A BOMB FRAGMENT IDENTIFICATION CHART*

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A scientific examination of the fragments of an exploded bomb may reveal valuable information as to the origin of the bomb and its type of construction. To the expert the battered and fragmentary pieces of metal, wood, paper, etc., recovered at the scene of the explosion fit together to form an outline of the construction of the original bomb. But it must be remembered that a great number of bombs are almost completely destroyed so that the fragments which are recovered may have little or no meaning to the layman, judge, or juror who is asked to decide the facts in the case. It was with this difficulty in mind that the writer developed a bomb fragment identification chart herein illustrated.

The particular chart illustrated, Figure 1, is made of plywood and is six feet high by four feet wide. Hereon is mounted the fragments of a clock mechanism used to ignite a time bomb. On this board are mounted in the columns marked “A—Parts of Clock Found at Scene” the fragments of a clock from an exploded bomb, each properly labeled as to their original function, while in the adjoining columns marked “B—Parts of Clock Identified” in the corresponding horizontal position is a duplicate part from a clock of the same make as the one used in the bomb. By this means the layman can better visualize the reconstruction and identification. As an additional aid in the explanation of the reconstruction, an assembled clock is mounted on a pivot at the top of the chart so that it may be turned face or back forward to illustrate points in the expert’s testimony.

The actual preparation of the chart varies with fragments recovered. The writer has found it convenient to place small fragments in transparent envelopes while larger pieces are more easily mounted on small boards, and in some cases the original outline is sketched on these background boards (see 8 A of illustration). A detailed study of the accompanying illustration will reveal some of the possible means of mounting these fragments.

The reader will realize that this chart only illustrates gross characteristics, i.e., the original and present form of certain fragments which were recovered at the explosion scene, and does not reveal the minute and individual characteristics, such as tool marks on cut ends of wire, so necessary to trace the bomb to its maker. However, it is extremely helpful for demonstration to large groups of the conclusions drawn from examinations of the explosion scene.

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by the expert investigator and consequently serves a useful function well worth the effort expended on its construction.