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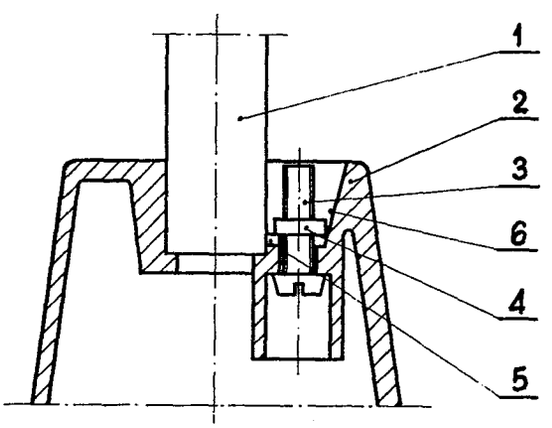
(54) Detachable connection for a pipe to the bottom of a holder, particularly of a screwed lamp holder.

(57) This present invention solves the problem of developing a design of an unscrewed detachable connection of a pipe (1) to the bottom of a holder, particularly a screwed lamp-holder, ensuring the required degree of connection reliability. According to this present invention, the detachable connection of the pipe (1) to the holder bottom (2) involves pressing a transversely and outwardly bent circumferential wall end fragment of the pipe (1) in the form of ring sector (5), preferably between a square nut (4) and a bottom edge (6) of an offset, asymmetrical, rectangular-sectioned hole of the holder bottom (2).



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Detachable connection for a pipe to the bottom of a holder, particularly of a screwed lamp holder

The invention relates to the detachable connection of a pipe to the bottom of an insulating holder, particularly a screwed holder used for securing electric lamps.

The hitherto known and used designs of the detachable connection of the pipe to the holder bottom, as for example that of the firm ZSE Silnoprouda Elektrotechnika "Elektro-Praga", Jablonec Nad Nisou, CSSR, published in the catalogue of 1975, pp. 6 to 9, objimky zarovek maleho a nizkoho napeti, involve screwing the screwed end of the pipe into the tapped holder bottom hole and preventing the holder from screwing off the pipe by tightening a set screw unit mounted in a hole adjacent to the holder axis by means of a single-sided engagement of the sharp-pointed tip of that unit with the pipe thread profile.

The basic disadvantage of such a design is that the process of making such holder bottoms is difficult, involving screwing out the press mould cores, the moulds being used for pressing the thread of the hole. The intricate design of the moulds for pressing the holder bottoms due to the extensive mechanismus used for screwing out the thread cores restricts in its turn the number of mould cavities and, in addition makes difficult their operation and maintenance.

Another disadvantage of such a design is the necessity for threading both the ends of the pipe.

An additional disadvantage of the previous connection is the necessity for satisfying the requirement that the hard-

ness of the tip of the set screw unit should be much higher than that of the pipe material since, otherwise, the tip would be blunted by the pipe thread without actually locking the pipe in the holder bottom.

A successive disadvantage of such a connection is a permanent set of the pipe thread due to the sharp tip engaging it and thus making it difficult and, sometimes, preventing the pipe from being screwed out of the holder bottom hole.

Allowing for the mass nature of the production, the above factors provide for an essential source of inconveniences of the design in the process of manufacturing and applying the holders.

The aim of the present invention is to simplify the design to facilitate the operation and to increase the number of the cavities of the pressing moulds during the manufacture of the holder bottoms and to eliminate the effect of the physical properties of the connecting parts on connection reliability.

This aim has been achieved by providing a design of the detachable connection of the pipe to the holder bottom, that design involving mounting in the cylindrical holder bottom hole a pipe end with a transversely and outwardly bent circumferential fragment of the pipe wall end in the form of a ring sector mounted in the space of an offset asymmetrical holder bottom hole being rectangular in its cross-section, preferably between a square nut and the bottom edge of that hole.

In a detachable connection of a pipe to the bottom of a holder, particularly a screwed lamp-holder, wherein the pipe end mounted in a cylindrical holder bottom hole is prevented from linearly and angularly shifting in relation to the holder bottom by means of a set screw unit the invention is specifically characterized in that the set screw unit is mounted in parallel to the pipe axis in an offset, asymmetrical, rectangular-sectioned holder bottom hole and that a transversely and outwardly bent circumferential wall end fragment of pipe in the form of a ring sector is mounted inside the offset, asymmetrical, rectangular-sectioned hole of holder bottom, preferably between a square nut of the set screw unit and a bottom edge of the offset, asymmetrical, rectangular-sectioned hole of holder bottom.

As per this present invention, this present connection is characterised by a simple design which is functional to operate and cheap to manufacture.

The subject of this present invention is embodied in the drawing whose

Fig. 1 shows the vertical view of a section of a fragment of the holder bottom, inclusive of the pipe and the set screw unit, and

Fig. 2 the top view of the holder bottom as per Fig. 1.

As presented in Figs. 1 and 2, the linear shift of pipe 1 in relation to holder bottom 2 is prevented by a set screw unit consisting of screw 3 and square nut 4, the latter pressing a transversely and outwardly bent circumferential

fragment of the wall end of pipe 1 in the form of ring sector 5 against a bottom edge 6 of an offset asymmetrical holder bottom 2 hole being rectangular in its cross-section.

The size of the transversely and outwardly bent circumferential fragment of pipe 1 wall end in the form of ring sector 5 has been selected in relation to the width of the offset asymmetrical hole being rectangular in its cross section, located in holder bottom 2 and mounting that sector 5 that it prevents in its turn pipe 1 from being angularly shifted in holder bottom 2. The length difference of the bases of the offset asymmetrical hole being rectangular in its cross section, located in holder bottom 2 and mounting square nut 4 that together with set screw 3 forms a set screw unit and the taper of the hole wall opposite to pipe 1, as resulting from that difference, is somewhat larger than the width of the transversely and outwardly bent circumferential fragment of the wall end of pipe 1 in the form of ring sector 5, which allows the end of pipe 1 to be freely introduced into the cylindrical hole of that bottom at the upper position of square nut 4 of the offset, asymmetrical rectangular-sectioned hole of holder bottom 2. The maximum screwing in of screw 3 into the hole of square nut 4 causes the latter to move to the position at which it presses the circumferential wall end fragment of pipe 1 in the form of ring sector 5 against the surface of bottom edge 6 of the offset, asymmetrical rectangular-sectioned hole of holder bottom 2 and prevents pipe 1 from being inadvertently disconnected from holder bottom 2.

CLAIM:

A detachable connection of a pipe (1) to the bottom (2) of a holder, particularly a screwed lamp-holder, wherein the pipe end mounted in a cylindrical holder bottom hole is prevented from linearly and angularly shifting in relation to the holder bottom (2) by means of a set screw unit (3, 4), characterized in that the set screw unit (3, 4) is mounted in parallel to the pipe axis in an offset, asymmetrical, rectangular-sectioned holder bottom hole and that a transversely and outwardly bent circumferential wall end fragment of pipe (1) in the form of a ring sector (5) is mounted inside the offset, asymmetrical, rectangular-sectioned hole of holder bottom (2), preferably between a square nut (4) of the set screw unit (3, 4) and a bottom edge (6) of the offset, asymmetrical, rectangular-sectioned hole of holder bottom (2).

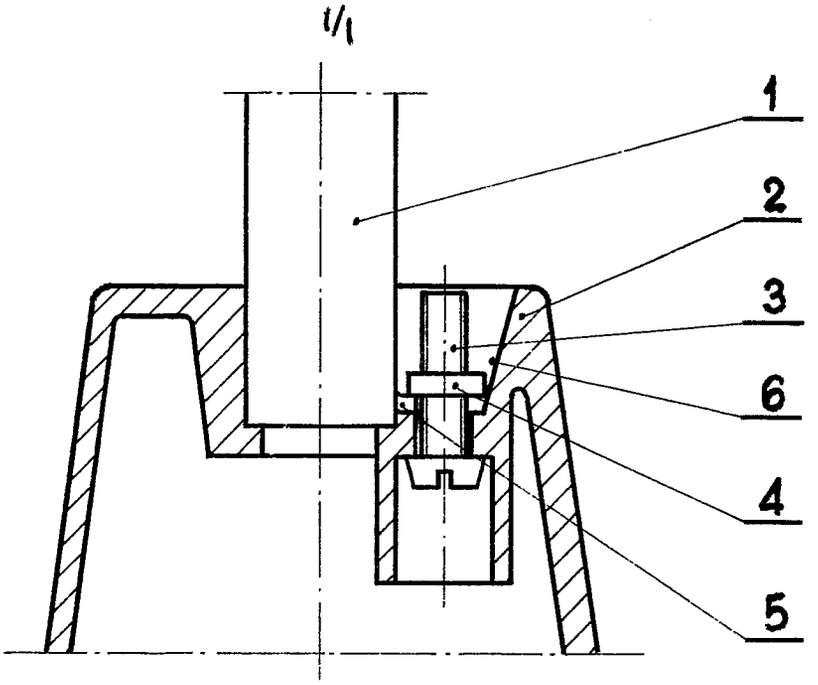

Fig. 1

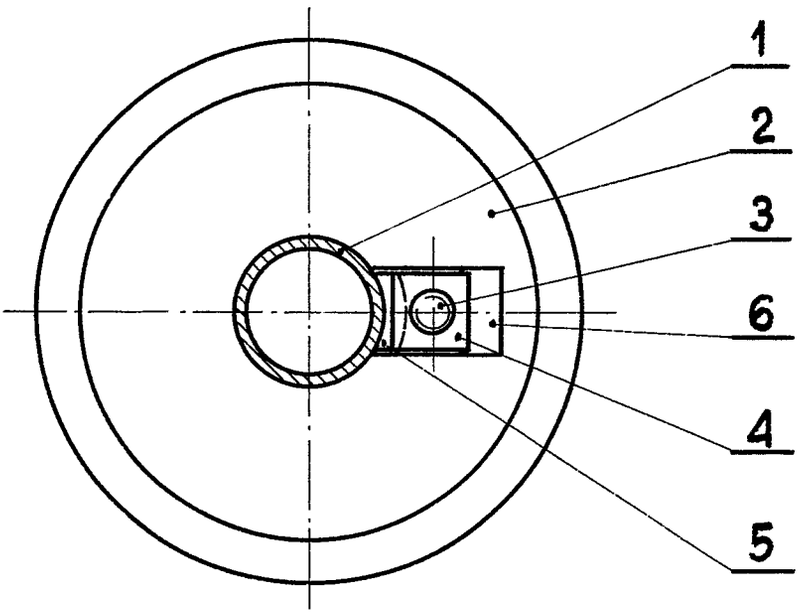

Fig. 2