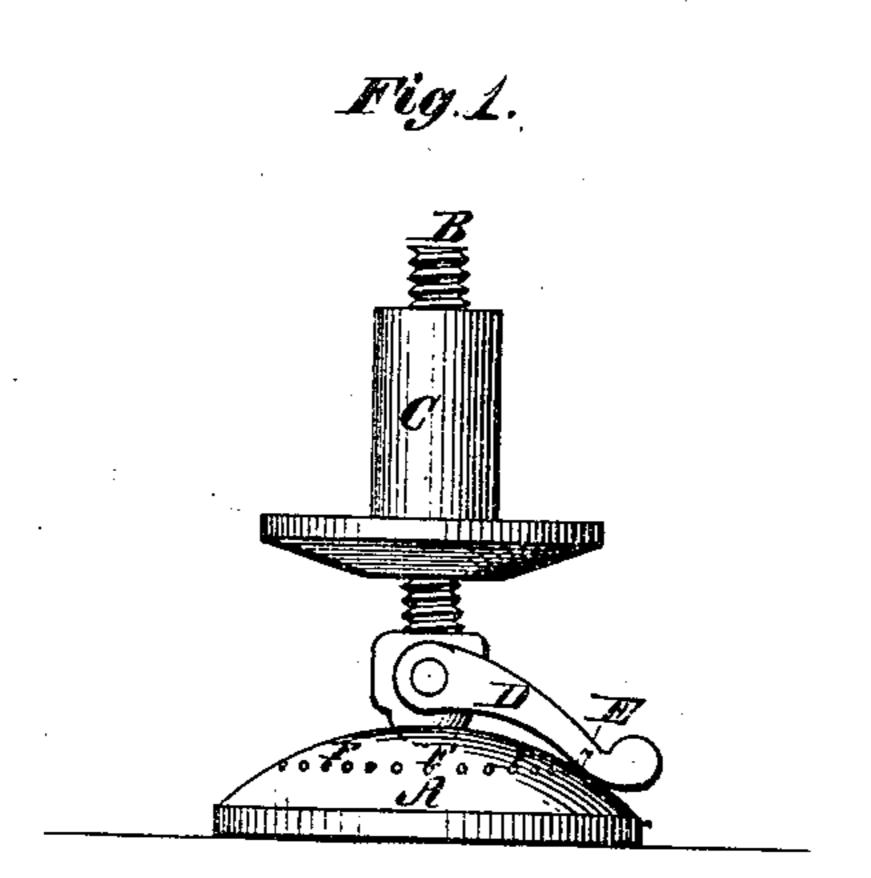
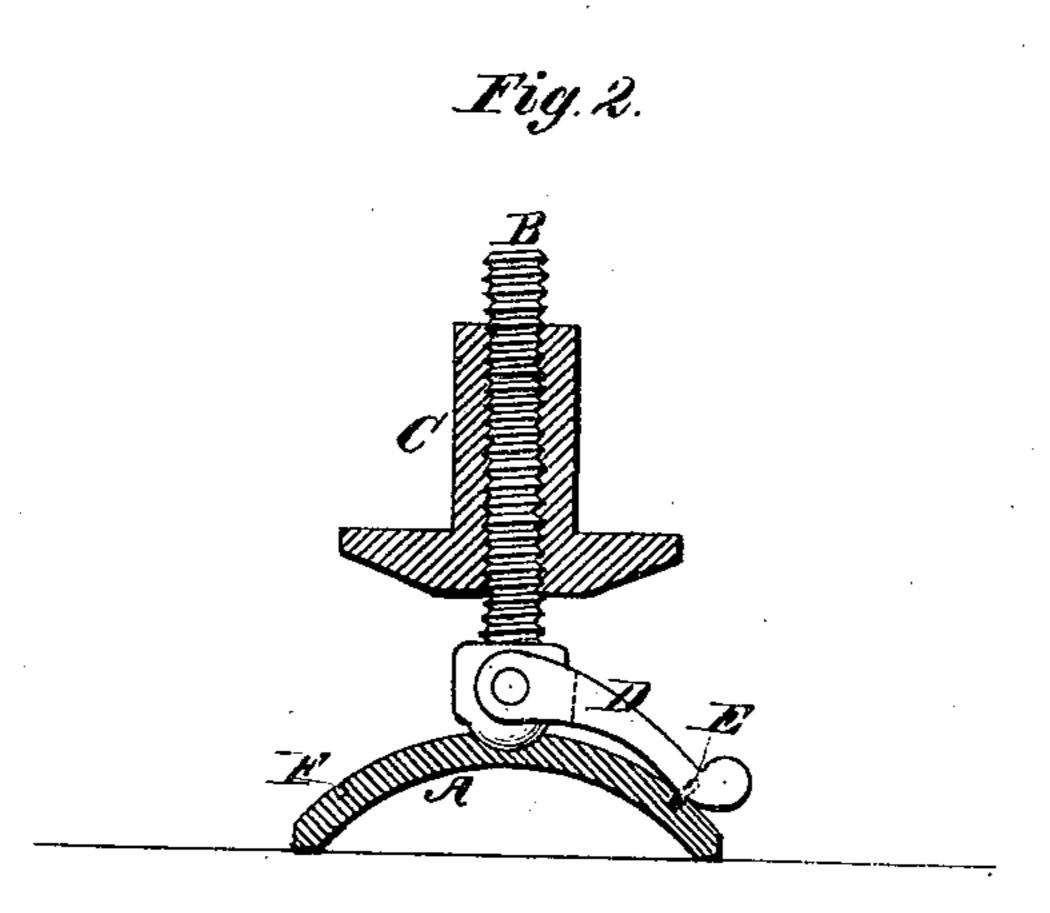
## E. H. L. SWINDLER. BILLIARD TABLE LEVELERS.

No. 179,626.

Patented July 4. 1876.





DRBlanchard Gwyse M Leland

Engene H. L. Swindler

## UNITED STATES PATENT OFFICE,

EUGENE H. L. SWINDLER, OF OTTAWA, ILLINOIS.

## IMPROVEMENT IN BILLIARD-TABLE LEVELERS.

Specification forming part of Letters Patent No. 179,626, dated July 4, 1876; application filed June 3, 1876.

To all whom it may concern:

Be it known that I, EUGENE H. L. SWIN-DLER, of Ottawa, in the county of La Salle and State of Illinois, have invented a new and useful Improvement in Billiard-Table-Leveling Screws, which improvement is fully set forth in the following specification, reference being had to the accompanying drawings.

The object of my invention is to have a billiard-table-leveling screw with a hinged lever, which is always ready to be used, and which, after the table is leveled, is fastened in that position, so as to prevent any change taking

place accidentally.

With the leveling - screws formerly used a separate wrench had to be kept on hand, and it was found that, because the table needed leveling only at long intervals, the wrench had meanwhile been mislaid or lost, thus causing a great deal of embarrassment, because, on account of the limited space, a common monkey-wrench cannot be used, and so the leveling of the table had to be deferred until at last it became too aggravating for further forbearance, when a new wrench had to be procured, to be again lost at the next occasion to use it.

Through my improvement the lever forming the wrench cannot be lost or mislaid, and, furthermore, it will be seen that, from the

wrench always being in place, any deviation from a true level can be corrected as fast as it is detected by the players themselves, which to them is very satisfactory.

The leveling-screw is illustrated more in detail in the vertical view, Figure 1, and in the

vertical section, Fig. 2.

The plate A lies on the floor. It is made of any kind of metal, and ornamented by plating or otherwise. It has on top a recess for receiving the rounding bottom end of the screw B. The screw B traverses a nut, C, which is attached to the foot of a billiard table. The lever or wrench D is hinged to the screw B, and has, at E, a pin, which drops into one of the holes F F F in the plate A. The number of these holes is not limited, it being only necessary to have enough of them, so that the distance from one to the other may not be too great for a small amount of variation that may have taken place in the level of the table.

I claim as my invention—

The hinged lever D, in combination with the plate A, having the holes F F F, substantially as and for the purpose described.

EUGENE H. L. SWINDLER.

Witnesses:

S. R. BLANCHARD, GEORGE M. LELAND.