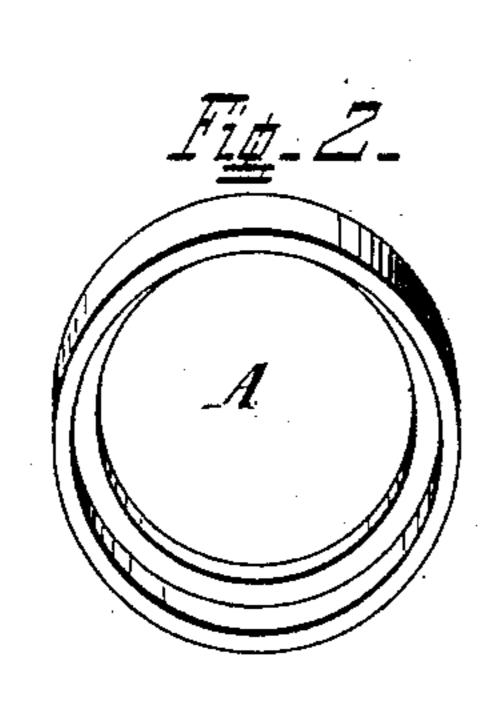
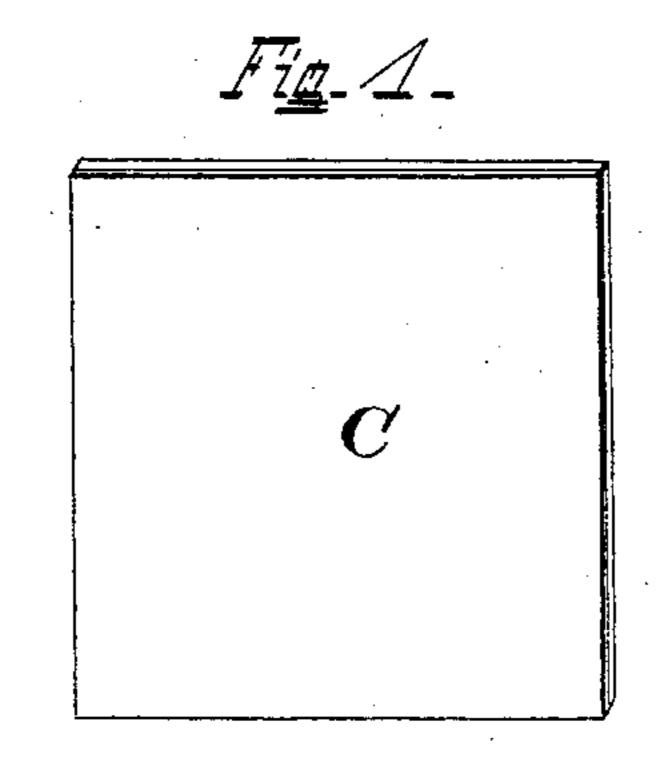
J. C. DUEBER.

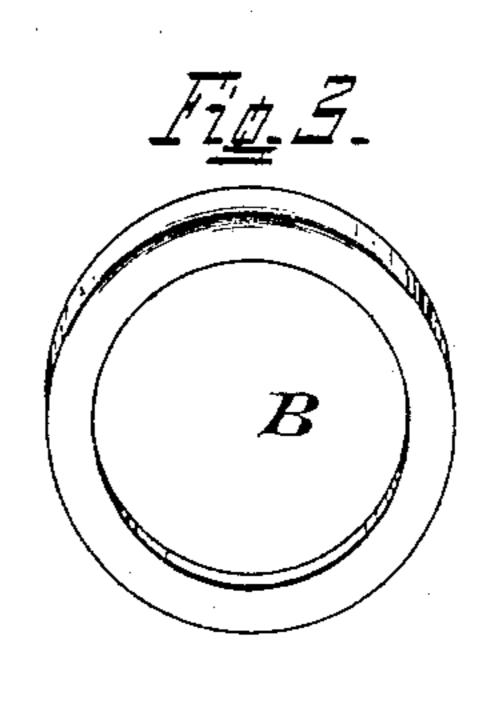
WATCH CASE CENTER.

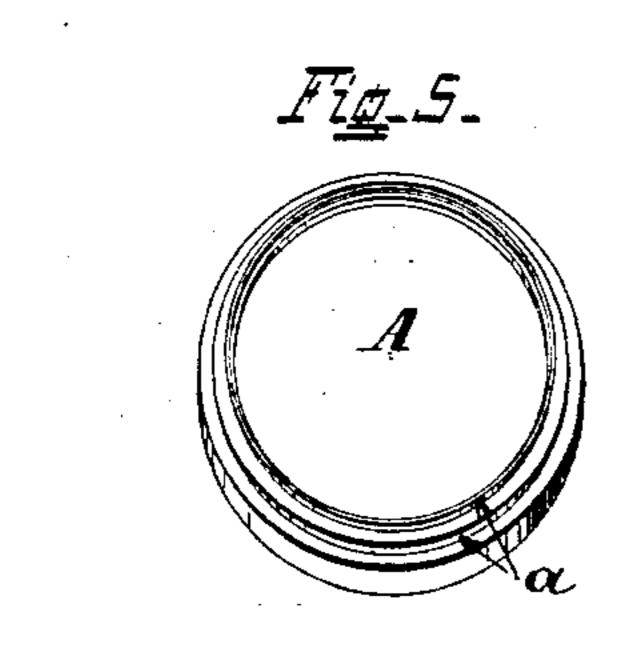
No. 290,870.

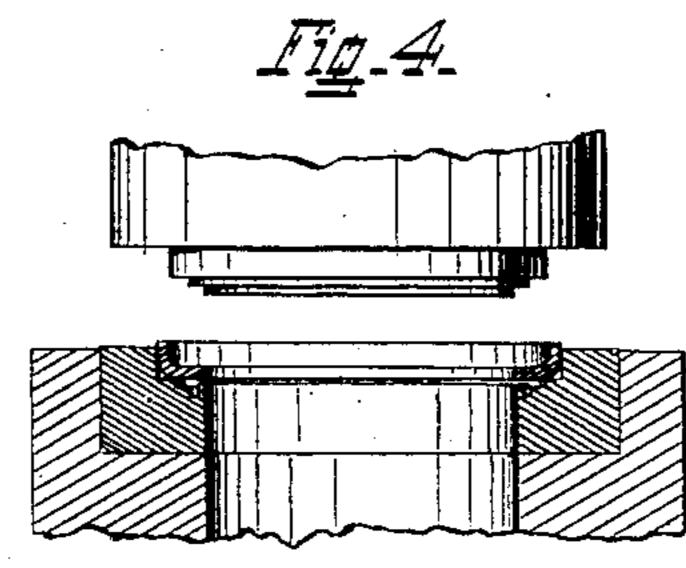
Patented Dec. 25, 1883.

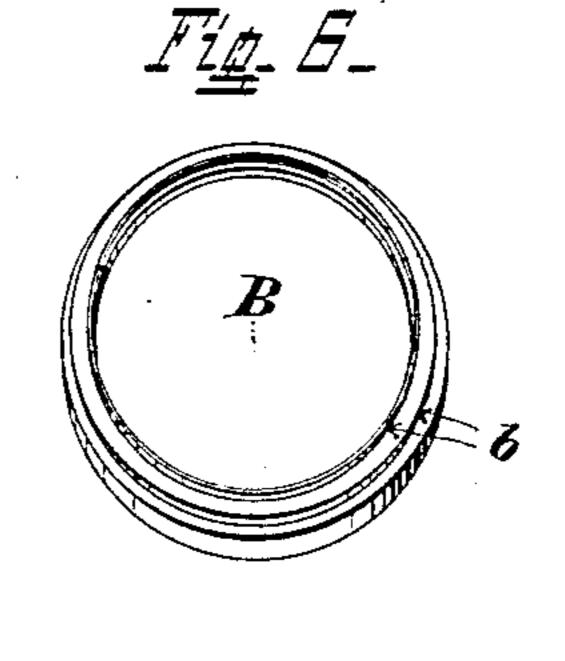


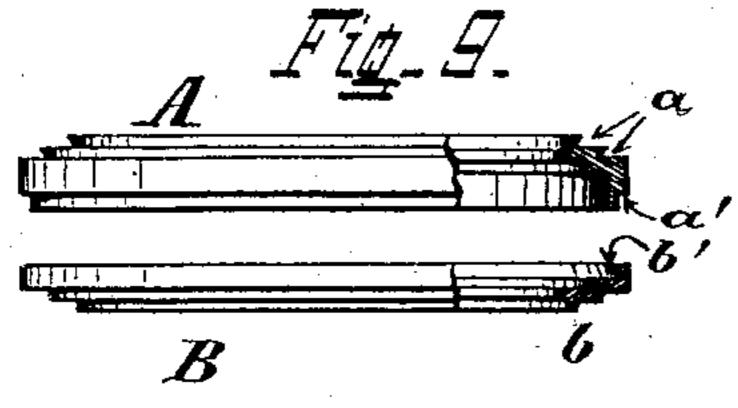


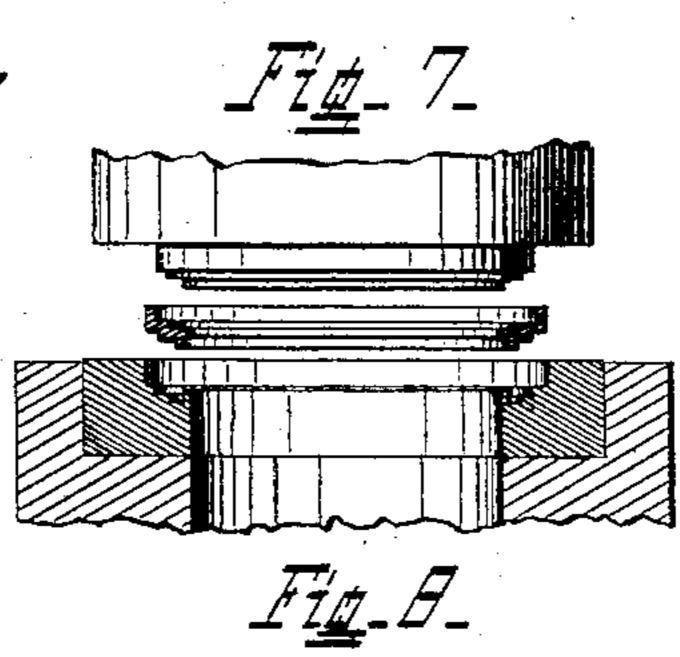


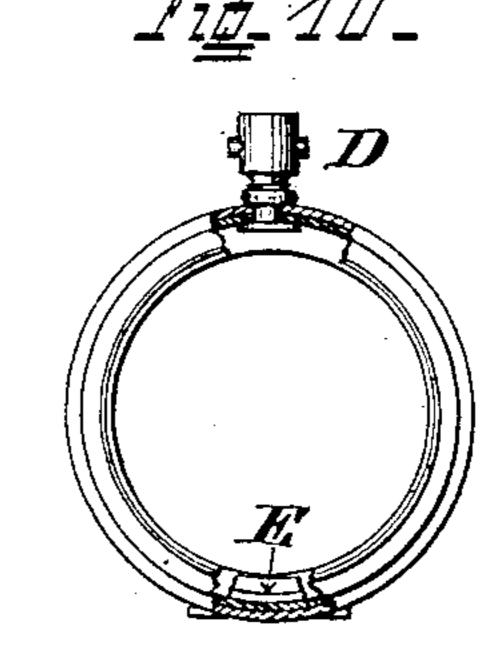


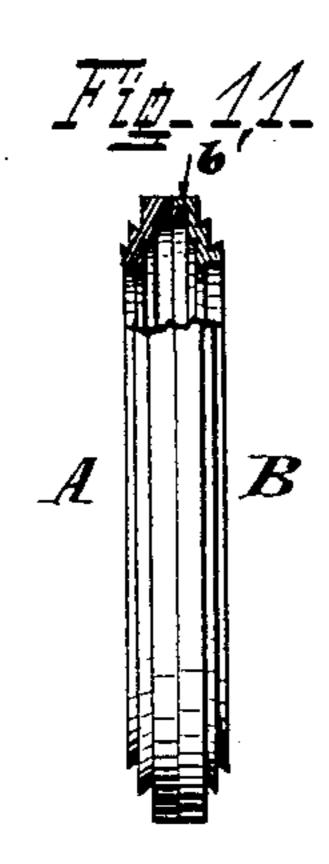


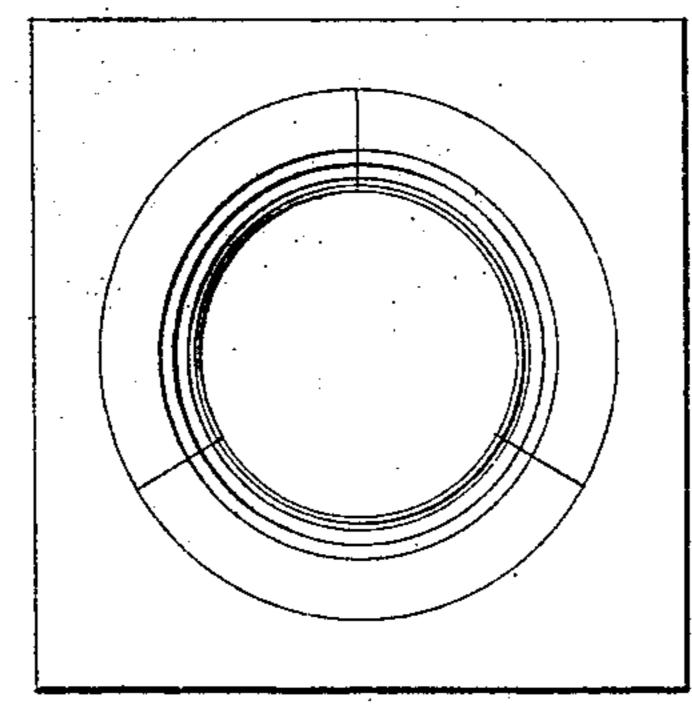












Altest Carl Spengel Helmight INVENTOR
INVENTOR
INVENTOR
INFORMATIVES.

United States Patent Office.

JOHN C. DUEBER, OF NEWPORT, KENTUCKY.

WATCH-CASE CENTER.

SPECIFICATION forming part of Letters Patent No. 290,870, dated December 25, 1883. Application filed September 26, 1883. (No model.)

To all whom it may concern:

Be it known that I, John C. Dueber, of | Newport, Campbell county, Kentucky, have | invented a new and useful Watch-Case Cen-5 ter, of which the following is a specification.

My invention relates to the construction of a two-part ring-formed middle member of a watch-case, technically known as the "center," and is more particularly designed to facilitate 10 and perfect the manufacture of those watchcase centers that are formed from sheet-brass that has been gold-plated on one side, commonly known as "gold rolled plate." In the customary mode of forming such centers by "spin-15 ning" from a "hoop" of the plated material, it happens that (even in the hands of the highlypaid artisans usually employed on this work) very many pieces are rendered unfit for making up into cases, in consequence of the rupt-20 ure of the skin of precious metal at the sharp salient angles of the "steps" ("snaps") required to enable the caps, backs, and bezels to snapsnugly to the center. Moreover, the tools employed are very costly. This loss and dam-25 age I avoid by stamping out of the rolled plate two annular parts whose meeting edges are preferably coincident with the middle plane or equator of the watch-case, and are adapted to be lapped and then locked together, as here-

even by inferior workmen, at a great saving of material and wages, and also of expensive tools, as before stated. In the accompanying drawings, Figure 1 represents an ordinary "blank" of "rolled gold plate." Figs. 2 and 3 represent annular pieces stamped out from such blanks. Fig. 4 represents by longitudinal section such a 40 piece about to be subjected to the second operation in a suitable die. Figs. 5 and 6 represent two annular pieces (for the front and rear

30 inafter explained. Centers thus manufactured

can be more perfectly and accurately finished,

halves of the center, respectively) thus produced. Fig. 7 represents by longitudinal sec-45 tion such a piece about to be subjected to the is a side view of the front annular piece, and partly side and partly sectional view of the 50 rear annular piece as it appears after the desired acute angle has been imparted to the

snaps and the desired joint to the overlap-

ping lips. Figs. 10 and 11 are respectively l

an equatorial and an axial section of a finished

center constructed on my plan.

A and B represent annular pieces which, after undergoing a series of manipulations, about to be described, become the front or "male" and the rear or "female" members of my improved center. These members 60 are stamped from customary rolled gold plate, of which C may represent a piece. These annular pieces A and B, having, by means of a suitable die, Fig. 4, been made to assume the form shown, respectively, in Figs. 5 and 6, 65 in which the snaps a b are rectangular, are subsequently, by means of another die, Fig. 7, pressed into a form in which the snaps become acutely angular, as shown in Figs. 9 and 11. The two thus-formed annular pieces 70 being then placed together in a suitable clamp or chuck within a lathe, the male lip a' is upset or turned outward, so as to interlock within the inwardly-receding lip b' of the female member by means of any convenient burnish- 75 ing, spinning, or knurling tool, as shown in Fig. 11. The seam or joint may be closed and rendered invisible, either by burnishing or knurling. Finally, either a pendant-bearing, D, or hinge-bearing E, (one or both,) being Sc soldered in place against the concave wall of the center, operates to permanently lock the parts immovably together. Soldering or brazing may also be applied over the joint on the concave interior wall, if desired.

In another application of even date herewith I have described a two-part center in which the lips are secured together by screwthreading, which is more accurate, generally; but in the present invention there is an ad- 90 vantage over the screw-thread, as in the spun joint there is less waste of metal and less labor in its production. Both forms have distinct advantages and are distinct articles of manufacture.

I claim as new and of my invention—

A watch-case center consisting of two annular parts or zones, one part having a lip, third operation in a suitable die. Fig. 8 is a |b'|, projecting therefrom, and the other part plan of the lower member of said die. Fig. 9 | having a lip, a', "spun" to the other lip, and 100 the locking-piece D, as set forth.

In testimony of which invention I hereunto set my hand.

Attest: JOHN C. DUEBER. GEO. H. KNIGHT, SAML. S. CARPENTER.

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