June 23, 1964 A. P. ABRAMOVICH 3,138,416

DRAWER STOP

Filed Dec. 8, 1961

Fig. 1.

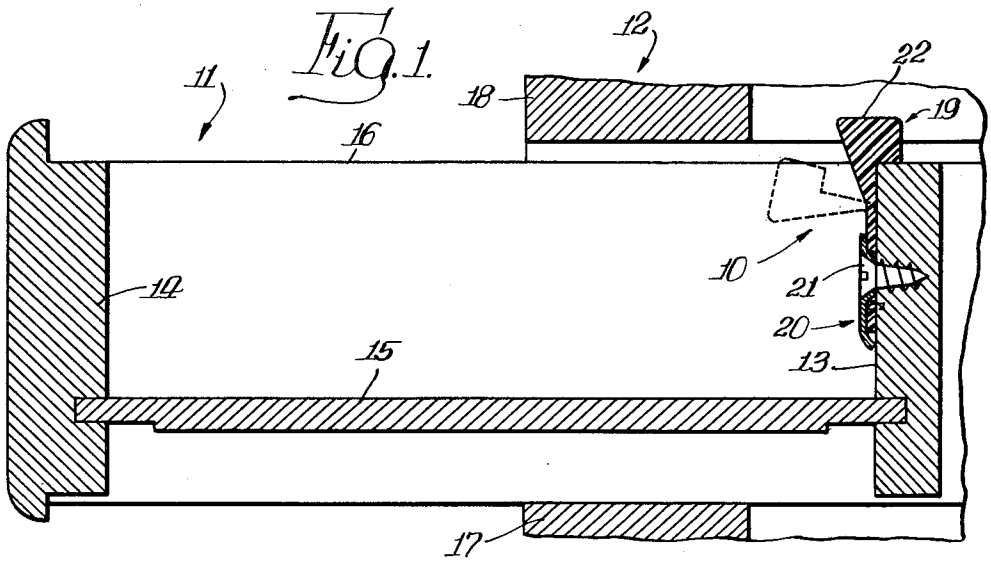


Fig. 2.

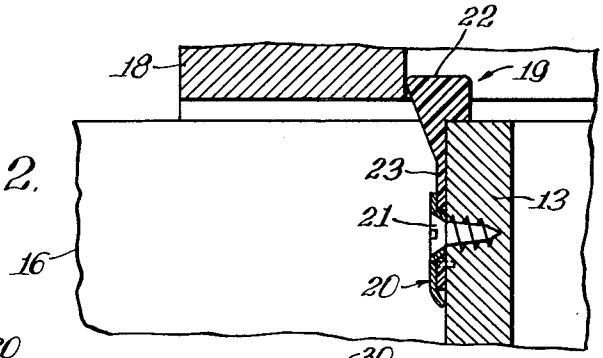


Fig. 3.

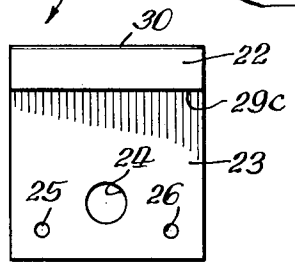


Fig. 4.

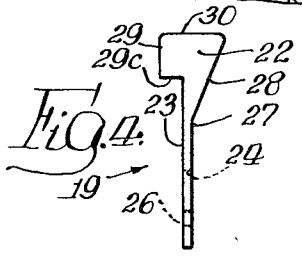


Fig. 5.

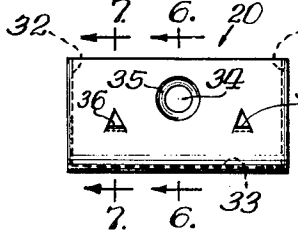


Fig. 6.

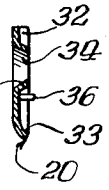
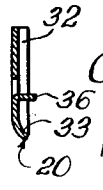


Fig. 7.



INVENTOR.
Adrian P. Abramovich,
BY
Davis, Lindsey, Hibben & Noyes
Attys.

United States Patent Office 3,138,416 Patented June 23, 1964

3,138,416

DRAWER STOP

Adrian P. Abramovich, Two Rivers, Wis., assignor to Hamilton Manufacturing Company, Two Rivers, Wis., a corporation of Wisconsin

Filed Dec. 8, 1961, Ser. No. 157,973
2 Claims. (Cl. 312—348)

This invention relates generally to drawer retaining mechanisms and, more particularly, to an improved stop for drawers of the type used in cabinets, desks, or the like.

It is usually desirably to equip cabinets having drawers with a stop to prevent a drawer from being accidentally pulled completely out of the cabinet. At the same time, the stop should also be adjustable to a position where it allows the drawer to be completely withdrawn when desired.

Conventional stops designed to accomplish these functions are usually permanent installations and difficult to repair or replace when broken. Quite frequently, they are also difficult to adjust when a drawer is to be removed or reinserted.

Accordingly, it is the general object of this invention to provide an improved drawer stop which is readily adjustable to a position where it allows a drawer to be removed.

It is another object of this invention to provide an improved adjustable drawer stop which is readily mounted on or removed from a drawer.

A further object is to provide a novel drawer stop which may be easily and inexpensively manufactured.

It is still another object of this invention to provide an improved cabinet having an adjustable drawer stop mechanism.

Other objects and advantages will become more apparent from the following description taken in conjunction with the accompanying figures of the drawing, in which:

FIG. 1 is a sectional view of a cabinet, drawer and an adjustable drawer stop embodying the invention.

FIG. 2 is a similar view showing the drawer in the extreme open position.

FIG. 3 is an elevational view of the stop member.

FIG. 4 is a view in and elevation of the stop member.

FIG. 5 is an elevational view of another part of the stop.

FIG. 6 is a sectional view taken along the line 6—6 of FIG. 5.

FIG. 7 is a sectional view taken along the line 7—7 of FIG. 5.

Generally, a drawer stop embodying the invention prevents a drawer from being pulled entirely out of a cabinet except when desired. The stop comprises a fastening plate and a stop member which are adapted to be mounted so that the stop member jams against the back of the drawer and the cabinet frame when the drawer is pulled to its extreme open position and the stop is in its normal position. The stop member is movable to an out-of-the-way position and allows complete withdrawal of the drawer. The fastening plate and stop member may be mounted on the back of the drawer. Although they are readily mounted by only one screw, rotational movement of the stop is prevented.

In detail, the stop (FIGS. 1 and 2) is indicated generally by the reference numeral **10**, the drawer by the numeral **11**, and a portion of the cabinet for the drawer by the numeral **12**. In this instance the drawer is shown as including a back **13**, a front **14**, a bottom **15**, and two sides **16** (only one being shown). These drawer members may be secured together by any desired means. The bottom edges of the two sides **16** slide along the

upper surface of a member **17** which forms part of the cabinet frame. The top edges of the sides **16** are spaced a short distance from an upper member **18** of the cabinet frame.

The stop **10** comprises a stop member **19** that is fastened to the back **13** of the drawer **11** by a plate member **20** and a single screw **21**.

The stop member **19** is illustrated in greater detail in FIGS. 3 and 4. It includes an enlarged portion **22** of substantial thickness connected to a flat mounting plate portion **23** which has three holes **24** to **26** formed in it. The hole **24** is formed approximately centrally of the plate portion **23**, and the two holes **25** and **26** preferably have a smaller diameter than the central hole **24** and are displaced from the center of the plate portion **23** and downwardly toward the lower corners of the portion **23**.

The enlarged portion **22** is connected to the mounting plate portion **23** at the point indicated by the numeral **27** and has two sides **28** and **29** and a top **30**. The side **28** projects upwardly and forwardly from the plane of the mounting plate portion **23**, and the side **29** is offset rearwardly from the mounting plate portion **23**. Thus, a laterally elongated shoulder **29***c* is provided. The top **30** and the shoulder **29***c* are substantially parallel with each other and are substantially perpendicular to the plane of the mounting plate portion **23**. The distance from the shoulder **29***c* to the top **30**, in the embodiment illustrated, is greater than the space between the cabinet frame member **18** and the upper edge of the drawer back **13**.

With reference to FIGS. 5 to 7, the fastening plate member **20** is a flat plate which is bent to provide flanges **31** and **32** at its two side edges and a flange **33** at its bottom edge. A hole **34** is fashioned at approximately the center of this plate and the plate around the hole **34** is dished at **35** for a countersink for the screw **21**. Two triangular points **36** and **37** having relatively sharp ends are punched from the plate to extend laterally therefrom.

The holes **25** and **26** in the plate portion **23** of the stop member **19** are positioned to mate with the points **36** and **37** when the portion **23** is placed against the plate **20** within the flanges **31** to **33**. The base of each triangular point is made wide enough to bite into the stop **19** at the margins of the holes **25** and **26**. The center hole **24** in the stop **19** is larger than and is positioned to mate with the countersunk hole **34** in the plate **20**.

The stop **10** is mounted on the drawer **11** by assembling the stop member **19** within the flanges **31** to **33** of the plate **20**, inserting the screw **21** through the holes **34** and **24**, and threading the screw **21** into the back **13** of the drawer **11** with the side **29** of the stop member **19** facing the back **13**. The height at which the stop is mounted is such that the shoulder **29***c* rests against the top of the drawer back **13**, as shown in FIG. 2. When the screw **21** is threaded tightly into the back of the drawer, the points **36** and **37** project through the holes **25** and **26** in the stop member **19** and bite into the drawer back **13**. Therefore, the plate **20** is prevented from rotating around the screw **21**, and the stop member **19** is prevented from rotating by the two points **36** and **37** and the three flanges **31** to **33**.

When the drawer **11** is in closed or intermediate positions in the cabinet, the enlarged portion **22** of the stop extends in a normal or straight-up position, as shown by the solid line in FIG. 1. As the drawer is pulled to the extreme open position shown in FIG. 2, the upper edge of the side **28** of the stop member **19** meets the frame member **18** and prevents further withdrawal. The shoulder **29***c* bears against the top of the back **13** and prevents the enlarged portion **19** from rotating.

In the event the drawer is to be taken out of the cabi-

net, the drawer is first placed in the intermediate position shown in FIG. 1. The enlarged portion **22** of the stop is then manually bent forwardly and down to the position shown by the dashed line in FIG. 1 by grasping the ends of the enlarged portion **22** between the thumb and forefinger. In this position, the portion **22** clears the frame **12** and allows withdrawal of the drawer. When the drawer is reinserted, the enlarged portion **22** is automatically bent down as it passes under the frame member **18**, and it springs to the normal position as soon as the drawer is in the cabinet.

The stop member **19** is made of a tough somewhat flexible material such as vinyl. The fastening plate **20** is preferably made of metal.

From the foregoing description, it will be apparent that a novel drawer stop has been provided for preventing accidental complete withdrawal of a drawer. The stop also permits such a withdrawal when necessary. It has a further important advantage in that it may be readily installed because it requires only one screw.

I claim:

1. An adjustable drawer stop comprising a substantially flat attaching plate, and an enlarged portion of substantial thickness formed integrally with said plate flexibly connected thereto and adapted to project above the back of the drawer for engagement with a frame member for the drawer, said enlarged portion having a laterally elongated shoulder adapted to bear against the top edge of the back of a drawer when engaged by said frame

member to prevent said enlarged portion from being pushed out of the way by said frame member, and said enlarged portion having a height that is greater than the distance between the top edge of the drawer back and the lower edge of said frame member for the drawer.

2. The combination of a cabinet, at least one drawer slidably mounted in said cabinet, and an adjustable drawer stop mounted in such a manner that it prevents said drawer from being accidentally pulled out of said cabinet, said stop including a portion mounted on said drawer and an enlarged portion of substantial thickness flexibly connected to said mounting portion and extending into the space between the top of said drawer and said cabinet, said enlarged portion extending upwardly and forwardly from the portion mounted on said drawer to provide an abutment engageable with said cabinet to prevent withdrawal of the drawer, said enlarged portion also extending rearwardly to provide a laterally elongated shoulder overlying the top of the back of the drawer to support said enlarged portion when engaged by the cabinet.

References Cited in the file of this patent

UNITED STATES PATENTS

2,826,474 Haydu ---------- Mar. 11, 1958

OTHER REFERENCES

"Popular Mechanics," March 1955, p. 179, Spring drawer stop item.