Sept. 22, 1931. F. G. BAKER 1,824,321

PLUMB LINE GUIDE

Filed Oct. 27, 1928

Fig: 2

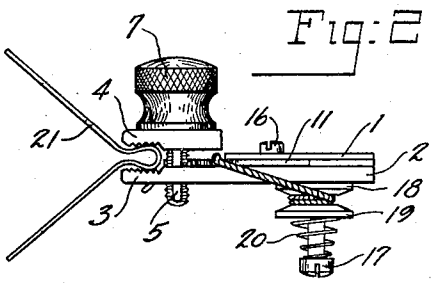


Fig: 1

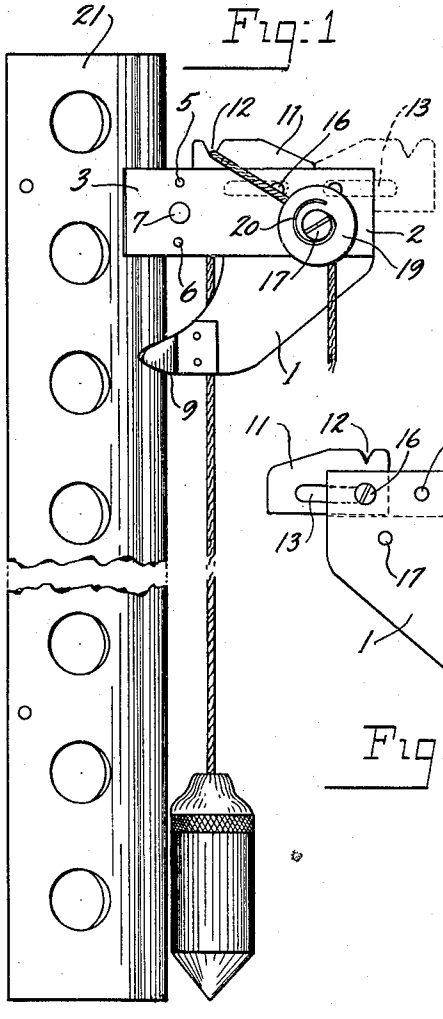


Fig: 3

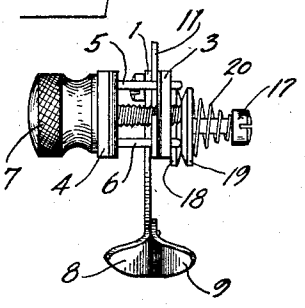


Fig: 4

Fig: 5

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PLUMB LINE GUIDE

Application filed October 27, 1928. Serial No. 315,361.

My invention relates in general to a plumb line guide or holder and, more specifically, to a clamping device which may be fastened to certain parts and acts as a guide or holder for a plumb line. This device is especially useful in "corner bead" erection, as will be later explained.

The manner of erecting so-called "corner beads" is well known to artisans, and it is also well known that it is difficult to use the plumb line on a "corner bead". It might be explained that "corner beads" are constructed of metal with large holes and are fastened to the lath of a partially constructed building where two plastered walls meet at a projecting angle. Such projecting surfaces are common in buildings around a window enclosure and in halls and lobbies, and the corner bead is used to provide strength and rigidity to the plastered corner and also to give the plasterer a definite line to follow. These corner beads may be of greath length, for instance in large halls and lobbies, or may be mounted in sections, and must be carefully erected and aligned. In addition to so-called corner beads there are various other types of beads used in construction, one of which is the so-called "base ground" which has a narrow edge similar to a corner bead but is mounted on a flat surface. The "base ground" is often used around the base of a wall above the floor, for instance as a separation between the plastered wall and a cement flooring and base board. The plumb line holder, while especially useful in corner bead and base ground erection, is also useful in various other forms of building construction and, in fact, is useful at any time when it is desired to fasten a plumb line or any other type of line.

An object of the invention, therefore, is to provide a simple clamp or holder which is readily attached to a surface to be aligned and which is adjustable to accommodate any size plumb bob or to guide and retain the line at various distances from the edge to be aligned.

Referring to the attached sheet of drawings, Fig. 1 is a front view of the plumb line clamp attached in working position to a section of "corner bead".

Fig. 2 is a view taken from above in Fig. 1.

Fig. 3 is a view of the clamp or holder taken from the left in Fig. 1. with the corner bead removed and the jaws of the clamp open.

Fig. 4 is a view of the clamp of Fig. 1 taken from the rear with the movable jaw of the clamp removed.

Fig. 5 shows two of the clamps or holders, such as shown in the remaining figures, mounted on a "base ground" and with a line stretched between the two holders.

Referring now to the above drawings, I will first explain the construction of the holder and later its operation. The holder has a part 1 formed from sheet steel to which is riveted or welded a heavier part 2 having an extended end forming one jaw 3 of the clamp. A second jaw 4 of the clamp is also of hardened steel and has a pair of guiding pins 5 and 6 registering with a pair of holes in the opposed jaw 3. A large thumb screw 7 is provided for clamping the two jaws together and its thread passes through a clearance hole in jaw 4 and into a threaded hole in jaw 3. On the lower end of plate 1 is a back-turned lip 8 and there is another section riveted to plate 1 also having its edge turned back to form a lip 9. These two lips form a V-shaped jaw which rests adjacent the end of the corner bead. The part 2 is milled away near its upper edge (Fig. 4) at 10, forming a pocket or slide into which the guide 11 is inserted. The guide 11 has a V-shaped notch 12 in its upper edge and slides freely back and forth in the slide. This guide 11 has a slot 13 shown in dotted lines, which registers with two clearance holes 14 and 15 in part 1. Opposite these clearance holes are a pair of threaded holes into which the screw 16 may be inserted to hold the guide 11 in any desired position. On the part 2 is mounted a spring holder held by a screw 17. This holder comprises a pair of discs or washers 18 and 19 held together under tension of the spring 20 and adjustable thereby.

The holder may be fastened as shown in

Figs. 1 and 2 to a corner bead such as 21 by adjusting the screw 7 to clamp the jaws 3 and 4 around the projecting bead so that the lips 8 and 9 rest adjacent the bead. The line of the plumb bob is then hug through the notch 12 and is then fastened by taking a turn of the free end around the spring holder as shown. The plumb bob will then hang down adjacent the bead and alignment can be readily assured. Referring to Fig. 1, I have shown the guide 11 in one position in full lines with the plumb line in position, and it will be readily understood that the guide may be moved back away from the bead by simply loosening screw 16 or the guide may be removed and reversed as shown in dotted lines and the screw reinserted. Thus it will be seen that the line can be held in any position between that shown in full and that in dotted lines in Fig. 1. Also the line may be inserted between the lips 8 and 9 as shown in Fig. 5, in which case the line will lie directly adjacent the edge of the bead.

In many instances when erecting "base grounds" such as that shown at 22 in Fig. 5, it may be desirable to use two holders and fasten the line between the two as shown in this figure. Again the line may be secured as shown in lips 8 and 9 or may be held farther away from the ground by using the notches in the guide 11.

In Fig. 1 I have shown the "corner bead" and the plumb line broken in the center indicating greater length, and in Fig. 5 I have shown the base ground and line also broken at the center. In addition I have inserted a sectional view of the base ground between the broken lines showing clearly its construction. As the bead and base ground form no part of my present invention, further details are thought unnecessary.

It should be understood that although I have shown this holder in connection with corner bead and base ground erection, I do not desire to be so limited but contemplate using the holder of my invention wherever it is desired to fasten or guide a line or plumb line to any object or device for any purpose.

Having fully described and ascertained the features and aspects of my invention, what I consider to be new and desire to have protected by Letters Patent will be pointed out in the appended claims.

What is claimed is:

1. In a plumb line holder, having a clamp for securing the holder to the surface to be aligned and a forked extension for engaging the surface to retain the holder in position, an adjustable guide having a notch, and means for fastening the line and holding it in place either in the notch or the forked end.

2. A plumb line holder consisting of a pair of metal parts secured together side by side and one having a rabbet in the side thereof adjacent the other, a line guide adjustable in said rabbet to hold the line in various positions relative to the holder to accommodate plumb bobs of various sizes, and means for securing the line.

3. In a plumb line holder, a clamp for securing the holder on a corner bead or like surface to be aligned, a forked extension adapted to rest against the bead or surface, a line guide movable relative to the clamp and means for holding the line in position either in said forked extension directly adjacent the surface or in said guide at varying distances therefrom.

4. In a plumb line holder, a metal clamp, having an adjusting screw for securing the holder to the device to be aligned, there being a groove in the holder, a notched guide movable in said groove and means for fastening the guide at varying distances from the surface to be aligned, and a spring fastener into which the line may be inserted and by means of which the line is secured.

In witness whereof, I hereunto subscribe my name this 24th day of October, A. D. 1928.

FRANCIS G. BAKER.