

(No Model.)

H. E. SPAUNHORST.
DRAWER STOP AND GUIDE.

No. 480,861.

Patented Aug. 16, 1892.

Fig. 1

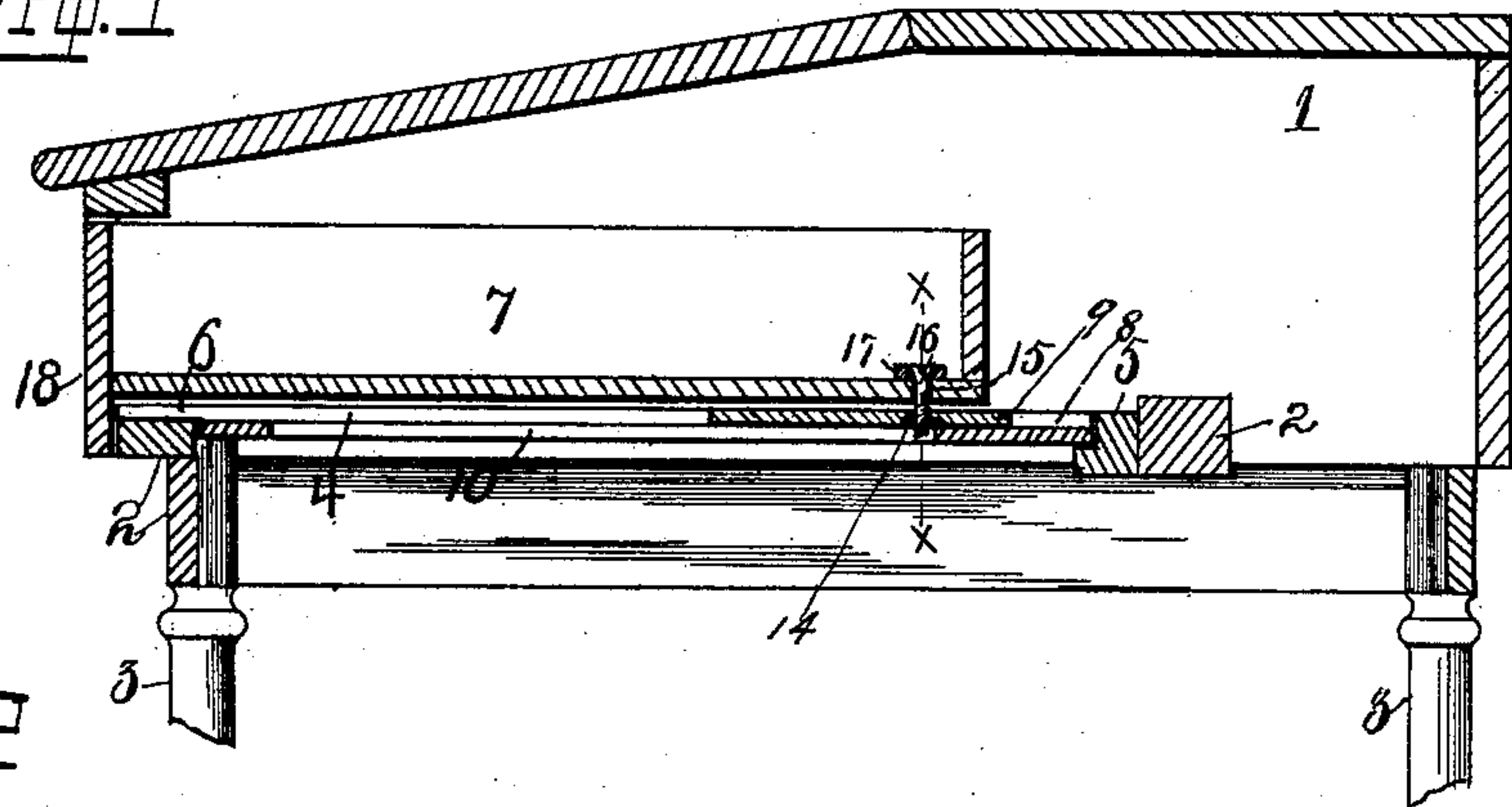


Fig. 2

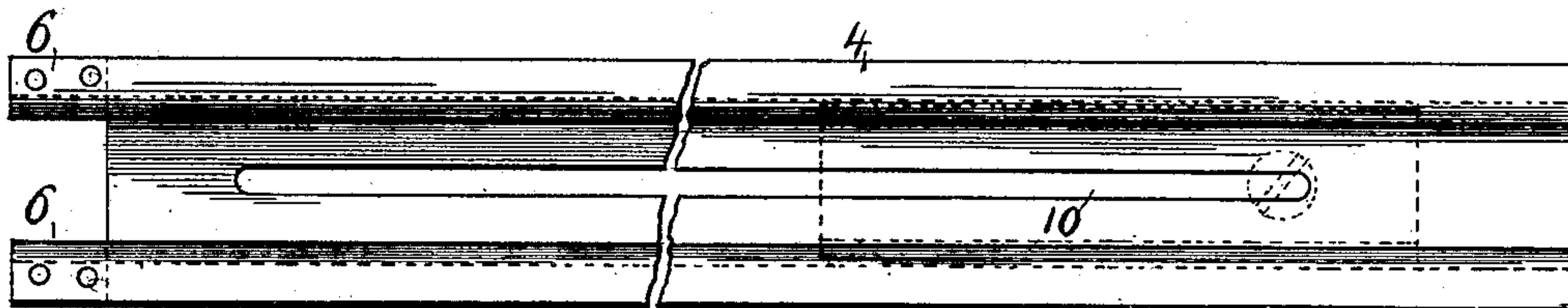


Fig. 3

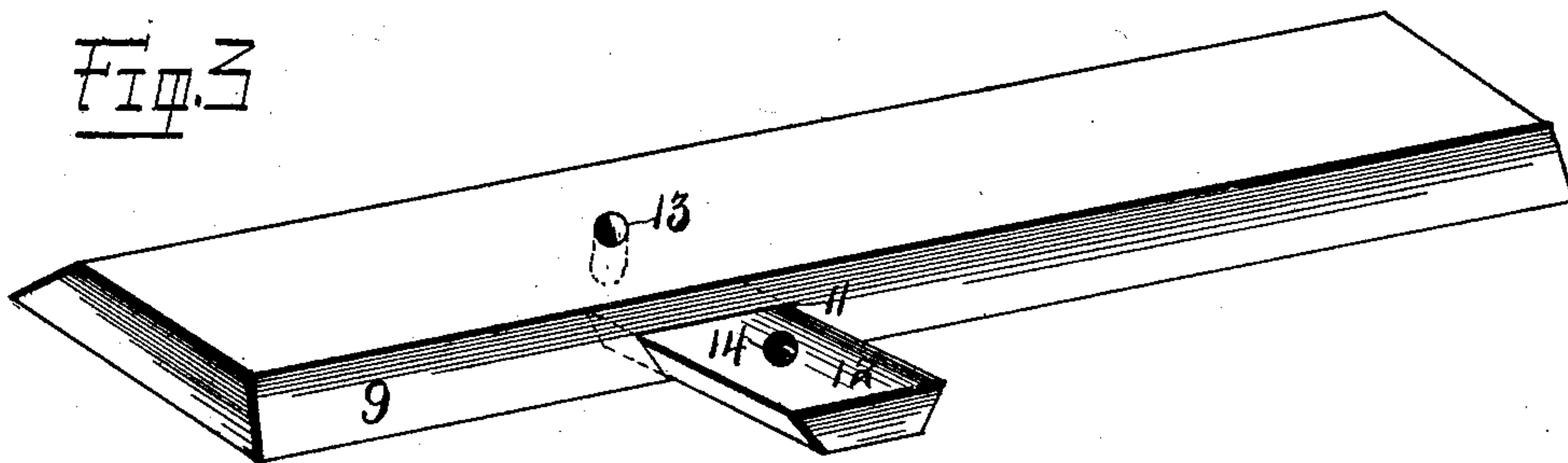
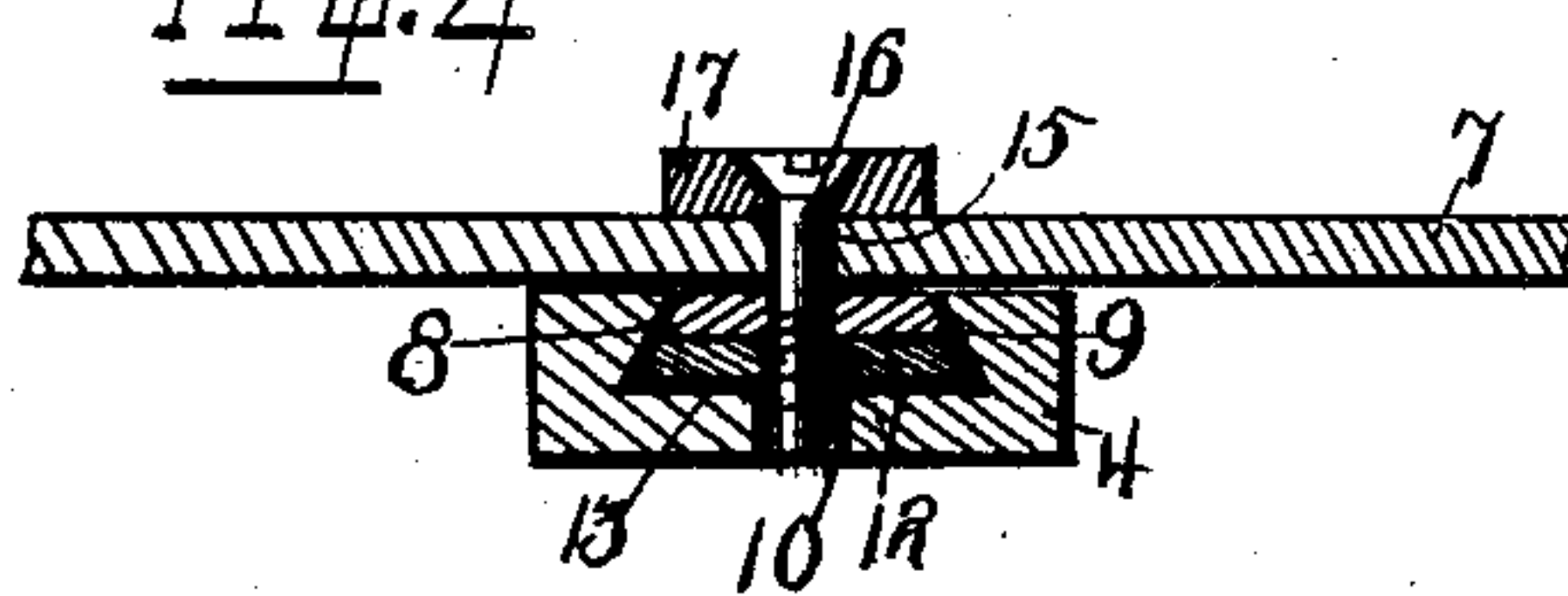


Fig. 4



Witnesses
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By his Attorneys Higdon & Higdon

UNITED STATES PATENT OFFICE.

HENRY E. SPAUNHORST, OF ST. LOUIS, MISSOURI.

DRAWER STOP AND GUIDE.

SPECIFICATION forming part of Letters Patent No. 480,861, dated August 16, 1892.

Application filed December 21, 1891. Serial No. 415,732. (No model.)

To all whom it may concern:

Be it known that I, HENRY E. SPAUNHORST, of the city of St. Louis and State of Missouri, have invented certain new and useful Improvements in a Combined Drawer Stop and Guide, of which the following is a full, clear, and exact description, reference being had to the accompanying drawings, forming a part hereof.

My invention relates to improvements in a combined stop and guide; and it consists in the novel arrangement and combination of parts, as will be more fully hereinafter described, and designated in the claims.

In the drawings, Figure 1 is a vertical longitudinal section of my invention as applied to a desk and drawer. Fig. 2 is a top plan view of the guide bar or plate forming a part of my invention. Fig. 3 is a perspective view of the slide detached, and Fig. 4 is a vertical cross-section taken on the line *x x* of Fig. 1.

The object of my invention is to provide a novel, simplified, and inexpensive drawer stop and guide which can be easily and quickly attached to an ordinary desk and drawer or other furniture, and when applied in the manner as shown in Fig. 1 the said drawer will be prevented from being displaced or withdrawn from the desk.

My invention is preferably constructed of hard wood; but other material may be substituted without departing from the nature of my invention.

By the use of my invention the drawer of the desk will be guided and will not bind against the ordinary guide for the same, and, further, provide a suitable stop in either movement of the drawer.

Referring to the drawings, 1 represents an ordinary desk having braces 2 and legs or supports 3.

4 represents the guide plate or bar which forms a part of my invention and which is of sufficient length, in order that it can be easily attached to the cross-pieces 2 of the desk.

5 represents a block of wood secured to the rear cross-piece 2 of the desk and to which is secured one end of the guide-plate 4. The opposite end of said guide-plate is provided with projecting ends 6, which ends rest upon the upper surface of the front cross-piece 2

and are united to the same. By the construction of the extension 6 the drawer 7 is provided with a stop when the same is entirely closed.

8 represents a dovetailed groove formed in the said guide-plate 4, which extends the entire length of said plate, within which the dovetailed slide 9 is adapted to freely move. Formed in the bottom of the said guide-plate 4 is a vertical longitudinal slot 10, which is of sufficient length to allow the drawer 7 to be opened to its full extent.

Through the slide 9 and adjacent to the bottom of the same is formed a dovetailed groove 11, which extends transversely across the same, which groove receives the corresponding dovetailed metallic plate 12, the same being of suitable size and dimensions from end to end, in order that when the said plate is properly inserted in said slide the ends of the said plate 12 will be flush with the bevel sides of said guide.

In Fig. 3 the plate 12 is shown partially drawn out of the slide 9, in order to more properly show the construction of the same; but in practice, however, the said plate will be pushed entirely in, as shown in the cross-section, Fig. 4.

13 represents a vertical opening formed in the slide 9 immediately above the dovetailed groove 11, which opening corresponds with the screw-threaded opening 14, formed in the metallic plate 12 when the said plate is in its normal position, as shown in Fig. 4.

In order to secure the drawer 7 to the guide, as above described, I employ the means as hereinafter more specifically described.

15 represents a vertical opening formed in the bottom of the drawer, through which a screw 16 is adapted to be passed, premising however, that a metallic washer 17 is placed between the head of the said screw and the upper surface of the bottom of the drawer, in order to protect the said drawer and receive the wear which would otherwise be brought to bear upon the same.

The screw 16, when properly applied, will be inserted into the vertical opening 15, formed in the bottom of the drawer, as above stated, and by the use of a proper tool—such as a screw-driver—the lower screw-threaded end of

the said screw is turned into the screw-threaded opening 14, formed in the plate 12, and the parts properly united.

The screw 16 is of sufficient length so that when the parts are united, as shown in Fig. 1, the lower end of the said screw will project into the slot 10, formed in the guide-plate 4. By this construction when the drawer is completely closed the projecting end of the screw 16 will strike the rear termination of the slot 10, and at the same time the front 18 of the drawer will simultaneously strike the projections 6, forming a part of the guide-plate 4. When the drawer is completely opened, the said projecting end of the screw 16 will be brought against the forward termination of the said slot 10 and thereby prevent the said drawer from being entirely withdrawn from the desk.

By empirical knowledge I have found that the construction as above described answers all the purposes designed of its use, and that the same can be easily applied to a desk by an unskilled person, as its application can be ascertained at a mere glance.

I am aware that dovetail guide-plates have been heretofore employed having a dovetail slide working therein, and I am also aware that it is not broadly new to set a metallic plate having a screw-threaded aperture into wood for the purpose of securing a firm hold for a screw or bolt. To such features I therefore lay no broad claim, my invention consisting in the combination and arrangement of the various elements, as set forth in the following claims.

Having fully described my invention, what I claim is—

1. The herein-described drawer stop and

guide, consisting of a guide-plate provided with a longitudinal slot 10, closed at its ends, a guide working in said guide-plate, and an attaching pin or screw 16, adapted to pass through the guide and engage the slot 10, whereby said projecting end of the pin or screw contacts with the respective closed ends of the slot when the drawer is opened and closed and acts as a stop for limiting the movement of the drawer, substantially as and for the purpose set forth.

2. The combination, with a receptacle and a drawer sliding therein, of a fixed guide-plate provided with a longitudinal slot 10, a guide working in said guide-plate, and a pin or screw 16, securing said guide to the bottom of the drawer and projecting downwardly into the slot 10, for the purpose described.

3. The combination, with a receptacle provided with the front and rear cross-pieces 2, the latter cross-piece having a recessed block 5 secured at its front edge, and a drawer sliding within said receptacle, of a guide-plate 4, secured at its rear end to the block 5 and having at its forward end projections 6 6, overlapping the front cross-piece 2, said guide-plate being provided with a longitudinal slot 10, closed at its ends, a slide 9, working in the guide-plate, a metallic plate 12, countersunk in the under side of said slide, and a pin or screw 16 passed through the bottom of the drawer and secured within the plate 12, substantially as and for the purpose set forth.

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

HENRY E. SPAUNHORST.

Witnesses:

C. F. KELLER,
ALFRED A. EICKS.