

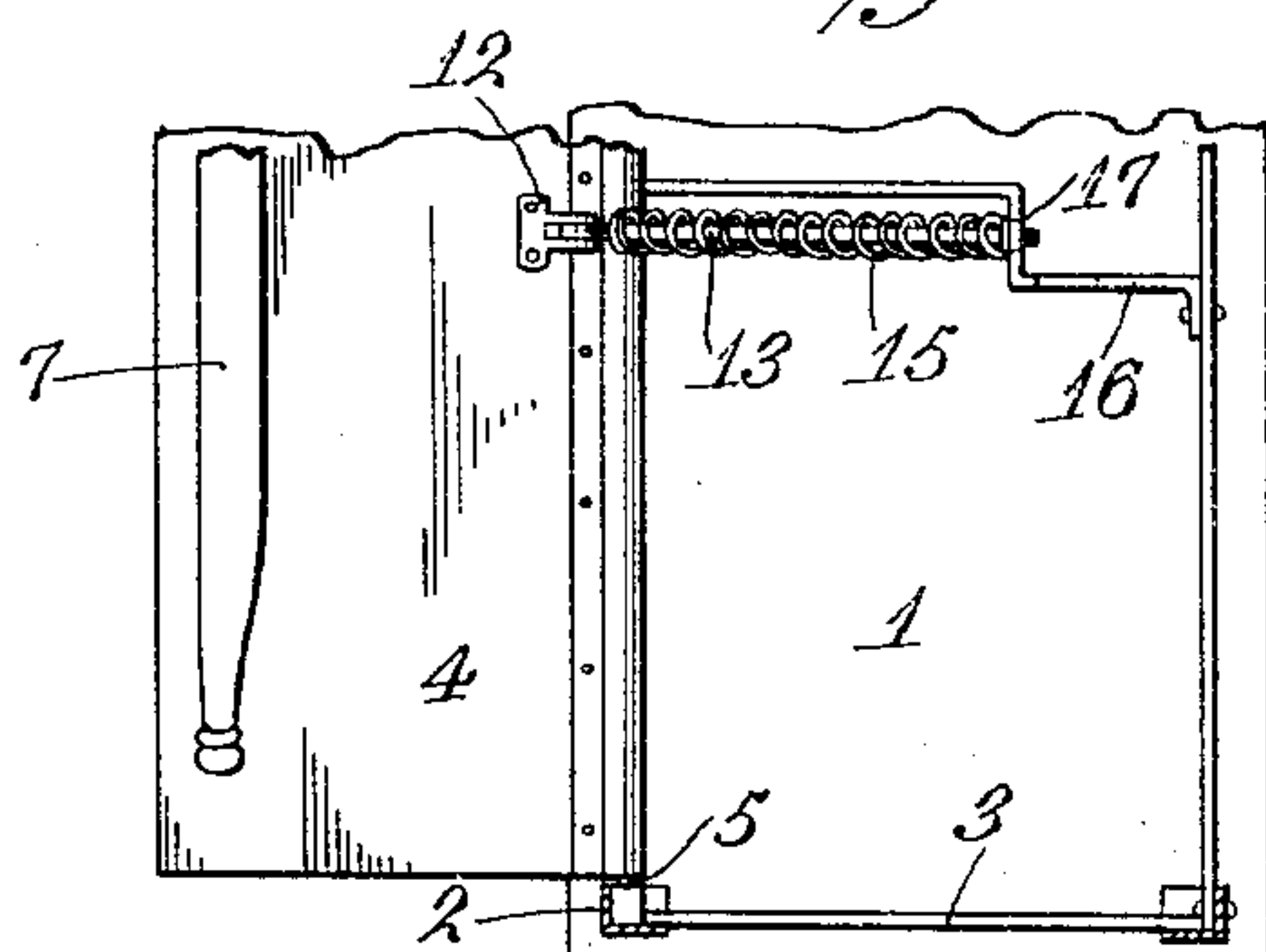
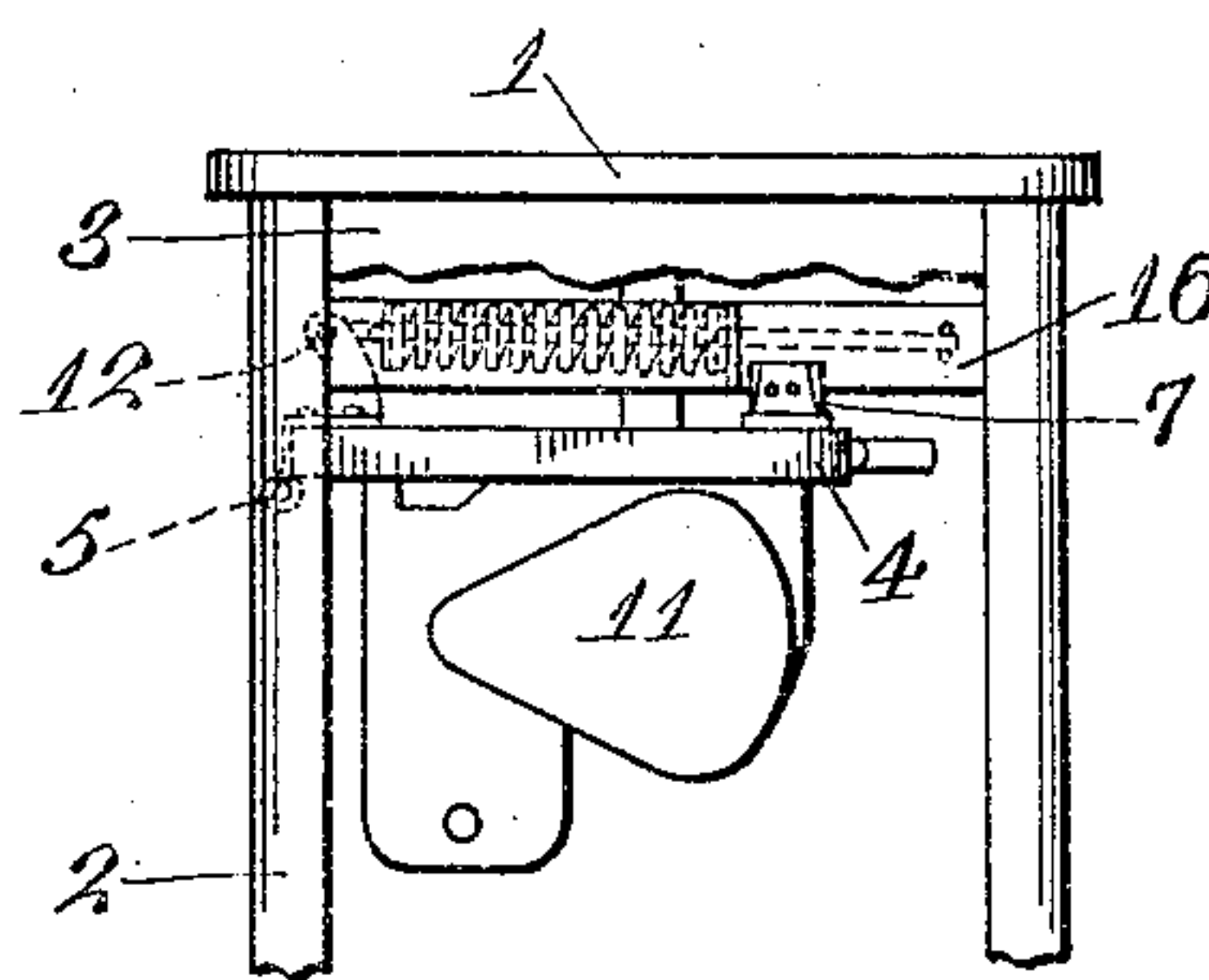
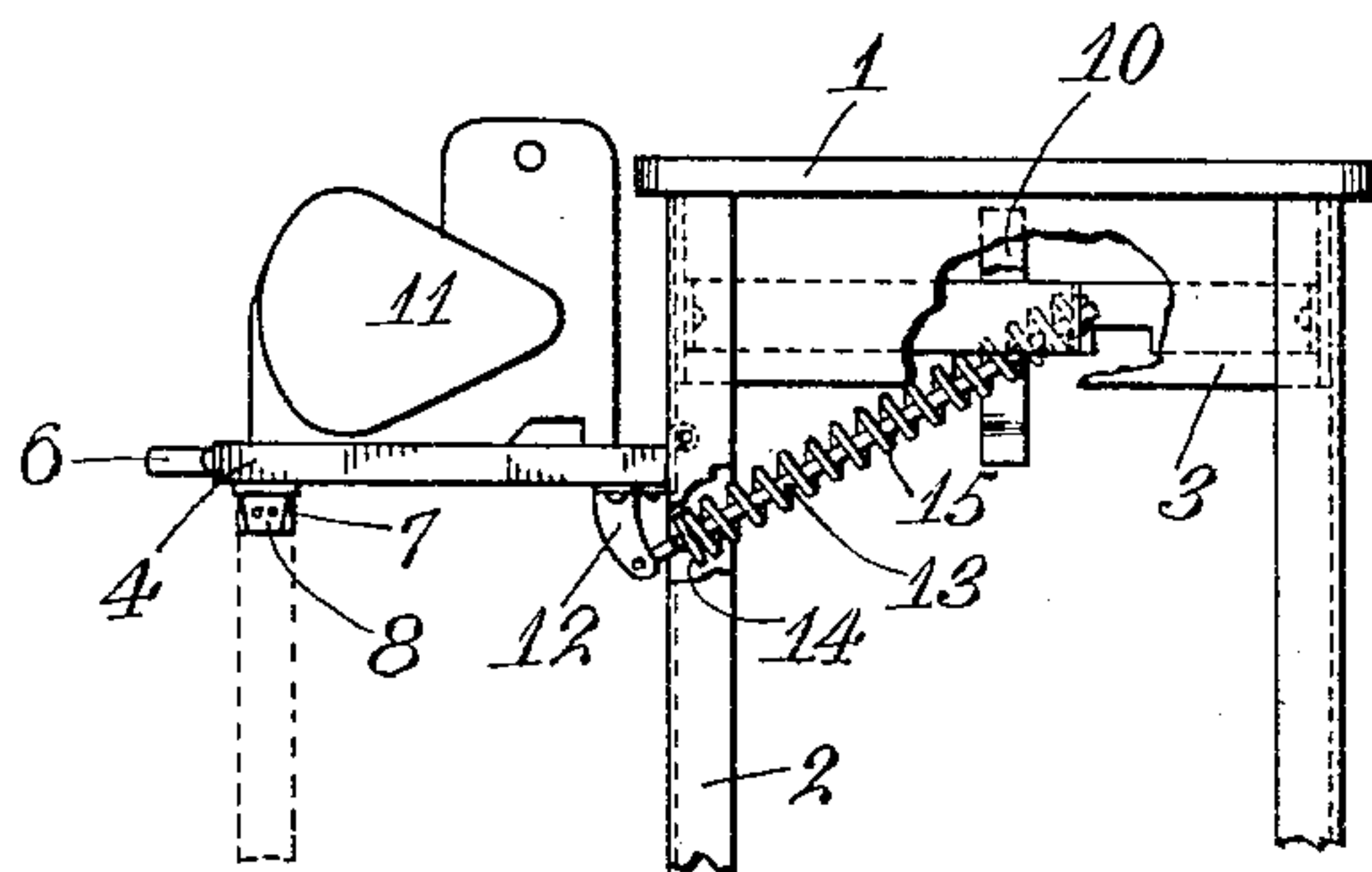
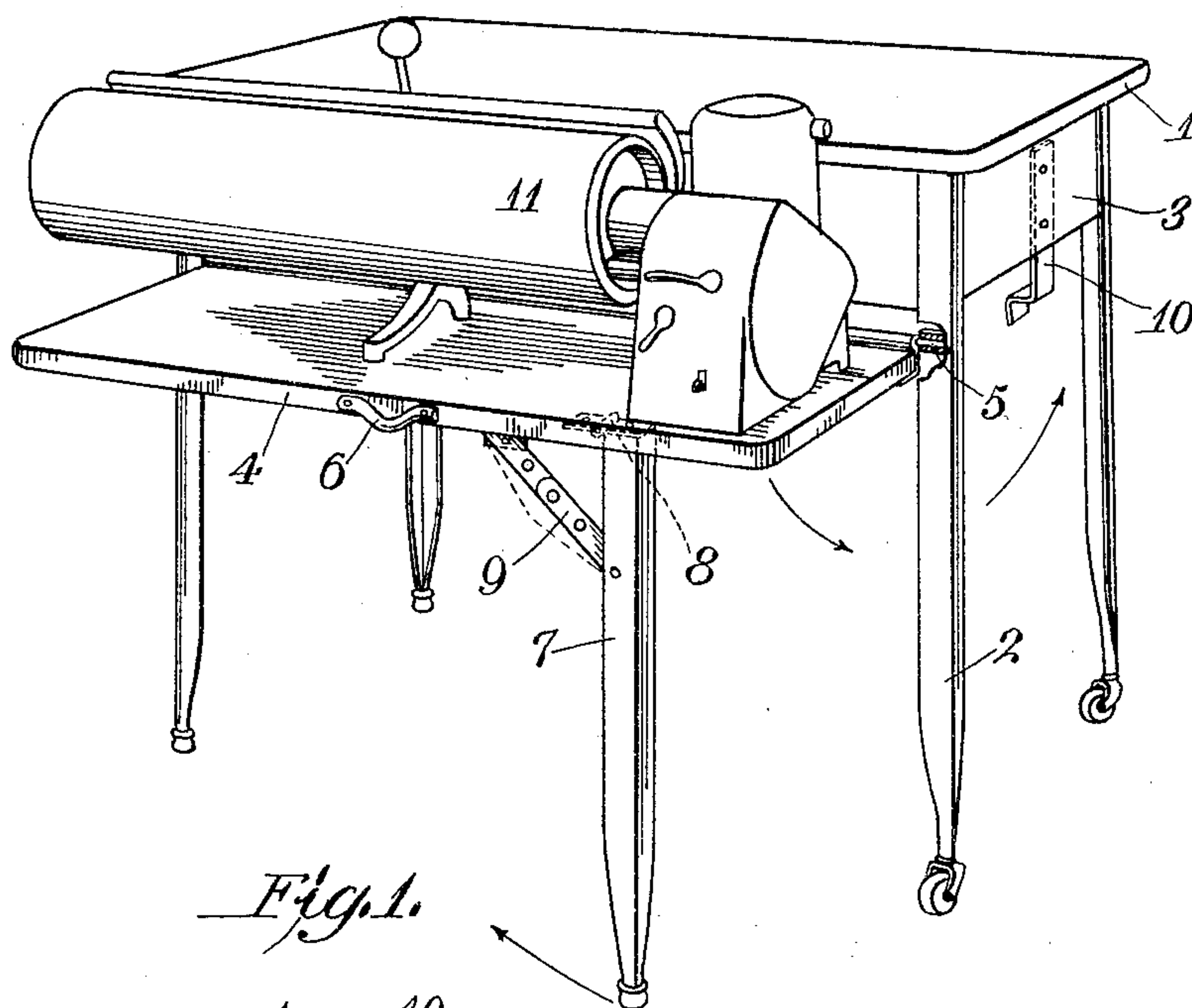
Feb. 14, 1933.

W. O. SUSTINS

1,897,152

WORKTABLE

Filed Oct. 16, 1930



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## UNITED STATES PATENT OFFICE

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## WORKTABLE

Application filed October 16, 1930. Serial No. 489,103.

This invention relates to improvements in tables adapted for use in conjunction with machines or appropriate appliances and utensils, for example, household ironing machines or mangles that are ordinarily too large and too heavy to be conveniently lifted or moved about from place to place by the user; or it may serve a sewing machine, typewriter, gas or electric plate or a small stove.

It is an object of my invention to provide in combination with a table of ordinary construction a folding shelf hinged to the legs of the table at an appropriate height to accommodate an ironing machine and arranged to swing either forwardly or rearwardly, carrying the ironing machine with it. In the forwardly projecting horizontal position of the shelf the ironing machine is located conveniently for use in front of the front edge of the table top, and the entire table surface is available for spreading and piling the goods during the ironing operations.

In the rearwardly projecting horizontal position of the shelf the ironer or other appliance is concealed beneath the table top, the whole presenting merely the appearance of an ordinary table.

Another object of the invention is to provide the shelf with a counterpoise whereby the manual effort required to lift the ironer up to its working position is minimized, also the effort required to raise the shelf and ironer into its concealed position.

With the foregoing and certain other objects in view, which will appear later in the specification, my invention comprises the devices described and claimed and the equivalents thereof.

In the drawing Fig. 1 is a front perspective view, partly broken away, showing a table with my improvement attached.

Fig. 2 is a fragmentary end view.

Fig. 3 is a part sectional bottom view of a portion of the table with the shelf extended.

Fig. 4 is a fragmentary end view corresponding to Fig. 2, showing the shelf in its rearwardly folded position.

As is clearly shown in the drawing, the structure comprises the table top 1 and sup-

ports or legs 2 and a connecting framework as rails 3.

A suitable supporting framework, such as a folding shelf 4, is secured by hinges 5 to the front legs of the table. A handle 6 at the outer edge of the shelf is used for raising and lowering it.

The displaceable means for supporting the folding shelf in its forwardly projecting horizontal position, shown in Fig. 1, comprises preferably a folding leg 7 that is secured to the under side of the shelf by a hinge 8 and is stiffened by a suitable folding brace 9, so that the leg will fold flat along the under edge of the shelf, as shown in Figs. 2 and 3. A releasable latch 10 is mounted on an end rail for holding the shelf in its concealed position beneath the table top, as shown in Fig. 4. An ironing machine or mangle 11 is fixed to the folding shelf.

The counterpoise for the weight of the ironing machine consists of an arm 12 fixed to the under side of the shelf at its rear edge, a rod 13 pivoted to the arm and extending rearwardly under the table top, a washer 14 fixed to the rod, a compression spring 15 on the rod and a brace bar or abutment member 16 secured to the under side of the table, as is illustrated in Fig. 3. An opening 17 is provided in this brace bar for the passage of the rod 13 which slides back and forth through it when the spring is compressed or released.

The position of the arm 12 with relation to the plane of the shelf 4 is such as to cause the spring 15 to be compressed when the table is pushed downward from its forwardly extending position shown in Fig. 1. In that position it is obvious that the spring acts as a counterpoise to the weight of the shelf and ironing machine.

When the leg has been folded and the shelf has been lowered to its depending position between the front supports, the spring 15 is under compression, and arm 12 is approximately in line with the spring, as on a dead center. When the table is raised to the position of Fig. 1 the spring is still in compression and then exerts its greatest supporting force on the shelf because it is approxi-



mately at right angles to the position of the arm. Similarly, maximum leverage and sustaining force is exerted by the spring when the shelf is in its rearwardly folded position, 5 as shown in Fig. 4. In some applications of the invention the spring may be made strong enough to hold the shelf in this position, the latch being dispensed with.

Upon releasing the latch 10 the shelf and ironing support swing downward, being cushioned by the compression of the spring. When the shelf is at the bottom of the swing the operator lifts the shelf by the handle 6, unfolds the leg 7, and the machine is ready 15 for use. It will be noted that by this arrangement the shelf and ironing machine are not only at convenient height for the operator, but they are also conveniently placed with respect to the table top so the latter can be 20 used for both the unironed and finished goods.

When the leg 7 is down it not only supports the greater part of the weight of shelf 4 and machine 11, but also renders the table more rigid by increasing the area of its sup- 25 porting base and carrying the weight on five legs instead of four.

Preferably the two legs of the table at one end are equipped with castors so the table can be rolled from place to place after lift- 30 ing up the other end, which is equipped with legs without castors, as shown in Fig. 1.

Having thus described my invention, what I claim and desire to secure by Letters Patent is:

35 1. In combination with a table top and supports for the same, a shelf member hinged at its rearward edge to said supports at a point below said top and arranged to swing between said supports to an inverted posi- 40 tion beneath the top, a latch carried by the table and positioned to releasably engage the shelf member when in said inverted position, a machine fixed to said shelf member, a down- 45 wardly extended arm fixed to the opposite face of the shelf near its hinged edge, an abutment member fixed to the table, a spring operatively interposed between said arm and 50 abutment member and arranged to counterpoise said shelf in its forwardly extended position by exerting thrust against the arm below the hinge and to counterpoise the shelf in its rearward position by exerting thrust against the arm above the hinge.

2. In combination with a table comprising 55 a top and supports therefor, a shelf hinged at one edge to said table, a member supporting the shelf in forwardly extended horizontal position, a latch positioned to releasably engage and support the shelf in rear- 60 wardly projecting inverted position beneath the table top, a machine fixed to said shelf member, and spring-actuated counterpoise means operatively interposed between the top and shelf, said means comprising an arm se- 65 cured to a face of the shelf, an abutment on

the table and a spring operatively interposed between the arm and the abutment and arranged to exert pressure against the arm for supporting the shelf in both the forwardly extended horizontal position and in 70 the rearward inverted position of said shelf.

3. In combination with a table, a shelf hinged to said table, a support for said shelf in forwardly extended horizontal position, 75 a latch comprising a spring hook carried by the table top and adapted to releasably support the shelf in rearwardly projecting position beneath the table top, a machine fixed to said shelf member, an arm projecting from the opposite face of the shelf and counter- 80 poise means including a spring operatively interposed between the table top and said shelf and adapted to exert pushing force against the arm in one direction when the shelf is in its extended position and in the 85 opposite direction when the shelf is in its inverted concealed position.

4. In combination with a table, a shelf hinged to said table and arranged to swing 90 to an inverted position beneath the table top, a member supporting said shelf in forwardly extended horizontal position, a machine fixed to said shelf, an arm projecting from the opposite face of the shelf, and counter- 95 poise means including a spring operatively interposed between the table top and the arm and adapted to exert pushing force against the arm below the hinge when the shelf is in its extended position and against the arm 100 above the hinge when the shelf is in its inverted concealed position.

In testimony whereof, I affix my signature.

WALTER O. SUSTINS.

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