

12

EUROPEAN PATENT APPLICATION

21 Application number: **84830097.6**

51 Int. Cl.³: **G 09 F 7/06**

22 Date of filing: **30.03.84**

30 Priority: **30.03.83 IT 2131283 U**
30.03.83 IT 2131383 U

71 Applicant: **CAGGIATI S.p.A., Via Martiri della Libertà, 71, Colorno (Parma) (IT)**

43 Date of publication of application: **07.11.84**
Bulletin 84/45

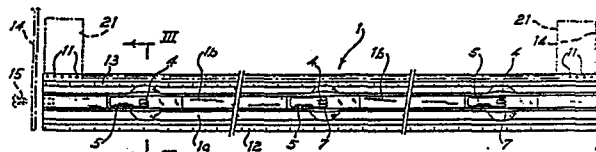
72 Inventor: **Caggiati, Claudio, Via Solferino, 50, Parma (IT)**

84 Designated Contracting States: **AT BE CH DE FR GB LI LU NL SE**

74 Representative: **Caregaro, Silvio et al, c/o Società Italiana Brevetti S.p.A. Via Carducci 8, I-20123 Milano (IT)**

54 Fixture for composing inscriptions on marble slabs or the like, especially on tombstones and loculi.

57 Fixture for composing inscriptions on marble slabs or the like, especially on tombstone and loculi, comprising a substantially bar shaped body (1) provided, on at least one side, with a plurality of small pins (11) to which may be secured, removably, templates (21) each representing the shape of metal letter to be applied. The templates are provided along at least one of their edges with a plurality of holes (22) for insertion on pins (11). The bar shaped body (1) is provided with means (2) for securing it to the marble slab.



"FIXTURE FOR COMPOSING INSCRIPTIONS ON MARBLE SLABS
OR THE LIKE, ESPECIALLY ON TOMBSTONES AND LOCULI"

This invention relates to a fixture for composing inscriptions on marble slabs, especially on tombstones and loculi.

The fixture in question is particularly suited
5 for the application of metal letters generally made of bronze or steel on a marble slab to form an inscription with letters perfectly aligned and correctly interspaced.

A further object of the fixture according to the invention is that it permits obtaining such inscriptions
10 in a rapid and easy manner.

The problem of forming inscriptions on marble slabs, especially on tombstones, is known in the art and consists in perforating on the tombstones a series of holes in convenient positions such that when the
15 pins provided on the metal letters are inserted in said holes the inscription thus formed appears to be perfectly aligned and spaced.

It has been attempted to solve the above problem by the use of devices which provide the user with
20 a reference for the above holes. Said devices essentially consist of a pair of metal slide bars, connected to each other at their ends and having a groove on their opposite sides, running through their full length. The two opposite grooves permit the insertion and
25 support between the two slide bars of a plurality of templates, each corresponding to a letter of the

inscription. The templates thus applied are then locked at the ends by clamps apt to secure the templates to the two slide bars. The single templates are provided with reference holes so that when the device
5 is applied on the marble slab, the user can perforate the holes required in the latter.

Devices of the above type have proven to be impractical in use and they are moreover limited, as each is adaptable exclusively to a particular character
10 size and type and must be substituted when the character type is changed. In fact, these devices are conditioned by the fixed distance of the template supporting bars.

Moreover, in these devices the reciprocal clearance
15 between the various letters (or number, obviously) is fixed, being determined by the width of the metal templates which are set side by side and blocked at the ends. Hence, the length of the inscriptions obtainable will be a constant in the above sense
20 and no variants in composition are possible, except those permitted by the device itself, for example, a short inscription with widely spaced letters.

A further drawback of the conventional devices lies in the fact that during perforation the metal
25 templates must not be in any way damaged; therefore, metal sleeves must be applied to the reference holes before perforation of the marble slab, and this further complicates the device.

The fixture forming the object of this invention
30 has been conceived to permit the composition of inscription on slabs of marble or similar material and to eliminate all of the above mentioned drawbacks

encountered in the conventional device heretofore known in the art.

One of the main features of the fixture according to this invention is that it can be used for any
5 character, regardless of type and size.

A further advantage afforded by the fixture according to this invention lies in the fact that it makes possible the composition of inscriptions in which the letters may be differently spaced to meet with
10 the users specific requirements.

Another advantageous feature of the fixture according to this invention is its extreme practicalness and simplicity of use, which make for a considerable saving in time in applying the inscriptions.

15 A still further advantage of the fixture according to the invention is that it may be used regardless of the height of the letters to be applied and furthermore its form is such as to permit partial overlapping of the templates so that an inscription may be composed
20 and formed in accordance with the compositive techniques practical and known in this art.

Furthermore, the templates used on the fixture according to this invention are preferably made of material that may be discarded, so that they
25 are used only once for the application of a metal letter. In this case, the templates are made for example, of cardboard or similar material, provided on one face with reference marks indicating the points at which the holes are to be perforated in
30 the marble slab.

A further characteristic associated with the above preceeding is that the templates will be sold together

with the metal letters as a single package, so that when a user applies the metal letters required from time to time, he will have available the corresponding templates.

5 It is evident, however that the templates may be made of re-usable material, if necessary.

 The fixture according to this invention is characterized in that it comprises a substantially bar shaped body, provided, on at least one side, with a plurality
10 of small pins to which may be secured, removably, templates representing the shape of the letter to be applied and provided with reference holes indicating the position of the corresponding holes to be perforated in the marble slab, said templates being provided along
15 at least one of their edges with a plurality of holes for insertion on pins of substantially bar shaped body the latter being provided at least on its edge opposite to the preceeding with a graduated scale, said bar shaped body being provided also with means for securing
20 it to the marble slab.

 The features and advantages of the fixture according to this invention will be evident from the following detailed description of a non limiting embodiment, taken in connection with the accompanying drawings,
25 in which:

FIGURE 1 is a top view of the slide bar assembly or "rule" shown partially interrupted;

FIGURE 2 is a view of the same from the bottom of Fig. 1;

30 FIGURE 3 is a view of the rule taken on section III-III of Fig. 1;

FIGURE 4 is a partial view of the rule according

to arrow IV of Fig. 3;

FIGURE 5 is a view of the rule, again according to section III-III of Fig. 1 in which the bar shaped body is made of a single piece;

5 FIGURE 6 shows two templates or cards corresponding, respectively, to letter H (left hand card) and letter "h" (right hand card); and

FIGURE 7 shows the partial overlapping of two cards relating to letters A and V.

10 With reference to Figs. 1 thru 4, the fixture according to the invention comprises an essentially bar-shaped body or "rule" 1, which consists of a substantially trapezoidal base part 1a, extending upward to form a substantially parallelepipedal part 1b which serves
15 as grip for the rule.

The rule is provided with means to secure it to the marble slab. In the embodiment shown, said means consist of three suction cups 2 arranged, as shown particularly in Fig. 3, in suitable seats 3 in part
20 1a of bar shaped body 1. The single suction cups 2 are connected, through a small bar 4 (which crosses the top base of part 1a) to a handle 5, pivoted at 6 to the top end of bar 4. The end of the handle 5 on the side of pin 6 is fork shaped and its two branches
25 of equal shape 7 project eccentrically with respect to the axis of rotation of handle 5. In this manner, when handles 5 are in the position shown in Figs. 1 and 4, suction cups 2 are deactivated. By rotating handle 5 180° counter-clockwise, suction cups 2 are
30 activated and the rule thereby becomes secured to the marble slab. In fact, projecting parts 7 will determine the uplifting of small bar 4, with consequent securing

of suction cup 2 to the marble slab.

As shown in particular in Fig. 3, bar shaped body 1 is provided, on its lower part, with two radially projecting sides 1c, to which is applied (by two lock screws 8) a thin metal plate 9 which envelopes the bottom part of the rule and is provided with three round openings 10 for suction cups 2.

According to one of the main characteristics of the invention, bar shaped body or rule 1 is provided, on at least one of its sides, in particular, on one of the edges of plate 9, with a plurality of small pins 11, distributed evenly along the side of the rule. Said small pins are equal in height; they are set at equal distances from each other and their top ends 11a are rounded.

A further characteristic of the rule is that it is provided on its side opposite to the preceeding with a graduated scale 12 (more clearly visible in Fig. 1) and shown schematically by the dotted line in Fig. 3. Said graduated scale 12 enables the user of the rule to evaluate the reciprocal distance of which to arrange the various letters, so that the composition will be in conformity with the style usually required on tombstones. Moreover, the scale makes it possible to set the inscription on any zone of the tombstone and enables the user to estimate the distance of the inscription from the edges of the marble slab.

It is obvious that the rule may be provided with an additional graduated scale 13 set on the same side which carries pins 11 as shown detailed in Fig. 1 and schematically by the dashed/dotted line in Fig. 3. In this case, scale 13 will be located directly on

- 7 -

the edge of bar shaped body 1.

Lastly the ends of the rule are provided with check bars 14, which may be secured to said ends by means of lock screws 15. Check bars 14 substantially form
5 a bracket to facilitate the user in evaluating the correct configuration of the inscription.

Check bars 14 are shown in Fig. 1 by a dashed/dotted line for the sole purpose of demonstrating that they are removable.

10 Fig. 5 is a transversal cross section of the rule, taken on lines III-III of Fig. 1 to show how the rule can be constructed in a single piece of plastic material comprising bar shaped body 1, 1a, 1c, as well as pins 11. In this way, bottom plate 9 is eliminated as well
15 as the need for lock screws 8. This embodiment is obviously much more economical with respect to the form shown in Figs. 1 and 4 as the rule is obtained by a single stamping operation.

Some examples of embodiment and use of the templates
20 forming part of the fixture according to the invention will now be described with reference to Figs. 6 and 7.

The description which follows relates to the case of a disposable type template or card but applies and is valid also for a re-usable type template or card.

25 With reference to the figures cited, the template or card consists substantially of a card board or similar material card 21, essentially rectangular in shape and provided, on at least one of its sides with a plurality of substantially aligned holes 22. In the embodiment
30 illustrated, said holes 22 are present on the lower edge of card 21 but may also be provided on its top edge, where they are identified by the dashed line.

Holes 22 are equally spaced, to render cards 21 modular and interchangeable, and partially overlapping, with particular reference to the supporting means for said cards, which consist of small pins 11 on rule 1. In fact, templates or cards 21 are applied on the rule by introducing pins 11 in holes 22 of same.

The contour of the letter which the card makes it possible to apply to the marble slab is reproduced schematically on the face of the template or card by a dashed line. In the cards shown on the annexed drawings, the letters are H and h in Fig. 6 and A and V in Fig. 7. Inside the contour of the letter, the card has reference indexes the position of which corresponds to that at which the holes are to be perforated in the marble slab, to receive the pins of the metal letters. In the embodiment shown, said reference indexes consist of two holes 23, but these may be represented simply by a mark, for example a dot, an asterisk or similar mark, the card being of the disposable type.

With regard, more specifically, to the application of templates or cards 21 on rule 1 by inserting pins 11 of the latter in holes 22 of the cards, these may simply be arranged adjacent to each other or partially overlapped as shown in Fig. 7. To facilitate the user in positioning some of the cards, as shown for one of them (the card bearing letter A by way of example), these are provided with a reference line 24, which in this case in its interrupted part bears a small letter V to indicate that the edge of the card corresponding to letter V must be positioned on said line, as shown in Fig. 7. Naturally, the cards may be provided with more than one reference line 24 each corresponding

to the positioning of a different card corresponding to a different letter.

As the templates or cards are of the disposable type, once the holes are perforated in the marble slab, the cards will be removed for application of the permanent letters, and then discarded. If the card material is of the re-usable type, the cards will be removed for application of the permanent letters, but not discarded.

The use of the fixture according to this invention is extremely simple and easy.

The user simply secures rule 1 on the marble slab by activating the suction cups 2, with the small pins 11 arranged preferably (but not necessarily) in the top part, as shown in Fig. 1. The rule may or may not necessarily be provided with check bars 14.

To form the inscription, it is sufficient to apply in succession on small pins 11, the templates 21 corresponding to the letters required to form the inscription itself, as described hereinabove. Said templates can be applied and placed adjacent to each other or partially overlapped or, again, suitably spaced, depending on specific requirements of the inscription.

It is clear that rule 1 may be utilized in conjunction with other types of templates or cards having means on their sides apt to be secured or in any case associated movably with small pins 11.

The advantages afforded by the rule according to the invention are evident from the above description. It emerges in fact from the description, that the rule can be utilized with letters of any type or size as it is not limited to any particular type of character. In fact, cards or templates 21 applied in the above

manner can be of any height and/or width; moreover the rule permits a uniform distribution according to the variable composition of the letters.

With specific reference to templates or cards 21,
5 these may be made of any material, as the material type does not constitute a limitation of the scope of the invention.

It is clear, lastly that variations and/or modifications can be introduced in the fixture according to the invention
10 without departing from the spirit and scope of the invention itself.

For example, with regard to rule 1, the securing means of same to the marble slab, particularly when the surface of said slab is not smooth, may be modified
15 by providing suitable blocking means of known type, for example on the ends of bar shaped body or rule 1. With regard to templates 21, instead of reproducing the contour of the letter to be applied on the face of same, the outline of the letter may be traced, in
20 different dimensions on any zone of the card, without need to change the position of reference marks or holes
23.

C L A I M S

1. Fixture for composing inscriptions on marble
slabs or the like, especially on tombstones or loculi,
characterized in that it comprises a substantially
bar shaped body (1) having, on at least one of its
5 sides a plurality of small pins (11) on which may be
secured, removably, templates (21) reporting the outline
of the letter to be applied and provided with correspond-
ing holes to be perforated in the marble slab said
templates (21) being provided along at least one of
10 their edges with a plurality of holes (22) for insertion
on pins (11) of substantially bar shaped body (1),
the latter being provided at least on its edge opposite
to the preceeding with a graduated scale (12), said
bar shaped body (1) being provided also with means
15 (2) for securing it to the marble slab.

2. Fixture according to claim 1, characterized in
that small pins (11) are arranged on the face of bar
shaped body (1) opposite to the face which is applied
to the marble slab.

20 3. Fixture according to claims 1 and 2, characterized
in that small pins (11) are set at equal distances
from each other equal in height and have their top
ends (11a) rounded.

4. Fixture according to claim 1, characterized in
25 that it is provided with a graduate scale (13) also
adjacent to small pins (11).

5. Fixture according to claim 1, characterized in
that it comprises bars (14) applicable to the ends
of bar shaped body (1) arranged substantially perpendicular
30 to its longitudinal axis.

6. Fixture according to claim 1, characterized in that essentially bar shaped body (1) consists of a base (1a) with decreasing section and terminating in a substantially parallelepipedal part (1b) apt to form a grip for the body.

7. Fixture according to claims 1 and 6, characterized in that parts (1a and 1b) of essentially bar shaped body (1) as well as small pins (11) are made of a single piece of plastic material.

8. Fixture according to claim 1, characterized in that holes (22) of templates (21) are set at equal distances from each other to render the templates modular, interchangeable and partially overlapping.

9. Fixture according to claim 1, characterized in that templates (21) are provided, on one of their faces, with at least one reference line (24) indicating the position at which the edge of the adjacent template must be set in the partially overlapped condition, said line (24) being provided in an interrupted zone with a small letter corresponding to the larger letter on the adjacent card.

10. Fixture apt to permit the composition of inscriptions on marble or similar material slabs, particularly on tombstones and loculi, substantially as herein above described and illustrated on the annexed drawings.

