

No. 815,191.

PATENTED MAR. 13, 1906.

J. MARTIN.
SPIRIT LEVEL.

APPLICATION FILED NOV. 3, 1905.

Fig. 1.

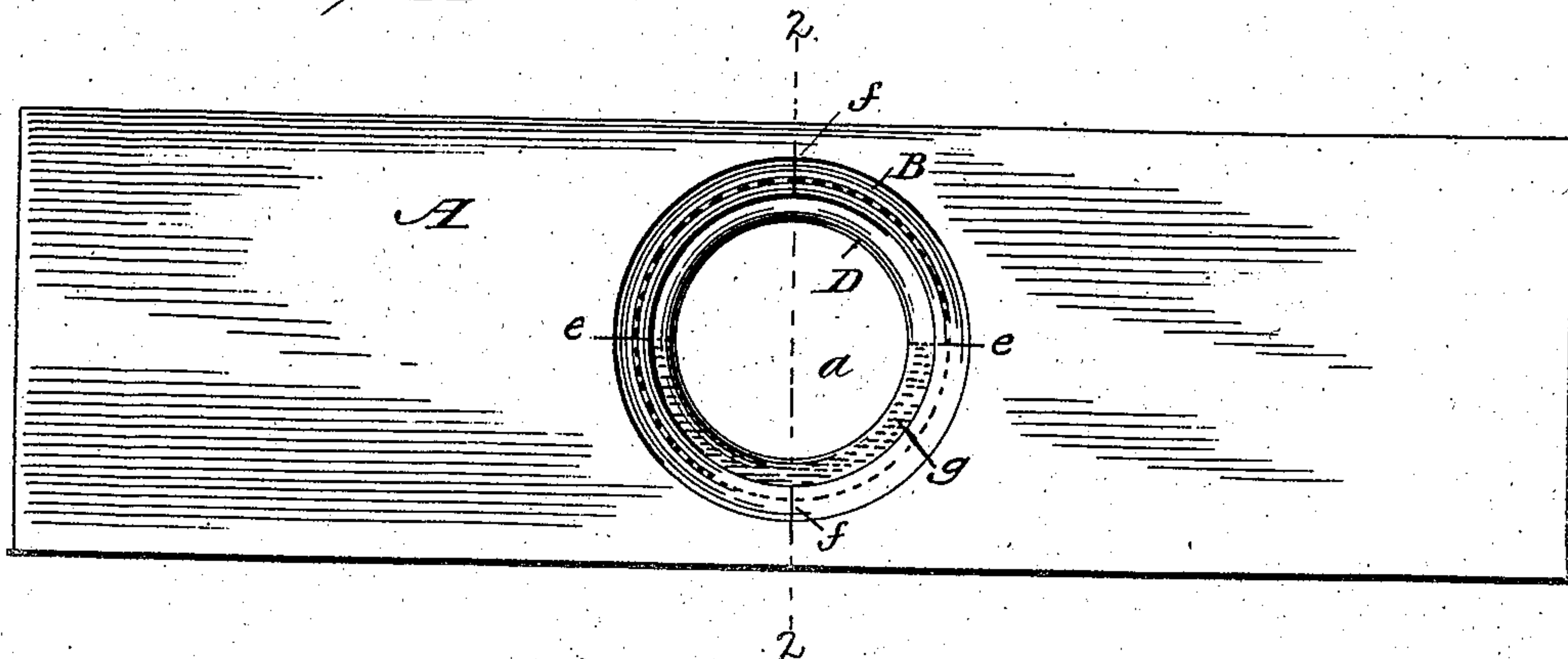


Fig. 2.

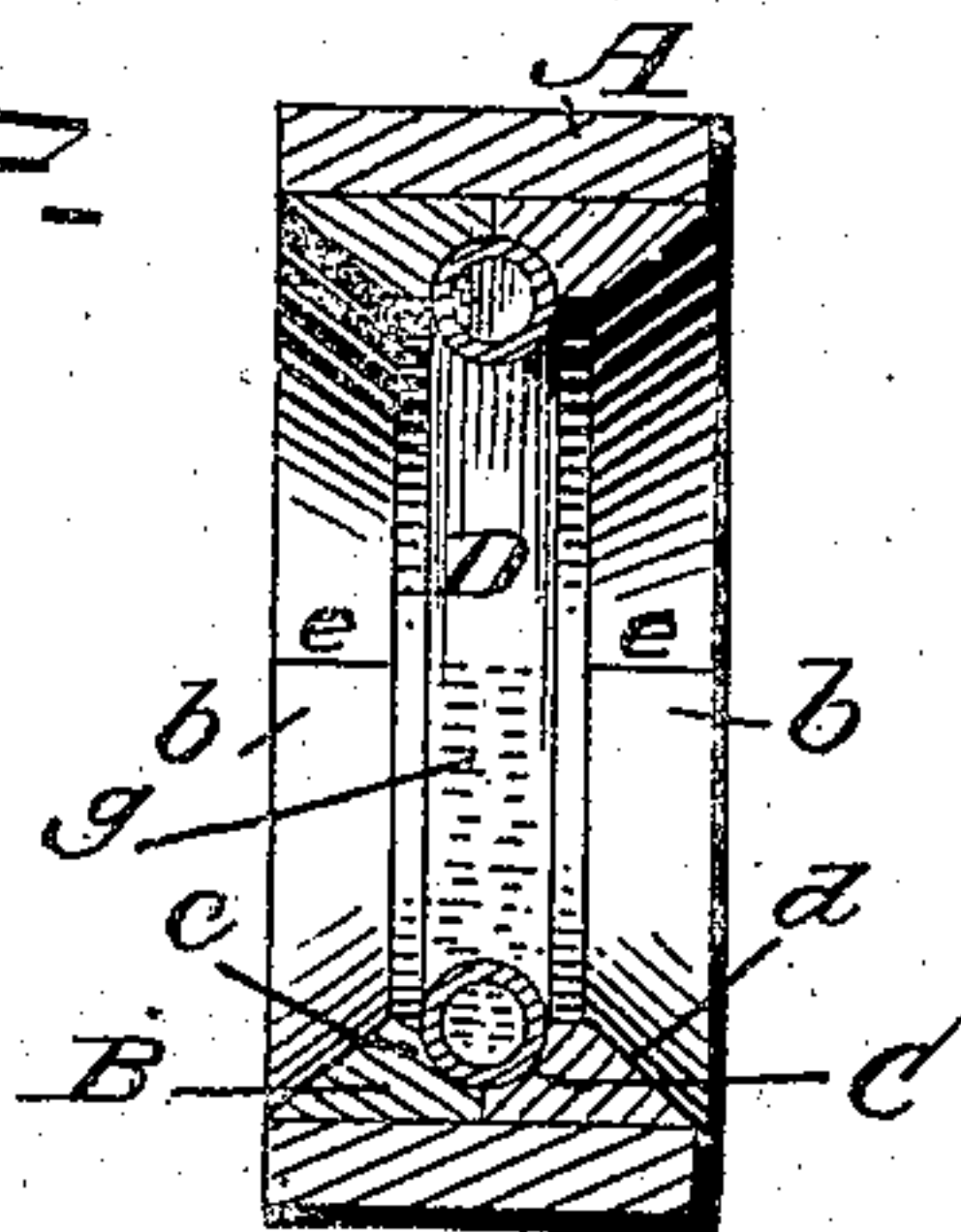


Fig. 3.

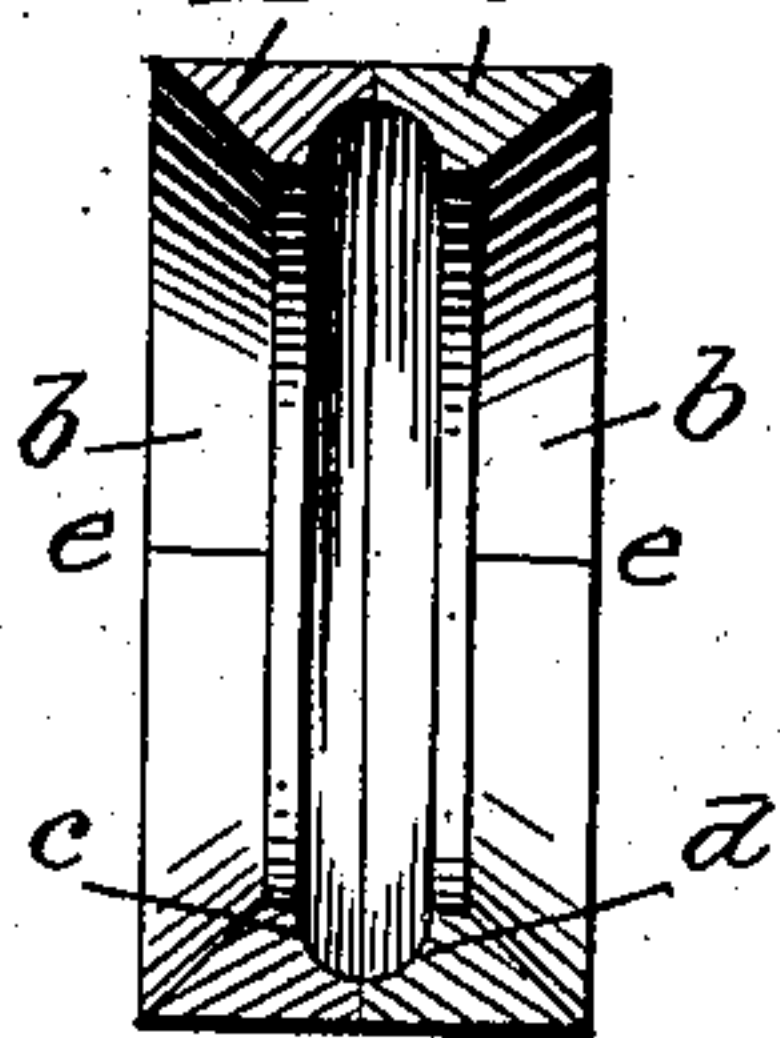
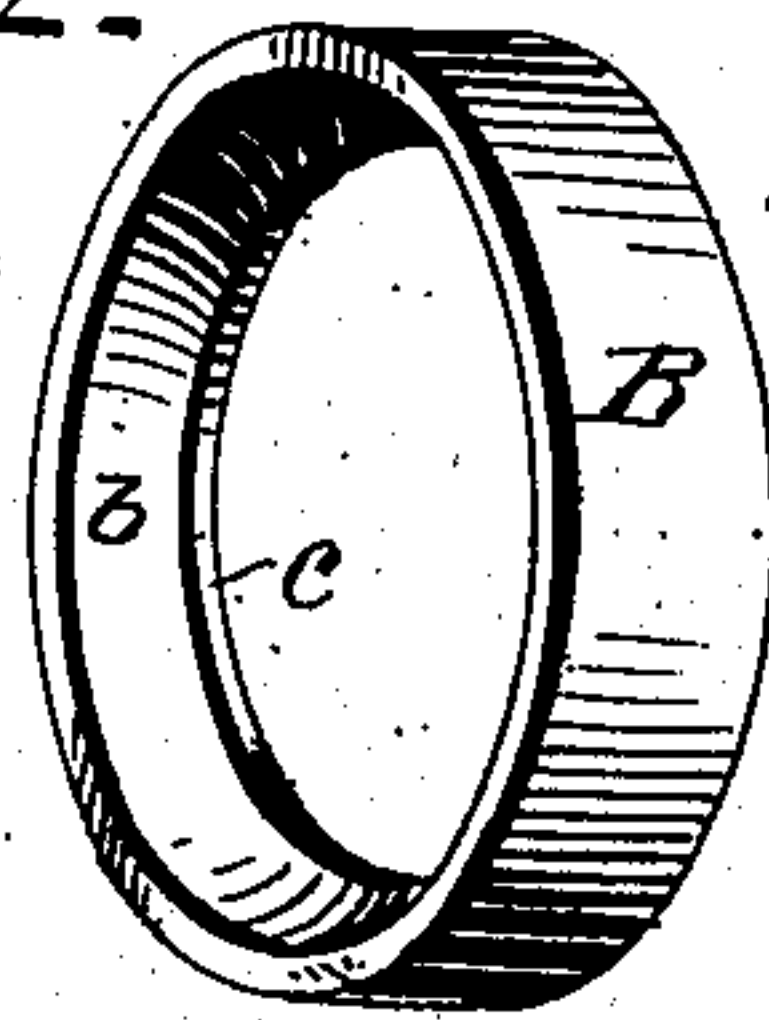


Fig. 4.



WITNESSES:

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SPIRIT-LEVEL.

No. 815,191.

Specification of Letters Patent.

Patented March 13, 1906.

Application filed November 3, 1905. Serial No. 285,665.

To all whom it may concern:

Be it known that I, JOHANN MARTIN, a citizen of the United States, residing at Galveston, in the county of Galveston and State of Texas, have invented certain new and useful Improvements in Spirit-Levels; and I do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the annexed drawings, making a part of this specification, and to the letters of reference marked thereon.

The present invention has for its object to provide a spirit-level that will be simple in construction and easily used in determining vertical and horizontal planes with comparative accuracy; and it consists in a spirit-level constructed substantially as shown in the drawings and hereinafter described and claimed.

Figure 1 of the drawings is a side elevation of a spirit-level constructed in accordance with my invention; Fig. 2, a vertical cross-section thereof, taken on line 2 2 of Fig. 1. Fig. 3 is a sectional elevation of the two sections of bushing when together. Fig. 4 is a perspective view of one of the sections of bushing.

In the accompanying drawings, A represents the stock or body of the level of any suitable form, size, and construction and of wood or other preferred material and has an opening through its side of circular form, as indicated at *a*. Within the opening *a* is located a bushing comprising two circular sections B C, each section having an outer beveled face *b*, so that a clear view of the spirit-glass will not be obstructed. The inner opposite sides of the two sections B C have curved seats *c d*, respectively, so that when the two sections are together a semicircular seat will be formed for the spirit-glass to hold it in position within the opening *a*.

After one of the bushing-sections is secured in place within the opening of the stock or body of the level the spirit-glass is placed in position, after which the other bushing-section is secured in place by any preferred means which will securely hold the spirit-glass in place, as shown in Fig. 2 of the drawings.

The stock or body of the level and the

spirit-glass are provided with indicator-marks *e f*, so that they may be used either as a level or plumb, as would be required, the spirit-glass containing the necessary amount of liquid, such as alcohol, as indicated at *g*.

The essential feature of the invention resides in the two bushing-sections B C when constructed as hereinbefore described, which provides a simple and practical means for securing the spirit-glass within the opening of the stock or body of the level.

After one of the bushing-sections is placed in position within the opening in the body or stock of the level the spirit-glass is then placed against the bushing-section so that it will rest against the curved seat thereof, after which the other bushing-section is placed against the spirit-glass within the opening of the stock or body of the level. The curved seat upon the inner side of each bushing-section when the two sections are together form a semicircular seat for the spirit-glass, which will securely hold it in position within the opening without any screws or other like fastenings.

The two bushing-sections are separate and independent of the stock or body of the level, as well as independent of each other, and consequently can be applied to any stock or body after the necessary opening is formed therein.

Having now fully described my invention, what I claim as new, and desire to secure by Letters Patent, is—

A spirit-level comprising a stock or body with opening therethrough, a bushing independent of said stock or body and consisting of two separable and independent sections each having an outer beveled face and an inner curved seat, said seats when together forming a semicircular seat and a spirit-glass held within the seat by the two bushing-sections, substantially as and for the purpose set forth.

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

JOHANN MARTIN.

Witnesses:

JULIUS STOCKFLETH,
GEO. AMBURN.