Oct. 19, 1965 G. W. FAUROT 3,212,748

COMBINATION DESK AND CABINET RACK STRUCTURE

Filed July 5, 1963

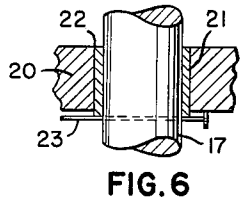


FIG. 6

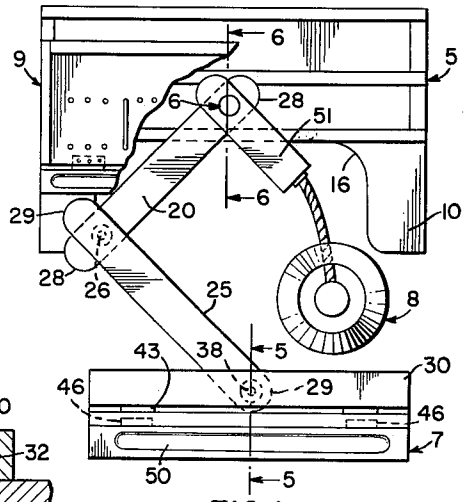


FIG. 1

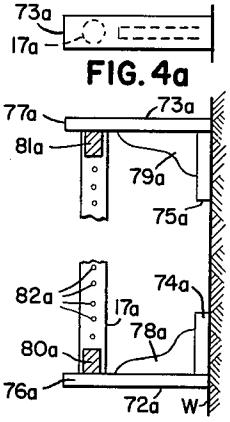
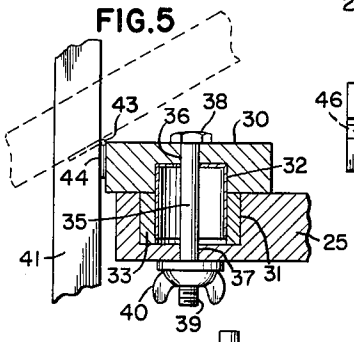


FIG. 4a

FIG. 4

FIG. 5



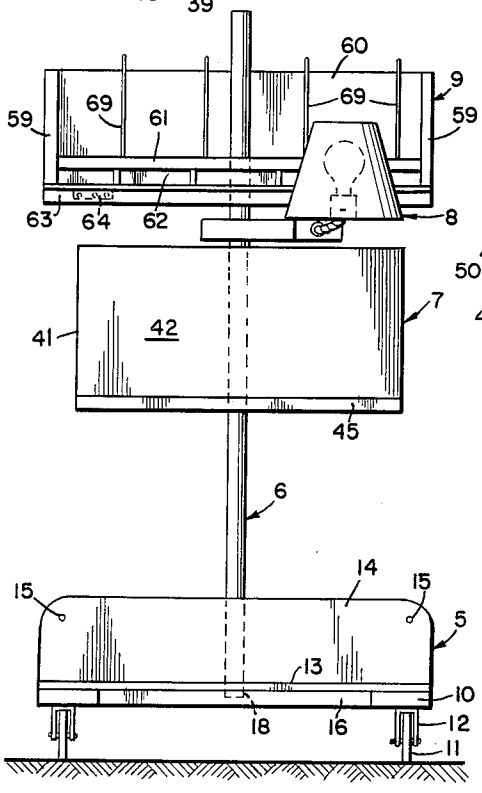


FIG. 2

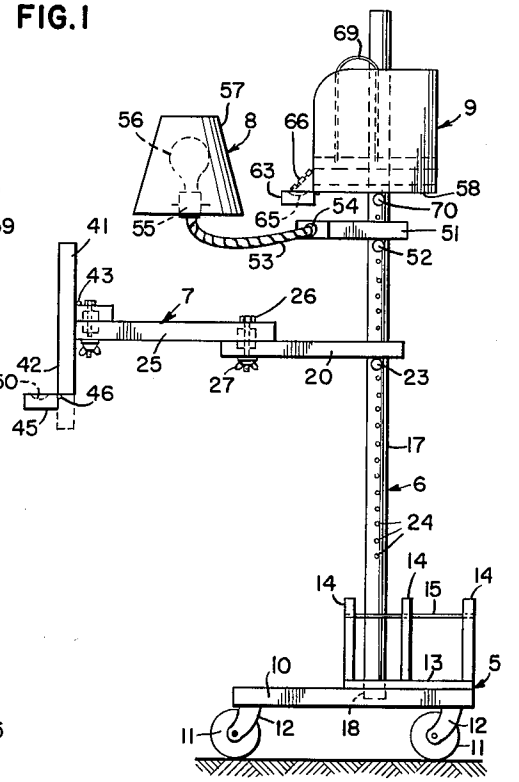


FIG. 3

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COMBINATION DESK AND CABINET RACK STRUCTURE

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The present invention relates to improvements in articles of furniture, and more particularly to a portable combination desk and cabinet structure.

One object is to provide a portable combination structure of the above-mentioned type which is compact and is adapted to be employed as a desk for supporting books, papers and the like as well as for storing books and other objects.

Another object is to provide a portable combination desk and cabinet structure in which the desk can be moved to various positions for supporting books and papers while the user reclines in a comfortable chair or relaxes in bed.

Another object is to provide a portable compact desk and cabinet structure is which the desk can be adjusted to various predetermined positions of elevation to facilitate use of the desk while reclining in a chair or otherwise assuming a relaxed position.

Another object is to provide a portable desk structure supported from a single standard on a pair of horizontally swinging arms which permits the desk to be adjusted to various positions with little effort upon the part of the user.

Another object is to provide a portable combination cabinet and desk structure having a desk member which is hinged to swing on a horizontal axis, thereby permitting the desk surface to be adjusted to various angular positions.

Another object is to provide a combination cabinet and desk structure of the above-mentioned type in which other devices can be adjustably supported on the vertical standard such as paper and pencil racks, illuminating means and various other devices.

Another object is to provide a novel hinge connection between the horizontal swinging arms, as well as the desk supporting structure to permit free swinging movement of the desk to various positions in a horizontal plane.

Another object is to provide a combination cabinet and desk structure which can be attached to the wall and supported thereon by suitable shelf members forming rack type supports for various objects.

Another object is to provide a combination desk and cabinet structure in which a storage rack or the like is adjustably supported on the upper end of the single standard and is provided with a hinged member having a pencil receiving trough for receiving various objects and in addition said rack-like support is provided with a series of longitudinally spaced U-shaped division members formed of wire adapted to separate the upper rack member into a series of separate compartments for books, papers and various other objects.

Another object is to provide a single standard type cabinet structure and desk with illuminating means adjustably mounted on the single standard above the desk portion of the structure so that said illuminating means can be adjusted to various elevations toward and away from the desk surface.

Other objects and advantages of the invention will become apparent during the course of the following description of the accompanying drawings, wherein:

FIGURE 1 is a top elevational view of the combination cabinet and desk structure showing a portion thereof broken away to illustrate the manner in which the horizontally swinging desk is rotatably supported by the single standard and illustrating the illuminating means attached to a separate horizontally swinging arm.

FIGURE 2 is a front elevational view of the combination cabinet and desk structure illustrating the general arrangement of the various elements.

FIGURE 3 is a side elevational view of the combination cabinet and desk structure illustrating the manner in which the various devices such as the desk, illuminating means and cabinet structure are adjustably supported on the single standard or upright.

FIGURE 4 is a side elevational view of a single standard mounted on a wall for supporting various cabinet structures and the like, as well as the horizontally swinging and adjustable desk member.

FIG. 4*a* is a top elevation of a single standard for wall mounting.

FIGURE 5 is an enlarged fragmentary cross-sectional view taken on line **5**—**5** of FIGURE 1 and looking in the direction of the arrows to illustrate the pivotal bearing connection between one of the horizontally swinging arms and the desk per se.

FIGURE 6 is an enlarged fragmentary view partly in section and taken on line **6**—**6** of FIGURE 1 looking in the direction of the arrows to illustrate the bearing structure for the horizontally swinging arms of the desk and illuminating support.

In the drawing, and more in detail, attention is first directed to FIGURES 1 to 3 inclusive wherein the reference character **5** will generally be employed to designate a base member to which is attached a single upstanding shaft or pedestal generally designated **6**. The desk structure is mounted on the standard **6** and is generally designated **7**. Mounted on the upper end of the standard **6** is an illuminating element **8** also generally designated, and a storage chamber or cabinet is adjustably mounted on the vertical standard **6** above the desk and illuminating means and is generally designated **9**.

The base or pedestal support **5** is of general rectangular shape and includes a platform **10** supported by caster wheels **11** mounted on swivel brackets **12** arranged at each corner of the rectangular platform **10**. Secured to the upper surface of the platform adjacent the rear edge thereof is a plate **13** having a series of upstanding parallel spaced plates **14** which are secured to the plate **13** and are held in spaced apart relation by two or more brass rods **15** which extend through aligned openings in the division plates **14** and are arranged adjacent the ends thereof (FIGURE 2).

The pedestal or vertical standard **6** is formed of a tubular section of metal or the like and has its lower end supported in a suitable socket **18** formed in the rectangular platform **10**. The socket **18** is provided with a metal liner to provide a metal to metal fit between the pedestal or standard **6** and the platform **10**. Any approved fastening means is provided for securely anchoring the lower end of the standard **6** in place and against removal.

Rotatably mounted on the vertical support or standard **6** is a horizontal arm **20** (FIGURE 6) and said arm is provided with an oversized bore **21** having a bearing sleeve **22** fitted therein and provided with an internal bore of a diameter to receive the vertical standard **6**. The arm **20** is adapted to be adjusted to any desired position or elevation from the floor by inserting a pin **23** through a preselected opening in the standard **6**. The standard **6** is provided with a series of vertically spaced openings **24** (FIGURE 3) to permit the pin **23** to be inserted in diametral aligned bores in the tubular standard **17**. Thus, the arm **20** can be adjusted to any desired elevation by inserting the pin **23** in one of the series of aligned apertures **24** beneath the arm **20** in the vertical standard.

Pivotally attached to the end of the arm **20** is an arm **25** by means of a bolt or the like as at **26**. The bolt or machine screw **26** extends through suitable bearing openings in the overlapped ends of the arms **20** and **25** and a wing nut or similar fastener element **27** is threaded on said bolt or machine screw to permit pivotal movement of said arm about the axis of the bolt **26**. The end portions of the pivoted arms **20** and **25** are curved as at **28** and **29** to present a finished appearance.

The free swinging end of the arm **25** is provided with a rectangular desk support **30** and said desk support is pivoted to the free end of the arm **25** by means of a bearing structure shown in FIGURE 5. The bearing structure is received in a recess **31** in the free end of the arm **25** and a correspondingly shaped recess **32** in the desk supporting arm **30**. As shown in the drawing a cylindrical sleeve bearing **33** is mounted in the recess **31** and a suitable pin bearing structure (not shown) is mounted in the cavity formed by the recesses **31** and **32**. A pivot bolt **35** extends through aligned openings **36** and **37** in the arm **25** and support **30**, and one end of said bolt is provided with a head **38** while the other end is threaded as at **39** for receiving a wing nut **40**. Thus, the wing nut **40** can be tightened or loosened to position the desk support **30** in any desired position in a manner similar to that described in connection with the pivot bolt **26**. The pivot bearing **26** is similar in construction to that described in FIGURE 5 for the pivot connection between the arm **25** and the desk support **30**. However, a description of one will suffice for both.

Hingedly connected to the desk support **30** is a desk top **41** of rectangular shape to provide a substantially flat writing and supporting surface **42**. The hinge connection **43** includes a pair of spaced hinge members with their leaves **44** attached to the underside of the desk **41** and to the side edge of the desk support **30** as shown in FIGURES 1 and 5. The leaves are connected by a suitable pintle pin in the usual fashion (not shown).

The lower edge of the desk **41** is provided with a longitudinal strip **45** adapted to form a stop or abutment for papers and the like supported on the desk when the desk **41** is tilted to an oblique position. A suitable hinge structure **46** is provided for pivotally connecting the stop **45** to the desk **41**. Thus, the desk **41** can be positioned at an incline as shown in FIGURE 5 and retained in position by the friction hinges **43** for supporting papers and books while the portable desk is being used for writing or reading purposes. If desired, a suitable arcuate latch bar can be attached to the rear of the desk **41** to engage a stop or latch on the desk support **30**. The latch bar being provided with a series of notches arranged in spaced relation to receive a pivoted detent mounted on the desk support **30** at either end thereof or both ends. When the desk **41** is used as above at an inclined position as shown in FIGURE 5 the pivoted stop rail **45** assumes the position shown in full lines in FIGURE 3 and the upper surface thereof is provided with a recess forming an elongated pencil trough **50**. When the desk is positioned in a horizontal plane the stop rail **45** is hinged to its dotted line position in FIGURE 3 to provide a continuous flat table surface.

Also rotatably mounted on the vertical support or standard **17** is an arm **51** mounted above the arm **20** and adapted to be held in position by means of a pin **52** similar to the pin **23** shown in FIGURE 6 extending through one of the apertures **24**. The arm **51** supports the illuminating means **8** which includes a short section of flexible cable housing **53** having one end attached to an electrical socket **54** and its opposite end suitably connected to an electric lamp socket as at **55**. An incandescent lamp **56** is mounted in the socket **55** and the lamp shade **57** has its supporting frame (not shown) arranged to receive the lamp and be supported thereby.

The rack structure **9** is likewise mounted on the vertical standard **17** and said rack includes a rectangular base

member **58** having an opening for receiving the vertical standard **17**. The base member **58** is provided with vertically extending end walls **59** connected by a back wall **60**. Spaced from the rectangular base **58** is a similarly shaped horizontal division plate **61** which has its ends connected to the end wall members **59** to form a space **62** for receiving various objects such as pencils, drafting instruments and similar devices. Hingedly connected to the front edge of the base member **58** is a wall member **63** forming a door which is hinged as at **64** to the base member and is adapted to close the compartments **62** between the base member **58** and the horizontal wall **61**. One face of the closure **63** is dished as at **65** to form a pencil trough and a flexible member **66** (FIGURE 3) has one end connected to the closure **65** and the opposite end secured to a nail or the like (not shown). The flexible member **66** comprises a short section of link chain so that the free end can be slipped over a stud or nail and retained in place in any selected position, as well as being held closed to prevent articles stored in the compartment **62** from being displaced when the portable combination desk and cabinet structure is moved one location to another.

The horizontal member **61** is provided with a series of U-shaped wire division members **69** having their ends received in suitable openings to provide a series of horizontally spaced division members for books, papers and the like.

The rectangular base member **58** and the horizontal member **61** are provided with aligned bores for receiving the vertical standard **17** and said cabinet structure **9** can be adjusted to any desired position and retained in place by means of a pin **70** extending through a selected set of apertures **24**.

Thus, it will be seen that the desk **7** can be adjusted to any desired elevation and inclination so that a student or the like can position the desk within easy access while seated in a comfortable reclining position, as for instance in an overstuffed living room chair, and it will also be seen that the portable desk structure can be used as a table or the like while one is reclining in bed by merely moving the desk **41** to a horizontal position in which the structure can be used as a table. Additionally, the illuminating means **8** can be adjusted as desired above the desk depending upon the position in which the desk is used, and that the cabinet structure **9** can be likewise adjusted to a proper elevation so that the articles therein such as books, papers and pamphlets will be within easy reach of the user and accessible from a reclining position.

In the modified or optional structure shown in FIGURES 4 and 4*a* the vertical standard **17***a* is supported by wall brackets **72***a* and **73***a*. The wall brackets are of angular construction and include foot members **74***a* and **75***a* respectively having horizontal arm portions **76***a* and **77***a*. The arms of the bracket are braced by suitable brace members **78***a* and **79***a* respectively. The horizontal arm members **76***a* and **77***a* are thus arranged in vertically spaced relation while the foot portions **74***a* and **75***a* are secured to a vertical wall surface W by suitable fastener elements (not shown). Formed on the lower and upper horizontal bracket portions **76***a* and **77***a* is a pair of opposed plug members **80***a* and **81***a* respectively. The plug members are arranged in opposed relation and are adapted to receive the ends of the tubular vertical standard **17***a*. Thus, the base member **10** can be dispensed with and the vertical standard can be supported in spaced relation from a vertical wall surface with the desk structure **7**, illuminating means **8** and cabinet structure **9** mounted on the tubular standard **17***a* as before and described in connection with the form of the invention shown in FIGURES 1, 2, 3, 5 and 6. The various elements are rotatably and adjustably supported on the vertical standard **17***a*, and as before are held in an adjusted preselected position by means of a suit-

able pin extending through and being seated in one of a series of aligned apertures **82***a*.

In the optional form of the invention the desk **7**, illuminating means **8** and rack **9** can be swung to various horizontal positions and secured and adjusted so that the user can assume a sitting position in a comfortable chair and use the desk and cabinet structure as previously described.

In the form of the invention shown in FIGURES 1, 2, 3, 5 and 6 the base member **10** has its front edge cut away as at **16** to provide space for the user's feet when the structure is used and positioned directly in front of the chair in which the occupant is seated in a reclined position.

In the forms of the invention herewith shown and described, it is to be understood that various changes in the shape, size and arrangement of parts may be resorted to without departing from the spirit of the invention or the scope of the subjoined claims.

What I claim is:

1. In a combination desk and cabinet structure a rectangular base member, castor wheels supporting said base member, a series of vertical division plates on said base member arranged in spaced relation to form a book rack and stabilize said desk and cabinet structure, a vertical tubular standard with its lower end connected centrally to said base member and having a series of vertically spaced pin receiving apertures extending from its lower portion to substantially the upper portion thereof, an arm rotatably mounted on said vertical standard to swing in a horizontal plane, a second arm having one end pivotally connected to the free end of said first named arm to swing in a similar plane, the overlapping ends of said arms being provided with enlarged recesses to accommodate a bearing member, threaded fastener means extending through said bearing member to releasably hold the same in an adjusted position, a horizontal bar pivoted intermediate its ends to the free

end of the second named arm arranged to swing in a horizontal plane, threaded fastener means extending through said arm and bar to releasably hold the same in an adjusted position, a pair of spaced hinged members affixed to said horizontal bar located at points adjacent the ends thereof, a flat rectangular member forming a desk supporting surface connected at the rear thereof to said hinges, and a pin for being received in a selected pin receiving aperture in said vertical standard to selectively position said arms of said desk supporting surface in different horizontal planes, said pivoted arms and flat rectangular member being removable from the upper end of said vertical standard to permit book racks and the like to be placed thereon beneath said pivoted arms and flat rectangular member.

2. In a combination desk and cabinet structure as set forth in claim **1** in which said flat rectangular member is provided with a pair of hinges arranged in spaced relation along the lower edge thereof, and an elongated pencil trough and paper stop secured to said hinges.

3. In a combination desk and cabinet structure as set forth in claim **1** in which said book rack comprises a box-like structure having a central opening in its lower wall for passage of said vertical standard, said box-like structure being open at the top and along one side and provided with division members for holding books and the like.

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