COLLAPSIBLE PODIUM STAND

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ABSTRACT
A podium that is capable of being collapsed and folded for transport. The podium is composed of a horizontal base and an upper horizontally disposed paper-supporting podium plate. The two are interconnected by links that engage and lock with one another when it is desired to hold the podium in its standing position and which may be disconnected and folded when it is desired to have the podium collapsed for transport.

7 Claims, 6 Drawing Figures
COLLAPSIBLE PODIUM STAND

BACKGROUND OF THE INVENTION

In group meetings, it is desirable to have podiums for speakers and consequently, most hotels, restaurants, motels and teaching establishments which cater to speakers and group meetings have in their possession a group of podiums. However, since podiums are not something that are used day by day, it is desirable to have them easily storable. A standard-type podium is usually bulky and storing of the podium not only requires space but also often places the podium in an area where it can be scratched or otherwise damaged.

Therefore, it is desirable to have a podium which is capable of being collapsed for the purpose of transport and also for the purpose of making it easily storable when not in use.

SUMMARY OF THE INVENTION

With the above in mind, it is the primary object of the present invention to provide a collapsible podium which may be locked in both its up and collapsible position and when collapsed is sufficiently small that it may be carried by a single person somewhat in the manner in which a suitcase is carried.

More specifically, it is the purpose of the present invention to provide a podium that has a base plate that will sit on a floor and an upper plate that will carry the papers of a speaker. The supporting stand between the base plate and the upper plate is composed of a series of linkages that cross one another and are capable of being locked to one another when the podium is in its standing position. However, the links may disengage from one another and thereby be collapsible to a degree where the upper plate is closely adjacent the lower base and the entire structure may be moved on its edge and then carried.

When collapsed, the links between the base and the upper plate are alongside one another and suitable locks are provided to hold the links in this position. The upper plate has a gripping portion associated therewith so that the entire structure, when in its collapsed position, may be carried manually.

BRIEF DESCRIPTION OF THE DRAWINGS

FIG. 1 is a front view of the podium in its standing position.

FIG. 2 is a side view of the podium as shown in FIG. 1.

FIG. 3 is a view similar to FIG. 1 but showing the podium in its collapsed position.

FIG. 4 is a side view of the structure shown in FIG. 3.

FIG. 5 is an enlarged sectional view taken substantially along the line 5—5 of FIG. 1.

FIG. 6 is a sectional view taken substantially along the line 6—6 of FIG. 1.

DESCRIPTION OF THE PREFERRED EMBODIMENT

The podium is composed of a base plate 10 that normally rests on the floor and offers balance as well as support for the podium. The base 10 has front and rear transverse edges 11, 12 and a fore-and-aft transversely spaced edges 13, 14. Projecting upwardly from the base plate 10 and rigid therewith are lugs, two lugs 15, 16 being adjacent the edge 13 and three lugs 17, 18 and 19 being adjacent the edge 14. Extending between the lugs 17, 18, 19 is a metal rod 20 which serves as a pivot as will become apparent. The plate 10 also includes an elongated slot 21 that is parallel to and adjacent the front edge 11. The slot 21 serves as a gripping area for the device when it is fully retracted.

The podium also includes a lecturer's platform or plate structure 25 at its top. The plate structure 25 includes an underplate 26 that is horizontal and has fixed on the top thereof a front horizontal plate portion 27. Hinged at 28 to the rear edge of the plate portion 27 is a vertically movable plate portion 29. The plate portion 29 has at its lower edge adjacent the hinge 28 a pencil and paper restrictor 30 that extends substantially the full width of the plate portion 29. It is on the plate portion 29 that a lecturer lays his papers and pencils and other markers. The underplate 26 has adjacent its right edge three depending lugs 31, 32 and 33 and adjacent its left edge a pair of depending lugs, the front one of which is shown at 34 and another, which is adjacent the rear corner. The lugs are substantially identical to those lugs 15-19 on the base plate 10 and are in fact a mirror of those lugs but on the upper plate 26. A fore-and-aft extending horizontal rod 36 is supported by and extends through the lugs 31, 32 and 33. The rod 36 serves as an upper pivot for linkages as will later be explained. The adjustable plate portion 29 is held in position by a pair of slotted links 37 that extend from the underside of the adjustable plate 29 to depending lugs such as is shown at 32 in FIG. 2. The slots of the links 37 terminate in a lower keyhole that receives pins 38 so that the brace 37 may be released and the plate portion 29 may be fully lowered or retracted as is shown in FIG. 4.

Support means extend between the base plate 10 and the upper plate structure 25 and includes in part a first set of upper links 40, 41 that have upper fore-and-aft extending openings, not shown, pivotally carried on the upper fore-and-aft horizontal pin 36. Connected to the upper links 40, 41 are a pair of lower links 42, 43 that have at their lower ends fore-and-aft extending openings, not shown, that are pivotally carried on the fore-and-aft extending pin 20. The upper links 40, 41 extend downwardly from the edge of plate 26 toward the opposite edges of the plates 10, 26 and the lower links 42, 43 extend upwardly from one edge of plate 10 toward the opposite edges of the plates 10, 26. The links 40, 41 are hingedly connected, such as at 44 to the upper ends of the lower links 42, 43. It should be apparent that the links 40, 41 may be shifted fore and aft on the rod or pin 36 and the lower links 42, 43 may be shifted fore and aft on the rod 20.

Opposite to the links 40, 41 and carried on the plate 26 adjacent the opposite or left edge thereof is an upper pair of links 45, 46 and a lower pair of links 47, 48 that are hinged at 49 to one another at their lower and upper ends respectively. The upper ends of the links 45, 46 are hinged as at 50 to depending lugs 34, 35 and the lower ends of lower links 47, 48 are hinged as at 51 to upwardly projecting lugs 15, 16. As can best be seen from viewing FIGS. 1 and 2, a diagonal brace 52 extends between and is fixed to upper links 40, 41 and a diagonal brace 53 extends between and is fixed to lower links 42, 43. The braces 52, 53 obviously provide rigidity in the structure. Reference is now made specifically to FIG. 5. From viewing FIGS. 1 and 2, it becomes clearly apparent that the upper links 40, 41
cross the upper links 45, 46 substantially at their midportion and the lower links 42, 43 cross the lower links 47, 48 at their midportion. Provided at the junctures in which they cross is a joint. At the junctures of the lower links 42, 47 the link 42 is provided with a notch or recess 54 opening rearwardly and the link 47 is provided with a notch or recess, not shown, opening forwardly. The links 42, 47 interlock at the recesses. A bolt-type latch 55 is provided at the juncture and the bolt 56 of the latch extends into and retracts from a small opening provided for the bolt in link 47. The latch 55 is to prevent the link 47 from shifting rearwardly on its pivot pin 20 out of engagement with the notch 54. A similar arrangement is provided between the lower links 43, 48 and the upper links 40, 45 and 41, 46 respectively.

Swing-type overcenter latches are provided to lock the podium in its retracted position as shown in FIG. 4. The depending lugs 31, 34 are provided with upper parts 60 of one latch and the lugs 15, 19 are provided with second or matching parts 61 of the same latch. When the lugs 31, 19 and 34, 15 are adjacent one another as is shown in FIGS. 3 and 4, the complementary latch portions 60, 61 and 62, 63 may latch the entire podium in its retracted or down position.

In operation and assuming the podium is in its retracted position as shown in FIGS. 3 and 4, the latch mechanisms 60–63 are first released and the podium extended to an upright position as shown in FIG. 1. The notches such as is shown at 54 in FIG. 5 of the respective cooperating links are placed adjacent one another and the links 40, 42 and 41, 43 are slid forwardly on the rods 20, 36 so as to interlock the respective links. The bolt latches 56 are then extended so as to lock the links 40–43 together. The podium is thereby locked in its standing position. When lowering the podium, latches 56 are unlocked and the links 40–43 separated to permit the podium to collapse. The latches 60–63 are latched and the podium may be carried manually through the slot 21 provided for such purpose.

1. A podium stand comprising: a base with opposite, transversely spaced sides; a paper-supporting plate having transversely spaced opposite sides; a collapsible support extending between the base and plate comprising a first set of upper and lower links hinged together at lower and upper ends respectively with the upper of said links being hinged to and adjacent one side of the plate and extending therefrom downwardly and toward the opposite side to join with the adjoining upper end of the lower of the links, and the lower of the links being hinged at the base adjacent the one side of the base and extending upwardly and inwardly to its upper end, and a second set of upper and lower links hinged together at lower and upper ends respectively with the upper of the second set of links being hinged to and adjacent the other side of the plate and extending downwardly and transversely toward the opposite side to join with the adjoining upper end of the lower set of links, the latter being hinged at the base adjacent the opposite side and extending upwardly and inwardly to its upper end; and the upper links of the first and second sets and the lower links of the first and second sets crossing one another; notches in the links and facing edges thereof for receiving the adjacent link to interlock the links in a fixed relation to one another; and means associated with at least one of the hinges on the base and said plate for permitting relative fore-and- aft movement between the link sets whereby the links may be moved to and from the fixed relation with the respective adjacent links.

2. The invention defined in claim 1 further characterized by a locking device mounted on and operable to prevent relative fore-and-aft movement between the link sets.

3. The invention defined in claim 1 characterized in that the hinge connections between the upper and lower links permit collapsing of the support when the links are not interlocked and further characterized by lock means between the plate and base for preventing extension of the support.

4. A podium comprising a base; a speaker's plate; and a collapsible support extending between the plate and base including links extending between and pivotally connected to the base and plate and including an upper pair of links connected at upper ends to opposite edge portions of the plate and extending downwardly and inwardly therefrom to lower ends and to cross one another intermediate their ends, and a lower pair of links having upper ends pivotally connected respectively to the lower ends of the upper links and extending therefrom downwardly and inwardly to cross one another and to lower ends pivotally connected to the base; and means for interlocking the links at a predetermined angular relation with one another so that the plate is positioned vertically in a normal position for a speaker, said means including notches in the edges of the links at the respective points of crossing when the links are extended for receiving the adjacent links, the links being movable toward or away from one another so that the links when seated in the notches of the adjacent links may be locked against collapsing.

5. The invention defined in claim 4 in which the links are movable toward and away from one another by supporting one of the upper links and the adjoining lower link on rods that permit pivoting as well as the shifting of the respective links toward the other links.

6. The invention defined in claim 4 further characterized by lock means for fixing the base and plate in close proximity when said links are collapsed.

7. The invention defined in claim 6 further characterized by the base being a plate and by at least one of the plates having an opening therein for manually carrying the podium when it is collapsed.