May 26, 1959 B. H. HILLS 2,887,790

WRITING PAPER SUPPORT

Filed Sept. 1, 1955 2 Sheets-Sheet 1

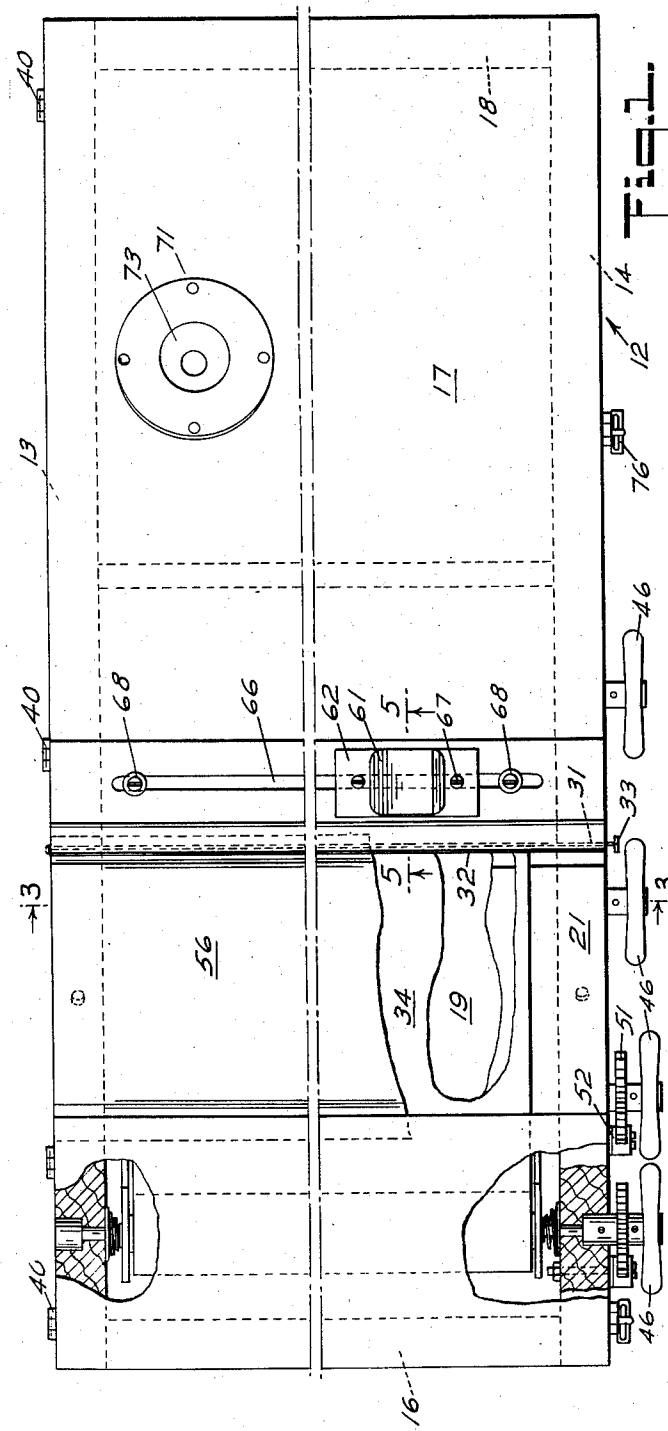


Fig. 1.

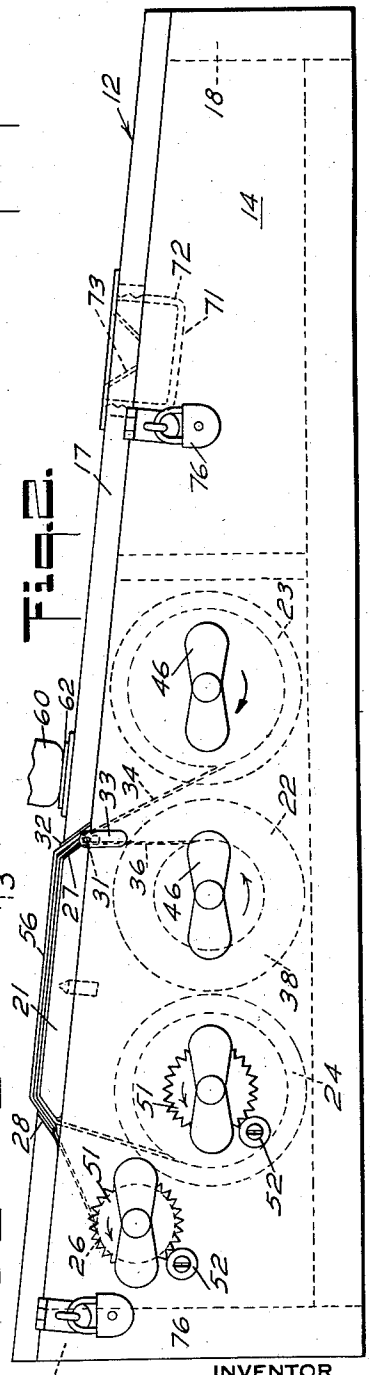


Fig. 2.

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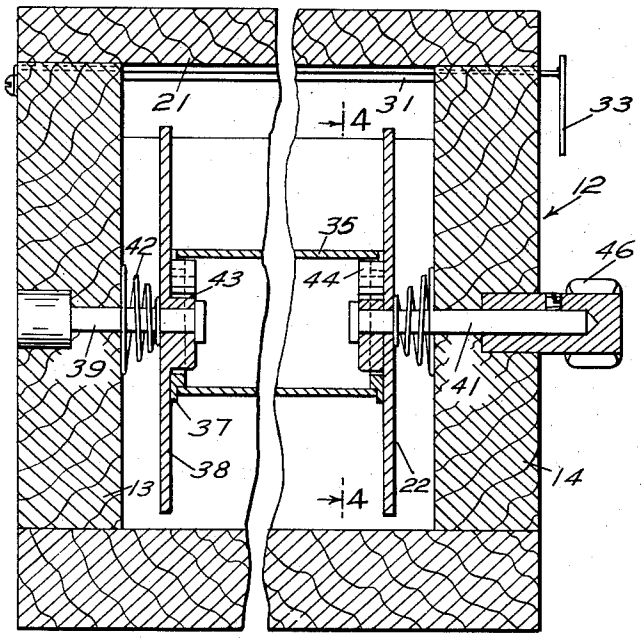


Fig. 3.

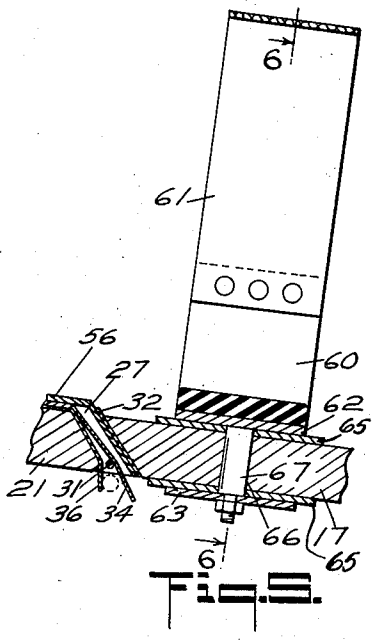


Fig. 5.

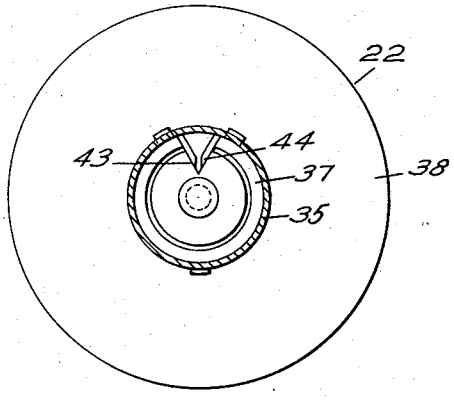


Fig. 4.

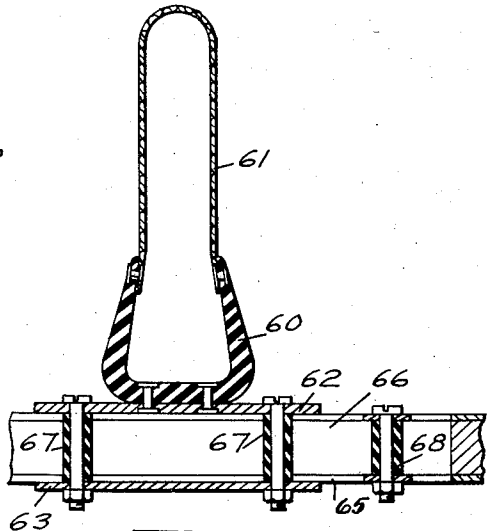


Fig. 6.

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WRITING PAPER SUPPORT

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Application September 1, 1955, Serial No. 532,023

2 Claims. (Cl. 35—38)

The invention relates to portable supports for writing paper and the like, and is more particularly directed towards a paper support which may be readily used by persons who are completely blind or otherwise physically incapacitated to assist them in writing in longhand.

It will be appreciated that it is most difficult for a person who is totally or substantially blind to do any longhand writing on conventional paper merely placed on a table, and therefore it is the primary object of the present invention to provide a paper supporting arrangement by means of which a person of totally impaired vision may write with a minimum of difficulty.

Another object or feature of the present invention is to provide a paper support of the character described in which the writer's hand may be guided along a path normal to the longitudinal axis of the paper so that a substantially straight line of writing may be produced.

A further object of the invention is to provide apparatus of the character described in which means are provided for advancing the paper after each successive line has been written.

Yet another object of my invention is to provide apparatus as above described in which a plurality of paper supply rolls are utilized, one of such rolls being arranged for lengthy continuous writing, such as a story, and the other roll supplying paper for shorter writing such as a letter or memorandum, the latter supply and paper in no way interfering with the last positioning of the first mentioned paper supply.

Another object of the invention is to provide apparatus of the above mentioned type in which the paper for the shorter writing may be readily cut off at any desired time, leaving the continuous writing paper again ready for use.

The invention possesses other objects and features of advantage, some of which, with the foregoing, will be set forth in the following description of the preferred form of the invention which is illustrated in the drawings accompanying and forming part of the specification. It is to be understood, however, that variations in the showing made by the said drawings and description may be adopted within the scope of the invention as set forth in the claims.

Referring to said drawings:

Figure 1 is a top plan view of the writing paper support of the present invention.

Figure 2 is a side elevational view of the structure shown in Figure 1.

Figure 3 is a transverse sectional view taken substantially in the plane indicated by line 3—3 of Figure 1.

Figure 4 is a cross-sectional view taken substantially in the plane indicated by line 4—4 of Figure 3.

Figure 5 is a longitudinal sectional view taken substantially in the plane indicated by line 5—5 of Figure 1.

Figure 6 is a cross-sectional view taken substantially in the plane indicated by line 6—6 of Figure 5.

In broad terms, the apparatus of the present invention comprises a cabinet within which is supported a pair of

paper supply rolls, the paper being threaded through slots in the top cover or writing surface of the cabinet whereby portions of the paper are exposed for use. The paper from both rolls is superimposed over the writing surface of the cabinet, the paper from one roll being on top of the other paper and adapted to be cut off as used, such as for writing letters or notes, while the paper from the other roll lies subjacent the exposed upper paper and is left in place for writing a story, such lower paper being left intact, that is, uncut after each use, with portions being successively available for additional writing as the user may desire. Naturally, the under sheet is only available for use when the upper sheet has been cut away or otherwise removed. As will also be hereinafter explained in detail, the cabinet is provided with a hand supporting arrangement for guiding the writer's hand transversely of the cabinet and across the width of the paper, and a cutting member is utilized for severing the top sheet as required. Also, as each line of writing is completed, the user may readily advance the paper longitudinally a predetermined amount so that the next blank space will be positioned adjacent his hand for further writing.

With more particularity, and referring now to the drawings, the cabinet, generally designated by the numeral 12 consists of a pair of side panels 13 and 14 respectively, end panels 16 and 18, and a top panel 17, which provides the writing surface. Preferably, the side panels 13 and 14 slope downwardly towards the front end panel 18 so as to provide a more comfortable writing position and support for the user's hands. It will be noted that the panel 17 is provided with a cut-out portion 19 extending transversely of the length thereof, such cut-out portion being substantially filled in by a member 21 which is seated in the cut-out portion. It is on this member that the writing is actually accomplished as will be presently explained.

Paper is arranged to be supplied over the member 21 in the following manner. Referring particularly to Figure 2, it will be seen that a pair of paper supply rolls 22 and 23 are provided, the former having in association therewith a paper take-up roll 24 and the latter's paper being taken up on a roll 26. As will be noted, paper is fed from roll 22 through a slot 27, thence over the member 21, and through a second slot 28 and on to the take-up roll 24, the slots 27 and 28 being positioned at the juncture of member 21 and the edges of panel 17 adjacent the cut-out portion therein. As was previously explained, the rolls 22 and 24 are utilized when a substantially lengthy article is being written. In distinction to this, the paper from roll 23 is adapted to likewise overlie the member 21 but is positioned over the paper from roll 22 whereby short notes or the like may be written. In connection with this feature, a cutting member which may be in the form of a wire 31 or the like is disposed transversely of the top panel and is arranged to be moved upwardly and against a short metal plate 32 forming the rear surface of the slot 27 for shearing the paper. The transversely extending cutter 31 may be secured at one end thereof to side panel 13, and the same is adapted to be manually lifted upwardly towards the slot and plate 32 by engagement with a handle 33 secured at the other end thereof, and hence the paper 34 which is supplied from the roll 23 may be readily severed at any time. After such severing and folding back or removal of the uppermost paper the paper 36 from roll 22 will be again accessible for writing. In this manner, if a long story is being written, it may be interrupted at any convenient time by the making of short notes or short letters on paper 34 from the roll 23.

All of the rolls are constructed in substantially the same manner and are best illustrated in Figures 3 and 4 of the drawing. Such rolls extend transversely of the

length of the cabinet and include a generally cylindrical core 35 on which the paper is adapted to be wound and/or unwound. The core 35 is supported on an annular retaining member 37 which is in turn resiliently and frictionally supported on a pair of disks 38 which prevent lateral displacement of the paper from the core. The disks are journaled in the side members 13 and 14 by means of pins 39 and 41 extending through such sides respectively and spring members 42 are interposed between the inner surfaces of the side walls and the outer surfaces of the disks to hold the roll in position. However, in order to provide access to the rolls, the sections comprising top cover 17 are pivoted as indicated by hinges 40 or is otherwise removable so as to provide access to the interior of the cabinet. Then, by merely forcing one of the disks against the spring, the core may be removed from the disks and a roll of paper thereby removed or inserted. To prevent rotation of the core on the annular ring, the disks are provided with V-shaped notch portions 43 which engage with similar projections 44 on the ring and thereby eliminates slipping movement therebetween. Insofar as deliberate movement or advancement of the paper is concerned, the rolls are provided with manually engageable handles 46 which extend exteriorly of one of the cabinet side walls and may be turned to effect rotation of the paper rolls disposed on the core. Naturally, in normal operation, only the take-up roll handle will be actuated and in this connection it is important to note that each of the take-up rolls, intermediate the outer surface of the side wall and the manually engageable handle is provided with a ratchet 51 engageable by a stationary member 52 mounted on panel 14 and giving an audible signal as each of the teeth of the ratchet 51 are rotated thereagainst. In this manner, a person may manually turn the rolls 26 and 24 a predetermined and preselected distance so that the spacing on the writing between the lines will be substantially uniform.

To protect the paper 34 and/or 36 when the writer is not being used, a metal cover 56 may be utilized, such cover overlying the member 21 and having flanges which are inserted in the slots 27 and 28.

As an important feature of the present invention means are provided for supporting and guiding the hand of the user, and as here shown such support and guide includes a hand-engaging member 60 of generally U-shaped cross-sectional form and having a length of elastic 61 secured thereto for encompassing the writer's hand. The member 60 is mounted on a pair of plates 62 and 63 disposed on plates 65 the upper and lower surfaces of the cabinet cover member as best seen in Figures 5 and 6. The cover and plates 65 are provided with a transversely extending slot 66 through which a pair of pins 67 extend, such pins also serving to hold the plates in position on opposite sides of the cover. Stop members 68 are provided adjacent the ends of the slots and preferably rubber coatings are provided on the pin 67 and stops 68 so as to reduce any jarring action created when the hand support is moved to its limits of travel. However, it will be appreciated that by positioning the hand support 60 adjacent the member 21, on which the paper is exposed for writing, the hand of a person with impaired vision, by utilizing the hand support may readily be guided for writing a line transversely of the paper and then before commencing a new line moving the appropriate take-up roller to the next position and advancing the paper.

If desired, a cigarette container or ash receptacle 71 may be provided at some convenient position on the panel 17 and preferably would have an ash receiver 72 and a snuffing portion 73 which terminates in a relatively small aperture leading into the chamber defined by the member 72 so that upon pivoting of the cover to its open position or otherwise moving the unit would not affect a dislodgement of ashes. Padlocks used with conventional hasps as shown at 76 can also be utilized to lock the respective sections of the cabinet when not in use.

From the foregoing description the operation of the device should be quite clear. To start with, the cover 17 may be opened and rolls of paper placed on the supply spools 22 and 23. The spools may be placed thereon by removing the old core 36 and replacing the same with filled cores by pressing the disks 38 outwardly away from each other. When this is done, the paper 36 from roll 22 is threaded through the slot 27, over the member 21, through the slot 28, and then onto the take-up spool 24. The paper 34 from the supply roll 23 is likewise fed through the slot 27 over the paper 36, through the slot 28 and onto the take-up spool 26. The paper 34 is then in position for writing and the writer, by inserting his hand in the support 60 and moving the same to its left hand position may commence writing transversely of the paper. Upon reaching the right hand limits of travel of the hand support, as defined by the stop member 68, the writer will then manually advance the paper by rotating the take-up roll 26. The support will then be brought back to its left hand position and a new line of writing may be commenced. Now, if the note is finished, the cutter 31 may be raised as will be clearest from Figure 5 of the drawings and the paper 34 transversely cut. This of course will have no effect on the paper 36 which may be run continuously without any cutting while numerous notes or memoranda may be produced on the uppermost paper 34, and to use the paper 34 again, it will have to be rethreaded through the slot 27.

It will thus be seen that while the apparatus of the instant invention is relatively simple in construction and operation it will fulfil a long needed want and enable persons of impaired or no vision to make their own correspondence in legible writing. The hand support and transverse guide therefor may also be used by persons with certain types of paralysis who find it impossible to guide their hands across a page of paper without some assistance.

What is claimed is:

1. Apparatus of the character described comprising a pair of side walls and a cover member overlying said side walls, a pair of transversely disposed rollers journalled in said side walls and adapted to support a roll of paper, a pair of transversely extending slot means extending through said cover member through which said paper may be threaded whereby a portion thereof overlies said member, a hand-supporting member mounted on said member adjacent one of said slots, transversely extending slot means in said cover for guiding said hand support member along the transverse width of said cover, means for moving said paper longitudinally over said cover, said hand supporting member including a flexible band adapted to embrace the hand of the user, and a slide member connected to said band and engageable in said slot.

2. A paper writing apparatus comprising an upper shelf-like member, means defining a pair of transversely extending slots therethrough, a paper supply roller positioned adjacent one of said slots, a paper take-up roller positioned adjacent the other of said slots, each of said rollers including a pair of disks, means normally urging said disks axially inwardly towards each other so as to engage a roll of paper positioned therebetween, manually engageable means disposed laterally beyond said member for rotating said rolls, means for sequentially advancing said take-up roll a preselected amount, means normally disposed in one of said slots and movable therein in a direction generally normal to the plane of said member for cutting said paper positioned adjacent one of said slots, a hand support element disposed adjacent one of said slots, said element being movable transversely of said member in a direction normal to the longitudinal axis thereof and including a generally U-

shaped member and a resilient loop of material attached to the ends thereof for substantially embracing a portion of the hand of the user.

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