adjacent cluster-stones at points intermediate the sockets, the said prongs serving, together

with the exterior prongs, to rigidly hold the cluster-stones in position in their sockets.

The center stone of the cluster is denoted by *h*, and the seat therefor is denoted by *i*, which seat in the present instance is shown as being in the form of a ring, which is soldered or otherwise permanently secured to the under face of the cluster-ring *a*, so as to project inwardly beyond the inner walls of the opening *b* in the cluster-ring.

After the long prongs *g* have been bent upwardly to permit the insertion of the center stone *h* of the cluster into its position on its seat the said prongs may be bent inwardly into engagement with the upper portion of the said central stone for holding it firmly in position.

A bottom plate *j* of any well-known or approved form may be soldered or otherwise secured to the cluster-ring to complete the setting, if so desired, the said plate forming no part of this present invention.

It is evident that slight changes might be resorted to in the form and arrangement of the several parts without departing from the spirit and scope of my invention. Hence I do not wish to limit myself strictly to the structure herein set forth; but

What I claim is—

1. In a cluster-setting, a sheet-metal ring having an annular series of exterior prongs and an annular series of interior short prongs arranged to hold the stones of the cluster in position, the said ring being further provided with an annular series of interior long prongs arranged to engage the central stone of the setting, substantially as set forth.

2. In a cluster-setting, a sheet-metal ring having an annular series of stone-receiving sockets therein, an annular series of exterior prongs, and an annular series of interior short prongs arranged to hold the cluster-stones in their positions within the sockets, the said ring being further provided with an annular series of long prongs arranged to engage the central stone of the setting, substantially as set forth.

3. In a cluster-setting, a sheet-metal ring having an annular series of exterior prongs, an annular series of interior short prongs arranged to hold the cluster-stones in position, the said ring being further provided with an

annular series of interior long prongs arranged to engage the central stone of the setting and a seat for the central stone permanently secured to the ring, substantially as set forth.

4. In a cluster-setting, a sheet-metal ring having an annular series of exterior prongs, and an annular series of interior short prongs arranged to hold the cluster-stones in position, the said ring being further provided with an annular series of interior long prongs arranged to engage the central stone of the cluster and a seat-ring for the central stone permanently secured to the under face of the cluster-ring, substantially as set forth.

5. In a cluster-setting, a sheet-metal ring having an annular series of stone-receiving sockets therein, an annular series of exterior prongs arranged to engage the stones; an annular series of interior short prongs arranged to engage the stones at points intermediate

the sockets and an annular series of interior long prongs arranged to engage the central stone of the cluster, substantially as set forth.

6. A cluster-setting blank, having a hole therethrough, an annular series of exterior prongs and annular series of interior long and short prongs, substantially as set forth.

7. A cluster-setting blank having a hole therethrough, an annular series of exterior prongs and annular series of interior alternating long and short prongs, 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 7th day of March, 1901.

RUDOLPH FUCHS.

Witnesses:

FREDK. HAYNES,
HENRY THIEME.