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(54) **Pencil for the building industry**

(57) The invention refers to a pencil for building, with a body (1) in which a retractable lead (3) is present; the finding provides for the presence of a cursor (4), and by manually operating thereon the lead (3) may exit out from the body (1) of the pencil; on the other hand, the return of the lead into the body (1) is carried out directly pushing the lead towards the interior of the body (1)

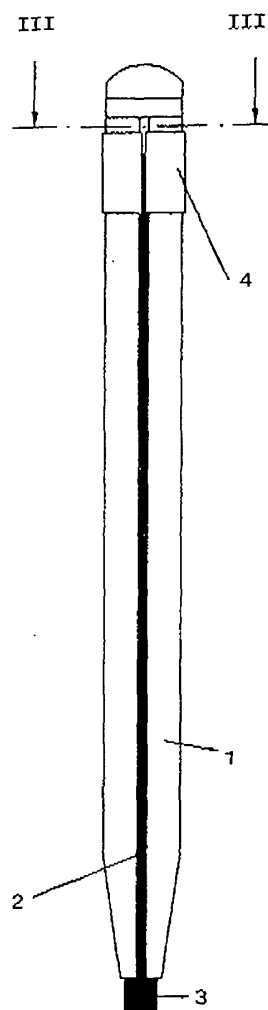


FIG 1

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Description

[0001] The present invention regards a pencil for building.

[0002] It is known that pencils are used in the field of building, which are similar to the drawing pencils normally used, with a few substantial particularities. In fact, pencils for building are made of wood through known methods and feature a fixed lead in graphite. However, the lead features a significant thickness, compared to regular pencils, in order to allow for affixing thick marks on walls, on plastered surfaces and the likes. It is clear that these marks must be very thick in order to be clearly seen by operators whereas, in general, no particular precision as regards the mark is required, as it is the case, for example, in technical drawing.

[0003] These pencils for building present, however, the significant disadvantage that, because of their heavy use, their lead, which is not clearly "protected" by the body of the pencil itself at the tip of the pencil, tends to be easily damaged, until it breaks even when it is not used because of falls, for example.

[0004] That very often implies the necessity of having to "redo" the tip with a special pocket knife, which implies a significant loss of time for the operator.

[0005] It is clear that for pencils for building it is not conceivable to use the construction arrangements used in retractable lead drawing pencils, because the latter features very narrow diameters and therefore, unlike leads used in building, they can be easily actuated by springs and the likes. Moreover, it has to be considered that, because of the heavy use pencils for building are subjected to, the devices normally used in retractable lead drawing pencils might not be used efficiently in pencils for building as they would be subjected to significant ruptures, making the use of the pencil not handy for the user.

[0006] The aim of the present invention is to make a pencil to be used in the field of building, which features a lead that is retractable and which is easy as regards construction, as well as functional, being in particular particularly robust. This is obtained, according to the invention, through the construction arrangement that will be described in detail hereinafter, referring to a preferential embodiment of the invention, given by way of example and not limitation, with the help of the accompanying drawings, in which:

in figs. 1 and 2 (table I) two views, respectively lateral and frontal, of the pencil of the invention are depicted; in fig. 3 a cross-sectional view thereof is depicted, carried out according to the line III - III of fig. 1; in figs 4 to 7 (table II) longitudinal section views of the device of the invention are depicted, which highlight its operation; figs. 8 and 9 (table III) represent views of the inside of the two portions that make up the body of the pencil of the invention;

fig. 10 represents an overall view of the element that allows for the movement of the lead present in the pencil of the invention.

[0007] In figs. 1 and 2, one sees that the pencil of the invention provides a body 1 in which a lead 3 is slidably arranged, which is likely to project from the tip of said body, of course when the user intends to use the pencil. In order to determine, to the desired extent, the ejection of the lead 3 from the body 1, a cursor 4 is provided, of a substantially cylindrical shape and which surrounds the lateral surface of the body 1, encompassing a limited portion. On the body 1 a groove 2 is made, into which two tabs 5 run, which depart from the cursor 4 towards the inside of the body 1 and are capable of pushing the ends of the lead 3 opposite the tip. In practice, as depicted in figures 4 to 7, when the user intends to push the lead 3 out of the body 1 from the position in which said lead is completely inside the body 1 (fig. 4), it will be necessary to act on the cursor 4 by pushing said lead 3 towards the outside of the body 1, through said tabs 5 (fig. 3).

[0008] On the other hand, when the user intends to push the lead 3 back into the body 1, he will first have to move the cursor 4 towards the end opposing that at which the tip of the lead is present (fig. 6) and will therefore have to, always manually, make the lead 3 go back into the body 1.

[0009] According to a preferential embodiment of the device of the invention (figs 8 and 9), it is provided that the body 1 of the pencil is made of two complementary portions 1', 1'', in each of which a portion 7' and 7'' of the groove into which the lead is designed to run is present. According to the invention, it is provided that at the tabs 5 oriented towards the inside of the cursor 4, small projections 6 capable of interacting with the knurled surface 8 of one of the portions 7'' of the groove 7 are present. In this way, one may avoid that, when the pencil is in a condition of use, the cursor moves freely from the wanted position, maybe because of the force thereof exerted by the lead during the writing phase. Of course, when the user wants to effectively move the cursor 4 from its position, he will be able to easily carrying out such operation, as the holding force exerted by the knurled surface 8 onto the projecting elements 6 is not particularly high.

[0010] From the above one may therefore see how it is possible to achieve the object of obtaining a pencil for building with retractable lead, by means of the device of the invention, which fully meets the objects previously set forth.

[0011] It should be specified that the present invention may also take forms and aspects different from those now described, provided that its essential characteristics remain intact, without departing from the scope of the patent.

Claims

1. PENCIL FOR BUILDING, **characterised in that** it features a body (1) of an elongated shape, inside which a groove (7) is present, in which a lead (3) is arranged, which runs along thereof, a groove (2) being provided along the full longitudinal extension of the body (1), tabs (5) being placed within said groove which are integral with a cursor (4) of a substantially cylindrical shape, which surrounds a portion of the body (1) and is sliding around thereof, it being foreseen that the movements manually carried out by the user of the cursor towards the part of the pencil in which the tip is present are likely to determine the corresponding movement of the lead (3) because of the thrust exerted on it through the tabs (5). 5 10 15
2. PENCIL, according to claim 1, **characterised in that** the body (1) is made by means of two side-to-side portions (1', 1''), in each of which one of the longitudinal portions (7', 7'') is present which make up the conduit (7) in which the lead (3) is placed, it being foreseen that on one of the two portions (7'') of said conduit a knurl (8) is present, which interacts with the projections (6) present on the tabs (5) of the cursor (4), determining the reversible stop of said cursor, which determines the stable positioning of the lead (3) present within said conduit (7) as long as the user wishes to maintain such situation. 20 25 30

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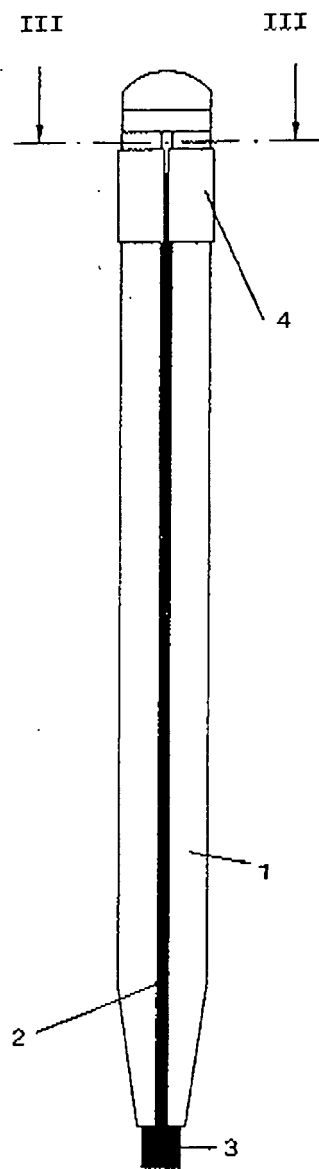


FIG 1



FIG. 2

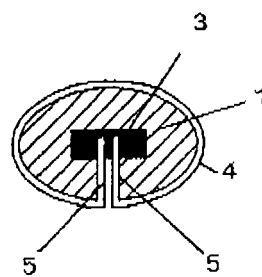
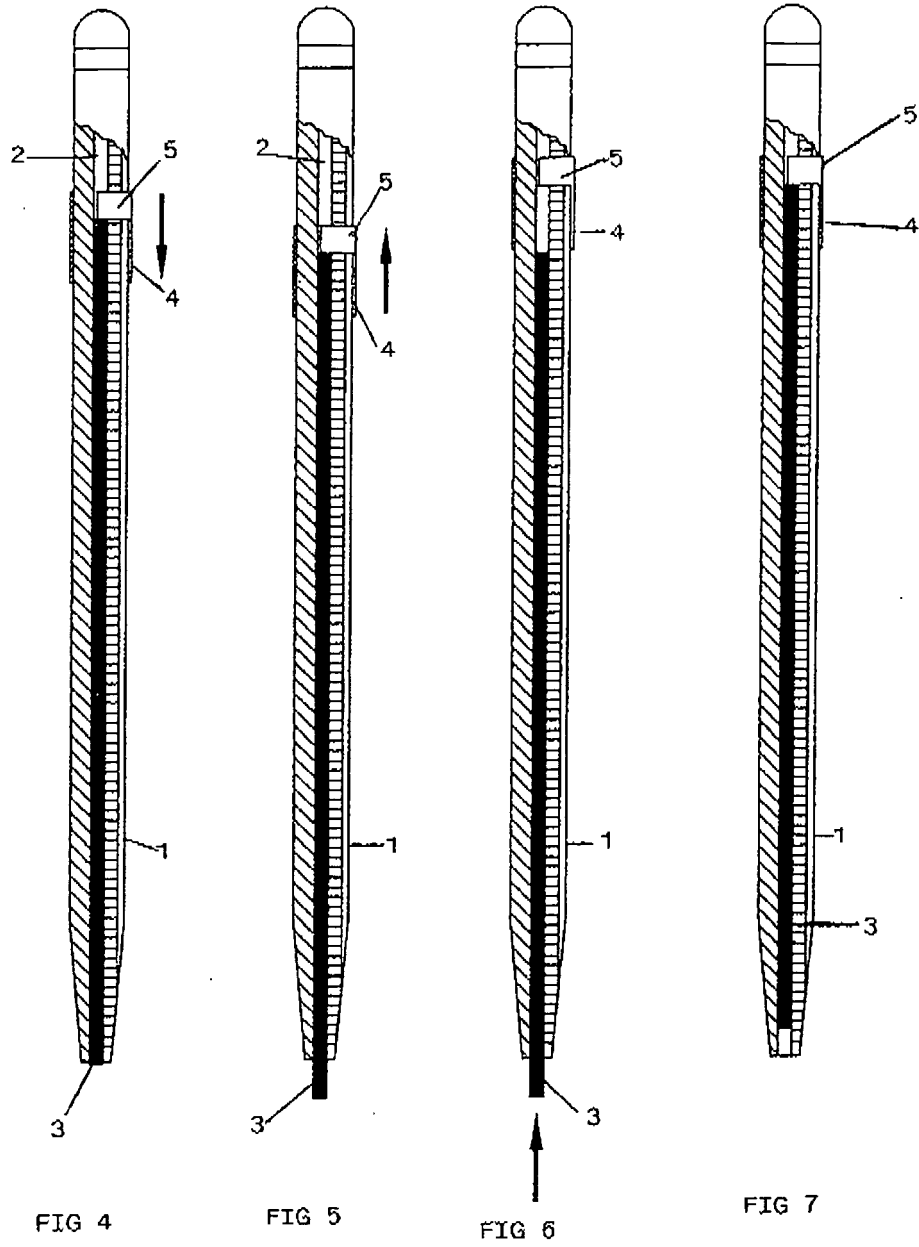


FIG 3



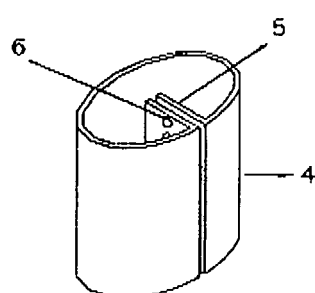
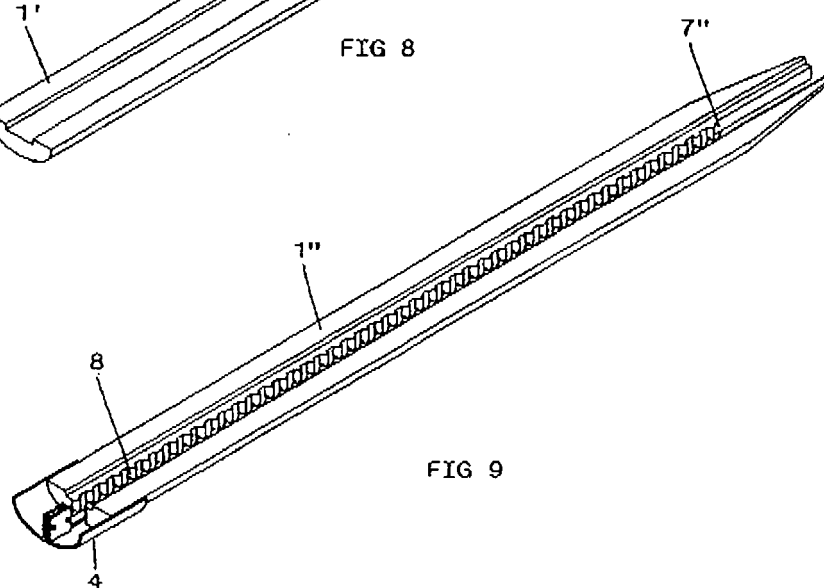
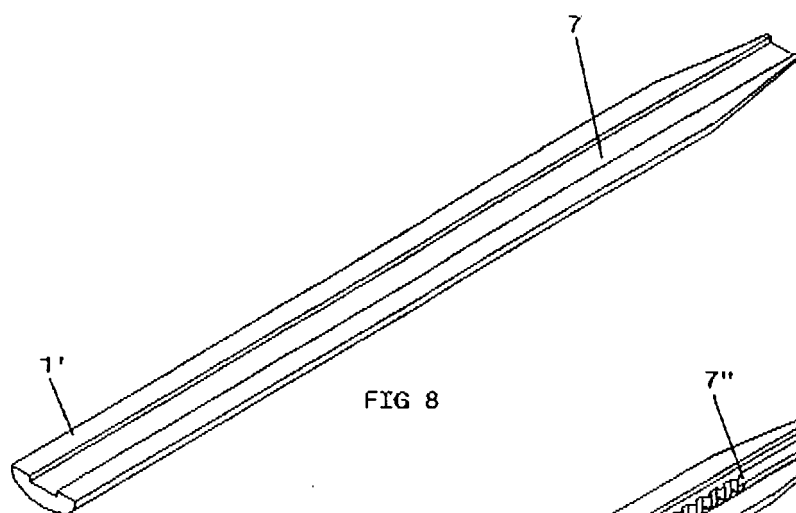


FIG 10