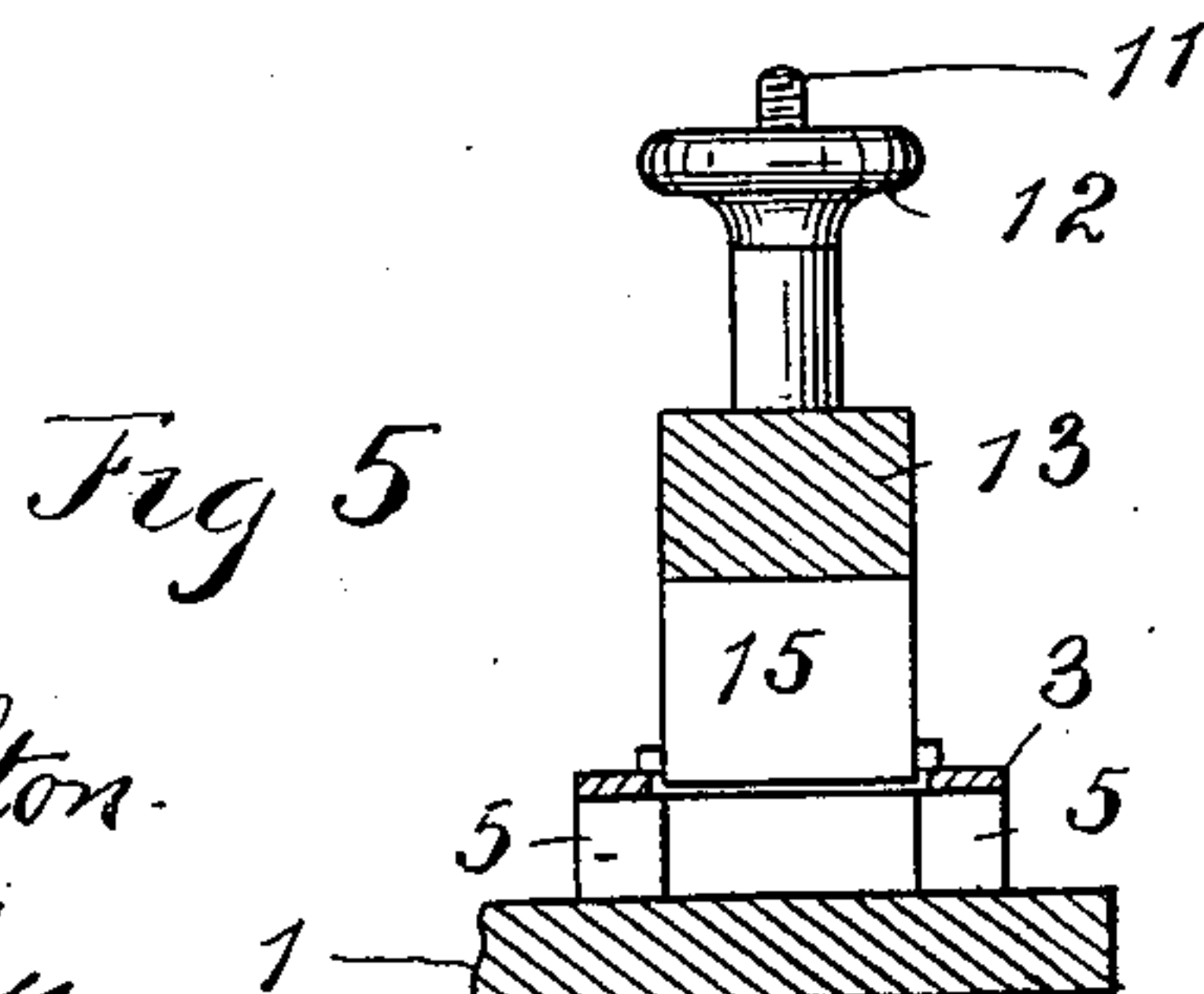
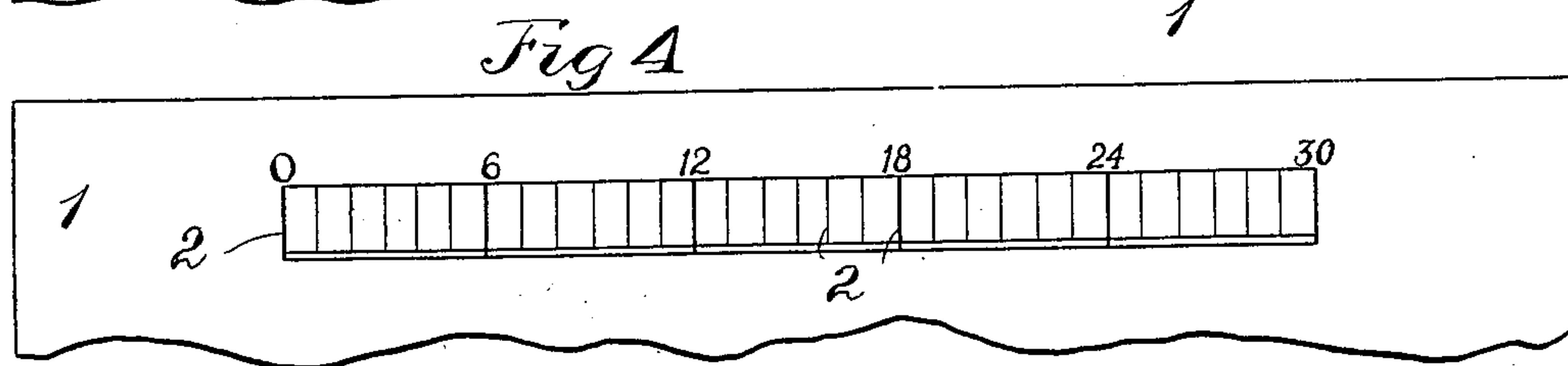
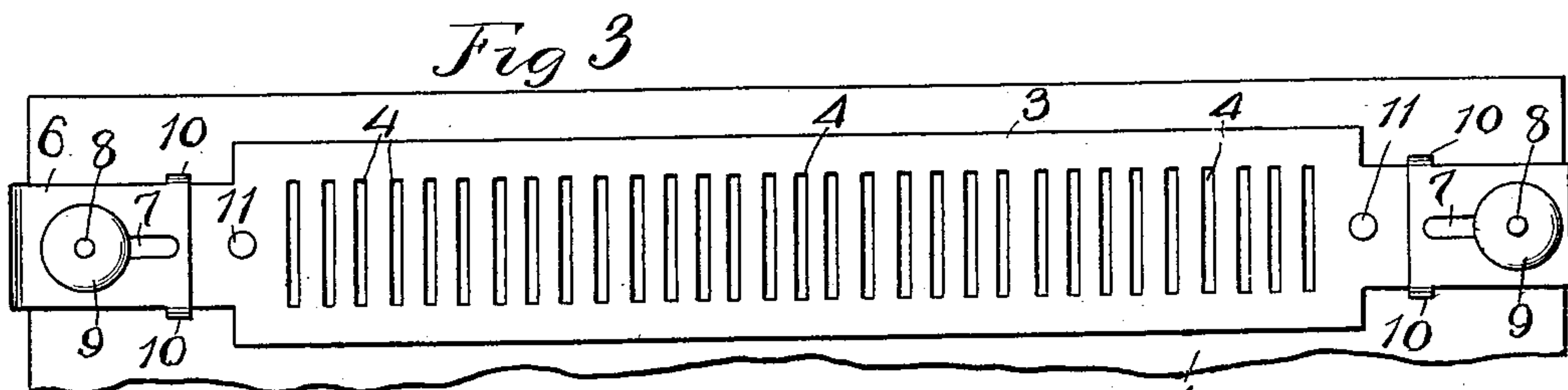
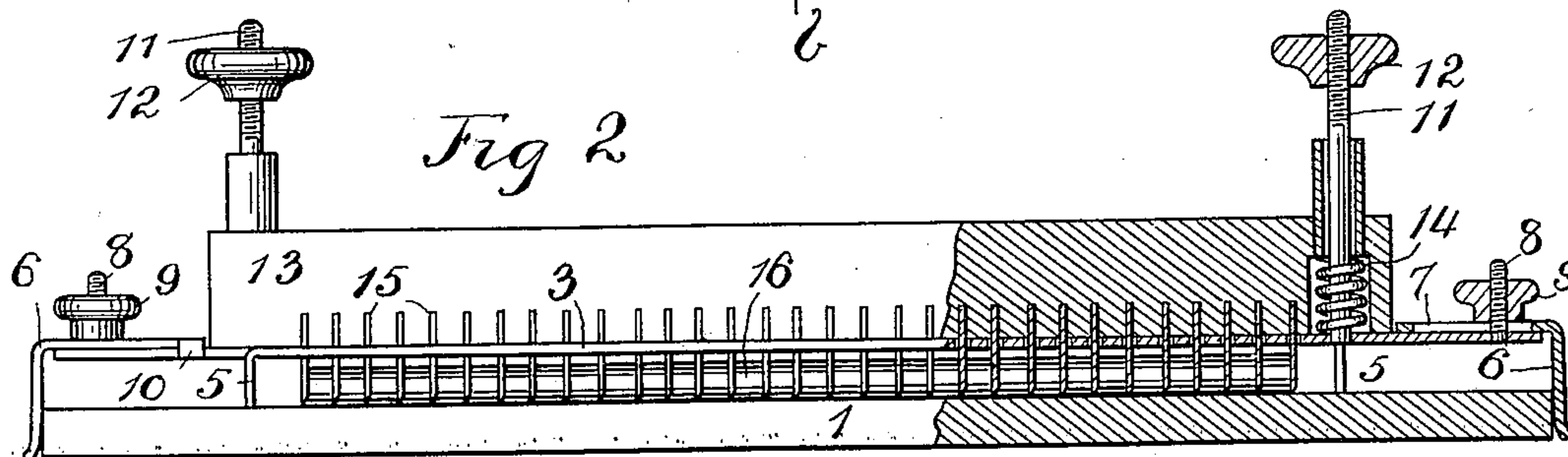
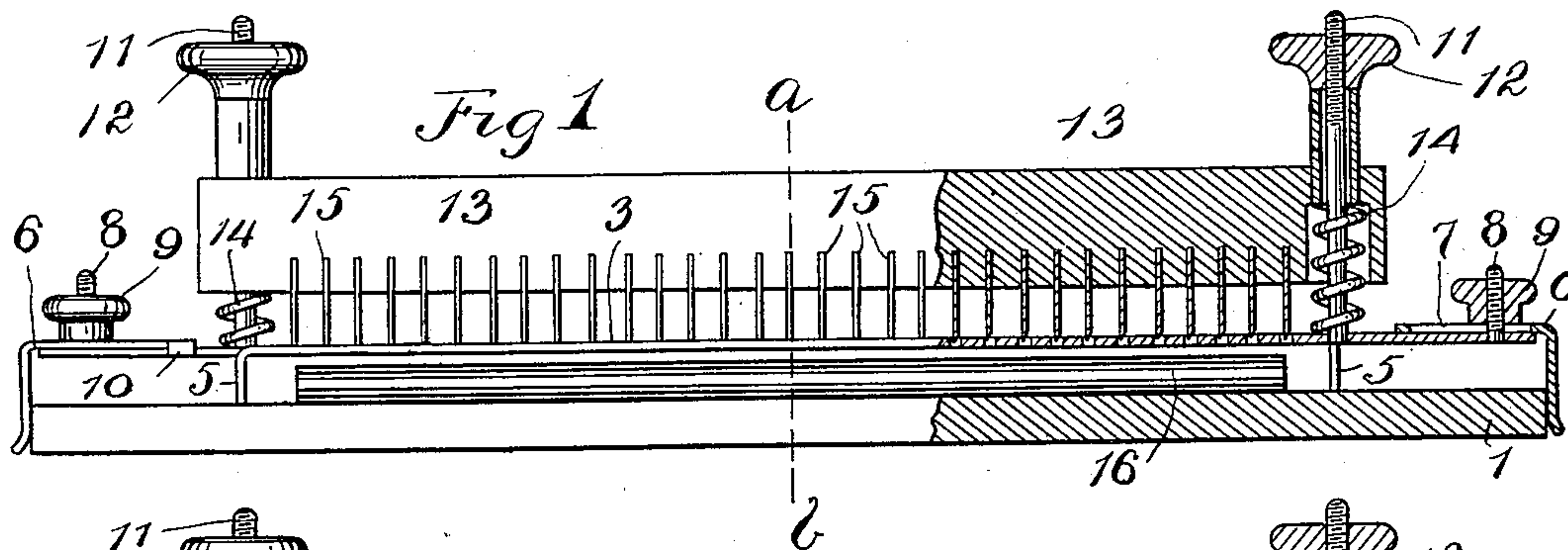


No. 731,188.

PATENTED JUNE 16, 1903.

J. W. JACKSON.  
DRUGGIST'S MASS DIVIDER.  
APPLICATION FILED AUG. 15, 1902.

NO MODEL.



WITNESSES:

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His ATTORNEY



# UNITED STATES PATENT OFFICE.

JOHN WALTER JACKSON, OF WESTON, MISSOURI.

## DRUGGIST'S MASS-DIVIDER.

SPECIFICATION forming part of Letters Patent No. 731,188, dated June 16, 1903.

Application filed August 15, 1902. Serial No. 119,747. (No model.)

*To all whom it may concern:*

Be it known that I, JOHN WALTER JACKSON, a citizen of the United States of America, residing in Weston, in the county of Platte and State of Missouri, have invented a new and useful Improvement in Druggists' Mass-Dividers, of which the following is a specification, reference being had therein to the accompanying drawings, forming a part thereof.

My invention relates to improvements in druggists' mass-dividers.

The object of my invention is to provide a mechanism by means of which at one stroke a mass of matter composing a medical compound may be severed into a number of equal portions.

My invention provides, further, a plurality of cutting-blades mounted on a suitable reciprocative plunger, the cutting-blades being disposed at distances apart corresponding to the distances between the graduations on a pill-tile, combined with means by which the cutting-blades may be adjusted over the scale of graduations on a pill-tile, means being also provided by which the plunger may be automatically retracted after the blades have severed the mass placed upon the pill-tile.

My invention provides, further, certain features of novelty hereinafter fully described and claimed.

In the accompanying drawings, illustrative of my invention, Figure 1 is a view partially in side elevation and partly in vertical section. Fig. 2 is a similar view showing the plunger depressed. Fig. 3 is a plan view with the plunger and some parts removed. Fig. 4 is a plan view of the graduation end of a pill-tile. Fig. 5 is a cross-section taken on the dotted line *a b* of Fig. 1.

Similar characters of reference indicate similar parts.

1 indicates the pill-tile, which is of the ordinary construction, having a series of transverse graduations 2 disposed at equal distances apart and indicating the width a mass should be divided. Above the pill-tile is disposed a horizontal plate 3, provided with a series of parallel transverse slots 4, adapted to be disposed one above each graduation 2. The plate 3 is provided near each end with the downwardly-extending projections 5, adapted to rest upon the upper surface of the pill-tile

1. Two end guides 6 are mounted and adjustable lengthwise upon the plate 3. Each of said guides 6 comprises a right-angled body, the horizontal arm of which is provided with a slot 7, fitted to a post 8, secured one at each end to the plate 3 and extending vertically thereon. The posts 8 are screw-threaded, and each has fitted to it a nut 9, adapted to press against the upper side of the guide 6 and secure it to the plate 3. The inner end of the arm of each guide 6 is provided with two downwardly-extending lateral projections 10, which embrace the sides of the plate 3 and prevent turning of the guide thereon. The vertical arm of each guide 6 extends to a horizontal plane below the lower ends of the projections 5. The guides 6 are adapted to embrace the side edges of the pill-tile, so as to keep the plate 3 in proper position on the pill-tile. Between the posts 8 are two vertical posts 11, the lower ends of which are secured to the plate 3 and the upper ends being screw-threaded and having mounted thereon the nuts 12, which limit the upward movement of a horizontal plunger 13, which is reciprocatively mounted on the two posts 11. In recesses in the lower side of the plunger 13 and encircling the posts 11, respectively, are two coil-springs 14, one on each post and each having a bearing at its lower end upon the upper side of the plate 3. These springs serve to retract the plunger after it has been forced to the position shown in Fig. 2. Secured at their upper ends in the plunger 13 are a series of parallel transverse cutting-blades 15, disposed vertically one above each graduation in the pill-tile 1 and adapted to pass through the slots 4 in the plate 3 when the plunger is forced downwardly.

In operating my invention the guides 6 are first set so that they will tightly embrace the side edges of the pill-tile, after which the nuts 9 are tightened, and the device may then be placed upon the pill-tile with the blades above the graduations in the pill-tile, but in the elevated position shown in Fig. 1. A "pencil" of the mass is then rolled to the length of the scale of graduations or as much shorter as may be desired. The pencil 16 is then placed on the pill-tile lengthwise thereof, after which the plate 3 is placed upon the pill-tile, as stated, with the blades



15 disposed over the graduations and over the pencil. The plunger is then forced into the position shown in Fig. 2, thus causing the blades 15 to pass through the slots 4 and  
 5 against the pill-tile, thus severing the mass into the proper number of parts, each of an equal size. These parts may then be rolled into pills or placed in capsules, as desired. After the plunger has been depressed the  
 10 plunger is retracted by the springs 14 to the original position shown in Fig. 1. The plate 3 and plunger 13 and parts connected therewith are then removed from the pill-tile until such time as it is desired to again use the  
 15 mechanism. The plate 3 serves as a stripper to remove the mass from between the blades 15.

My invention may be variously modified without departing from its spirit.

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

1. The combination with a pill-tile provided with a series of graduations, of a series of cutting devices disposed apart from each  
 25 other the same distance as the distance between adjacent graduations, a reciprocative support for the said cutting devices, and means for adjusting the said support transversely across the said graduations, substantially as described.

2. The combination with a pill-tile provided with a series of graduations, of a series of cutting devices disposed respectively opposite the said graduations, a support adjustable lengthwise of the said graduations and  
 35 provided with means for engaging the pill-tile, and a plunger carrying the said cutting devices and reciprocatively mounted on the said support, substantially as described.

3. The combination with a pill-tile provided with a series of graduations, of a series of cutting devices disposed opposite the said graduations respectively, a support mounted upon the pill-tile and adjustable lengthwise  
 45 of the graduations thereon, a plunger reciprocatively mounted on the said support and carrying the said cutting devices, and means for retracting the plunger, substantially as described.

4. The combination with a pill-tile provided with a series of graduations, of a support mounted upon the pill-tile and adjustable lengthwise of the graduations thereon and provided with a series of slots disposed  
 55 parallel with and opposite the said graduations, a reciprocative plunger mounted on the said support, and a series of cutting devices carried by the plunger and adapted to enter respectively the said slots and press  
 60 against the pill-tile when the plunger is reciprocated in the proper direction, substantially as described.

5. The combination with a pill-tile provided with a series of graduations, of a support provided with a series of slots disposed  
 65 parallel with and opposite the said gradua-

tions and provided also with means for supporting the said support upon the pill-tile and having means for engaging two edges of the tile, a plunger reciprocatively mounted  
 70 upon the said support, and a series of cutting devices mounted on the plunger and adapted to pass through the said slots and against the pill-tile when the plunger is properly reciprocated, substantially as described.

6. A mass-divider comprising a reciprocative plunger, a series of cutting devices mounted thereon, a support on which the plunger is mounted, means for retracting the plunger, and end guides provided one at each  
 80 end of the said support and adjustable to different positions thereon, substantially as described.

7. A mass-divider comprising a reciprocative plunger, a series of cutting devices  
 85 mounted thereon, a support on which the plunger is reciprocatively mounted, a spring for retracting the plunger, adjustable end guides mounted on the support, the support being provided also with a series of slots  
 90 through which the cutting devices are adapted to pass when the plunger is reciprocated, substantially as described.

8. A mass-divider comprising a horizontal plate provided with a plurality of parallel  
 95 slots arranged in series, end guides one at each end of the said plate, vertical guides on the said plate, a plunger reciprocative on said vertical guides, and a series of blades carried by the plunger and adapted to pass through  
 100 the said slots when the plunger is properly reciprocated, substantially as described.

9. A mass-divider comprising a horizontal plate provided with a plurality of parallel slots arranged in series, end guides longitudinally adjustable upon the said plate, two  
 105 vertical posts on the said plate a plunger mounted on said vertical posts, stops for limiting the movement of the plunger, springs for retracting the plunger and a series of  
 110 transverse blades, mounted on the plunger and adapted to pass through the said slots when the plunger is reciprocated in the proper direction, substantially as described.

10. A mass-divider comprising a horizontal  
 115 plate provided with two downwardly-extending supporting projections, two end guides longitudinally adjustable on the said plate, means for locking the said guides in position on the said plate, two posts secured to the  
 120 plate, a plunger mounted on the posts, two springs for reciprocating the plunger on the posts, and a series of blades mounted on the plunger and adapted to enter the said slots, substantially as described.

In testimony whereof I have signed my name to this specification in presence of two subscribing witnesses.

J. WALTER JACKSON.

Witnesses:

J. B. WILLIS,

J. H. BRILL, Jr.