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(7a-7d; 7a-7f; 7a,7b,7d,7g) that is part of said plate and is positioned to the side of the said fastening surface (2). The at least one measuring instrument (7a-7d; 7a-7f; 7a, 7b,7d,7g) comprises a vernier caliper (7d).



Description

[0001] The present invention refers to a plate for holding objects.

[0002] More in particular, the present invention refers to a plate for holding objects of the kind used to hold objects which are meant to be sold.

STATE OF THE PRIOR ART

[0003] In modern supermarkets, points of sale, or any other places where business activities are carried out, or even simply in public exhibition places, such as fairs and the like, some display products for public exhibition for example mainly middle or small-sized objects, are fastened to universal plates, usually of a disposable kind, made of cardboard, plastic materials or the like.

[0004] A plate for holding objects of this kind is described, for example, in the patent for Italian utility model no. 242.330 by the same applicant.

[0005] As already said, these plates are for universal use, that is they are apt to hold many kinds of objects having different sizes and shapes, because they are provided with various equidistant holes, into which some straps are inserted in order to fasten the items to the plate.

[0006] These plates are used, in most cases, in order to display or to sell different kinds of utensils and tools, mainly hand tools, such as wrenches, screwdrivers, hammers pliers, pincers, spatulas and others, used for example in professional sectors or for DIY activities and the like.

[0007] As already known, the practical use of such utensils or tools very often requires the use of measuring instruments, slide rules, protractors and the like. Hence the user who needs to take precise measurements always needs to be equipped with all suitable tools. Obviously, such tools are not always immediately available to the user, for example in case of emergency. In order to be used in any kind of situation, such tools should be near at hand, for example they should be kept inside appropriate tool cases and the like, thus resulting in a less handy or comfortable use.

PURPOSES OF THE INVENTION

[0008] Hence the technical task of the present invention is to improve the state of the art.

[0009] Within such technical task, a purpose of the present invention is to realize a plate for holding objects that allows the user to perform, in any situation, precise operations that require the measurement of certain characteristics such as sizes, lengths, angles and the like.

[0010] Another purpose of the present invention is to realize a plate for holding objects that holds down costs, limits sizes and weights and that is handy, easy and immediate to use.

[0011] This task and these purposes are achieved by the plate for holding objects according to the attached

claim 1. Further advantageous characteristics are described in the dependent claims.

BRIEF DESCRIPTION OF THE DRAWINGS

[0012] The features of the invention will be better understood by any expert in the field from the description that follows and from the attached drawings, which are given by way of example of the invention but do not limit its scope, and in which:

figure 1 is a front view of the plate for holding objects, according to the present invention, in an exhibition or selling configuration;

figure 2 is a front view of the plate for holding objects in figure 1, in a configuration of use;

figure 3 is a front view of another embodiment of the plate for holding objects, according to the present invention, in a configuration of use;

figure 4 is a front view of another embodiment of the plate for holding objects, according to the present invention;

figure 5 is a front view of a further embodiment of the plate for holding objects, according to the present invention;

figure 6 is a front view of an additional embodiment of the plate for holding objects, according to the present invention.

EMBODIMENTS OF THE INVENTION

[0013] With reference to figure 1 attached hereto, the plate for holding objects according to the present invention is indicated as a whole by 1.

[0014] The plate for holding objects 1, according to the invention, can be used for displaying or for selling items of different kinds and sizes, or for other similar purposes.

[0015] By way of example, which is in no way restrictive, the plate for holding objects according to the present invention, can be efficiently used to hold utensils, tools and the like, but also for objects of a different nature, such as various household or professional items. As it will be made clearer in the following description, the plate according to the present invention is particularly, but not exclusively, suitable for displaying or selling utensils and tools such as wrenches, screwdrivers, hammers, pliers, pincers, scratch awls, spatulas, brushes and any other tool of this kind, used both for professional purposes and for typical hobbies such as DIY activities and the like. Plate 1, mainly for reasons of cost, weight and comfort, is rather thin, for example in the order of a few millimeters at the most, or, in some cases, it is even less than one millimeter thick.

[0016] The plate for holding objects 1 according to the present invention can be made in different materials.

[0017] For example, plate 1 can be made in materials such as polypropylene or similar.

[0018] As a further alternative, plate 1 according to the

invention can be made in cardboard.

[0019] As a general rule, the plate can be made in any other suitable material which is light, cheap, rigid or semi-rigid enough and therefore slightly flexible as well. Plate 1 according to the invention comprises at least one fastening surface 2 for one or more items 3 to be displayed or sold.

[0020] Figure 1 shows plate 1 associated to an item 3, constituted by a tool, which in this case is, for example, a spatula.

[0021] It is obvious that, in place of this item 3, constituted by a tool, one or more items of any other nature can be fastened to plate 1, with no restriction to the purposes of the present invention.

[0022] Plate 1 has a substantially rectangular shape.

[0023] However, plate 1 can have any other geometrical, shape, with no restriction to the purposes of the present invention. For example, different shapes can be realized depending on the shape and size of the item 3 that has to be fastened.

[0024] The fastening surface 2 of plate 1 is substantially provided alongside its central portion, as shown in figure 2.

[0025] The aforesaid fastening surface 2 of plate 1 comprises a series of holes 4.

[0026] Holes 4 are preferably equally distributed over the surface, that is the holes are substantially equally spaced between one another, forming a reticular pattern. As an alternative, however, the distribution of the holes 4 over the fastening surface 2 can also be different, according to specific needs, for example according to the kinds and sizes of items 3 that have to be associated to the fastening surface 2.

[0027] As shown in figure 1, holes 4 of the fastening surface 2 are used for the passage of one or more straps 5 or the like, which hold item 3 tightly to plate 1.

[0028] Strap 5, of a type in itself known in the sector, can be made for example of plastic material or metal material or any other suitable material and in any case it does not constitute the object of the present invention.

[0029] In the current embodiment, plate 1 comprises an hanger hole 6 towards its top end for inserting hooks or other means for being hung in the point of sale, in the display rack or in any other place the plate is to be located.

[0030] As an alternative to hanger hole 6, any other suitable element could be provided for hanging plate 1, for example an external eyelet or the like.

[0031] According to the invention, plate for holding objects 1 comprises at least one measuring instrument 7a, 7b, 7c, 7d that is part of plate 1 itself and is positioned to the side of the aforesaid fastening surface 2.

[0032] In further detail, plate for holding objects 1 comprises a plurality of measuring instruments 7a, 7b, 7c, 7d, arranged all around the fastening surface 2.

[0033] As it will be made clearer hereafter, the measuring instruments 7a-7d are particularly of a type suitable to measure certain characteristics - for example lengths, angles, diameters, thicknesses, etc. - that are directly

connected to the operations involving for example item 3 associated to plate 1, or even other items at the user's disposal.

[0034] In other words, the user who purchased item 3 - constituted for example by an utensil or a tool - can actively use plate 1, as well, while performing the required operations, because the latter, as it will be made clearer hereafter, provides the support for several useful measuring instruments 7a-7d in various situations.

[0035] The at least one measuring instrument 7a-7d comprises, in further detail, at least one ruler 7a, for measuring lengths.

[0036] The ruler 7a is realized alongside one of the edges 8, 9, 10 of plate 1.

[0037] The embodiment of plate 1 shown in figures 1 and 2 comprises, more in particular, two rulers 7a.

[0038] The two rulers 7a are located respectively alongside the bottom edge 10 and the right edge 9 of plate 1.

[0039] The two rulers 7a use millimeter scales. Obviously, rulers 7a can be realized with different scales, with no restriction.

[0040] The scales of rulers 7a can be simply printed on the surface of plate 1, for example in relief; as an alternative, other similar techniques can be used in order to realize the scales of rulers 7a.

[0041] Furthermore, the at least one measuring instrument 7a-7d comprises at least one protractor 7b for measuring angles,

[0042] In further detail, protractor 7b comprises an opening 11 conformed as a portion of annulus.

[0043] The opening 11 is located below the fastening surface 2. Particularly, the opening 11, conformed as a portion of annulus, has a total extension corresponding, for example, to a right angle; as an alternative, such opening 11 can also have a different extension. Moreover, the protractor 7b comprises a little hole 12 which constitutes its centre.

[0044] The at least one measuring instrument 7a-7d of plate 1 also comprises at least one template 7c.

[0045] The at least one template 7c has a set angular width.

[0046] In further detail, plate 1 is provided with three templates 7c, with a set angular width, corresponding respectively to the three top angles, that are those located all around hanger hole 6.

[0047] For example, two of the aforesaid templates 7c have a set angular width of 120 degrees, while the remaining one measures 150 degrees.

[0048] The width of the different templates 7c can be printed on the surface of plate 1.

[0049] Obviously, templates 7c with different angular widths can be realized, according to the specific requirements of application.

[0050] The angular widths of templates 7c are, for example, chosen among the most frequently used ones in various technical applications.

[0051] By using the different templates 7c the user can

quickly check and verify that given angles that characterize certain technical applications - for example the assembling and installation of household goods and the like - are correct.

[0052] The at least one measuring instrument 7a-7d also comprises a vernier caliper, indicated as a whole by 7d. In further detail, the vernier caliper 7d comprises a first jaw 13 conformed by the top edge of the left side 8 of plate 1.

[0053] Said left side 8 of plate 1. comprises a rectilinear guide 14 constituted, for example, by a portion of plate 1 which is of a reduced thickness compared to the thickness of the remaining portions of plate 1 itself. Furthermore, caliper 7d comprises a vernier scale 15. The vernier scale 15, in the exhibition, or selling configuration of plate 1 together with item 3 - that is the configuration shown in figure 1 - is linked to plate 1 itself by two small bridges 16.

[0054] In particular, bridges 16 join the vernier scale 15 to the bottom edge 10 of plate 1.

[0055] Bridges 16 are thin and therefore can be broken by hand or be cut with a simple pair of scissors.

[0056] Thus, the vernier scale 15 can be easily separated from plate 1 and therefore it can be associated to the rectilinear guide 14 provided along the left side 8 of plate 1 by sliding on it, as shown in figure 2.

[0057] A millimeter scale is printed on the vernier scale 15, in a way in itself known.

[0058] The vernier scale 15 comprises a second jaw 17.

[0059] In the configuration of use shown in figure 2, the second jaw 17 is opposite the first jaw 13, in a way in itself known.

[0060] The vernier scale 15 is coupled through sliding means to the rectilinear guide 14 provided on plate 1.

[0061] For example, such sliding coupling means can comprise a longitudinal groove - not shown in the figures - wherein the rectilinear guide 14 can be lodged.

[0062] As an alternative, the sliding means of the vernier scale 15 coupled to the rectilinear guide 14 can be of another similar type.

[0063] Thanks to this solution, after having purchased item 3 together with the relative plate 1, the user can also use, in addition to the other measuring instruments 7a-7c previously described and provided on plate 1, a vernier caliper 7d for measuring the size of small objects with an estimated precision of about one-fifth of a millimeter, or even more, and at a low cost compared to that of the other measuring instruments present in the market.

[0064] Moreover, said vernier caliper 7d is incorporated in the same support - that is plate 1 - which also comprises the other measuring instruments 7a-7c, and therefore it can be easily transported and used in unusual or emergency situations as well.

[0065] In the light of what has been described above, the directions for use of the plate for holding objects 1. according to the present invention can be easily guessed.

[0066] Indeed the user, after purchasing item 3 togeth-

er with the relative support provided by plate 1, removes strap 5 in order to use item 3 and keeps plate 1 as well. The latter can be used in various technical applications, for example when it is necessary to measure lengths in centimeters or inches, to measure and check angles or thicknesses, or to determine in a quick and precise way the size of nuts or other small metal parts.

[0067] The invention so conceived provides important technical advantages.

[0068] Indeed the user, after separating item 3 from plate 1 by removing strap 5, can keep plate 1 and use it as a support for various measuring instruments 7a-7d, which are all grouped as one object that holds down costs and limits sizes and weights.

[0069] This solution is particularly useful in unusual or emergency situations, that is when the user is not equipped with a set of measuring instruments necessary to perform the required operations.

[0070] Indeed the plate has reduced sizes and weights, and therefore it can be kept anywhere, for example in a pocket, in the car, in a briefcase or the like.

[0071] In further detail, with only one simple and handy object the user, within his own technical applications, both in the household and professional field and both in ordinary and emergency situations, can quickly measure lengths and angles, check and verify set angular widths, measure small thicknesses and check the size of small metal components.

[0072] Moreover, even the holes 4, in which strap 5 is inserted in order to hold item 3, can be efficiently employed to fasten other items or can also be used as reference points for drilling holes or for other similar applications.

[0073] Another embodiment of the plate for holding objects according to the invention is shown in figure 3.

[0074] This embodiment differs from the preceding one - that is the one corresponding to figures 1 and 2 - in that plate 1 comprises at its bottom edge 10, in addition to the already mentioned measuring instruments 7a-7d, a further measuring instrument constituted by a small machinist square, indicated as a whole by 7e.

[0075] Indeed the small square 7e comprises a protrusion 18 perpendicular to the bottom edge 10 of plate 1.

[0076] A millimeter scale is printed along the rectilinear side 19 of the protrusion 18.

[0077] Square 7e is associated to ruler 7a located alongside the bottom edge 10 of plate 1.

[0078] Thanks to the presence of the aforesaid small square 7e, plate 1 according to the invention can thus be used in further technical applications, both in the household and professional field, for example to draw right angles of set sizes.

[0079] Furthermore, the present embodiment differs from the preceding one in that it comprises, in addition to the already mentioned measuring instruments 7a-7e, a further measuring instrument constituted by a notch, vindicated as a whole by 7f, for the selective measuring of nuts, screws, pins, drills, nails and the like.

[0080] Notch 7f is realized along the left side 8 of plate 1, substantially close to the bottom edge 10.

[0081] Notch 7f comprises portions 20 with a progressively decreasing width from the mouth of the notch 7f until its end.

[0082] The various portions 20 of the notch 7f have respectively decreasing widths for example from 7mm to 2 mm.

[0083] These portions 20 of decreasing widths allow to determine, by direct comparison, the diameter or width of various kinds of items that can be used in any kind of technical application.

[0084] For example, the diameter of drills, screws, pins, bars and the like or the thickness of plates or other elements used in said applications can be quickly measured in any situation.

[0085] Indeed, it is enough to insert within the notch 7f the element of which the diameter or the thickness has to be determined in order to get the information looked for in a quick and precise way, by aligning the surfaces of said element with the opposing faces of one of the portions 20 of the notch 7f.

[0086] A further embodiment of the plate for holding objects according to the present invention is shown in figure 4. In this embodiment the plate for holding objects 1, structurally similar to those of the preceding forms of embodiment, comprises the following measuring instruments:

- three rulers 7a, located respectively alongside edges 8, 9 and 10 of plate 1;
- a protractor 7b;
- the vernier caliper 7d;
- at least one graphic reproduction 7g of small metal parts such as nuts and the like.

[0087] The at least one graphic reproduction 7g is apt to instantly provide information about the size of said parts, that is nuts and the like.

[0088] The at least one graphic reproduction 7g is realized - for example printed - on the surface of plate 1, on the side of the fastening surface 2 of item 3.

[0089] In further detail, in this embodiment plate 1 comprises on its surface a plurality of graphic reproductions 7g corresponding to the unified sizes of the most commonly used nuts, for example from "M3" to "M10", or others. Thanks to these graphic reproductions 7g, the user can quickly and efficiently determine the size of a nut in his possession, by simply moving it closer or overlapping it with the graphic reproductions 7g, in order to find the one corresponding to the size of said nut.

[0090] Moreover, in this embodiment of plate 1, the sliding guide 14 of the vernier caliper 7d is constituted by a groove; the sliding means of the vernier scale 15 coupled to the guide 14 comprise a cog 21 of the vernier scale 15 itself that is inserted in said groove.

[0091] Another embodiment of the plate for holding objects according to the present invention is shown in figure

5. This embodiment of the plate differs from the one in figure 4 in that the plate is provided with a bigger protractor 7b that is therefore more practical and effective to use.

[0092] The bigger protractor 7b is provided alongside the bottom edge 10 of plate 1. It comprises a semicircle 22 with the diameter corresponding to the bottom edge 10. The semicircle 22 outlines a window 23 in which the vernier scale 15 is attached by small bridges 16, in the exhibition or selling configuration.

[0093] A further embodiment of the plate for holding objects according to the present invention is shown in figure 6. Also this embodiment differs from the one in figure 4 in that the plate is provided with a bigger protractor 7b that is therefore more practical and effective to use. The bigger protractor 7b, in this embodiment, is provided in the top portion of the plate, that is where the top hanger hole 6 is.

[0094] Consequently, the top portion of plate 1 is conformed as a semicircle around the top hanger hole 6; the center 12 of the protractor is provided immediately below the top hanger hole 6.

[0095] This solution allows to take the maximum advantage of the top portion of plate 1, which in the forms of embodiment of figures 4 and 5 has the sole function of lodging the top hanger hole 6 when the plate is hung for exhibition or selling purposes.

[0096] It should be noted that all measuring instruments 7a-7g described in the embodiments shown can be variously combined, according to specific needs, in further embodiments not represented, with no restriction.

[0097] It will be appreciated from the foregoing that the invention achieves its stated aims.

[0098] The present invention has been described according to preferred embodiments, but equivalent variations can be conceived without exiting from the protection ambit offered by the following claims.

40 Claims

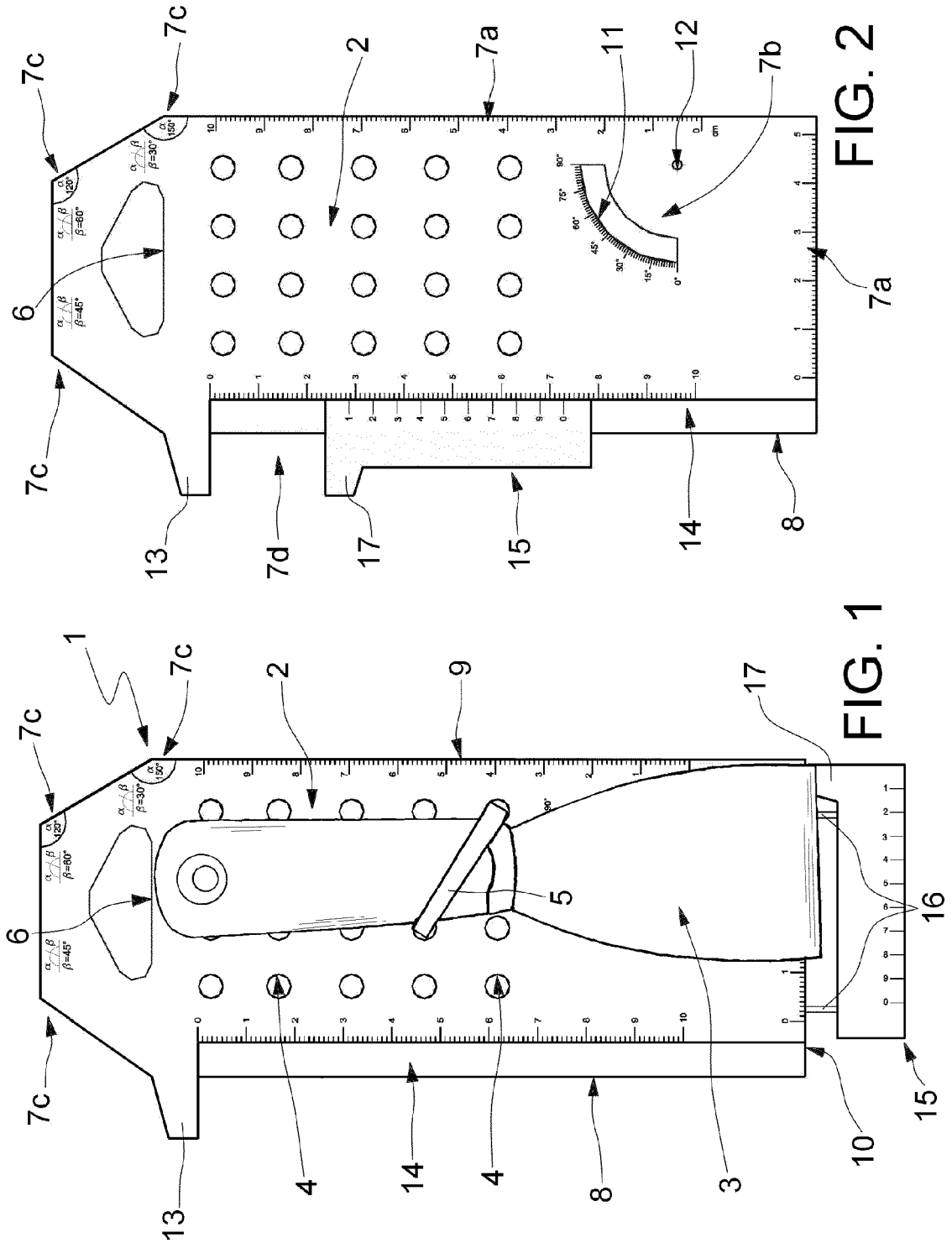
1. Plate for holding objects, comprising at least one fastening surface (2) of one or more items (3) to be displayed or sold and at least one measuring instrument (7a-7d; 7a-7f; 7a,7b,7d,7g) that is part of said plate and is positioned to the side of the said fastening surface (2), **characterized in that** said at least one measuring instrument (7a-7d; 7a-7f; 7a,7b,7d,7g) comprises a vernier caliper (7d).
2. Plate, according to the preceding claim, wherein said caliper (7d) comprises a vernier scale (15) which can be separated from said plate and associated to a rectilinear guide (14) of said plate (1) by sliding on it.
3. Plate, according to claim 1 or 2, wherein said fastening surface (2) is substantially provided alongside the central portion of said plate, said plate comprising

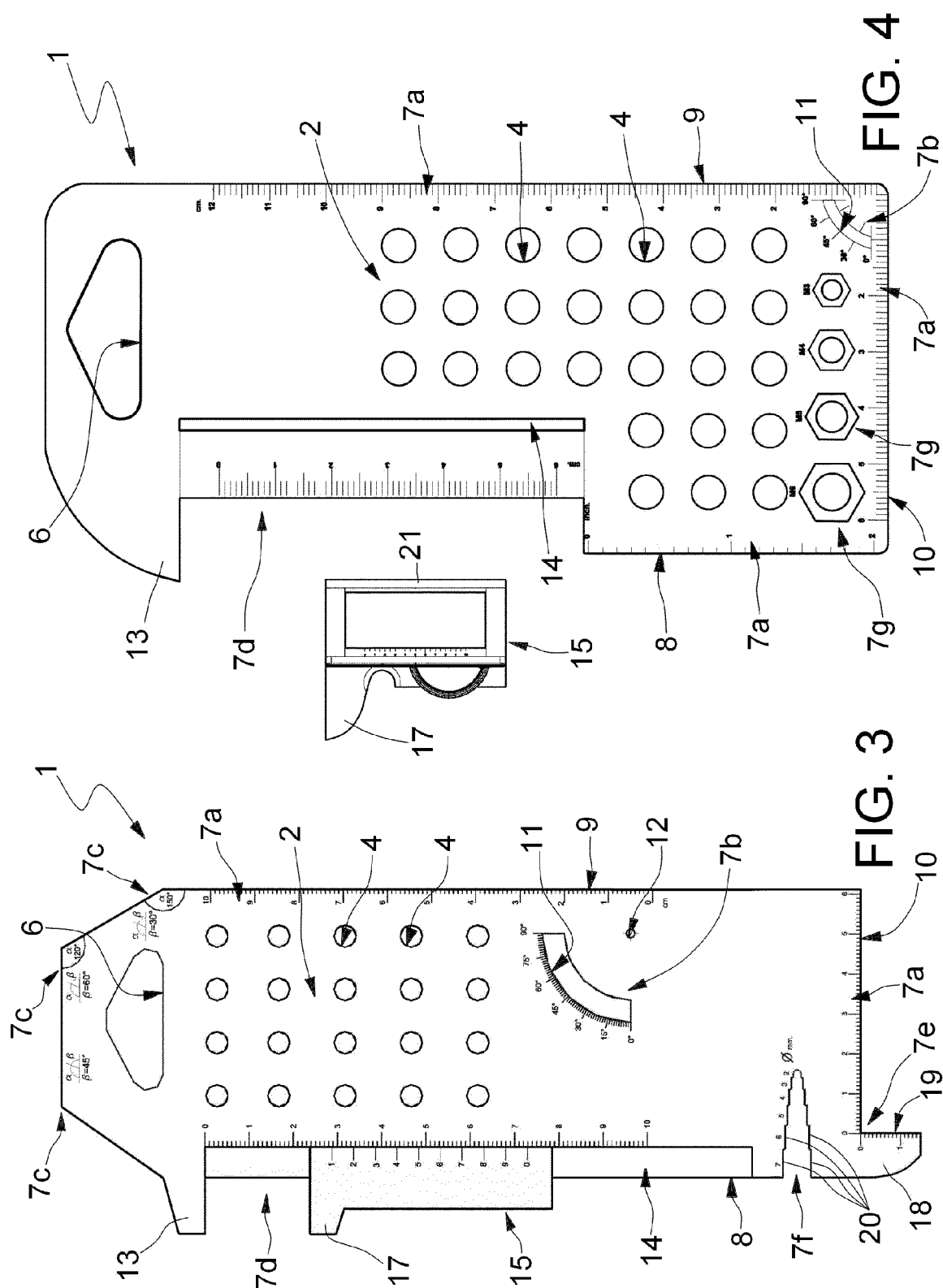
a plurality of said measuring instruments (7a-7d; 7a-7f; 7a,7b,7d,7g) arranged around said fastening surface (2).

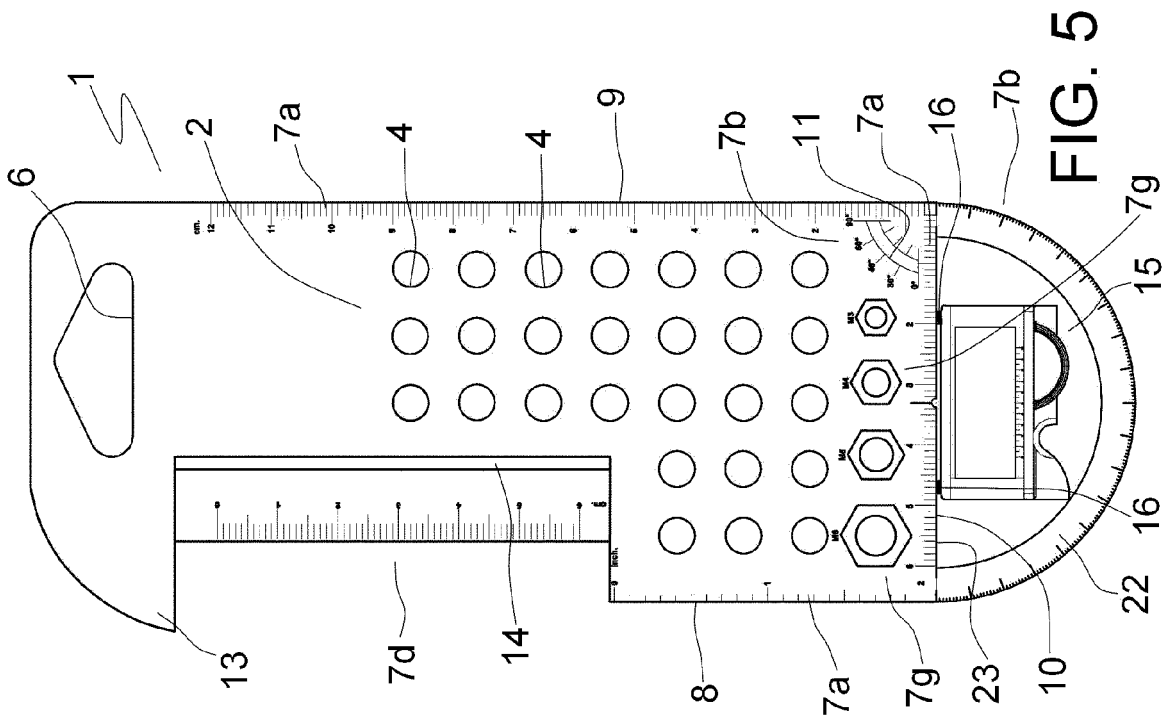
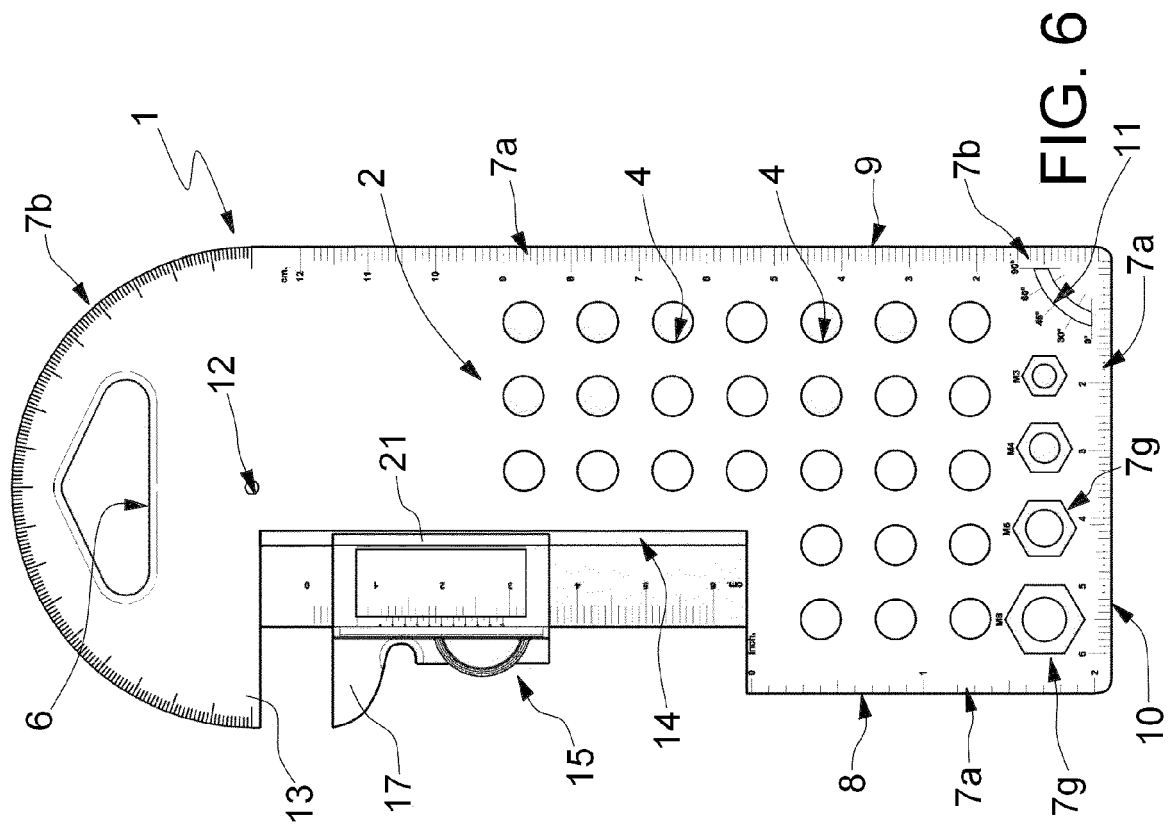
4. Plate, according to one of the preceding claims, wherein said at least one measuring instrument (7a-7d; 7a-7f; 7a,7b,7d,7g) comprises at least a ruler (7a). 5
5. Plate, according to the preceding claim, wherein said ruler (7a) is realized alongside one of the edges (8,9,10) of said plate. 10
6. Plate, according to one of the preceding claims, wherein said at least one measuring instrument (7a-7d; 7a-7f; 7a,7b,7d,7g) comprises a protractor (7b). 15
7. Plate, according to the preceding claim, wherein said protractor (7b) comprises an opening (11) conformed as a portion of annulus. 20
8. Plate, according to claim 6 when depending on claim 2, wherein said protractor (7b) comprises a window (23) in which said vernier scale (15) is lodged. 25
9. Plate, according to claim 6, wherein said protractor (7b) is provided in the top portion of the plate, around a top hanger hole (6).
10. Plate, according to one of the preceding claims wherein said at least one measuring instrument (7a-7d; 7a-7f) comprises at least one template (7c) with a set angular width. 30
11. Plate, according to one of the preceding claims, wherein said at least one measuring instrument (7a-7f) comprises at least one botch (7f) for the selective measuring of nuts, screws, pins, drills, nails and the like. 35
12. Plate, according to one of the preceding claims, wherein said at least one measuring instrument (7a-7f) comprises at least one small machinist square (7e). 40
13. Plate, according to one of the preceding claims, wherein said at least one measuring instrument (7a, 7b,7d,7g) comprises at least one graphic reproduction (7g) of small metal parts such as nuts and the like, 45

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EUROPEAN SEARCH REPORT

Application Number
EP 11 18 9039

DOCUMENTS CONSIDERED TO BE RELEVANT			
Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (IPC)
A	GB 1 363 795 A (HOWARD HARDWARE PROD) 14 August 1974 (1974-08-14) * page 1, line 30 - line 37 * * page 2, line 68 - line 76; figures 1,5 * -----	1	INV. B65D73/00 B65D81/36
A	US 2 048 753 A (PETERSON GUNNARD P) 28 July 1936 (1936-07-28) * page 1, line 42 - line 45; figure 1 * -----	1	
			TECHNICAL FIELDS SEARCHED (IPC)
			B65D A47F
The present search report has been drawn up for all claims			
Place of search The Hague		Date of completion of the search 8 May 2012	Examiner Bridault, Alain
CATEGORY OF CITED DOCUMENTS X : particularly relevant if taken alone Y : particularly relevant if combined with another document of the same category A : technological background O : non-written disclosure P : intermediate document T : theory or principle underlying the invention E : earlier patent document, but published on, or after the filing date D : document cited in the application L : document cited for other reasons & : member of the same patent family, corresponding document			

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**ANNEX TO THE EUROPEAN SEARCH REPORT
ON EUROPEAN PATENT APPLICATION NO.**

EP 11 18 9039

This annex lists the patent family members relating to the patent documents cited in the above-mentioned European search report.
The members are as contained in the European Patent Office EDP file on
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08-05-2012

Patent document cited in search report		Publication date	Patent family member(s)	Publication date
GB 1363795	A	14-08-1974	NONE	

US 2048753	A	28-07-1936	NONE	

REFERENCES CITED IN THE DESCRIPTION

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Patent documents cited in the description

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