My invention relates to new and useful props or braces embodying features adapting them to be employed as clothes props but not limiting them to such use. One object of the invention is to provide a prop consisting of two sections or members slidable longitudinally of one another for adjustable extension to a considerable length and retraction to a relatively short size for storage purposes. Another object of the invention is to produce a prop or brace comprising a base section or member, an extensible section or member, and a gravity latch having a nose, said latch being swingingly pivotally connected to the upper portion of the base section and embracing the extensible section while the nose is adapted to enter any one of a series of angularly arranged holes in the extensible member, said holes being spaced longitudinally of said extensible member.

Another object of the present invention is to produce a unique form of gravity latch including side legs for pivotal connection to the base section of the prop, a cross bar at the outer free ends of said legs, said cross bar projecting across the face of the extensible section and a nose projecting inwardly from said cross bar at an angle to and below the plane of the side legs. Another object of the present invention is to produce a prop or brace which lends itself to the use of sections or "sticks" of solid, hollow and channel formations of wood, plastic or metal, resulting in a light-weight but strong and durable article.

A further object of the invention is to produce a prop or brace consisting of two nested channels so that, in effect, they telescope for sliding movements and having means for holding them close together and retaining one against retrograde movement after being extensibly adjusted.

A still further object of this invention is to produce a gravity latch of such form that the nose thereof may be automatically disengaged from an aperture during the extension sliding movement of one section of the prop or brace relative to the other section thereof.

With the above and other objects in view this invention consists of the details of construction and combination of elements hereinafter set forth and then designated by the claims.

In order that those skilled in the art to which this invention appertains may understand how to make and use the same I will describe its construction in detail referring by numerals to the accompanying drawing forming a part hereof, in which:

Fig. 1 is a face view of a prop constructed according to my invention wherein two nested channel sections are employed.

Fig. 2 is a side view thereof at right angles to Fig. 1.

Fig. 3 is a section on the line 3—3 of Fig. 2.

Fig. 4 is a cross sectional view of a modified form of prop.

Fig. 5 is a fragmentary longitudinal sectional view in the region of the latch.

Fig. 6 is a fragmentary perspective view of the upper portion of the channel extensible section showing the formation of a line receiving notch.

Fig. 7 is a fragmentary longitudinal sectional view of the extensible section or member in the region of one of the latch receiving holes to show the formation of each of the holes.

In carrying out my invention as herein embodied I have illustrated the subject matter in connection with a clothes prop although it is to be understood that the invention is not to be limited to such an application. As particularly shown in Figs. 1, 2, 3, 6 and 7, the prop or brace includes a channel base section or member 10 and a similar extensible section or member 11, one nested into the other in opposed relation. These members may be produced from plastic, metal or even wood to provide a light-weight article having sufficient strength for the purposes for which the device is intended to be used.

The members are to have a sliding fit whereby they may be slid longitudinally relative to one another for adjustable extension and retraction into a small parcel. One member, as the extensible section 11, is shallow and wide while the other member, as the base section 10, is deep and narrow, considered with relation to said extensible section 11, so that the latter embraces a portion of the base section leaving another portion exposed for a purpose to be presently described.

The base section 10 includes a web 12 and a pair of side flanges 13 and, similarly, the extensible section includes a web 14 and side flanges 15.

The two sections are loosely or slidably connected to each other by a strap 16 and a gravity latch 17, each of which is attached to a separate section and embraces the other section.

The strap 16 has its arms 18 secured to one of the sections, as the extensible section 11, by suitable fastening devices 19, such as rivets, and loosely embraces the other section, as the base section 10, whereby the two sections may freely slide longitudinally of each other.

To prevent accidental separation of the sections when moved longitudinally in one direction, a stop 20, in the form of a pin, a projection, a lump of welding metal or other equivalent is carried by the base section, for example, and located in the path of downward travel of the strap while the latch 17 will accomplish the same result when the sections are moved in the other direction.

The gravity latch 17 includes a pair of parallel side legs 21 pivotally and swingingly connected to one section of the prop, as the base section 10, a cross bar 22 joined with the outer ends of said legs and extending across the face of the other prop section, as extensible section 11, and a nose 23 at an acute angle to the plane of the side legs and below the latter. Desirably, the latch is produced from a section of wire bent upon itself for a short distance to form the nose 23 and then bent at right angles in opposite directions from the nose straddles to constitute the cross bar 22 and then bent rearwardly at right angles to said cross bar, in the same general direction as the nose, to form the side arms and finally bent inwardly to provide trunnions 24 to be inserted in apertures in the other or base section 10 to pivotally swingingly assemble the gravity latch thereon.

The side legs 21 are of sufficient length to permit the nose 23 to be spaced from the face of the extensible member when the latch is raised towards the horizontal position when the prop is in an upright or vertical position. The nose 23 is adapted to enter any one of a series of keeper holes 25 in the front face of the extensible section 11, said holes being suitably spaced in a row longitudinally of said extensible section. Each hole 25 is formed obliquely to the face of the prop section so as to slant upwardly, Fig. 7, from the front face towards the rear.
Because of the angular formation of these holes 25 and also the angular arrangement of the latch nose, the latter is readily retracted from a hole as the prop sections are moved longitudinally in a withdrawing direction but provides a secure holding action when the prop sections are moved in a retracting direction or a force, such as a weight or clothes line, tends to move them in the latter direction.

Where the prop is fashioned for holding a clothes line, the extensible section 11 is provided with a V-shaped notch 26 and in the case of a channel said notch is formed in the web 14 as plainly shown in Fig. 6.

As previously suggested, the prop sections may be of other forms than channels and therefore I have shown a solid base section 10a and a similar extensible section 11a. These sections are placed back to back for longitudinal adjustment relative to one another. The balance of the structure is identical with that previously described, including the strap and stop (not shown), the gravity latch and the keeper holes which have been supplied with the same reference numerals as used in connection with the first described type of prop or brace.

In using the prop or brace, the extensible section is elevated or projected to any desired or preselected height within the limitation of the space between the stop and latch and until the nose of said latch enters a hole 25 at the predetermined level. If the selected hole 25 is above others, the nose will be "ratched" out of said other holes so that the extension movements of the prop will not be interfered with. Upon release of said extensible section 11, its tendency to descend will cause the nose of the latch to enter the approaching keeper hole and securely hold the extensible section in the adjusted or projected position. When it is desired to retract the prop or brace, the extensible section is elevated sufficiently to eject the latch nose from its keeper hole and by retaining the latch in the disengaged position the extensible section may be retracted relative to the base section.

Of course I do not wish to be limited to the exact details of construction herein shown and described as these may be varied within the scope of the appended claim without departing from the spirit of my invention.

Having described my invention what I claim as new and useful is:

In a prop or brace, a relatively shallow channel member including a web and side flanges and constituting an extensible section, said web having a longitudinal row of spaced holes therein, a second channel member deeper and narrower than the first channel member and also including a web and side flanges and constituting a base section, said channel members being nested with the webs in opposed spaced relation whereby portions of the side flanges adjacent the web of the second channel member are exposed, a strap on the first member and embracing the second member, and a gravity latch pivotally attached to the upper parts of the exposed portions of the side flanges of the second channel member and embracing the first channel member, said latch including means to selectively enter the holes for retaining the extensible section in various adjusted positions relative to the base section.

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