(Model.)

J. W. SIDLE.

Turn Table for Mounting Microscopic Objects.

No. 235,030. **Patented Nov. 30, 1880.**

Fig. 1.

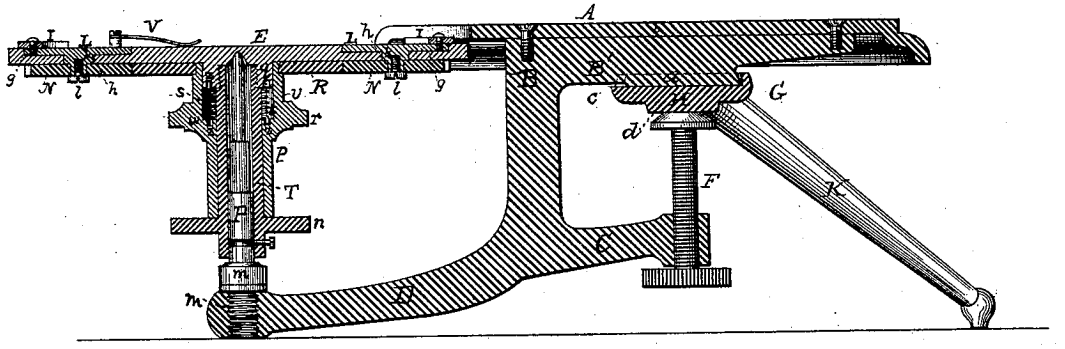


Fig. 2.

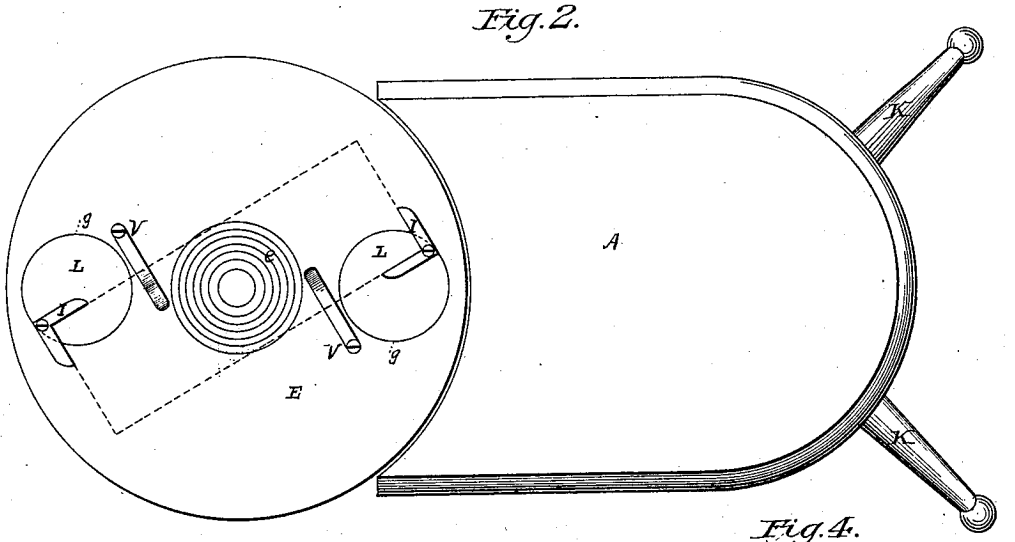


Fig. 3.

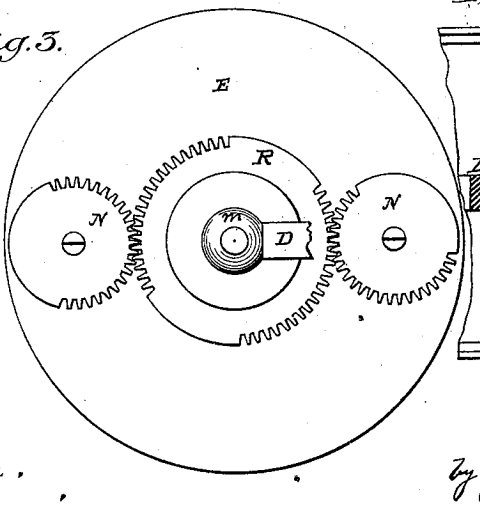
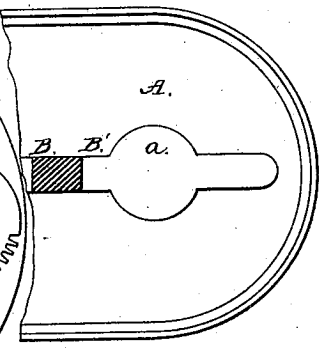


Fig. 4.



WITNESSES

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UNITED STATES PATENT OFFICE.

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TURN-TABLE FOR MOUNTING MICROSCOPIC OBJECTS.

SPECIFICATION forming part of Letters Patent No. 235,030, dated November 30, 1880.

Application filed August 31, 1880. (Model.)

To all whom it may concern:

Be it known that I, JOHN W. SIDLE, of Philadelphia, in the county of Philadelphia and State of Pennsylvania, have invented a new and valuable Improvement in Turn-Tables for Mounting Miscroscopic Objects; and I do hereby declare that the following is a full, clear, and exact description of the construction and operation of the same, reference being had to the annexed drawings, making a part of this specification, and to the letters and figures of reference marked thereon.

Figure 1 of the drawings is a representation of a central vertical section of this invention. Fig. 2 is a top view, and Fig. 3 is a bottom view, of the turn-table plate.

This invention has relation to self-centering turn-tables for mounting microscopic objects; and it consists in the construction and novel arrangement of the disk-boss on the under side of the fixed portion of the stand and the detachable double leg or forked support having a concave head, the under extension of the frame below the disk-boss, and the clamp-screw; also, of the circularly-recessed turn-table and the clamp-plates set therein flush with the surface of the turn-table, and in connection therewith the side pinions and the center wheel having a recessed body and milled collar, and the spring set in the recess of the body and connected with said body and with the turn-table, whereby the clamp-plates are automatically turned toward each other, all as hereinafter shown and described.

In the accompanying drawings, the letter A designates the fixed portion of the stand, having a concave edge at one end next the turn-table.

B represents the under brace or frame, extending downward and having an arm or extension, C, under the stand, extending toward that end which is farthest from the concave edge, and an arm or extension, D, extending in the opposite direction under the turn-table E. Above the arm C, on the main rib of the frame, is formed a horizontal disk-boss, *a*, and through the end of said arm, engaging a threaded perforation, *b*, therein, extends the clamp-screw F, having a conical end and milled head, and serving, in connection with the disk-boss, to fix the stand to the edge of a table, when desired, this being very desirable in operating upon microscopic objects and slides, because of the firm position of the stand which is attained. At the same time the broad disk-boss is not liable to injure the surface of the table.

When a movable stand is desired the double-leg attachment G is employed, consisting of a concave or rimmed head, H, and two oblique legs, K, extending downward therefrom. The head H is formed with a notch, *c*, in its rimmed edge, which engages the rib B′ of the frame and fixes its position when its rimmed head is applied on the disk-boss *a*, the attachment being secured to the stand by means of the clamp-screw F, which engages a bearing, *d*, on the under side of the head. The legs K, together with the supporting-arm D under the turn-table, form a tripod-support for the stand.

The turn-table E is upon its upper surface marked with concentric circles at its central portion, as shown at *e*, and is formed with circular recesses *g* on each side, perforations *h* being made through the floors or bottoms of these recesses for the passage of the journals *k* of the rotary clamp-plates L, to each of which is secured, on the under side of the turn-table, a pinion, N, by means of a screw, *l*, entering a threaded hole in the journal *k*.

The spindle or pivot-post P of the turn-table has its lower end screwed in a bearing, *m*, on the extension D, and it is provided with a sleeve, T, having milled collar *n*. The sleeve T extends up through the box *p* of the large toothed center wheel, R, and is provided with a threaded end, which is screwed into a boss, *q*, on the under side of the turn-table. On the exterior of the body or box *p* is a milled collar, *r*, whereby it can be turned when necessary. Within it is formed a recess, *v*, opening upward to receive the center boss, *q*, of the turn-table, and forming below this boss a chamber, *t*, in which is seated a spiral spring, *s*, the upper and lower ends of which engage each with one of a series of perforations, *z*, made in the center boss of the turn-table and in the floor *w* of the recess in the box *p*, respectively.

The large center wheel, R, engages on opposite sides the pinions N; and the clamp-plates L, to which the latter are attached, are provided each with a right-angle clamp or jaw, I, which is pivoted eccentrically or near the margin of the clamp-plate. When the box *p* is turned by means of its milled collar the jaws I are carried away from each other, so that the microscopic slide can be placed on the turn-table between them, the action of the spring when the box is released causing the wheel and pinions to carry the jaws toward each other, so that they will automatically engage the corners of the slide, which should be arranged in juxtaposition, and will center the slide with reference to the center of the turn-table, the latter having been duly marked with concentric circles, as aforesaid.

The ordinary spring-clamps can be conveniently applied to this turn-table, as indicated at V.

Having described this invention, what I claim, and desire to secure by Letters Patent, is—

In a turn-table for mounting microscopic objects, the combination, with the supporting-arm D, the opposite arm C, having a threaded perforation, and the disk-boss *a* on the frame-rib, of the detachable double leg G, its rimmed head H, having the notch *c* and recess *d*, and the clamp-screw F, substantially as specified.

In testimony that I claim the above I have hereunto subscribed my name in the presence of two witnesses.

JOHN W. SIDLE.

Witnesses:
AL. P. BURCHELL,
ALLEN N. GANGEWER.