

L. Van Hoesen,

Piano Stool,

N^o 11,771.

Patented Oct. 3, 1854
Fig. 2

Fig. 1.

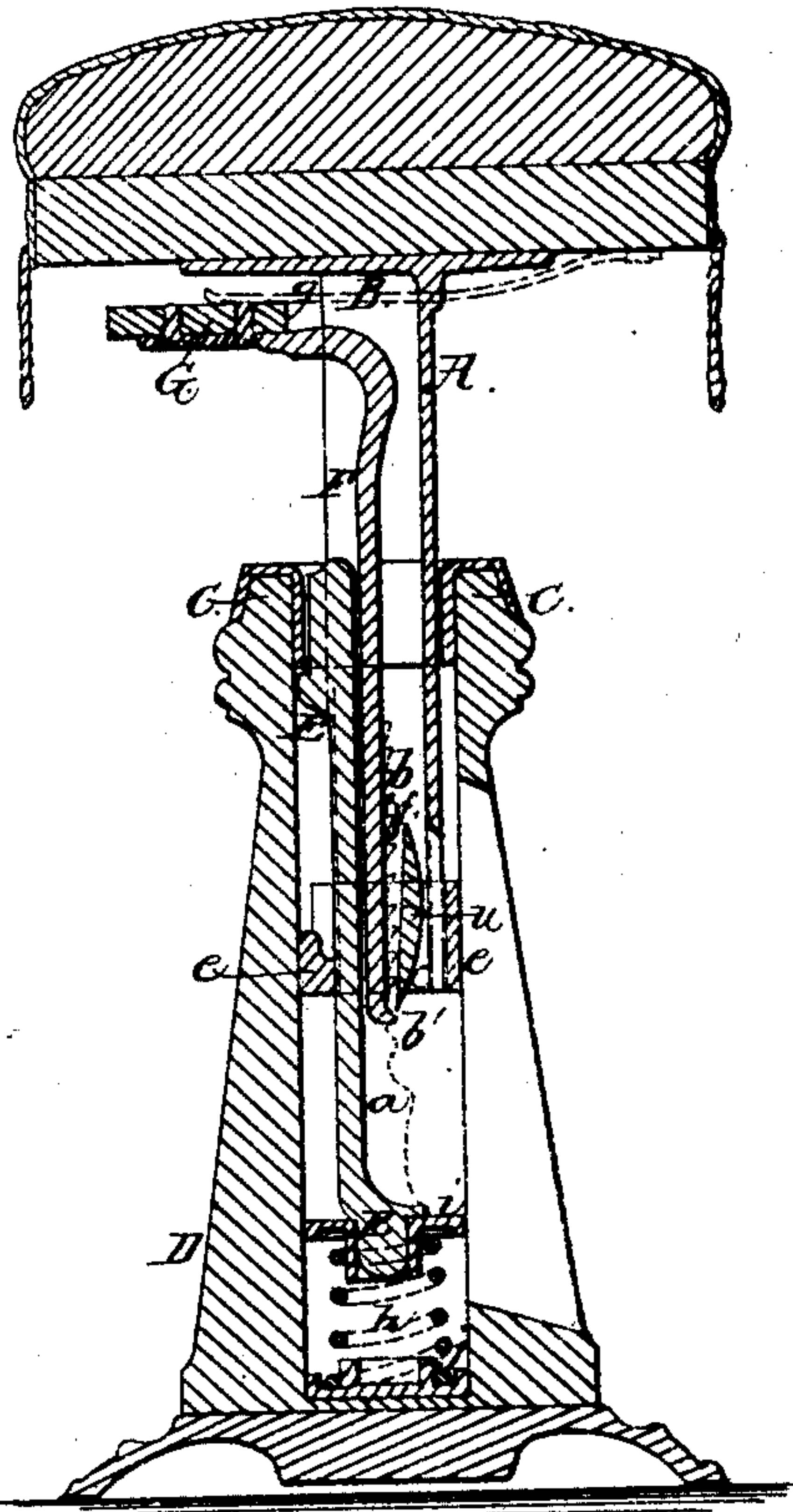
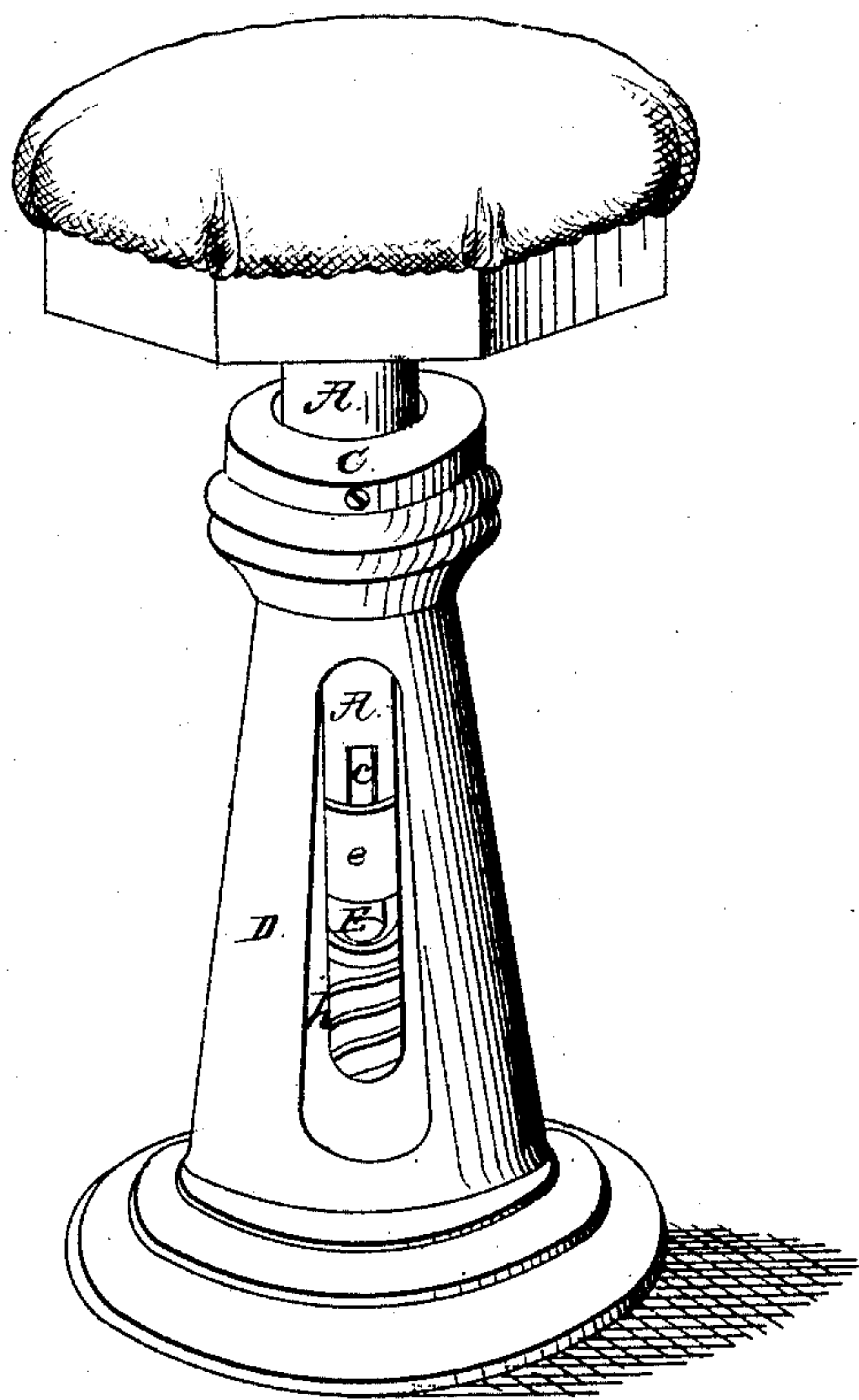
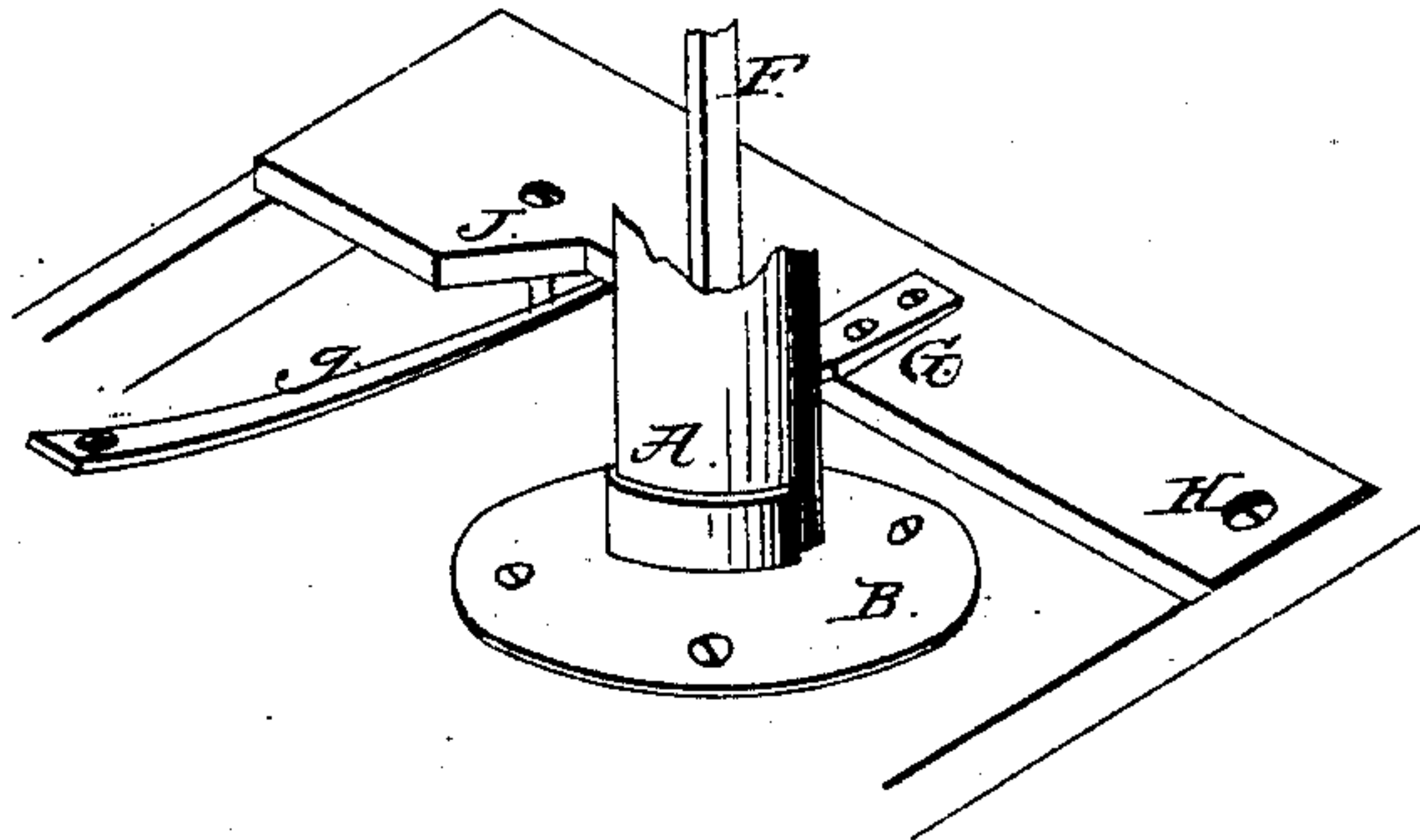


Fig. 3.



UNITED STATES PATENT OFFICE.

LEVI VAN HOESEN, OF NEW HAVEN, CONNECTICUT, ASSIGNOR TO NEW HAVEN IRON RAILING CO.

PIANOFORTE-STOOL.

Specification of Letters Patent No. 11,771, dated October 3, 1854.

To all whom it may concern:

Be it known that I, LEVI VAN HOESEN, of the town and county of New Haven, in the State of Connecticut, have invented a new and useful Improvement in Pianoforte-Stools; and I do hereby declare that the following is a full, clear, and exact description of the construction, character, and operation of the same, reference being had to the accompanying drawings, which make a part of this specification, in which—

Figure 1 is a perspective view of a piano forte stool. Fig. 2, is a vertical section of the same, showing the operating parts which are used to sustain the seat in an elevated, or depressed, situation, at the pleasure of the user. Fig. 3, is a perspective view of the upper part of the apparatus, inverted, showing the lever by which the operating parts are worked, with its spring, &c.

My improvement consists in so constructing and arranging the double acting dog, or pawl, *c*, that it may act upon the double rack *E E'* on the grooved tubular section, by means of the projections, or swells, *b, b'* on the bar, or rod which works within for that purpose, and in the manner of so connecting a lever *G* and spring *g* with the bar *F* as that the spring will cause this lever, by means of the bar, to cause the double acting dog *c* to hold the parts firmly at any elevation which may be desired, while this lever may, by hand, be made to unlock the dog from the rack and allow the seat to be elevated, or depressed, at pleasure. And in fitting a spiral spring in the lower part of the pedestal, or body of the frame, or support, so as to render it an easy seat to sit upon, at all times, without reference to its elevation, or depression, as the spring acts the same.

I make all the parts of the apparatus of malleable iron, (except the springs,) or other suitable material.

I make the part *A*, which sustains the seat, in the form, substantially, of a longitudinal section of a tube, as shown at *A*, Fig. 3, with a circular plate, or disk, at the top, as shown at *B*, Figs. 2 and 3, and I pass the lower end, or part, through a double collar, or ferrule, *C*, Fig. 1, as indicated, in section, at *C*, and *C*, Fig. 2, where it is represented as secured to the top of the main standard, *D*, Figs. 1, and 2.

Within the concave space in the part *A*, I

place another part, *C, C'*, Fig. 2, which has a longitudinal depression, or groove, as indicated, in section, at *a*, Fig. 2, the two edges of which are serrated, or notched, as indicated by dots, at *b, b'*, in which the lower end of the dog, or pawl, *c*, works to sustain the seat at the desired elevation. This dog, or pawl, *c*, is secured to the main part, *A*, by a joint pin *d*, Fig. 2, (which acts as a fulcrum,) which also passes through both sides of the band, or ferrule, *e*, Fig. 1, shown also in section at *e, e*, Fig. 2, which holds the whole together. The lower end, *c*, of this dog, is pressed into the notches, in the part *E, E'*, as they are indicated by dots at *b, b'*, by means of the projection at *f*, on the bar, or rod, *F*, all as shown in Fig. 2. The bar, *F*, has also a projection at its lower end, as shown at *b'*, Fig. 2, of such extent that when the bar, *F*, is drawn upward, this projection, *b'*, will force the lower end of the dog, *c*, into one of the notches, *b, b'*, (and by the same upward motion the projection, *f*, will be raised out of the way of the upper end of the dog,) and leave the part, *E, E'*, to work freely within the part *A*, so that the part *A*, may be elevated, or depressed, to any desired extent, (within the compass of the apparatus).

I attach the upper end of the bar, *F*, to a lever, *G*, as shown in Figs. 2, and 3. One end of this lever, *G*, I attach to the under side of the seat, by a screw, as shown at *H*, Fig. 3, or otherwise, while the other end is steadied and gaged by the set screw, *I*, as shown in Fig. 3. The end, *I*, of this lever, *G*, is forced down by a spring, *g*, as shown in Figs. 2, and 3, and the set screw, *I*, gages it so that it will go down just far enough to bring the lower projection, *b'*, on the bar, *F*, below the lower end of the dog, *c*, when the upper projection, *f*, will force the upper end of the dog, *c*, outward, and thereby press the lower end into the notches, *b, b'*, all as shown in Fig. 2. At the lower end of the part, *E, E'*, I fit a spiral spring *h*, in suitable sockets, or bearings, as seen at *i*, and *j*, Fig. 2, the upper one, *i*, having a suitable hole in the center to receive the end *E'*, of the part *E, E'*, as shown in Fig. 2, so that it will be always equally good, as a spring seat, without reference to its elevation, as the connection between the part *E, E'*, and the spiral spring, *h*, is never changed. Near the upper end of the part *E, E'*, I make a projection

on one side, as shown at E, Fig. 2, against which the double collar, C, C, will rest to prevent the part E, E', from rising out of its place when the stool is handled.

5 Having made all the iron parts, and put them together, as represented in section in Fig. 2, I screw the circular plate, or disk, B, Figs. 2, and 3, to the bottom of the seat, and the upper, or horizontal, part of the bar, F, to the lever, G, as shown in Figs. 2, and 3, and the stool is ready for use.

10 When I wish to elevate the seat, I put my hand under the seat and apply it to the end, I, of the lever, G, and press it up against the spring, g, by which means I raise the bar, F, so that the projection, b', will force the lower end of the dog, c, out of the notches b, b', when the seat may be elevated, without the slightest hindrance, to the desired height; 20 when by releasing the lever, G, the spring, g, will depress it, and consequently force down the bar, F, so as to carry the projection, b', below the lower end of the dog, c, and the

projection, f, will force the upper end of the dog outward, and thereby press the lower 25 end into the notches, b, b', to secure the seat at that elevation, all as indicated, in section, in Fig. 2. To depress the seat, use the lever, G, as above described, and the weight of the seat, &c., will carry it down, as there will 30 then be nothing to hold it up, until the lever, G, is again released, when all will be secure, as before.

What I claim as my invention, and desire to secure by Letters Patent, is— 35

The combination of the part E, E', (with its serrated, or notched, edges,) with the double acting dog, c, when the dog is operated by the bar, F, and the whole is constructed, arranged, and combined, substan- 40 tially as herein described.

LEVI VAN HOESEN.

Witnesses:

VIRGINIA VAN HOESEN,
R. FITZGERALD.