

No. 721,949.

PATENTED MAR. 3, 1903.

D. M. HEALD.
ROUTING TABLE.

APPLICATION FILED OCT. 1, 1902.

NO MODEL.

3 SHEETS—SHEET 1.

Fig. 1.

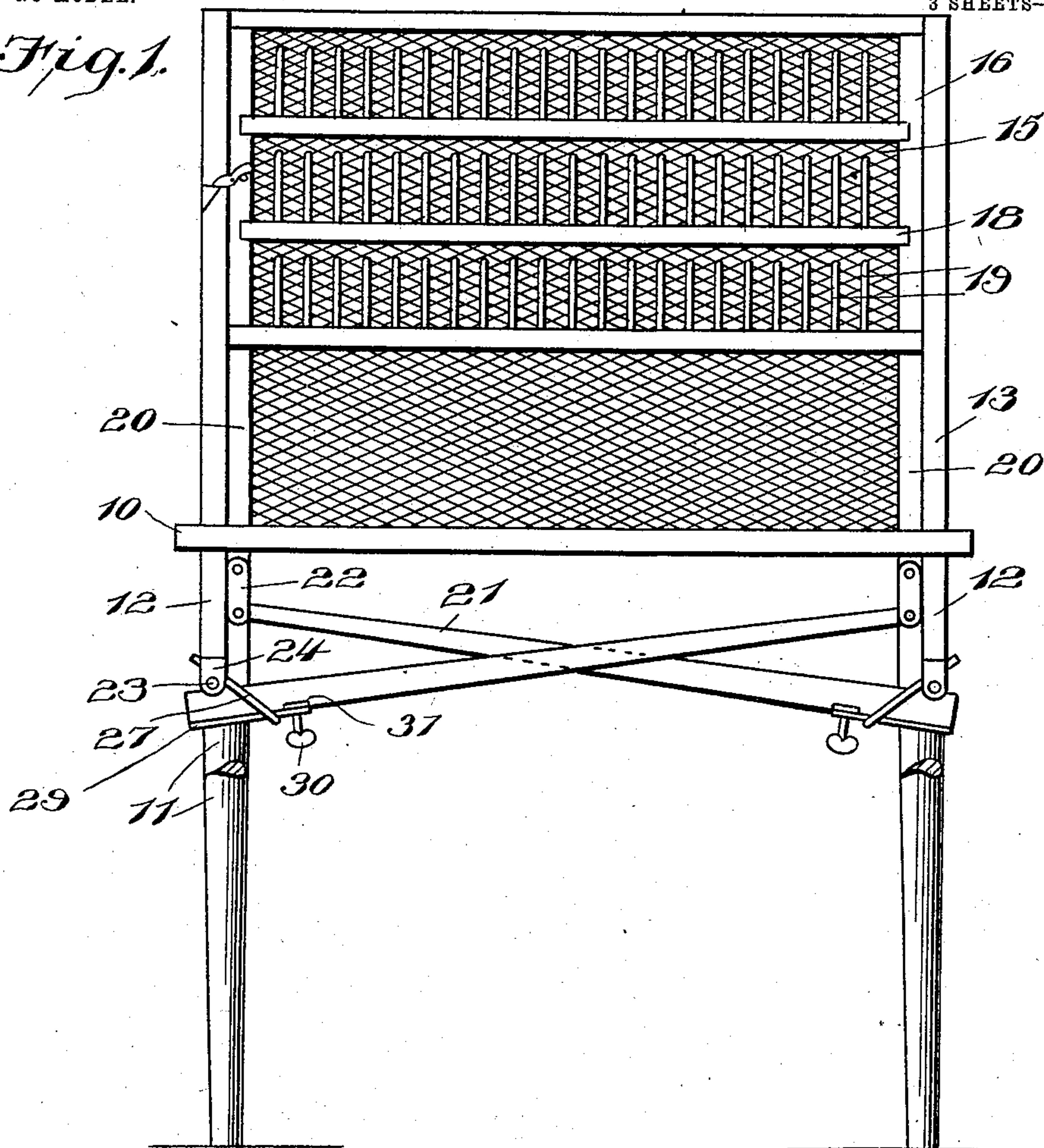


Fig. 3.

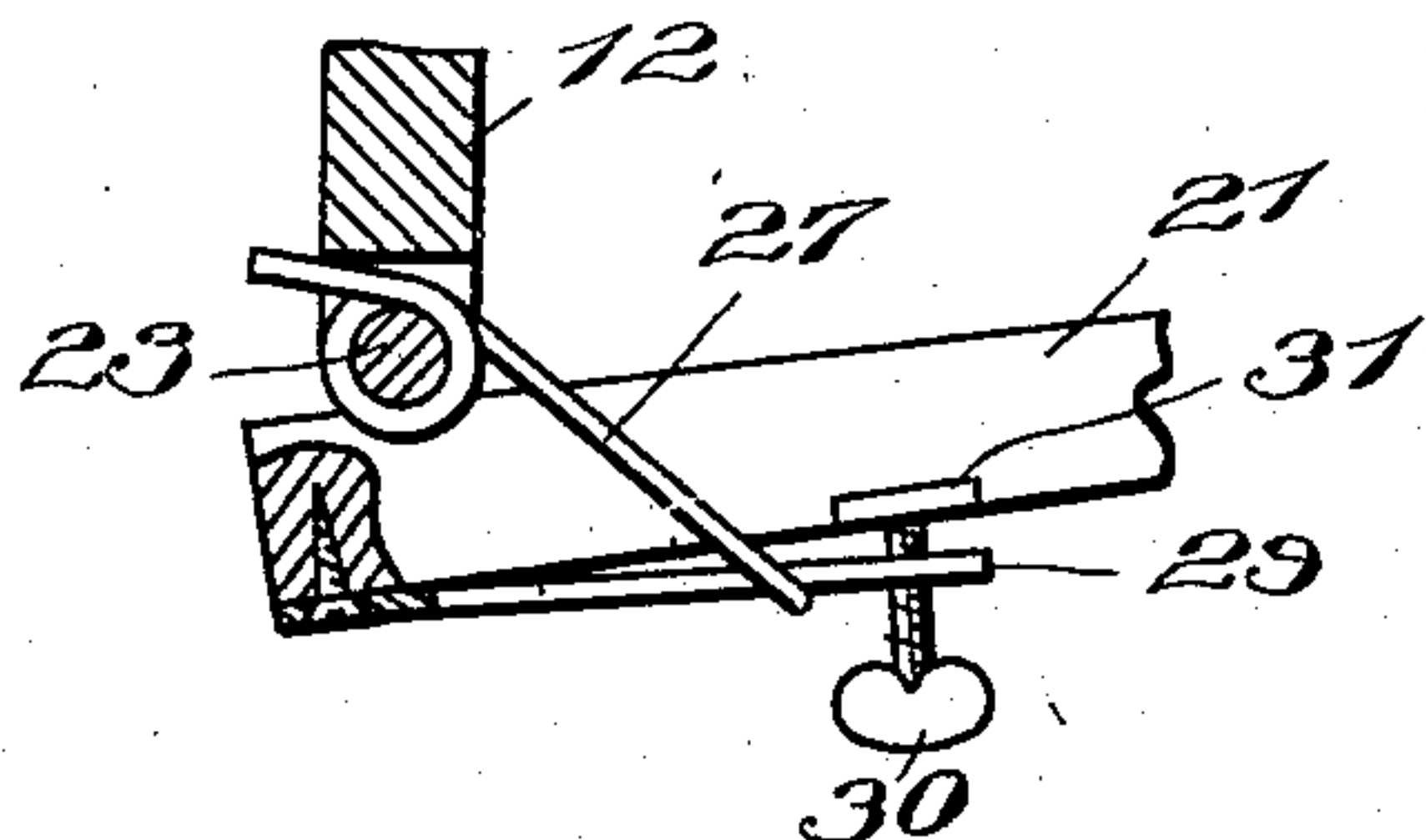
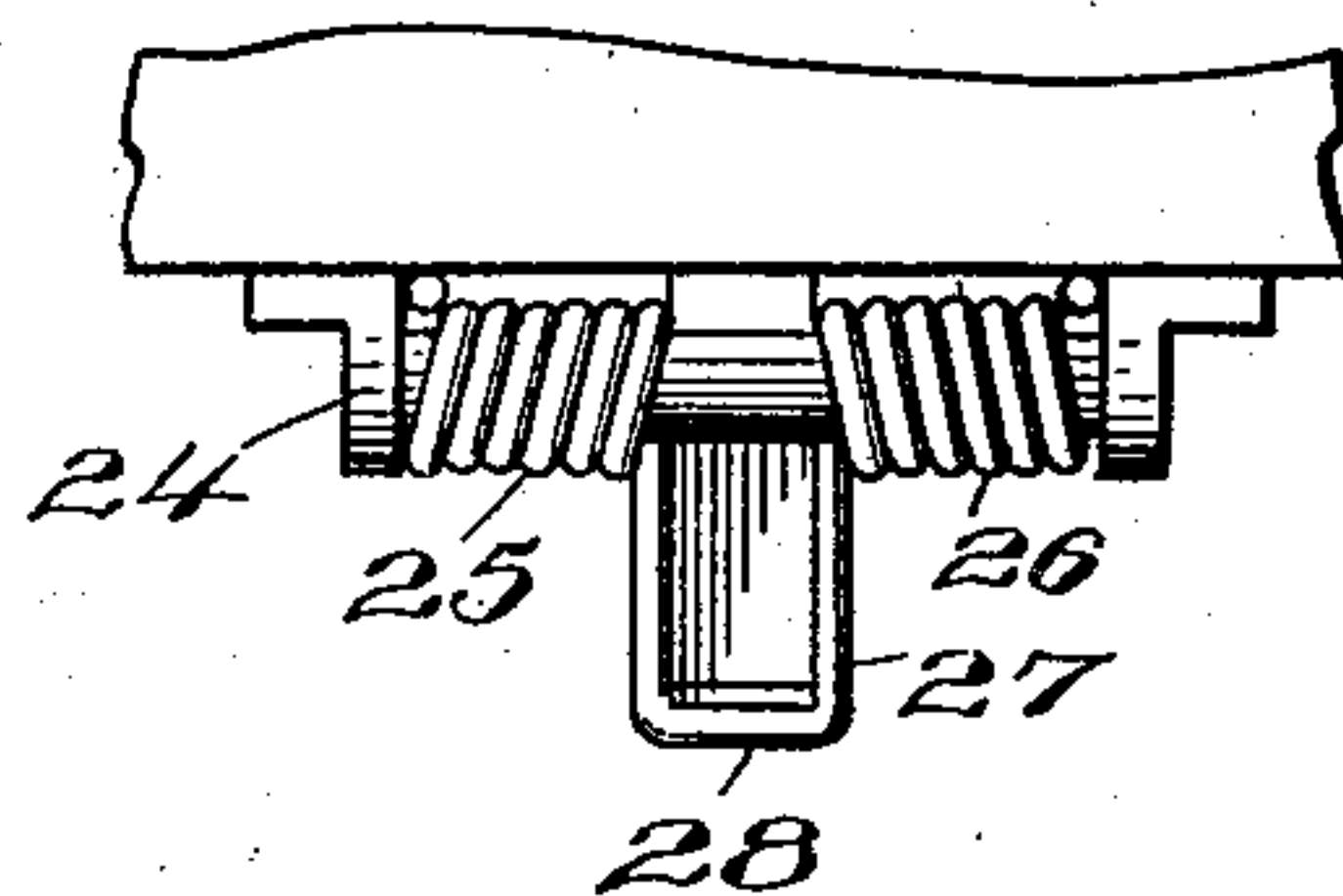


Fig. 4.



Witnesses

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3 SHEETS—SHEET 2.

Fig. 2.

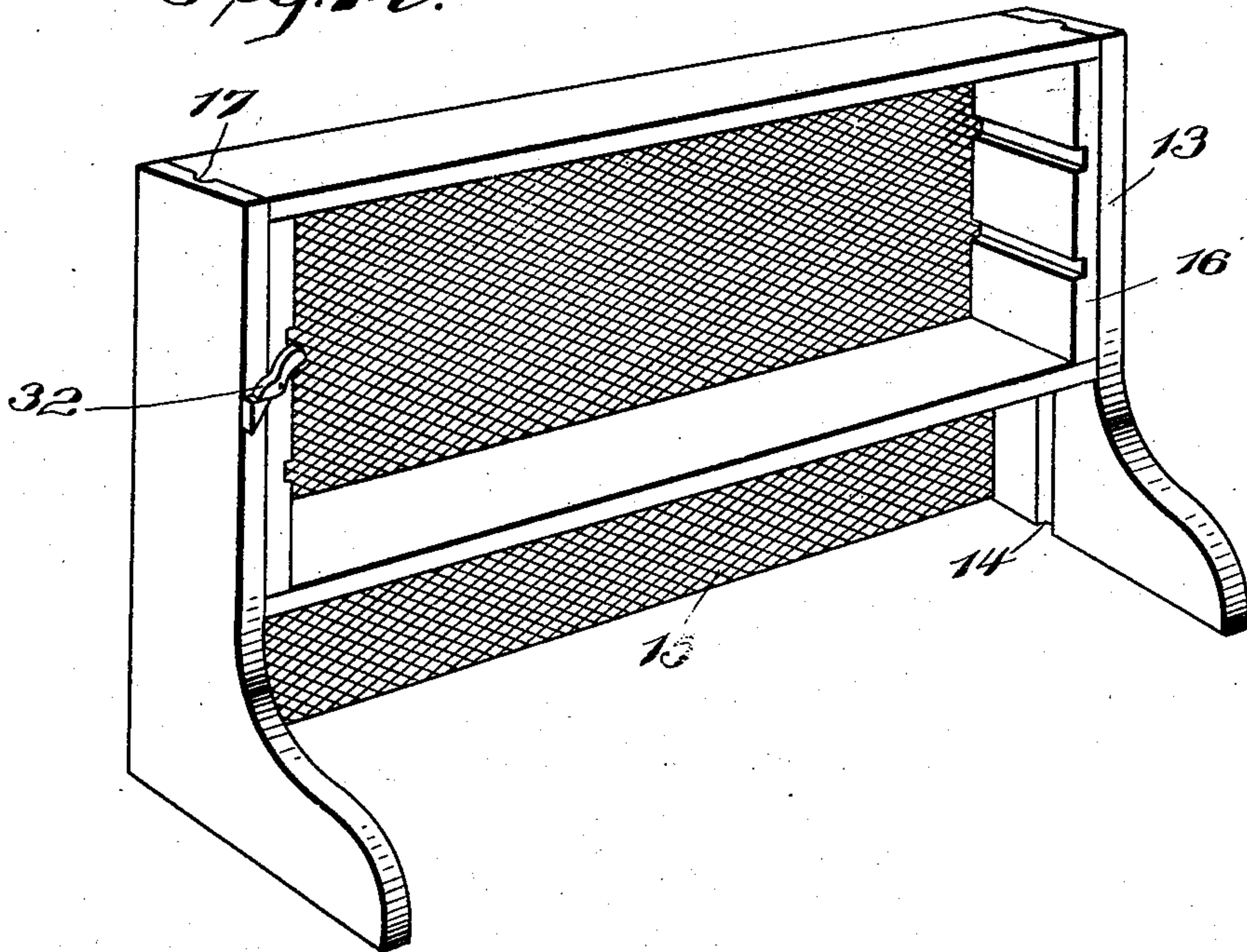
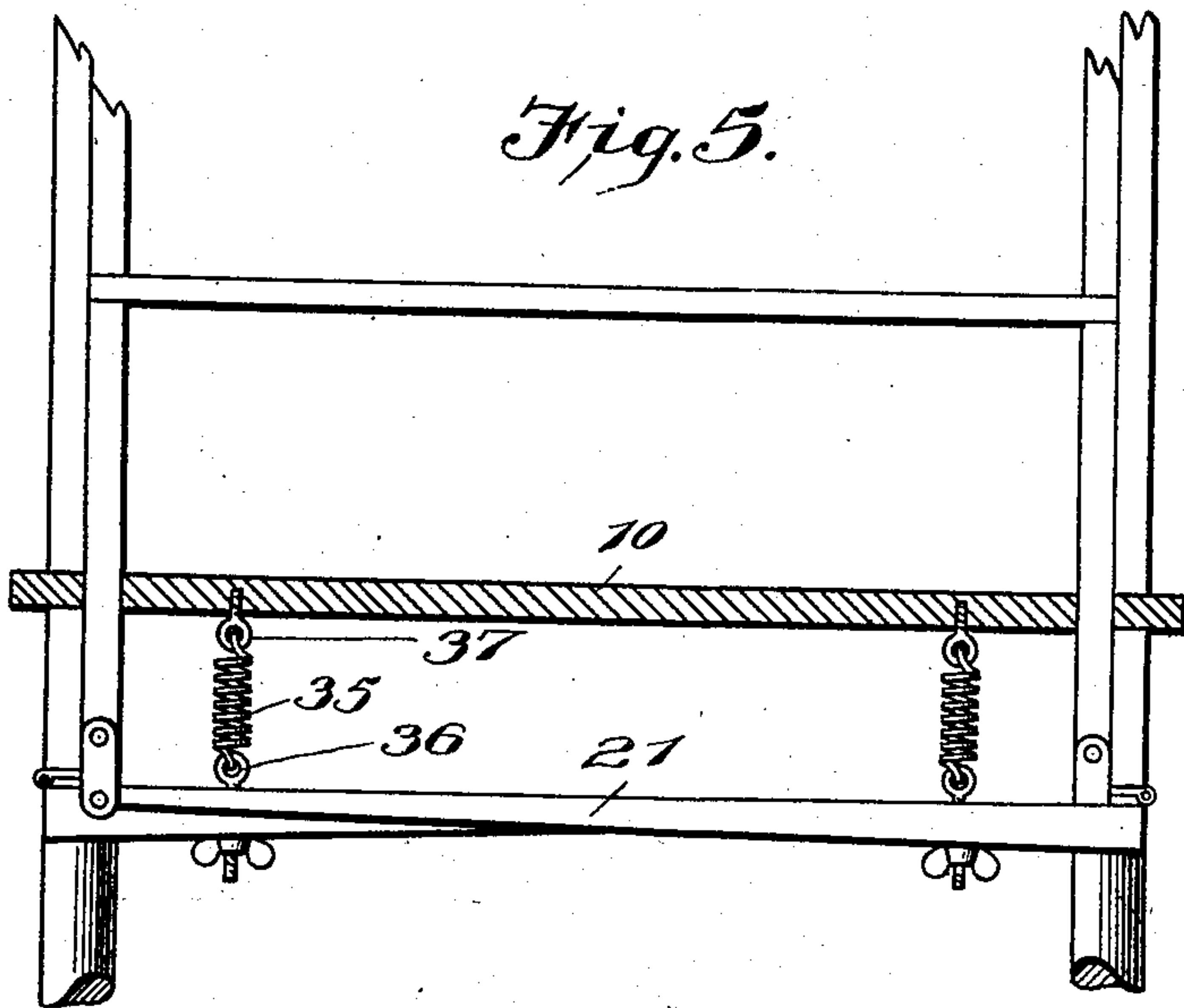


Fig. 5.



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3 SHEETS—SHEET 3.

Fig. 6.

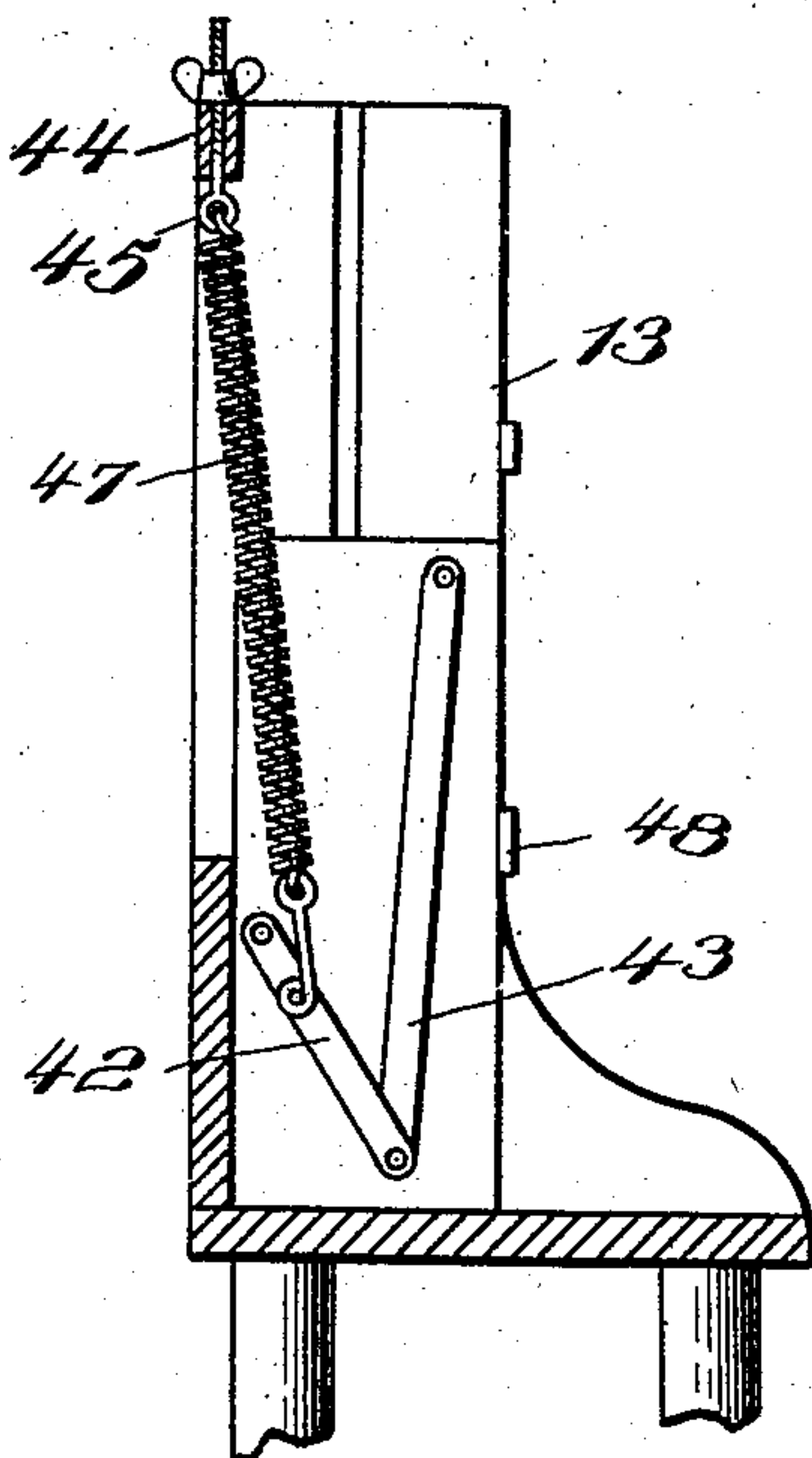
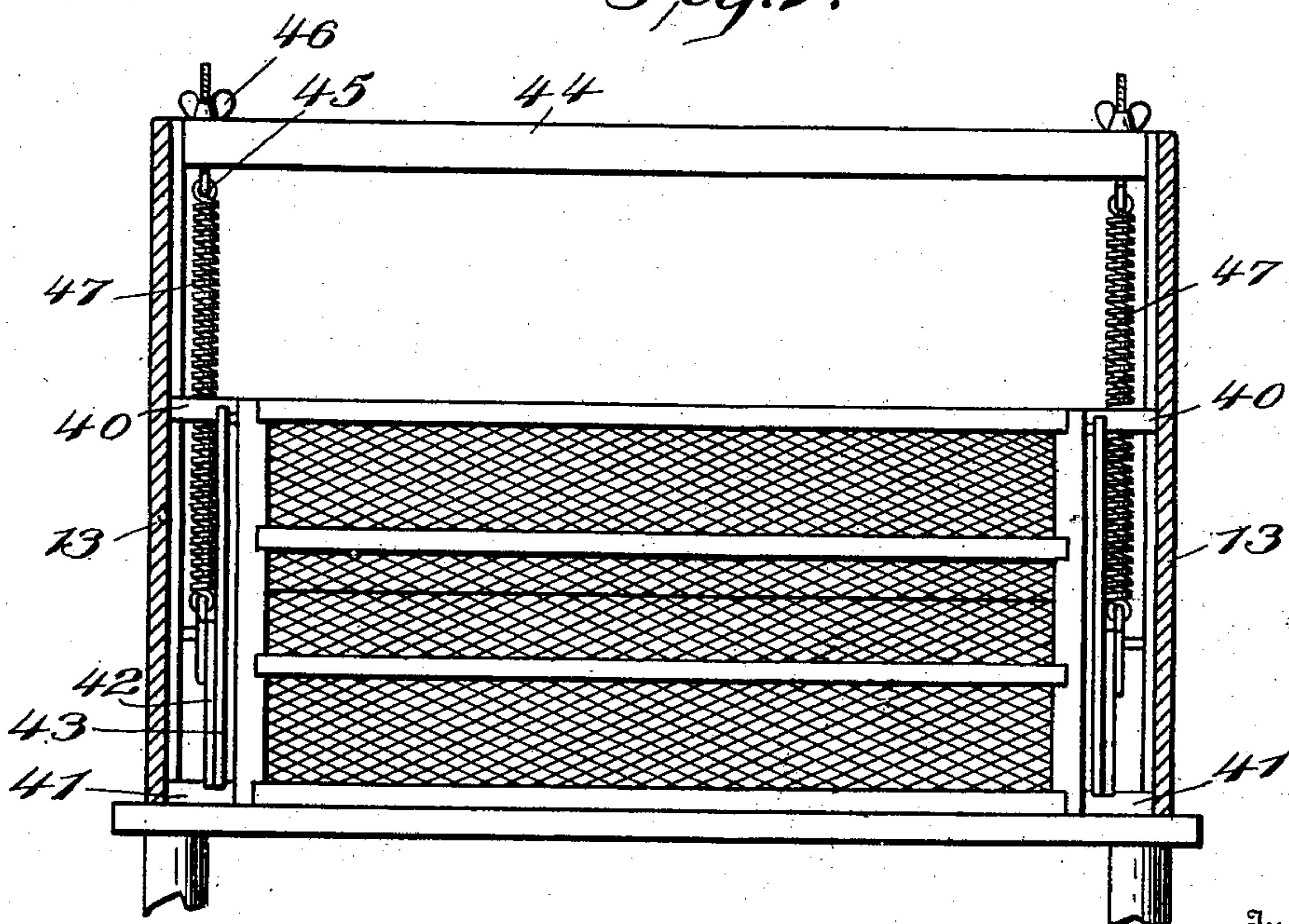


Fig. 7.



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UNITED STATES PATENT OFFICE.

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ROUTING-TABLE.

SPECIFICATION forming part of Letters Patent No. 721,949, dated March 3, 1903.

Application filed October 1, 1902. Serial No. 125,563. (No model.)

To all whom it may concern:

Be it known that I, DANIEL M. HEALD, a citizen of the United States, residing at Milford, in the county of Hillsboro, State of New Hampshire, have invented certain new and useful Improvements in Routing-Tables; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

This invention relates to post-office furniture, and more particularly to what are known as "routing-tables;" and it has for its object to provide a table including a top provided with legs and an upwardly-extending frame and a series of mail-receiving compartments in the form of a rack to receive and hold the mail as it is sorted and in which the said rack will be movable vertically from the table-top and will be assisted in such movement by the action of springs and will be held in raised position by means of a latch.

A further object of the invention is to provide a simple and efficient mechanism for conveying motion from the springs to the rack.

Other objects and advantages of the invention will be understood from the following description.

In the drawings forming a portion of this specification, and in which like numerals of reference indicate similar parts in the several views, Figure 1 is a front elevation of a routing-table embodying the present invention, the adjustable rack being in raised position. Fig. 2 is a perspective view of the rack with the shelves removed and the frame in which it slides. Fig. 3 is a detail view showing a form of spring-hinge used and the means for adjusting the tension of the spring. Fig. 4 is an elevation of the end of a lever and showing the spring-hinge thereof. Fig. 5 is a view showing the upper portion of the table proper in section, with the lower portion of the sliding rack and the connected levers, the latter being provided with a different form and arrangement of springs. Fig. 6 is a vertical section at one side of the rack and showing a different arrangement of spring-actuated lever. Fig. 7 is a vertical section through both sides of the frame in which the rack

slides, the rack and its levers being in elevation.

Referring now to the drawings, and more particularly to Figs. 1, 2, and 3 thereof, there is shown a routing-table comprising a table proper or base which includes the top 10, having legs 11, and the end portions 12 between the legs and below the top 10. Upon the top 10 is a frame including end uprights 13, having longitudinal grooves 14 in their inner faces, said uprights being connected at their rear edges by means of the back 15, which may be of gauze or other material, as may be preferred.

The mail to be sorted is dumped upon the top 10, and each piece after inspection is placed in a rack. This rack consists of a rectangular frame 16, which is slidably fitted between the uprights 13 and has vertical beads 17, which engage in the grooves 14 to guide the rack vertically in its sliding movement while preventing outward displacement thereof. In the rack-frame 16 are disposed transverse shelves 18, provided with partitions 19, which may be in the form of wire loops or have any other specific structure desired. During the sorting of letters and other small mail-matter the rack is lowered to rest upon the top 10; but when second-class matter is to be sorted the entire top 10 is required for use, and the rack is then slid upwardly to stand above the top and give free access to all parts thereof. To raise the rack and hold it yieldably in raised position, a system of spring-actuated levers is employed. From the end portions of the rack-frame project downwardly the posts 20, which are passed through openings in the top 10, and connected to the lower ends of these posts are the levers 21 by means of the pivoted links 22, said levers 21 being passed downwardly and crossed and having their lower ends hinged to the portions 12. The hinge connections of the levers 21 to the ends 12 consist of the horizontal pintles 23, engaged in hangers 24, which depend from the ends 12, and against the under side of the pintle is disposed the upper face of the lever. A helical spring is wound upon each pintle and comprises the spaced helical sections 25 and 26, having the yoke-shaped connecting portion 27, including

spaced members and a connecting-bight 28, the lever being disposed against the pintle between the spaced members in question and the bight 28 bearing against the under face of the lever between the pintle and its point of connection to its link 22. The ends of the single wire from which the two-part spring is made are disposed against the corresponding end piece 12. The bight portion 28 of each spring instead of bearing directly against the under face of the corresponding lever 21 bears against a plate 29 of spring metal which is fastened at one end to the lever at a point below the pintle of that lever, and through the opposite end of the plate at a point beyond the bight 28 is engaged a thumb-screw 30, which bears against the under face of the lever or a wear-plate 31, attached to the lever, so that when the screw is adjusted in one direction it will cause the plate 29 to move away from the lever and correspondingly move the bight 28 to increase the tension of the spring, and when the screw is moved in an opposite direction the plate is permitted to return and decrease the tension of the spring. The action of the springs is to move the levers with their outer ends upwardly, and thus to elevate the rack, the upward movement of the levers being limited by the table-top 10, against which they strike, and in which position of the levers the rack is held by the action of the gravity-catch 32 with its bottom sufficiently high above the top 10 to permit of access to all parts of the top. When the rack is to be used in its lowered position, it is depressed and is held in such position by its own weight.

In Fig. 5 of the drawings there is shown a construction wherein instead of the arrangement of springs above described helical springs 35 are employed, one for each of the levers 21. An eyebolt 36 is passed through each of the levers at a point near to its hinged end and has an adjusting thumb-nut engaged with its lower end for drawing it through the lever. The eye at the upper end of the bolt has the lower end of a spring 35 engaged therewith, while the other end of the spring is engaged in an eye 37, secured to the under side of the top 10. The operation of this form of the invention is the same as that first described.

In Figs. 6 and 7 of the drawings there is shown a form of the invention wherein the table proper is provided with the uprights 13, having vertical grooves in their inner faces, as in the other forms of the invention; but the frame of the rack instead of fitting closely between the uprights and having beads for engagement with the grooves of the uprights has guide-blocks 40 and 41 at the top and bottom, respectively, of each end of the frame of the rack and which blocks permit of free vertical movement of the rack while preventing outward displacement thereof. A lever 42 is pivoted at one end to the inner face of each of the uprights 13 and is pivoted at its

opposite end to the lower end of a link 43, which is in turn pivoted at its upper end to the adjacent face of the rack-frame near to the upper end thereof, so that when said levers are raised the rack will be correspondingly moved. Connecting the upper rear corners of the uprights 13 is a cross-bar 44, through which are engaged eyebolts 45, having adjusting thumb-nuts 46 engaged with their upper ends and with the eyes, at the lower ends of which bolts are connected the upper ends of helical springs 47, having their lower ends connected to the levers 42 at points between the pivotal connections thereof. These helical springs tend to move the levers to raise the rack, while permitting the rack to be forced downwardly, the rack being held in lowered position by its own weight. To hold the rack at the upper limit of its movement, a suitable form of latch 48 is used, which may be of any desired form. By adjusting the thumb-nuts 46 the tensions of the springs will be correspondingly adjusted, so that the rack will remain at whatever elevation it is placed, the friction between the rack and the frame in which it slides being such as to prevent the springs from raising the rack while assisting the springs to sustain the rack at different elevations.

It will thus be seen that there is provided a construction wherein the rack may be easily and quickly raised and lowered without the use of objectionable weights, which do not permit of adjustment of the speed of movement of the rack when released from its lowered position. Furthermore, in the present invention the operating mechanism is in large part concealed, it is cheap of manufacture, efficient in its operation, is light, and easy of shipment.

It will be understood that in practice other modifications may be made and that any suitable materials and proportions may be used for the various parts without departing from the spirit of the invention.

What is claimed is—

1. In a routing-table, a base, a rack mounted for movement toward and away from the base, and spring-actuated mechanism connected with the rack for moving and holding it yieldably in spaced relation to the rack, said spring-actuated mechanism being adjustable to vary the energy imparted to the rack.

2. In a routing-table, a base, a rack mounted for movement toward and away from the base, spring-actuated mechanism connected with the rack for moving and holding it yieldably in spaced relation to the base, and means for holding the rack against the action of said mechanism, said spring-actuated mechanism being adjustable to vary the energy imparted to the rack.

3. In a routing-table, a base, a rack mounted for movement toward and away from the base, pivot-levers connected with the rack, and actuating-springs connected with the le-

vers to move and hold the levers with the rack in spaced relation to the base.

4. A routing-table comprising a base, a rack mounted for movement toward and away from the base, supporting-posts for the rack passed through the base, levers pivotally connected with the base and with the said posts, and actuating springs connected with the levers and the base for holding the levers yieldably with the rack in spaced relation to the base.

5. A routing-table comprising a base, a rack mounted above the base for movement toward and away from the base and having supporting-posts passed through the base, levers con-

nected to the posts and pivoted to the base, a plate attached at one end to each lever and having means for moving its opposite end toward and away from the lever, and actuating-springs for the levers bearing against said plates, whereby the tensions of the springs will be adjusted when the plates are moved.

In testimony whereof I affix my signature in presence of two witnesses.

DANIEL M. HEALD.

Witnesses:

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