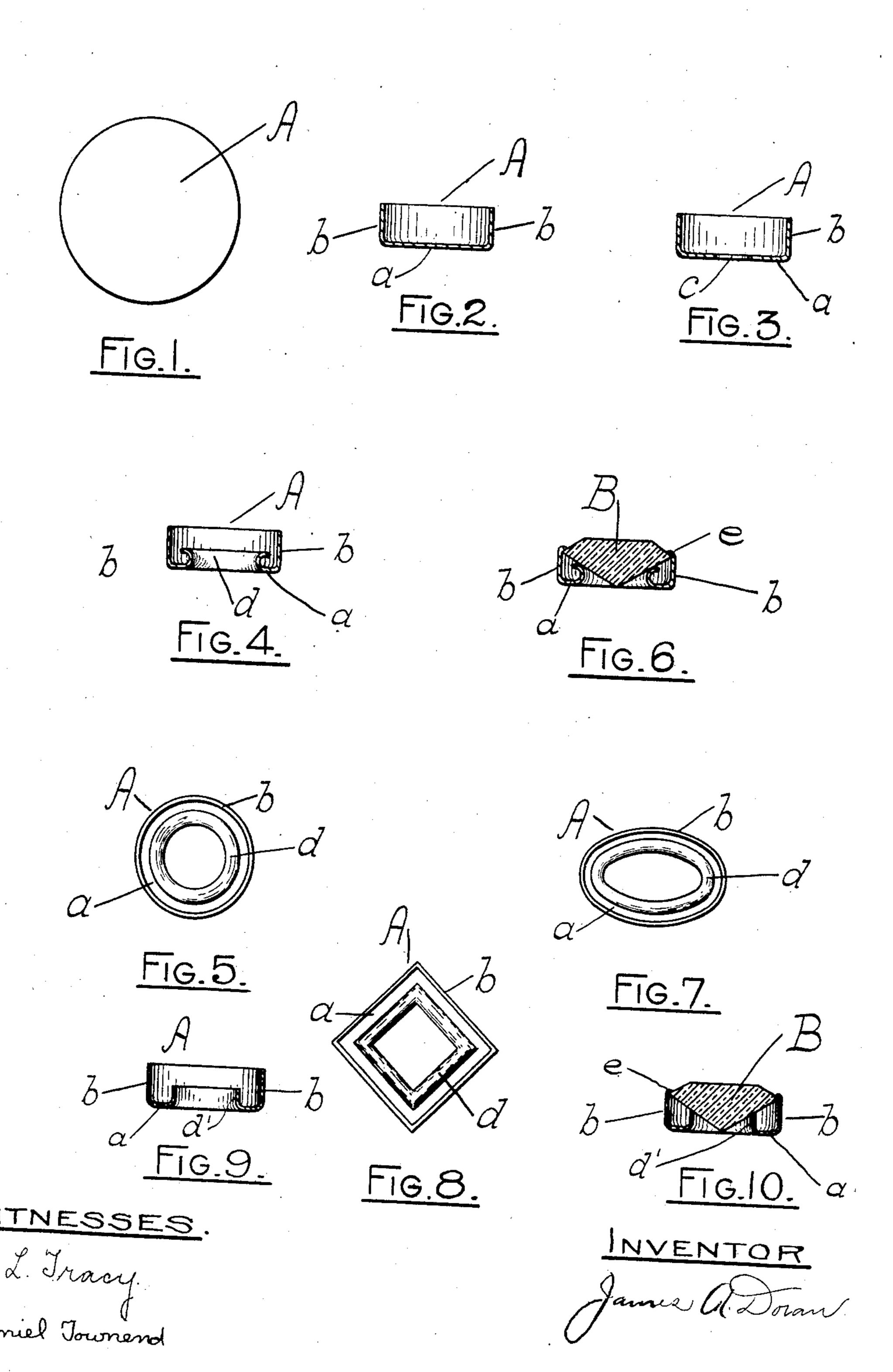
## J. A. DORAN. SETTING. APPLICATION FILED JAN. 16, 1906.



## UNITED STATES PATENT OFFICE.

JAMES A. DORAN, OF PROVIDENCE, RHODE ISLAND.

## SETTING

No. 829,388.

Specification of Letters Patent.

Patented Aug. 28, 1906.

Application filed January 16, 1906. Serial No. 296,246.

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 certain new and useful Improvements in Settings, of which the following is a specification.

My invention relates to what is known as "box-settings," and has for its object a structure of this class that is capable of construction from stock-plate and which shall be light in weight, cheap in cost, secure in engagement, and of a minimum of parts.

A further object is to secure the enumerated advantages in a structure which shall admit a maximum of light to the stone from the rear.

To the above ends my invention consists in a setting constructed from a single piece of stock-plate so formed as to engage the gem by the upper and lower margins of the setting.

In the drawings which form a part of this specification, Figure 1 is a plan of the original blank or planchet; Fig. 2, a central transverse section of the same after the cupping operation; Fig. 3, a like section of the same after the piercing operation; Figs. 4 and 5, a sectional and top plan view, respectively, of the same after the turning or rolling operation; Fig. 6, a central transverse section of the setting engaging a stone; Figs. 7 and 8, plan views of my setting in elliptical and rectangular forms, respectively; and Figs. 9 and 10, a modified construction of my setting unmounted and mounted, respectively.

Like reference-letters indicate like parts throughout the views.

To construct the setting, a planchet A is

struck up from stock-plate and cupped up 40 with the fine metal outside into the form shown in Fig. 2, having a base a and side wall b. The base is then pierced to provide a circular opening c. By suitable tools the margin of the base adjacent the opening c is up- 45 turned or rolled to form an upright flange d, adapted to support a gem B. The upper margin of the wall b is then bent in and over the edge of the gem, forming an annular flange e. In Figs. 4, 5, 6, 7, and 8 the up- 50 right flange d is shown curved in cross-section. This flange may be vertical, as shown at d' in Figs. 9 and 10. It will be observed that the gem B is firmly held by the flanges e and d, that no backing-ring is employed, that 55 all exposed surfaces are of fine metal, and that ample space is afforded for the access of light to the gem.

What I claim is—

1. In a box-setting the combination with 60 the gem, of a setting-wall provided upon its upper portion with an inturned retaining-flange for engaging the gem, an annular base integral with the wall, and means upon the base and integral therewith for support- 05 ing the gem.

2. In a box-setting the combination with the gem, of a vertical setting-wall provided upon its upper portion with an inturned retaining-flange engaging the gem, an annular 70 base integral with the wall, and a flange upon the base adapted to support the gem.

In testimony whereof I have affixed my signature in presence of two witnesses.

JAMES A. DORAN.

Witnesses:

Daniel L. Donovan, Joseph G. Doran.