Jan. 5, 1960 W. ESPINOSA 2,919,489

MASON'S CHALK LINE HOLDER

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Fig. 1

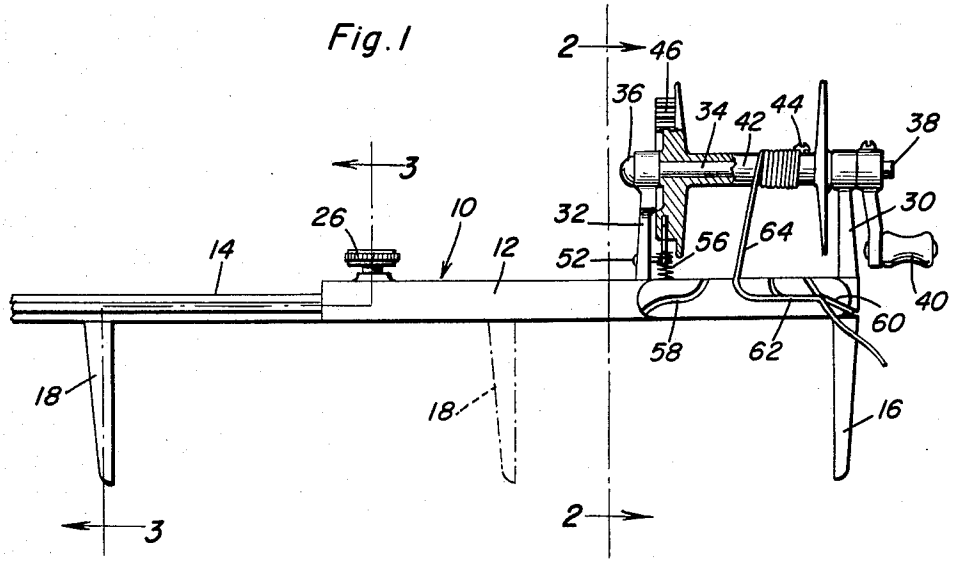


Fig. 2

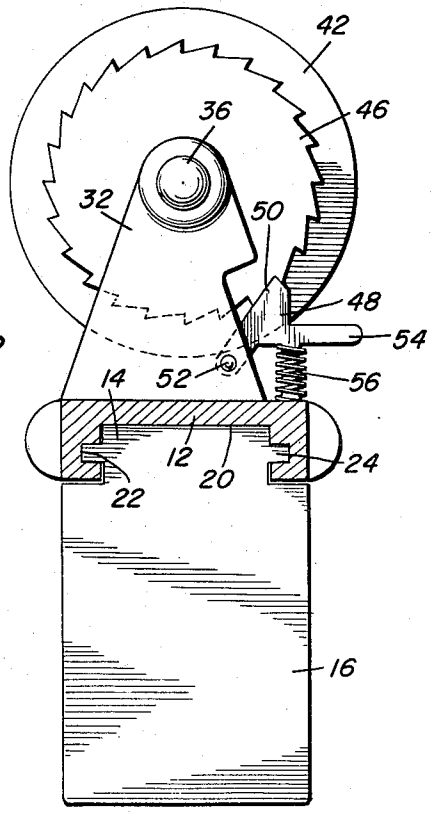
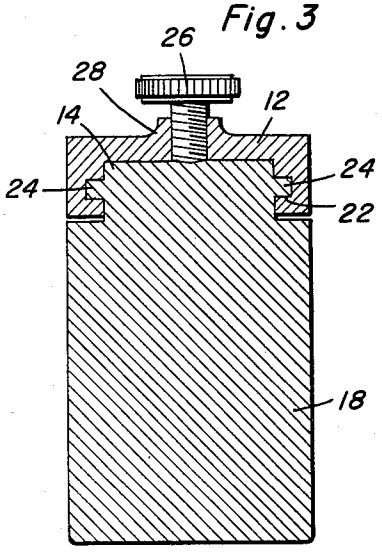


Fig. 3



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Fig. 4

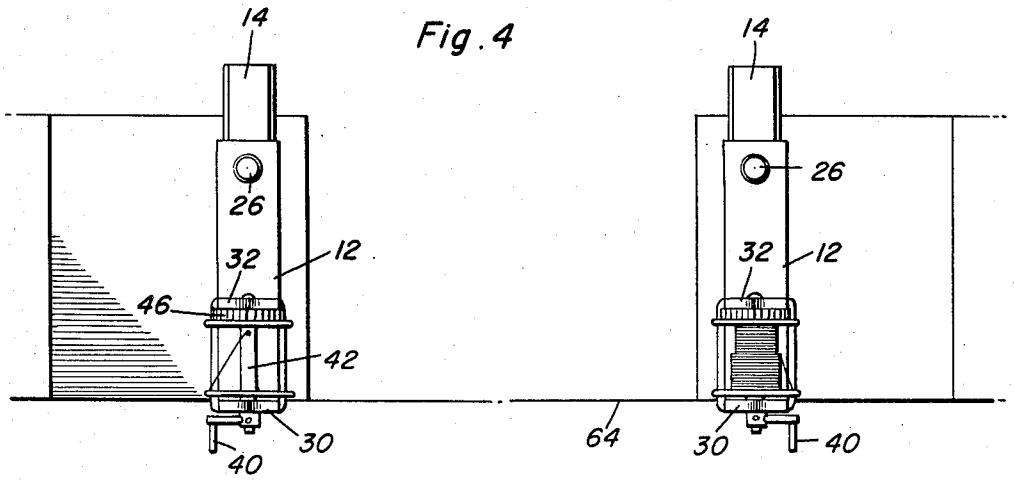


Fig. 5

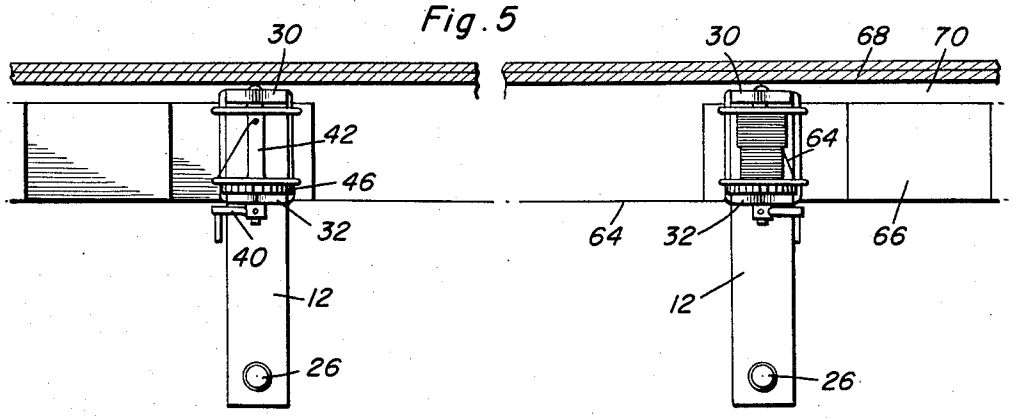
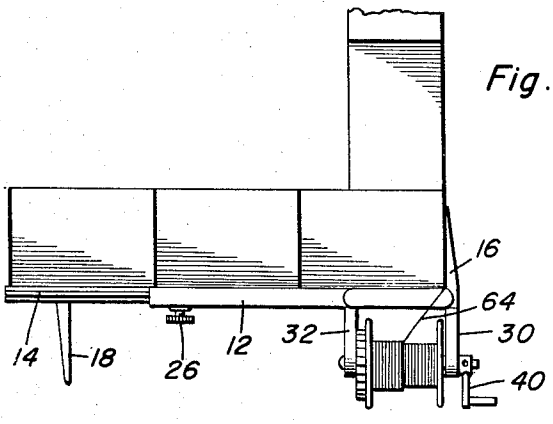


Fig. 6



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MASON'S CHALK LINE HOLDER

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4 Claims. (Cl. 33—85)

This invention comprises novel and useful improvements in a mason's chalk line holder and more specifically relates to a device for applying and positioning a chalk line in an improved manner upon the horizontal top or side surfaces of a wall or a vertical surface thereof as desired.

The primary object of this invention is to provide an improved chalk line holder wherein there is provided a longitudinally adjustable base having clamping means whereby the holder may be secured to a masonry wall.

A further object of the invention is to provide a chalk line holder in conformity with the foregoing object having improved ratchet wheel drum means for retaining a chalk line taut.

Yet another object of the invention is to provide an improved chalk line holder as set forth in the preceding objects wherein the ratchet drum assembly may be easily adjusted to permit the driving handle of the drum to be disposed upon either end of the same.

A still further object of the invention is to provide a chalk line holder in accordance with the above mentioned objects in which the base of the elements shall be provided with a plurality of guiding grooves or channels to effectively guide and position the chalk line at an appropriate position at either end of the drum to thereby enable the device to be applied to a masonry wall for positioning the line at either side of the same.

These together with other objects and advantages which will become subsequently apparent reside in the details of construction and operation as more fully hereinafter described and claimed, reference being had to the accompanying drawings forming a part hereof, wherein like numerals refer to like parts throughout, and in which:

Figure 1 is a side elevational view showing the chalk line holder incorporating therein the principles of this invention, the longitudinally extensible holder being shown in full lines in an extended position and in dotted lines in a relatively retracted position;

Figure 2 is a vertical transverse sectional view taken upon an enlarged scale substantially upon the plane indicated by the section line 2—2 of Figure 1;

Figure 3 is a vertical transverse sectional view taken upon an enlarged scale substantially upon the plane indicated by the broken section line 3—3 of Figure 1;

Figure 4 is a top plan view showing one manner of utilizing the chalk line holder in accordance with this invention for applying a horizontal chalk line to the exterior vertical surface of a masonry wall;

Figure 5 is a view similar to Figure 4 but showing the chalk line applied in a horizontal position to the exterior vertical surface of a wall in which the space adjacent thereto is restricted by the presence of a veneer; and,

Figure 6 is a detailed view in plan showing still another manner in which the holder is applied to a masonry wall.

As will be seen by Figure 1, the chalk line holder in accordance with this invention consists of a base indicated generally by the numeral 10 and which is of a longitudinally extensible construction, the same consisting of a relatively fixed section 12 which is slidably associated with a movable section 14. The section 12 is a flat plate-like member which at one extremity is provided with a substantially perpendicular plate 16 constituting a securing means, while the movable section 14 likewise has a similar plate 18 secured thereto.

As will be observed from Figures 2 and 3, upon what may be termed its bottom surface, the fixed section 12 has a recess or guide channel 20 which extends longitudinally of the same from one end thereof, this channel terminating closely adjacent the other end of the section which carries the securing means 16. The walls of the channel are provided with parallel longitudinally extending grooves or guideways 22.

The movable section 14 is slidably received within the channel 20 and has a pair of longitudinally extending ribs 24 which are adapted to be slidably received within the guideways 22. As will be apparent from Figures 2 and 3, the adjacent surface of the movable section 14 is slidably received upon the bottom wall of the channel 20 whereby the two sections may be longitudinally extended or adjusted relative to each other. A locking or fastening means in the form of a thumb screw 26 extends through an internally threaded boss 28 upon the top surface of the fixed section 12 and engaging the movable section 14 serves to secure the two sections in longitudinally adjusted position. As shown in Figure 4, the sections may be extended, this being substantially a full line showing of Figure 1, whereby to extend across a masonry wall and by engagement of the securing plates 16 and 18 with the opposite vertical surfaces of the wall, securely clamp and retain the chalk holder in place thereon. Alternatively, the extensible sections of the base may be collapsed or retracted, as for example as shown in the dotted line showing of Figure 1, whereby the device may be clamped as in Figure 5 to a wall of lesser thickness.

Rising from the top surface of the fixed section 12, adjacent the end of the section which carries the fixed securing plate 16, are a pair of standards 30 and 32. These standards are preferably integral with the top surface of the fixed section 12, but may be rigidly mechanically attached thereto if desired.

Journaled in these standards for free rotation therein is a shaft 34, which at one end is provided with an enlarged head 36 limiting endwise motion of the shaft in the standards, and its other extremity as at 38 extends through and beyond the other standard such as the standard 30 shown in Figure 1. To the extending end of the shaft there is secured a handle or crank 40 which being clamped to the end of the shaft serves to prevent with the head 36 endwise movement of the shaft, as well as permit rotation of the same.

Slidably received upon the shaft 34 is a drum or winch 42, which may be detachably but fixedly secured to the shaft as by a set screw or the like 44. At one end, the end cheek of the drum 42 is provided with a toothed ratchet wheel 46 of a conventional configuration. Cooperating with this ratchet wheel is a pawl 48 having a detent or tooth 50, the pawl being pivoted as at 52 to the standard 32 whereby the tooth 50 will cooperate with the teeth of the ratchet wheel 46. The pawl is provided with a release finger 54 extending therefrom, and the spring 56 is interposed between the finger and the top surface of the fixed section 12 to thereby yieldingly urge the pawl's tooth 50 into engagement with the ratchet wheel 46. The arrangement is such that the pawl normally prevents rotation of the ratchet wheel and consequently of the drum 42 in one direction, although rotation in the other direction is permitted by the teeth of the ratchet wheel passing over the tooth 50 of the pawl. The finger release 54 may be manually depressed against the action of the spring 56 to permit

the drum to be rotated in a reverse direction as desired.

As will be best observed from Figure 1, the vertical side edge of the fixed section **12** is provided with a plurality of guide grooves, channels or passages **58**, **60**, **62** and the like whereby a chalk line **64** wound upon the drum may be disposed in a selected groove and guided as the line is positioned tautly across a masonry surface.

By means of placing the line in a proper selected groove, after the device has been secured to a masonry wall, it will be observed that the chalk line will be disposed as in Figures 4 or 5 against the vertical surface of the wall in horizontal position thereon in accordance with conventional usage.

It should be observed particularly that in some instances, the device must be mounted in such a way that there is not sufficient room to manipulate the handle **40**. For this purpose, the handle may be removed from the extremity **38** of the shaft **34**, and the shaft then reversed in the standards with the handle placed adjacent the standard **32**, as shown in Figure 5. In this position, it will be observed that the masonry wall indicated generally by the numeral **66** is associated with a masonry veneer construction **68** having a restricted air space **70** therebetween. This space **70** being sufficient to accommodate a securing plate **16**, is not sufficient to permit the operation of the handle **40** therein. In this instance, the handle **40** and the shaft have been reversed and the chalk line is now disposed in the guide groove **58** adjacent the standard **32**.

As shown in Figure 6, the movable section **14** may be removed from its guide channel **20** and reversed therein whereby the securing plate **18** extends to the opposite side of the base from the plate **16**. This enables the plate **16** to be secured to a corner masonry wall, with the base lying along one side of the wall, the securing plate **18** being thus so positioned as to prevent obstruction in the placing of the device against the wall. In this position the chalk line may be disposed vertically for plumbing a corner of the wall.

The foregoing is considered as illustrative only of the principles of the invention. Further, since numerous modifications and changes will readily occur to those skilled in the art, it is not desired to limit the invention to the exact construction and operation shown and described, and accordingly all suitable modifications and equivalents may be resorted to, falling within the scope of the invention as claimed.

What is claimed as new is as follows:

1. A mason's chalk line holder comprising an elongated flat plate-like longitudinally extensible base consisting of a pair of relatively movable sections, said base having a flat, coplanar longitudinally extending bottom surface for engaging a wall, a pair of parallel plates each attached to and depending from the bottom surface of one of said sections for gripping the sides of a wall therebetween whereby to secure said base upon said wall, a pair of longitudinally spaced standards mounted upon and rising from the top surface of one of said sections, the section upon which said standards are mounted having a slot extending longitudinally inward from one end thereof, said slot having longitudinal channels in its side walls, the other section having on its side edges and disposed medially between its top and bottom surfaces longitudinal ribs slidably received in said channels, whereby said other section may be reversely mounted in said slot for reversibly positioning the plate carried thereby and whereby either the top or bottom surface of said other section may be positioned to form a coplanar longitudinally extending surface with the bottom surface of the section carrying said standards, means engaging both sections for securing the same in longitudinally adjusted positions, a shaft journaled in said standards, a drum secured upon said shaft between said standards and a chalk line wound upon said drum, the section carrying said standards being provided with guide grooves in an edge adjacent said drum for guidingly receiving said chalk line therein.

2. The combination of claim 1 wherein one of said standards is located at the end of its section which is remote from the other section, said shaft having its ends projecting beyond said standards and being reversible end for end in said standards, a handle detachably secured to an end of said shaft whereby the handle may be disposed adjacent either of said standards.

3. The combination of claim 1 wherein said guide grooves are disposed in said edge adjacent each standard whereby the check line may be guided in the grooves.

4. The combination of claim 1 wherein said drum has a ratchet wheel adjacent one standard, a pawl pivoted on said last mentioned standard and movable to engage said ratchet wheel, a spring engaging said pawl and its associated section and yieldingly urging the pawl against the ratchet wheel whereby to limit the drum to rotation in one direction, a release finger on said pawl manually operable to disengage the latter from said ratchet wheel.

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