Sept. 9, 1969 T. ARNT-JENSEN 3,465,462

BASE PLATES FOR SECURING SHEETS OF PAPER

Filed Feb. 28, 1967

FIG. 1.

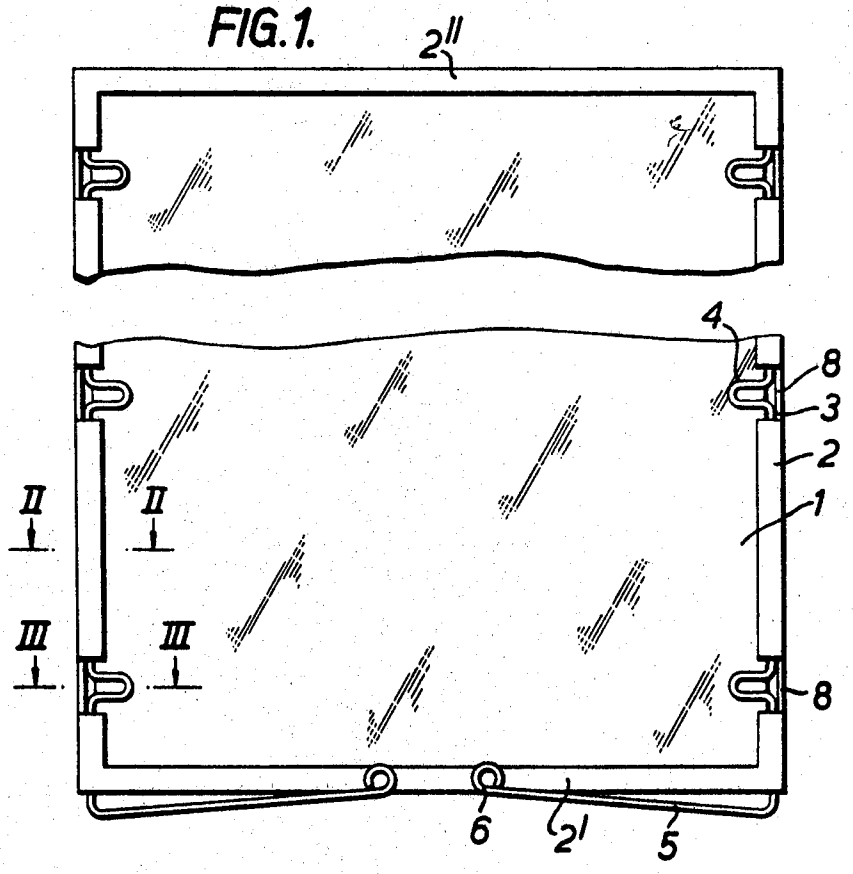


FIG. 2.

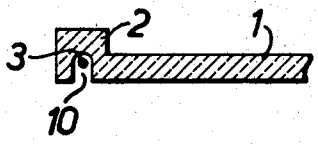


FIG. 4.

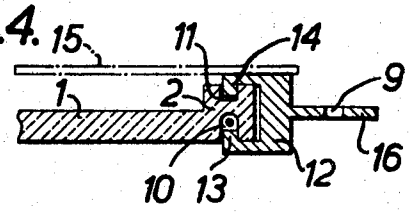


FIG. 3.

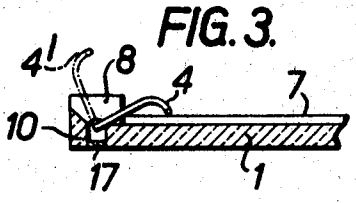
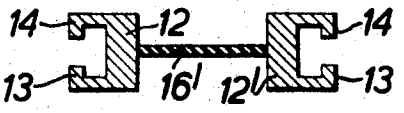


FIG. 5.



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BASE PLATES FOR SECURING SHEETS OF PAPER

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Int. Cl. G09f 1/12, 3/18
U.S. Cl. 40—156 6 Claims

ABSTRACT OF THE DISCLOSURE

A base plate for securing a sheet of paper to the flat surface of the plate, the plate having wires pivoted to the sides, the wires lying in grooves in the plate projecting through the grooves and serving as ears and also as operating and securing means. The plate can be of transparent material or not.

The present invention relates to improvements in or relating to base plates of the type specified in the Norwegian Patent No. 81,383. Base plates of this kind have proved to be encumbered with certain drawbacks, the elimination of which is the object of the invention. Such base plates produced of a metal sheet with turned-in, tube-like edges, are very difficult to bring back into a completely plane state if they have been buckled through careless usage. Furthermore, it is often desirable to read the rear of the sheet secured to the plate without loosening it. This is rendered possible if the plate is produced of a transparent material. The turned-in tube-like edges forming a journaling for the securing means also necessitate a comparatively time consuming production process which enhances the price of the plates.

According to the invention certain important improvements of base plates of the type in question are made. Said improvements in or relating to base plates for securing sheets of paper are characterized in that the plate is produced of preferably a transparent artificial material, and that the wires serving as ears for the securing of the sheet of paper are journaled along the lateral edges of the plate by being placed in grooves made in the rear surface of the plate. Said grooves are on the front surface of the plate met by through-going recesses at the points where securing ears are to be arranged, through which recesses the said ears are passed. The groove is pointwise closed by a weld or the like in order to secure the wire in its journaling in the groove.

The invention will now be described in detail with reference to an embodiment shown by example in the drawing.

FIG. 1 shows a plan view of a base plate according to the invention.

FIG. 2 is a section along the line II—II in FIG. 1, but shown in a larger scale.

FIG. 3 likewise shows a section in larger scale and taken along the line III—III in FIG. 1.

FIG. 4 shows a section through a plate edge similar to that of FIGS. 1 and 2, but provided with further grooves and a profile means cooperating with the plate edge.

FIG. 5 shows a modification of such a profile means.

The plate according to FIG. 1 is produced of a transparent artificial material having enough thickness to make the plate selfsustaining and rigid. The plate thus constitutes a plane and firm support for a sheet of paper to be placed on the front surface of the plate.

Along the periphery of the plate a bead or frame **2** is preferably produced in one piece with the plate **1**. At the rear of this frame **2** a longitudinal groove **10** is formed and

a wire **3**, e.g. a steel wire, is placed in the groove **10**. The wire **3** is in a known manner shaped with bulges or ears **4**. At the locations where such ears are arranged, recesses **8** are made in the frame **2** of the plate, which recesses meet the groove **8**. This is clearly shown in FIGS. 2 and 3.

The wire **3** with its securing ears **4** is thus journaled along the plate edges **2** being placed in the groove **10** from the rear with its ears projecting through the recesses **8**. The groove **10** may then be closed, e.g., pointwise by a cross weld, as indicated at **17** in FIG. 3.

One end **5** of each wire is placed along the lower plate edge **2'** and the free end of it is turned in, as indicated at **6**, to form a spring catch like that shown in the Norwegian patent specification No. 81,383.

Thus, according to the invention a unitary plate is achieved which serves as a firm support for a sheet of paper **7** secured by the ears **4** to the front of the plate. The plate consists of a material that cannot be buckled or become distorted and it is preferably transparent, so that the rear of the sheet of paper may be observed through the plate. In many instances the rear of the sheet may suitably show e.g. tables or data which it may be desirable to have available for the description of the front of the sheet.

Furthermore, according to the invention an exceptionally simple journaling is achieved for the securing means along the lateral edges of the plate.

This journaling, where the wire is placed in a groove along the lateral edges of the rear of the plate, also, preferably by another corresponding groove in the front surface of the plate makes it possible to fasten profile means by which the plate may be suspended or hinged etc. somewhere. The FIGS. 4 and 5 show examples of such profile means. In FIG. 4 said means consists of a profile bar **12** shaped for engagement with the groove **10** and a corresponding groove **11** in the frame of the plate, the means **12** having engaging ledges **13, 14** for these grooves. Along the rear of the profile means a projecting rib **16** has been formed, which may have perforations **9**, by which the plate may be suspended. The profile means **12** thus advantageously may be snapped across the upper frame **2''** of the plate in order to serve as a suspension means. If desired, the profile element **12** may also serve to fasten a cover plate **15**, which protects the sheet **7**, e.g. against rain and snow, or it may serve to secure rulers or the like, which may be parallel displaceable along the plate, the element gliding in the grooves **10, 11**.

A modified profile element is shown in FIG. 5. In this case the element consists of engaging parts **13, 14** shaped on the profile part **12, 12'**, like those mentioned in connection with FIG. 4. This modified element, however, has its parts **12, 12'** connected by a narrow elastic rib **16'**. With this element two plates of the kind shown in FIG. 1 may be connected along adjacent lateral edges, the rib **16'** serving as a hinge, so that one of the plates may be turned to cover the other one like a closed book. One of the profile parts **12, 12'** may, if desired, be engaged to a covering plate instead of a plate according to FIG. 1.

It will be understood that the described improved plate may be modified in several ways within the scope of the present invention.

I claim:

1. Improvements in or relating to a base plate, consisting of a plane plate the edges of which are provided with securing means for a sheet of paper arranged on the plate, which means comprise ears formed by steel wires extending along the lateral plate edges and pivotally journaled to said edges, the free ends of which wires serve as operating and securing means, characterized in that the

plate consists of a preferably transparent artificial material and that the journaling of the wires along the plate edges is achieved by placing the wires in grooves made in the rear surface of the plate, which grooves are met by through-going recesses, through which the said ears project.

2. Improvements according to claim 1, characterized in that the plate is shaped in one piece with a peripheral bead or frame through which the said recesses run.

3. Improvements according to the claim 1, characterized in that the frame is provided with a longitudinal groove in its front surface.

4. Improvements according to the claim 1, characterized in profile elements, which are shaped for engagement with said groove and which elements are provided with suspension means, ruler or covering means or hinge joints.

5. Improvements according to the claim 2, characterized in that the frame is provided with a longitudinal groove in its front surface.

6. Improvements according to the claim 3, characterized in profile elements, which are shaped for engagement with said groove and which elements are provided with suspension means, ruler or covering means or hinge joints.

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40—13; 281—44