Jan. 8, 1952 W. M. HUNGERFORD 2,581,534

MARKING INSTRUMENT

Filed March 21, 1949

Fig. 1.

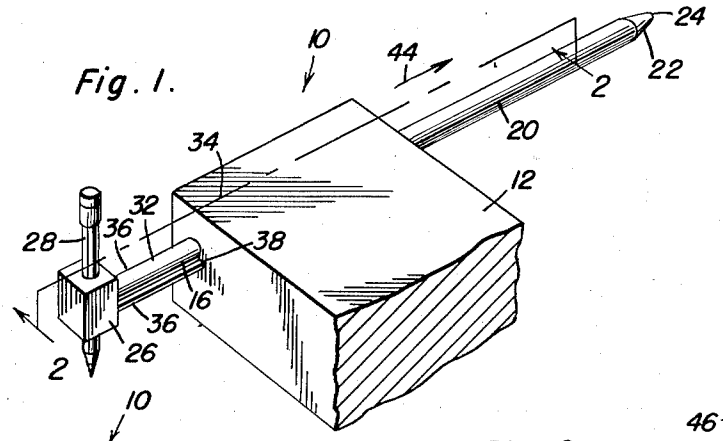


Fig. 2.

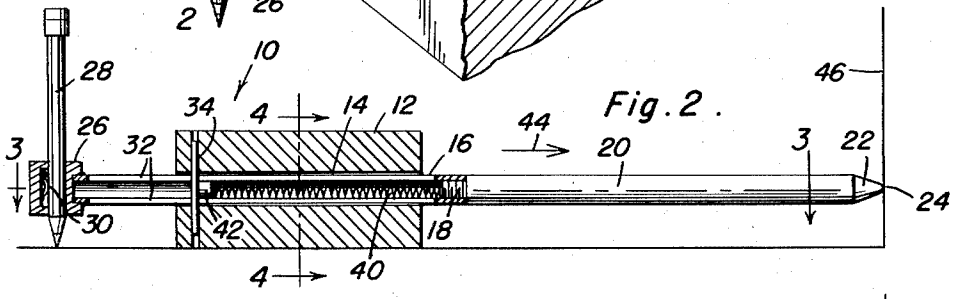


Fig. 3.

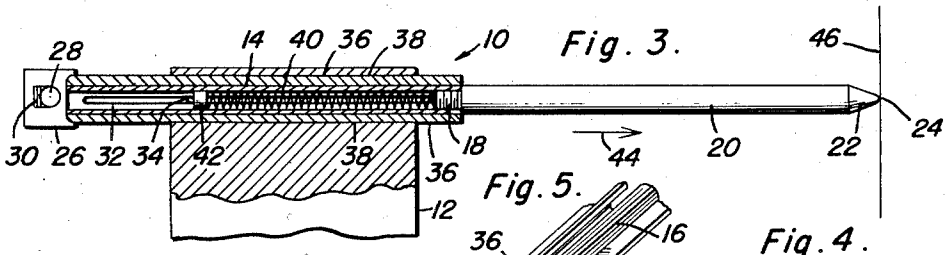


Fig. 5.

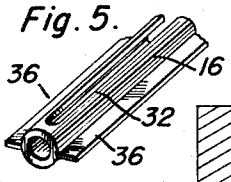
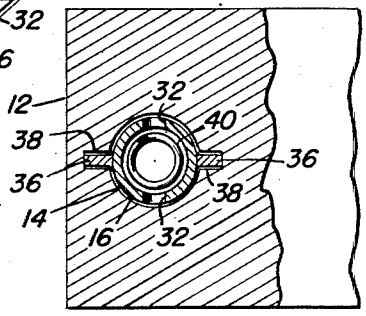


Fig. 4.



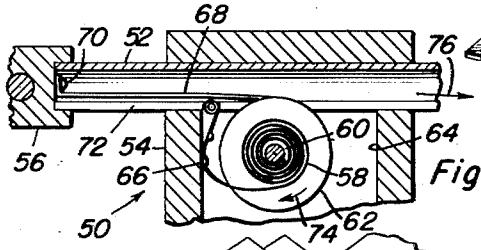
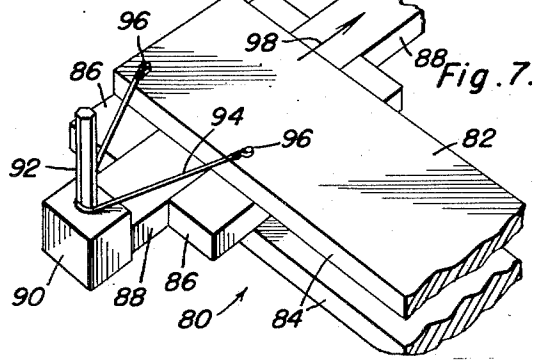


Fig. 6.

Fig. 7.



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2,581,534

MARKING INSTRUMENT

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Application March 21, 1949, Serial No. 82,613

1 Claim. (Cl. 33—42)

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This invention relates to new and useful improvements and structural refinements in marking instruments, and the principal object of the invention is to provide an instrument of this nature such as may be conveniently and expeditiously employed by linoleum layers, carpenters, sheet metal workers, and the like, for efficiently and accurately marking their work preparatory to cutting the same to fit a predetermined contour, such as for example, when laying linoleum to fit the usual, irregular contour of a bathtub.

This object is achieved by the provision of the instant marking instrument which includes in its construction a holder provided with a transversely slidable stem, the latter carrying at one end thereof a suitable scribing instrument while its remaining end is engageable with a guiding surface, so that by virtue of the slidable stem the scribing instrument faithfully follows the guiding surface and marks the work in strict accordance with a predetermined contour.

An important feature of the invention resides in the provision of resilient means for urging the stem in contact with the guiding surface, while another feature resides in the structural arrangement of the stem per se.

Some of the advantages of the invention lie in its simplicity of construction, in its convenient operation, and in its adaptability to economical manufacture.

With the above more important objects and features in view and such other objects and features as may become apparent as this specification proceeds, the invention consists essentially of the arrangement and construction of parts as illustrated in the accompanying drawings, in which:

Figure 1 is a perspective view of the invention;

Figure 2 is a cross sectional view, taken substantially in the plane of the line 2—2 in Figure 1;

Figure 3 is a cross sectional view, taken substantially in the plane of the line 3—3 in Figure 2;

Figure 4 is a cross sectional detail taken substantially in the plane of the line 4—4 in Figure 2;

Figure 5 is a fragmentary perspective view of the stem used in the invention;

Figure 6 is a fragmentary perspective view of a modified embodiment of the invention, and

Figure 7 is a fragmentary perspective view of a further modified embodiment of the same.

Like characters of reference are employed to

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designate like parts in the specification and throughout the several views.

Referring now to the accompanying drawings in detail, more particularly to Figures 1–5 inclusively, the invention consists of a marking instrument designated generally by the reference character 10, the same embodying in its construction a holder 12, preferably assuming the form of a straight edged beam, which is provided in one end portion thereof with a transverse bore or passage 14 to slidably receive a tubular stem 16.

One end portion of this beam is internally screw-threaded to receive a screw-threaded adapter 18 of a cylindrical stem extension, the outer end portion of the latter being tapered as at 22 and terminating in what may be referred to as a guiding point or extremity 24.

The remaining end of the stem 16 is provided with a block shaped socket 26 adapted to receive a suitable scribing implement, such as for example, a pencil 28, the latter being vertically disposed and being frictionally retained in the socket by means of a suitable spring 30 with which the socket is equipped (see Figure 2).

The stem 16 is provided with a pair of diametrically opposed, longitudinally extending slots 32 to slidably accommodate a transverse pin 34 provided in the holder 12, by which arrangement the rotation of the stem 16 in the bore 14 is prevented and the implement 28 is retained in its vertical position, as will be clearly apparent. If desired, a plurality of radial, longitudinally extending ribs 36 may be provided on the stem 16 in slidable engagement with longitudinal grooves 38 formed in the wall of the bore 14, whereby not only is a greater bearing surface provided for the sliding stem, but additional assurance is had that the implement 28 remains in its vertical position.

In any event, a compression spring 40 is positioned in the tubular stem 16 between the adapter 18 of the extension 20 and a pressure exerting collar 42 which is also positioned in the stem and engages the aforementioned pin 34, whereby the stem, together with the extension 20 and the scribing implement socket 26 are urged in the direction of the arrow 44.

When the invention is placed in use, such as for example, when it is desired to trim linoleum to properly fit an irregular contour of a bathtub, the beam-shaped holder 12 is disposed in a substantially parallel position to the guiding surface 46 which is to be fitted, and the scribing implement 28 is positioned upon the linoleum

to be trimmed. Thereupon, by simply sliding the holder 12 along a straight edge (not shown) the extremity 24 of the stem extension 20 will follow the contour of the guiding surface 46 under the resiliency of the spring 40, and an accurately corresponding contour will be marked upon the linoleum by the implement 28, as will be clearly apparent.

In the modified embodiment of the invention illustrated in the accompanying Figure 6 and designated by the general reference character 50 the stem 52 is slidable transversely in one end portion of a holder 54 and is provided with a scribing implement socket 56 and also with a stem extension (not shown) similar to the extension 20.

However, in this embodiment the spring 40, collar 42 and pin 34 are not present, the stem 52 being urged in engagement with the guiding surface by means of a spiral spring 58, one end of which is secured to a rotatable shaft 60 carrying a reel 62. This reel is disposed in a recess 64 with which the holder 54 is provided, and the remaining end of the spring 58 is secured to the holder as at 66.

A flexible cord or tape 68 is windable on the reel 62 and is secured as at 70 to the socket 56 or to the stem 52, as desired. Needless to say, the stem 52 is formed with a longitudinally extending slot 72 through which the flexible element 68 may extend into the stem, matters being so arranged that the resiliency of the spring 58 causes the reel 62 to rotate in the direction of the arrow 74, thus sliding the stem 52 in the direction of the arrow 56 by virtue of the element 68, as will be clearly apparent.

Finally, the further modified embodiments of the invention designated generally by the reference character 80 and illustrated in the accompanying Figure 7 is somewhat simplified in construction, the holder 82 simply consisting of a pair of spaced parallel members 84, which are secured to the opposite sides of suitable spacers 86 so that the spacers not only rigidly connect the members 84 together, but also provide therebetween a passage to slidably receive a stem or bar 88, as will be clearly apparent.

One end portion of this stem or bar is formed with a socket 90 to receive a scribing implement 92, while the remaining end of the stem is engageable with the guiding surface.

However, resilient means are provided for urging the stem in contact with the guiding surface, these means consisting of an elastic band 94 which has the ends thereof secured as at 96 to one of the holder members 84 and passes around the implement 92, thus urging the implement together with the stem 88 in the direction of the arrow 98.

It is believed that the advantages and use of the invention will be clearly apparent from the foregoing disclosure and accordingly, further description thereof at this point is deemed unnecessary.

While in the foregoing there has been shown and described the preferred embodiment of this invention it is to be understood that minor changes in the details of construction, combination and arrangement of parts may be resorted to without departing from the spirit and scope of the invention as claimed.

Having described the invention, what is claimed as new is:

In a marking instrument, the combination of a holder formed with a transverse passage, a hollow stem slidable in said passage and projecting at both ends therefrom, a scribing implement mounted at one end of said stem, the remaining end of the stem affording a guiding extremity, a reel rotatably mounted in said holder, a flexible element windable on said reel, said stem being provided with a longitudinal slot, said element extending into said stem through said slot and having its free end anchored to the scribing implement carrying end of the latter, and resilient means for rotating said reel whereby said guiding extremity may be urged in engagement with a guiding surface.

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