

(No Model.)

C. MÜLLER.
DRAWING PIN.

No. 529,744.

Patented Nov. 27, 1894.

Fig. 1.

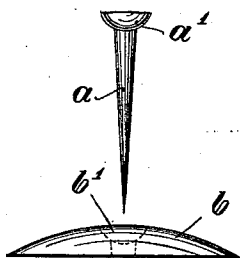


Fig. 2.

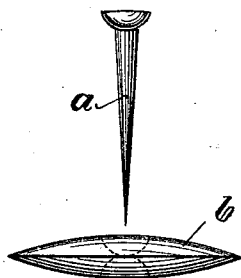
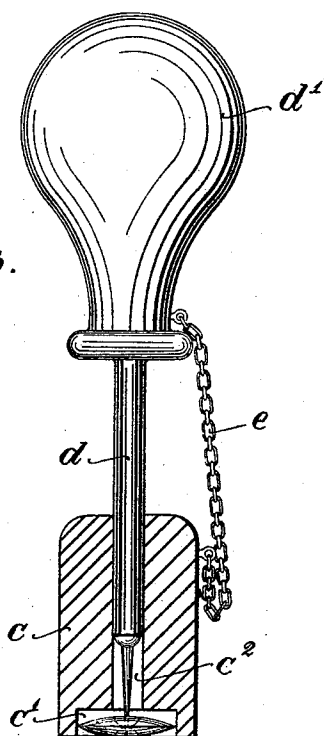


Fig. 3.



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UNITED STATES PATENT OFFICE.

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DRAWING-PIN.

SPECIFICATION forming part of Letters Patent No. 529,744, dated November 27, 1894.

Application filed September 29, 1893. Serial No. 486,802. (No model.)

To all whom it may concern:

Be it known that I, CARL MÜLLER, a subject of the King of Prussia, German Emperor, and residing at Eberswalde, in the Province of Brandenburg, Kingdom of Prussia, German Empire, have invented certain new and useful Improvements in and Connected with Drawing-Pins, of which the following is an exact specification.

My invention relates to the well-known drawing-pin used for fastening drawing-paper to drawing-boards, and composed of the pin proper and of a head-plate fixed thereto, and my improvements in such pins relate, briefly stated beforehand, to making the same in two separate parts each of a special formation, and in connecting these two parts at the very moment of use by means of a device especially made for that purpose.

In order to make my invention more clear, I refer to the accompanying drawings, in which similar letters denote similar parts throughout the different views, and in which—

Figure 1 shows the two parts composing my new drawing-pin. Fig. 2 shows a modified form of the same, and Fig. 3 shows a simple device for connecting the two parts.

Before entering into the details of my invention, I wish to remark that drawing-pins as made hitherto are sold in a finished state, *i. e.*, the pin proper and the head-plate rigidly connected. When pressing such pin into the wood, it often happens, that both parts disconnect when a certain depth and a certain resistance have been reached, and that, in consequence thereof, the head-plate alone is moved down onto the board, while the upper part of the pin penetrates into the finger of the operator, thus causing there a very inconvenient and, perhaps, dangerous wound. When further, on driving the drawing-pin home, the pressure does not act perfectly axially, but somewhat sidewise, it very easily occurs, that the pin proper is bent, so that the whole drawing-pin, irrespective of the uninjured head-plate, must be thrown away. All these drawbacks shall be avoided by the new drawing-pin, shown in Figs. 1 and 2, in which *a* is the pin proper and *b* the head-plate, the former having a hemispherical head *a'*, and

the plate having a corresponding cavity *b'*, in the center of which latter a hole for the pin is provided. This hole is somewhat larger than the diameter of the pin shortly below its head *a'*, so that both parts, *i. e.*, pin *a* and plate *b*, when loosely put together, may move against each other without a decrease in their surface of contact, on account of the hemispherical shape of the parts *a'* and *b'*.

The head-plate *b* may be of plano-convex section as in Fig. 1, or of double-convex section, as in Fig. 2, in which latter case a hemispherical cavity is provided on each side.

Drawing-pins constructed according to my invention are driven into the board not by hand but by a special auxiliary-device, as for instance by that shown in Fig. 3. The said device consists of a small casing *c* having in its bottom a cavity *c'* for the reception of the head-plate *b*, and a vertical guide-channel *c''* for receiving the pin proper *a* and a piston *d*. The latter has a knob *d'*, by means of which the piston may be pressed onto the pin, so as to drive the latter down into the wood, and to fasten thereby the head-plate, too. Casing *c* and knob *d'* may be connected by a cord or chain *e*.

Having thus fully described the nature of my invention, what I desire to secure by Letters Patent of the United States is—

A drawing-pin, consisting of the loose pin proper *a* having an inverted hemispherical head *a'*, and of the biconvex loose head-plate *b* having in each side a hemispherical cavity *b'*, said pin being adapted to hold said plate in proper working-position exactly parallel to the drawing-board, when the pin is driven home into the board in a vertical or inclined direction, said plate being adapted to be used on either side, plate and pin being separable when removed from the board, for the purpose as described.

In testimony whereof I have signed this specification in the presence of two subscribing witnesses.

CARL MÜLLER.

Witnesses:

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H. GENEHR.