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Pinkard

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[54] **FRAMING TEMPLATE**

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[52] **U.S. Cl.** ..... **33/174 G,** 33/96, 33/108

[51] **Int. Cl.** **G01b 3/30**

[58] **Field of Search** ..... 33/174 G, 180 R, 75 R, 33/90, 95, 96, 108, 112, 168 R, 197

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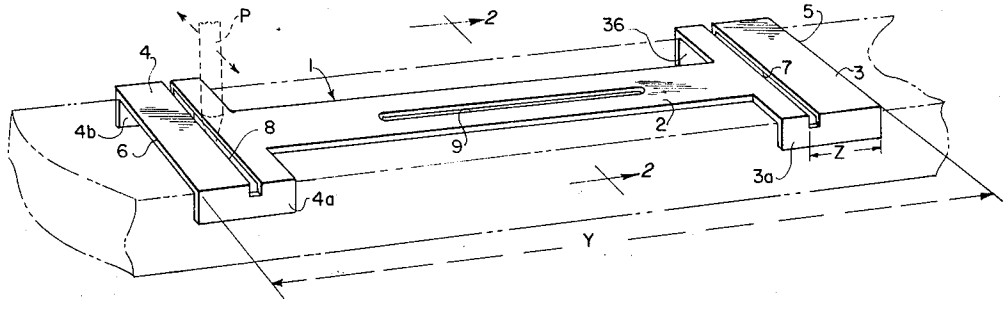
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[57] **ABSTRACT**

A simple one-piece item of sheet metal or plastic, constructed to facilitate the emplacement and proper spacing and collocation of studs, joists, rafters and like elements in the construction of a building.

7 Claims, 2 Drawing Figures



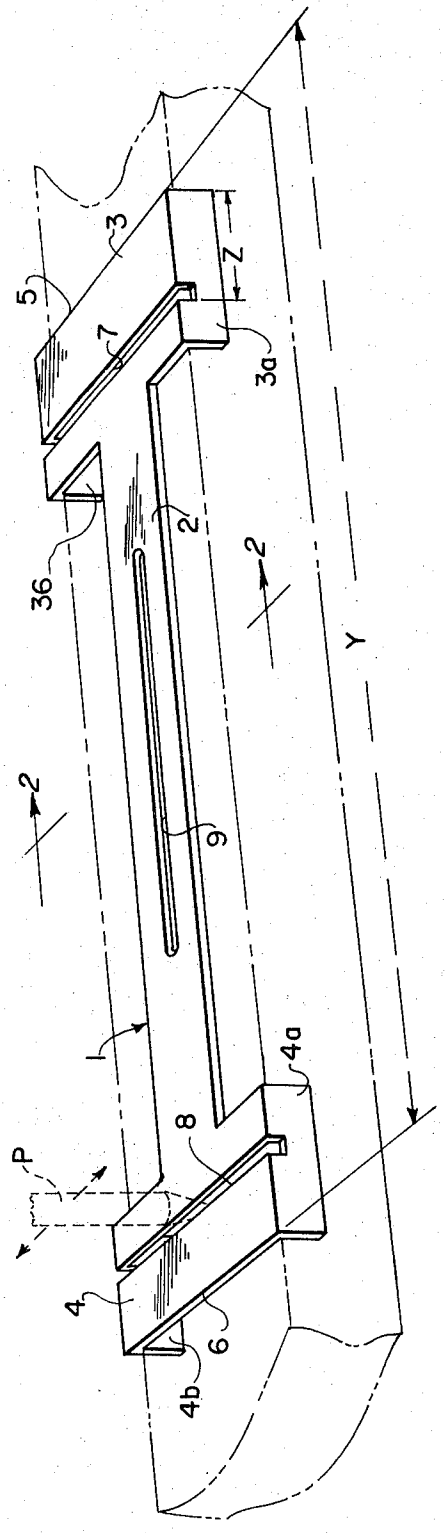


FIG. 1

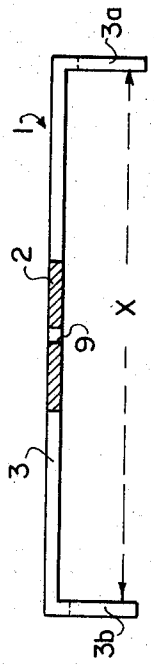


FIG. 2

FRAMING TEMPLATE

FIELD OF THE INVENTION

This invention relates to a framing tool for use in the proper spacing and collocation of studs, joists, rafters and other building elements which must be positioned in regular and accurate relation.

It is the chief purpose of the invention to afford a tool of the type aforesaid type which is simple and inexpensive to construct, capable of being formed in a variety of sizes for the selected spacings of building elements, easy to use by professional carpenters as well as by do-it-yourselfers, highly accurate in the uniform emplacement and spacing of building elements, capable of substantial savings in time and building costs, and a general advance in the art.

Other objects and advantages will become clear to those skilled in the art, after a study of the following detailed description, in connection with the accompanying drawing.

BRIEF DESCRIPTION OF THE DRAWING

FIG. **1** is a perspective view of a tool embodying the invention and showing in dot-dash lines a sill or like element of timber being marked; and

FIG. **2** is a cross section to an enlarged scale, taken in a plane identified by line **2 — 2**, FIG. **1.**

DESCRIPTION OF THE PREFERRED EMBODIMENT

Referring in detail to the drawing, **1** identifies generally the tool which, as shown, is conveniently formed of an initially flat piece of sheet metal of substantial rigidity and in the form of an "I" comprising a central elongated shank **2** and transverse ends **3** and **4.** The terminal portions 3a and 3b of end **3,** for example, are turned down at right angles to the main or central portion, it being understood that the two ends **3** and **4** are the same in formation and dimensions. The tool may be formed by stamping or, if made of synthetic plastic, by molding.

The transverse distance between flanges *3a*, *3b*, and *4a*, *4b* is such that the tool will fit smoothly and accurately over and about a conventional so-called "two by four" which actually has a transverse rectangular section of about 1¾ inches by 3½ inches. In other words the aforesaid transverse distance X, FIG. **2,** will in such cases be slightly in excess of 3½ inches so that when applied to such a building element the tool is positioned accurately with the longitudinal axis of shank **2** parallel with the longitudinal axis of the timber element.

Assuming for the purpose of explanation that studs are being erected with a centerline to centerline spacing of 16 inches, as is conventional, the distance "Y" measured parallel to the longitudinal axis of shank **2,** between the two transverse straight edges **5** and **6** of the terminal portions, will be 16 inches + *t*, where t is the thickness of the studs being installed. Thus, where such thickness is 1¾ inches, distance Y will be 17¾ inches.

At a distance Z from transverse edge **5,** end **3** is formed with a slot **7** parallel to the edge. In the example being followed, this distance will be 1¾ inches. As shown, end **4** is formed with a like slot **8** parallel to and spaced the same distance from edge **6.** As an added feature, one or both ends of the slots may extend, as

shown, an appreciable distance downwardly into the flange of each terminal portion, for a purpose subsequently described. As a matter of added utility and convenience the transverse dimension of shank **2** may be closely equal to the thickness of the framing elements being emplaced and which in the example will be about 1¾ inches.

In use, as where studs are being emplaced and secured in spaced relation along and to a sill of 2 by 4 or 4 by 4 size, beginning at one end, the tool is placed over the sill with its flanges extending down thereover, and is held motionless while pencil marks are drawn upon it first along edge **5** as a guide, then through and along slot **7,** then through and along slot **8** and finally along edge **6.** The two sets of parallel lines thus drawn are thereby so located and related that when the ends of two sequential studs are located, each in registration with a respective pair of those lines, they are spaced the desired distance centerline to centerline and which in this instance, is 16 inches. The procedure is repeated throughout the length of the sill.

For example, assuming work is from left to right as viewed upon FIG. **1,** other properly-spaced pairs of collocating lines are drawn, as, by placing edge **6** and slot **8** in registration with a previously drawn pair of lines, then using slot **7** and edge **3** as guides for drawing another pair of lines.

In this way cumbersome and frequently inaccurate measurements with a rule are avoided and eliminated, and the studs are quickly and positively located at uniformly spaced and precise intervals. Where as shown the slots **7** and **8** descend part way into each of the flange portions such as *3a*, *3b* and *4a*, *4b*, the lines may be continued part way down the width of the sill and thus afford check lines by which an inspector may note the accurate emplacement of the studs. Also this feature enables the carpenter to mark around the entire periphery of the timber if he desires to make sure that the marks are always parallel. Further, after the wall covering has been applied, the tool can be used to locate a desired stud so long as the location of any one stud is known or can be found.

Shank **2** is shown provided with an elongated longitudinally extending slot **9.** In the example shown, assuming that timber elements such as studs are to be spaced 24 inches centerline to centerline, instead of 16 inches, slot **9** will be 8 inches in length and symmetrically located, that is, with its respective ends spaced the same distance from slots **7** and **8.** In using this feature the carpenter draws a first pair of lines using, for example, edge **5** and slot **7.** He then places a pencil or nail through slot **9** at its end remote from the first pair of lines just drawn, holds it in firm contact with the sill, then slides the tool along the sill and pencil until it is contacted by the other end of the slot. He then draws a second pair of lines on the sill using slot **8** and edge **6** as guides. Thus the two pairs of lines are spaced exactly 24 inches centerline to centerline.

By making slot **9** of a selected length other spacings of timber elements are made possible such for instance as 20 inches. In that case the slot will be 4 inches in length. It is contemplated that two or more slots **9** may be provided in shank **2,** all parallel and each corresponding to a particular desired spacing of the elements. Each slot may be clearly marked with the spacing distance it facilitates.

Of course it is not absolutely necessary that such longitudinally extending slots be symmetrically located as described above, so long as each has the correct length. Symmetrical relation is preferred however.

While I have described my invention as of particular use in the uniform accurate emplacement of studding, it is also very useful in the spacing of joists, rafters and like elements. To emplace joists for example, the carpenter uses the invention to mark the top surface of the band the same as has been previously described herein for emplacing studs. Since the edges of the flanges **3***a*, **3***b*, and **4***a*, **4***b*, lie in respective planes each normal to the longitudinal axis of shank **2** and slot **9,** if present, the tool is very useful for marking bands for the spacing of joists, rafters and like elements. For example, the tool can be located on and to extend across a band, with the depending flanges such as **3***a*, **3***b* in contact with one side surface thereof. This locates the edges of shank **2** truly transverse, eg., at 90°, to the longitudinal axis of the band. Since the width of the shank is equal to the thickness of a rafter, joist, etc., its edges may be used as a guide in drawing lines at properly-spaced intervals, thus indicating the correct location and spacing of rafters, etc.

Where in the foregoing specification the thickness of "2 by 4's" is stated as 1¾ inches, it will be understood that when such timber elements are actually **1½** inches thick, the tool will be constructed and modified accordingly. That is, the longitudinal distance between edges **5** and **7,** and between **6** and **8,** will be correspondingly reduced to 1½ inches, as well as the transverse dimension of shank **2.** The thickness of the metal or other material of which the invention is constructed can be increased as desired where added strength and rigidity are desired.

Numerous other uses are possible and will readily occur to those skilled in the art, after a study of the foregoing disclosure, by which the proper and precise location and relation of framing timber elements can be effected. Hence the disclosure is to be taken in an illustrative rather than a limiting sense.

I claim:

1. A framing template comprising a sheet of rigid or semi-rigid material forming an elongated shank having a central longitudinal axis and integral first and second transversely extending portions at its respective ends, to form an "I," the opposed outer edges of said transversely extending portions being normal to said axis and spaced a predetermined distance apart along said axis, the extending ends of each said transversely extending portion being turned down at **90°** and forming flanges parallel with said axis.

2. A framing template comprising a sheet of rigid or semi-rigid material forming an elongated shank having a central longitudinal axis and integral first and second transversely extending portions as its respective ends, to form an "I," the opposed outer edges of said transversely extending portions being normal to said axis and spaced a predetermined distance apart along said axis, there being first and second slots in each said transversely extending portion, respectively, each parallel with the outer edges of its said portion, and spaced therefrom in a direction parallel with said axis, by the thickness of a framing element to be emplaced.

3. The template of claim **2,** at least one end of corresponding ends of said transversely extending portions being turned down 90° to form planar flanges parallel with said axis, each said slot extending part way into a respective one of said flanges.

4. The template of claim **3,** both ends of each said transversely extending portion being turned down 90° to form opposed pairs of flanges spaced by the width of a framing element to be emplaced.

5. The template of claim **2,** there also being at least one slot of predetermined length in said elongated shank, parallel with said axis.

6. The template of claim **2,** the distance between said first and second slots, measured parallel with said axis, being equal to the desired centerline-to-centerline spacing of framing elements to be emplaced, minus the thickness of one of said elements.

7. The template of claim **6,** there also being at least one additional slot in said shank, parallel with said axis, and correlated with the distance between said first and second slots by a preselected added distance of centerline-to-centerline spacing of a pair of framing elements to be emplaced.

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