Feb. 7, 1961 J. P. GRIFFIN 2,970,539

TRANSPARENT SYMBOL STAMPS

Filed March 20, 1953

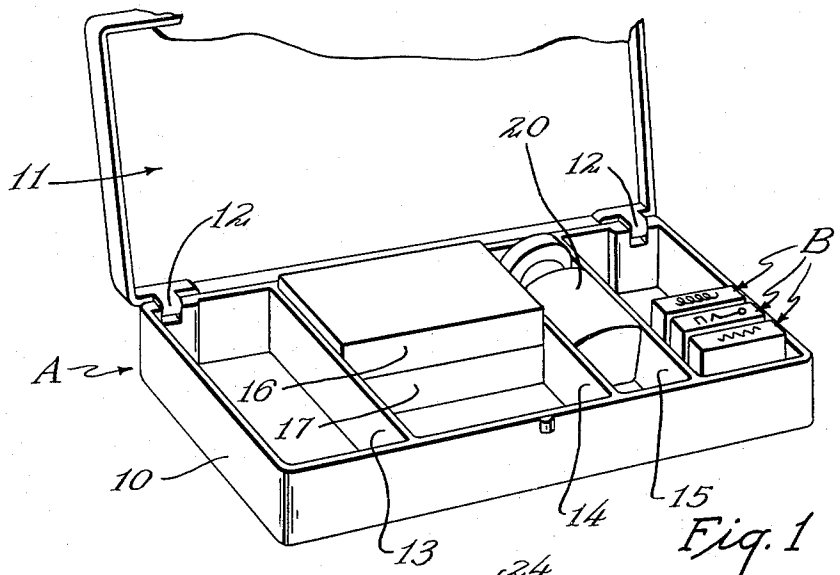


Fig. 1

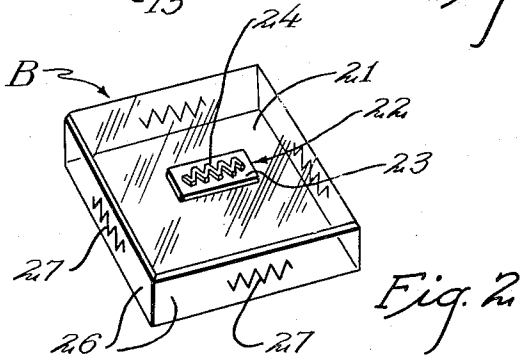


Fig. 2

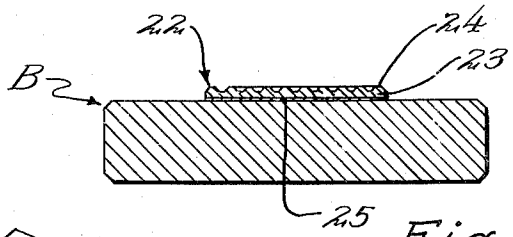


Fig. 3

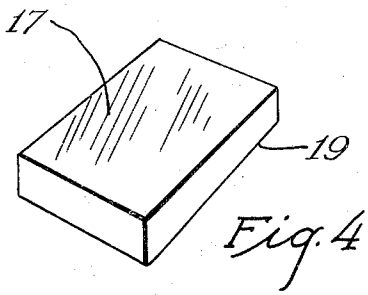


Fig. 4

INVENTOR

John P. Griffin

BY Robert M. Dunning

ATTORNEY

United States Patent Office 2,970,539 Patented Feb. 7, 1961

2,970,539

TRANSPARENT SYMBOL STAMPS

John P. Griffin, 2157 James Ave., St. Paul, Minn.

Filed Mar. 20, 1953, Ser. No. 343,670

1 Claim. (Cl. 101—368)

This invention relates to an improvement in transparent symbol stamps and deals particularly with a stamp useful in producing drawings and the like. In drawing electrical diagrams, architectural plans, and other technical drawings, a considerable amount of time is spent in making symbols designating various elements of the drawing. For example, in the drawing of electrical diagrams, considerabl work and time is involved in indicating electrical resistances, electrical coils, such as, transformer coils, vacuum tubes and the like. Stamps bearing symbols of this type could be used to good advantage in such work, but difficulty has been experienced in properly placing the various elements so that each part will appear in its precise location.

An objective of the present invention lies in the provision of symbol stamps capable of providing the necessary symbol and in forming these stamps in such a way that the symbol may be positioned directly in its exact location. As a result, a considerable length of time which has been wasted in making the proper symbols by hand may be eliminated.

A feature of the present invention resides in the provision of symbol stamps which are formed of transparent material so that the draftsmen look directly through the stamp and properly position each symbol. As a result the difficulty which would have been experienced in the use of symbol stamps of a different construction may be eliminated.

A feature of the present invention lies in the formation of symbols of a transparent plastic material and in cementing these symbols to a block of transparent material such as Plexiglas. As a result the operator may look directly through the block of Plexiglas and through the base portion of the attached symbol so as to properly locate the symbol upon the drawing.

A further feature of the present invention resides in the provision of a transparent symbol stamp which comprises a block of transparent material of relatively large size having a symbol centrally located on one surface thereof, and spaced from the edges thereof. The block may be easily manipulated by grasping the edges of the block by the thumb and fingers and placing the block over the drawing. By extending the thumb and fingers slightly below the level of the under surface of the block, the symbol may be held slightly above the surface of the drawing until it is properly located. By pressing downwardly on the block after it has been located, the symbol is forced into contact with the drawing. The previously inked under surface of the symbol then leaving a mark in an indelible or waterproof ink at exactly the proper location.

A further feature of the present invention resides in the provision of an ink pad which consists in two blocks of soft wood, such as Balsa wood. The wood blocks are edge grain cut, with vertical pores which are capable of absorbing a considerable quantity of ink. Only a very small amount of the ink absorbed is on the block surface but the blocks may be used for substantial periods

of time without re-inking. When a drop or two of the ink is placed upon the surface of one block, the two block surfaces may be rubbed together to evenly spread the ink. The symbol to be applied is then placed against the inked surface of the block to pick up sufficient ink to print the symbol.

A further feature of the preferred form of this invention relates to the projection of a series of transparent symbol stamps of rectangular or multi-sided form. The symbol is usually placed parallel to an edge of the block and as a result the symbol may be aligned through the use of a T-square or straight-edge as desired. Each of the side edges of the block are preferably roughened and the symbol is imprinted on each of the sides of the block so that a series of blocks may be supported on edge in side by side relation and any symbol may be readily selected.

A further feature of the present invention resides in the provision of a transparent case designed to accommodate the interior combination of parts necessary. Providing a transparent cover upon the case, the various symbols contained at readily detected from the outside of the box so that the proper symbol may be located without even opening the box.

These and other objects and novel features of the present invention, will be more clearly and fully set forth in the following specifications and claim.

In the drawing forming part of my specification, Figure 1 is a perspective view of a case in open position showing a series of elements therein.

Figure 2 is a perspective view of a symbol stamp removed from the case.

Figure 3 is a cross section view through the symbol stamp shown in Figure 2.

Figure 4 is a perspective view of one of the ink blocks used in conjunction with my symbol stamps. Figure 1 of the drawings shows virtually the entire symbol stamp marking unit A. However, in this view only a small number of the symbol stamps are pictured therein.

The unit A includes a transparent box of transparent plastic or the like, including a bottom portion **10** and a cover portion **11**, hingedly connected by hinges **12**. The bottom portion **10** is shown as including a series of partitions **13**, **14** and **15** which separate the various elements of the combination.

A pair of ink blocks **16** and **17** are shown between the partitions **13** and **14**. Each ink block is formed of soft wood, such as Balsa wood or the like, and is provided with a liquid-tight covering **19** on its outer surface. The covering on the block **17** is on the under-surface of this block, while the block **16** is provided with its covering **19** on the upper surface. In operation a liquid or semi-liquid ink is placed upon the surface of one block and the opposed surface of the two blocks are rubbed together. This action spreads the ink upon the wood surface and creates an even film of ink upon each block. After the symbols have been inked, the two blocks are placed together in superposed position shown in Figure 1, with the ink surfaces in contact. This prevents the drying of the ink and the adherence of foreign matter to the blocks. Between the partitions **14** and **15** is located a bottle of ink designated by the numeral **20**. This ink is of a protective type to provide a smooth black printed symbol and is selected to function properly when applied to the blocks **16** and **17**.

Between one end wall of the bottom portion **11** of the box A and the partition **13**, and between the opposite end of this bottom portion of the box and the partition wall **15** spaces are provided for the storage of symbol stamps B. These blocks are constructed as best illustrated in Figures 2 and 3 of the drawing. Each symbol stamp includes a block **21** formed of a transparent material.

Plexiglas has been successfully used for this purpose. While the size and proportions of the blocks may, of course, vary substantially, the blocks illustrated are approximately 5/16 of an inch in thickness and are about 1¼" square. The blocks are of transparent material in any event.

Mounted upon one flat surface of each of the blocks is provided a symbol element **22** which in the present form is formed of Vinylite plastic which includes a substantially flat base portion **23**, and a projecting symbol portion **24**. The projecting symbol portion **24** is of suitable shape to produce the proper symbol when this projecting surface is placed against the drawing paper. The symbol elements **24** and the flexible base portion **23** may be produced either by stamping, by molding, or in any other suitable manner to produce a flat base portion and a projecting plating portion.

Transparent adhesive **25** is applied between the symbol element **22** and the surface of the block **21** to secure these parts together. As a result, the operator may look through the base portion **23** of the symbol element in positioning the symbol portion upon the drawing. After the symbol has been inked, the projecting edge of the symbol becomes darker than the remaining portion thereof so that the outline of the symbol stands out clearly through the block.

As indicated in Figure 2 of the drawing, the marginal edge surfaces **26** of each block are roughened somewhat so as to loose the transparency and to merely be translucent. Each of these edges **26** is then imprinted with the symbol **27** identical to the symbol adhered to the under surface of the block. As a result, each symbol may be immediately visible when the stamps are positioned in the box A regardless of the edge which is uppermost during storage. It will be noted that the symbol **24** is supported in substantially parallel relation to an edge **26** of the block so that the edges may be used against a T-square or straightedge in locating the symbol upon the drawing if it is so desired. This is a practical advantage in conjunction with symbols such as resistance symbols and coil symbols where an elongated resistance or coil may be produced by imprinting two symbols in side by side or over-lapping relation.

My symbol stamps have been found extremely useful in the formation of wire diagrams and the like in which

considerable time is required to form the small symbols employed in such diagrams. The symbols are also useful in many other fields, such as in the field of architecture where valve locations, plumbing fixture locations and other such indications are required. The symbols are produced in a multiplicity of sizes to set drawings of difficult scales. However, in each case, the symbols are formed substantially in the manner described.

In accordance with the patent statutes, I have described the principle of construction and operation of my transparent symbol stamps and while I have endeavored to set forth the best embodiment thereof, I desire to have it understood that obvious changes may be made within the scope of the following claim without departing from the spirit of my invention.

I claim:

A symbol stamp including a rectilinear, multi-sided body of transparent Plexiglas material having a pair of oppositely facing transparent surfaces, the remaining sides being roughened to render them translucent, identifying indicia carried by at least one of said translucent sides, and transparent Vinylite symbol means projecting from one of said transparent surfaces which is visible through the block from the other transparent surface thereof.

References Cited in the file of this patent

UNITED STATES PATENTS

212,175	Beach	Feb. 11, 1879
316,268	Horner	Apr. 21, 1885
551,902	Laughton	Dec. 24, 1885
721,474	Smith	Feb. 24, 1903
830,188	Sternau	Sept. 4, 1906
1,142,560	Folger	June 8, 1915
1,142,562	Folger	June 8, 1915
1,285,094	Fisher	Nov. 19, 1918
1,363,017	Russo	Dec. 21, 1920
1,657,437	Shinohara	Jan. 24, 1928
2,258,501	Miller	Oct. 7, 1941
2,584,908	Oblinger	Feb. 5, 1952

FOREIGN PATENTS

493,203	Germany	Mar. 24, 1928
568,467	Great Britain	Apr. 5, 1945