

(No Model.)

L. S. HOYT.

LEVELING AND SUPPORTING IMPLEMENT.

No. 332,715.

Patented Dec. 22, 1885.

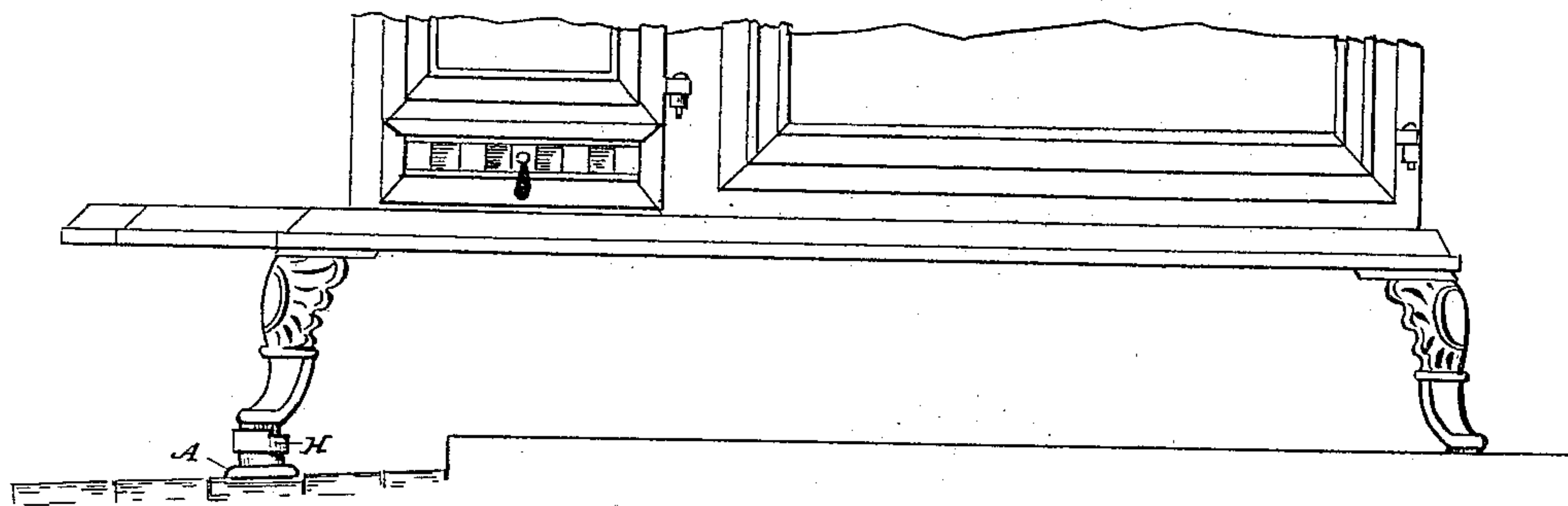


Fig. 3.

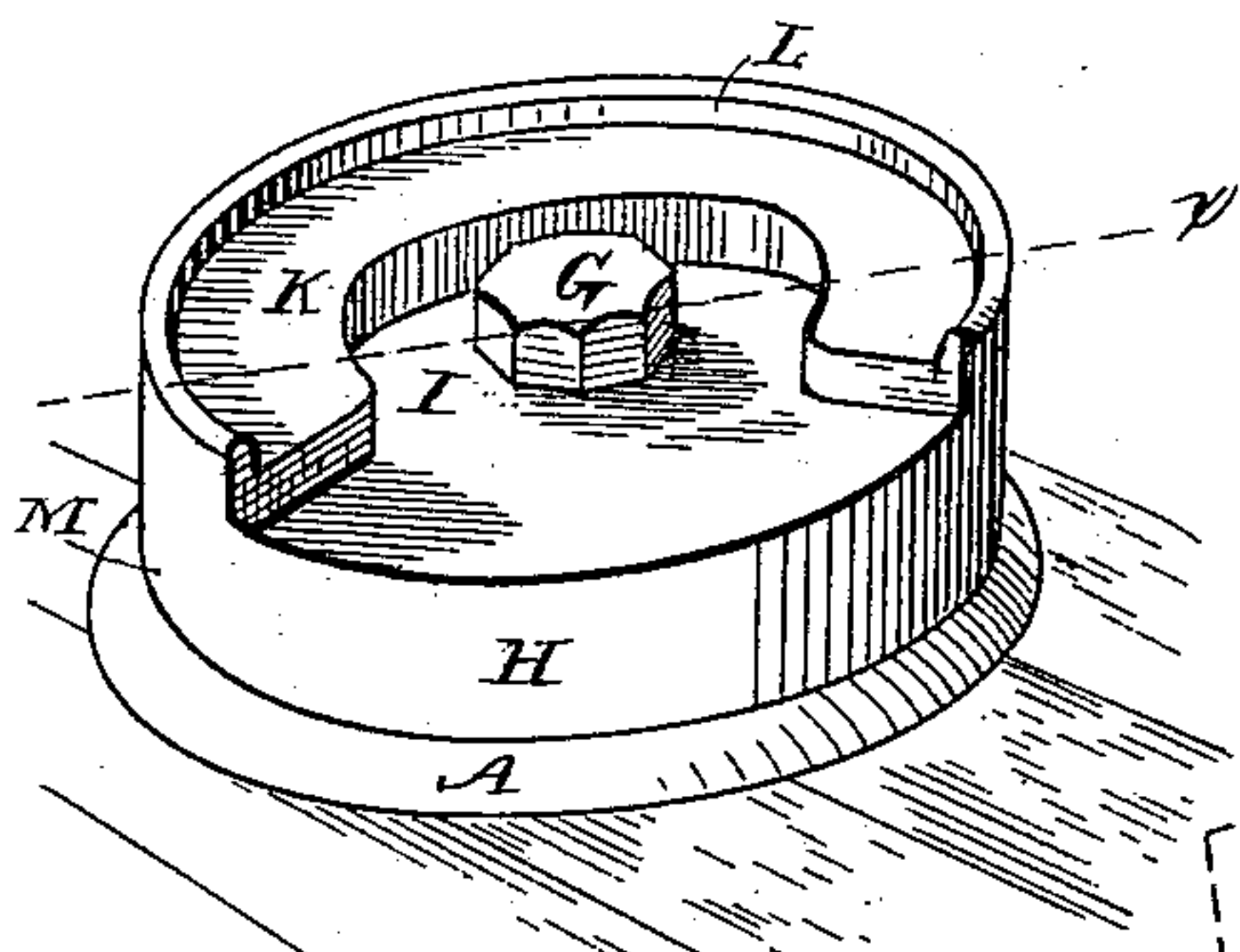


Fig. 1.

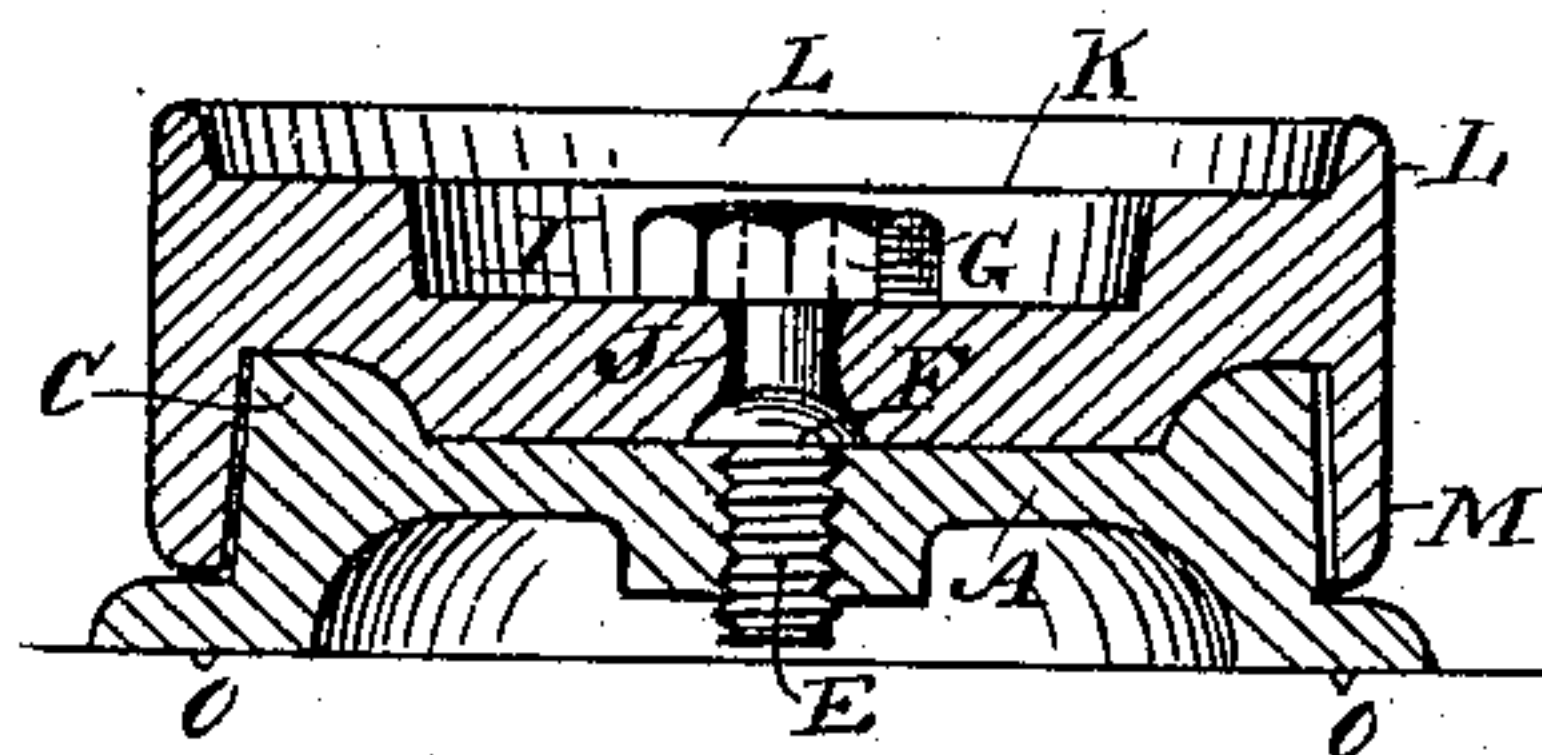


Fig. 2.

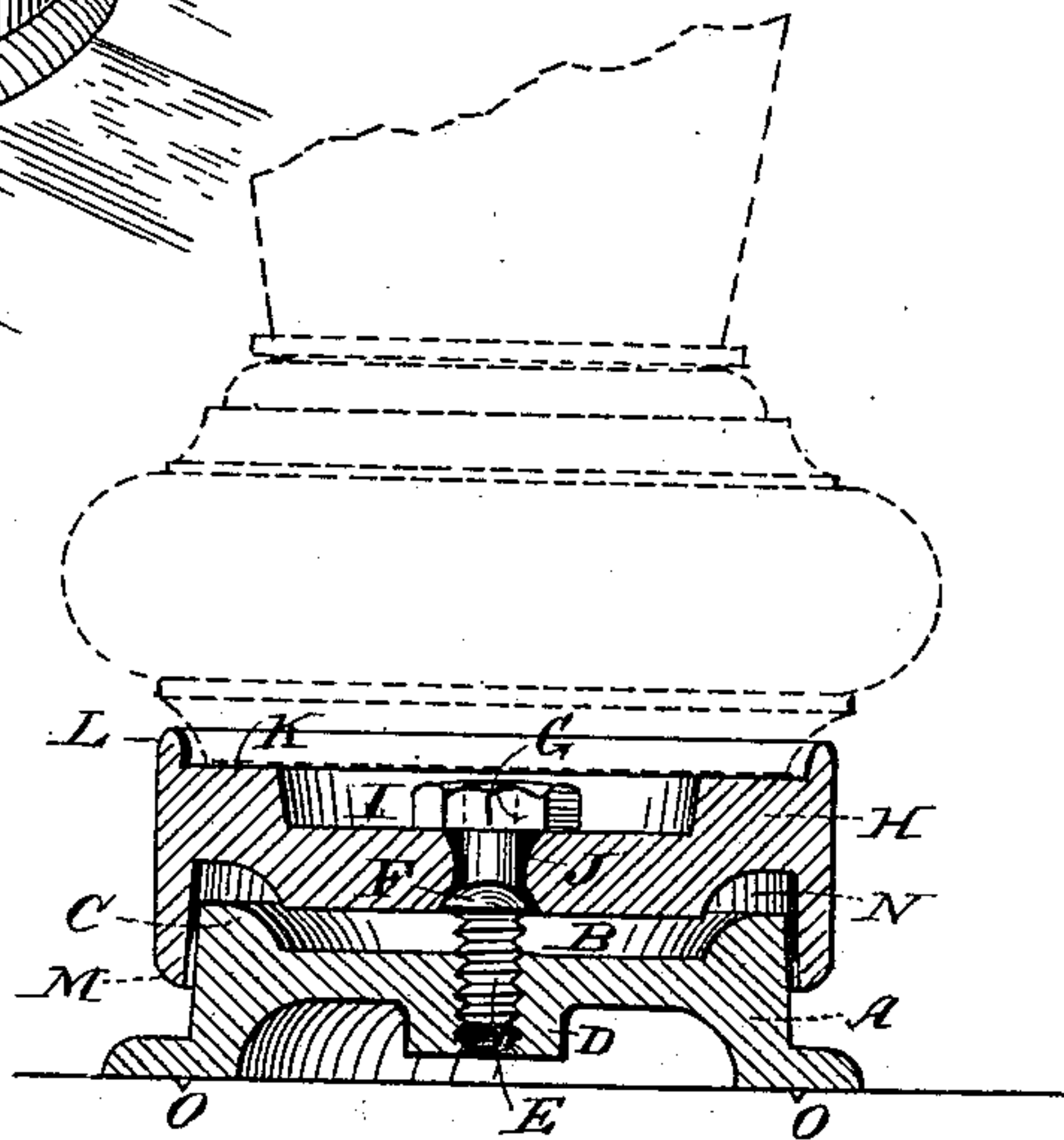


Fig. 4.

Witnesses:
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UNITED STATES PATENT OFFICE.

LEWIS S. HOYT, OF BOSTON, MASSACHUSETTS.

LEVELING AND SUPPORTING IMPLEMENT.

SPECIFICATION forming part of Letters Patent No. 332,715, dated December 22, 1885.

Application filed June 1, 1885. Serial No. 167,301. (No model.)

To all whom it may concern:

Be it known that I, LEWIS S. HOYT, a citizen of the United States, residing at Boston, in the county of Suffolk and State of Massachusetts, have invented an Improved Leveling and Supporting Implement, designed to raise, level, and sustain light or weighty articles of a miscellaneous nature, of which the following is a specification.

10 The object of my improved invention is to overcome, through an inexpensive but efficient device, the irregularity in floor or other surface planes which support more particularly weighty masses, in prescribed areas where absolute equilibrium is to be established, instancing, as an illustration, all classes of machinery, articles of furniture, apparatus for heating—particularly stoves, furnaces, &c.—and in vessels where water-levels are necessary to be maintained, together with innumerable instances which a fertile mind may suggest.

My improved invention relates more particularly to Letters Patent No. 278,433, issued to me May 29, 1883, for stove-legs, in the construction of which exist certain objectionable features, and its utility is circumscribed.

My invention therefor, to consummate the purposes hereinbefore alluded to, comprises duplex, cylindrical (or square) sections, the upper of which is fitted to receive the lower, which I define as the "base." The upper side of this base is provided with a centrally-depressed floor surrounded by a segmental raised periphery or rim and with an extended toothed or indented base, to insure stability in its plane of contact. Projecting centrally from the under concaved side of said base to a plane with the extended toothed rim a boss is formed to receive an internal screw-thread, which co- operates with an octagonal-headed external screw, provided integrally with a conoidal shoulder, to produce, when said screw is revolved, pressure in the direction of its length upon said upper or superimposed section supporting the body requiring leveling. For greater perspicuity, I refer to said upper section as a "supporting-base," through which centrally penetrates said external screw, the orifice being double-concaved and smooth-walled, to permit a slight oscillatory movement and re-establish the equilibrium of the super-

incumbent weight, which regulates itself about said sustaining conoidal shoulder when the sections are apart and their horizontal planes are unparalleled. An annular depression in the under floor of the supporting-base conforms to and is fitted to receive said raised segmental periphery when the sections are drawn together, while the upper portion duplicates the previously-described depressed floor of said base and forms a recess for the reception of said fixed external screw-head and for the operation of the wrench actuating said screw, for the admission of which a suitable opening is left in the surrounding wall of said supporting-base. Above this recess, and nearly surrounding it, is the surface or floor receiving the article to be supported, the circumferential terminus of which forms said opening, admitting the wrench to operate the parts when objects are to be raised and leveled. The exterior wall of the supporting-base extends slightly above the plane of the receiving-floor, forming a semi-circumferential rim, to enhance the security and stability of the article supported, while below said wall extends in a like manner and to a greater depth to encompass the base over which it oscillates.

The practical advantages in the operation of my invention may be pointedly illustrated in securing the adjustment of stove-legs to their base, where their usual tendency to become loosened and insecure is entirely remedied through the co-operation of the elevated rim on the upper base with the toe of said leg, the pressure of the superimposed weight being equally distributed to the base, which in turn is secured in a firm position to the floor by the serrated or toothed under side of said base, imparting to the stove that invaluable requisite, rigidity.

The utility of my improved invention is further exemplified in the accompanying drawings, forming a part of this specification, in which—

Figure 1 indicates a perspective view of my invention with the base and supporting-base closed. Fig. 2 is a transverse vertical central section on line *x*, Fig. 1, and also closed. Fig. 3 represents in side elevation my invention supporting and leveling a stove, the front of which is situated above an inclined floor. Fig.

4 illustrates a side elevation transversely sectioned, with the supporting-base elevated and leveled.

5 Similar letters of reference indicate corresponding parts in the various figures thereof, referring to which—

10 A is the base, and B is the depressed floor, surrounded by the segmental periphery C, which seats in the depression N when the parts are in juxtaposition.

15 D indicates the boss sustaining the external screw, E, which is provided at the plane of junction of the upper and lower base with the shoulder F, which raises or depresses and sustains the supporting-base H as said screw is rotated by action of a wrench.

I indicates the depression or chamber for the bolt-head G, and K the upper sustaining-floor.

20 L is the semi-circumferential rim protecting and securing the body supported, while M is the lower circumferential wall embracing the base loosely to permit oscillation.

25 N is the annular segmental depression in the lower side of the upper base, H, to receive the corresponding segmental elevated shoulder C when the parts are adjusted.

30 J indicates the double-concaved opening admitting the lifting-screw E, which is permanently secured from a longitudinal movement by the firmly-riveted octagonal head G.

O designates the toothed surface.

35 Having fully described the construction and operation of my improved leveling and supporting implement, what I desire to secure by Letters Patent of the United States and claim is—

1. In an organized lifting and leveling im-

plement, the oscillating supporting-base H, provided centrally with a double countersunk perforation, J, operating with and receiving the elevating-screw E, the quadrantal or semi-circular depressed open chamber I, permitting access to said screw E, and the sustaining-floor K, the outer semi-circumference of which forms the protecting and confining rim L, combined to operate with a perforated depressed receiving-base, A, having a corrugated floor, O, substantially as arranged and described. 40 45

2. In an organized lifting and leveling implement, the receiving-base A, having a depressed floor, B, inclosed by a continuous wall, C, the threaded boss D, receiving and sustaining the elevating-screw E, combined to operate with the supporting-base H, provided with the quadrantal chamber I, the double-concaved opening J, the sustaining-floor K, the protecting-rim L, and circumferential wall M, as described, and for the purpose set forth. 50 55

3. In an organized lifting and leveling implement, the combination of the base A, provided with the depressed face B and screw-threaded boss D, the supporting-base H, having the double-concaved perforation J, the segmental floor K, and the elevating-screw E, having the conoidal shoulder F and fixed actuating-head G, all operating substantially as described. 60 65

In witness whereof I have signed this specification in the presence of two subscribing witnesses. 70

LEWIS S. HOYT.

Witnesses:

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