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Examination of Cachet Impressions

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ABSTRACT: The examination of cachet impressions can be an important factor in determining the authenticity of a document. This paper explores the question of how cachets of different materials leave impressions and how the class characteristics of these impressions can be differentiated from individualities. Finally, the authors deal with some of the aspects of forgery and the weight of evidence in formulating opinions.

KEYWORDS: questioned documents, cachets, toolmarks

The issue of impressions made by cachets[2] is a recurrent subject in questioned document examinations. Questions arise not only as to the authenticity of a cachet impression, but also as to whether it was made from exactly the same piece as another impression.

The purpose of this article is to clarify some of the individual and class features of cachets, and to discuss some of the guidelines and limitations in writing opinions regarding cachet impressions.

Although there is written material concerning rubber cachets [*1*], other manufacturing materials have received less attention in questioned document literature. Thus, in order to examine a recent case, the writers of this article made a series of different cachet impressions under various conditions. They then examined and evaluated the results within the background of prior experience and previous cases.

Cachet Materials

Although most cachets carry the stereotyped description of being "rubber stamps," the fact is that a number of different materials can be used in the manufacture of cachets. A soft and pliable rubber mounted on a thin cushion layer is generally considered to be most effective in providing clear impressions under normal and usual conditions, but for various reasons other manufacturing materials are used.

Most obviously, the cost of a thin cushion can be avoided by placing the cachet directly on the mount. Soft rubber is also not very durable under constant wear, so when extended use is contemplated, hard rubber or plastic is often substituted. In those cases in which cachets are in almost constant use, many manufacturers prefer to use metal, although this can increase

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[2]"Cachets" are stamping devices and the impressions that they make on documents. These devices are often called rubber stamps; however the term cachet is more general, since it does not specify the material of which the stamping device is constructed.

the short term cost of the cachets. There are, however, always exceptions to these generalizations. For example, most countries use rubber immigration cachets, although these cachets are in almost constant use; this usually leads to wearing down of a cachet, and to its individualization.

Forgeries of cachets have been made in rubber, plastic, and metal; and, in certain cases, usage of the wrong material has been instrumental in the proof of forgery. Forged cachets have also been made in other materials (Figs. 1 and 2), but these forgeries (such as wood cachets made during World War II by underground units) are generally not to be found in current cases.

Production of the Cachet

In broad terms, cachets can be made from items that are photographically placed on a negative, or by direct casting from a model. In either case, there are certain preliminary steps that do have an influence on the cachets and the inked impressions that they make.

In those cases in which cachets have alphabetical texts, the text can be created by (a) type-

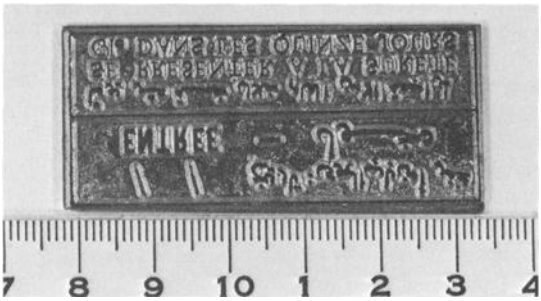

FIG. 1—*Forgery of a Syrian border cachet produced by a terrorist group. Although the genuine cachet is rubber, the forgery is metal. (Seen in mirror image, since this is a photograph of the original cachet, and not of the impression.) 1 in. = 25.4 mm.*

FIG. 2—(top) *Impression made from the forged Syrian cachet (X2) and* (bottom) *impression of lower half of genuine Syrian border cachet (X2).*

setting of various kinds, (b) manual application to a model of pasted or rubdown letters, or (c) handwritten lettering (see Fig. 3). As might be expected, machine typeset preparation can often be differentiated from manual methods by examining the details of alignment and spacing. In nontextual cachets, the designs are usually produced from artwork or photographs.

Many different methods can be used to make the finished cachet, and sometimes the exact method can be important to the questioned documents examiner, as has been discussed elsewhere [*1*]. This, however, is not within the scope of this article.

Class Characteristics of Cachet Impressions

When rubber cachets are new, microscopic impression examination can often show the dotted/porous characteristics of the rubber (Figs. 4 and 5). After the cachet is well used, however, the inking can become more even as the pores fill with ink. (It is interesting to note that soaking a cachet in ink overnight did not change the dotted nature of the impressions.)

Large and thick designs show the most characteristics of "dotted rubber;" heavy or excess inking show fewer such characteristics (Fig. 6).

As rubber cachets are used, they begin to wear down and develop their own individual characteristics. When a forged cachet is made by photographing an impression, the forger can retouch areas of wear, or he can leave the worn impressions without any restorations (Fig. 7). It is important to be alert to imperfect retouching or crisp edges on supposedly worn down sections of a cachet.

Metal cachets show different class and individual characteristics. Generally, the ink in the impression is unevenly scattered when it is examined under magnification, since the ink cannot be evenly distributed over the face of the metal. Heavy inking and smearing sometimes obscure this detail, as does the usage of certain ink formulas (particularly with oil bases).

Rubber cachets are affixed to the holder with some type of adhesive; metal cachets are at-

FIG. 3—*Part of forged cachet. Note that the word "FRANCE" was obviously handwritten.*

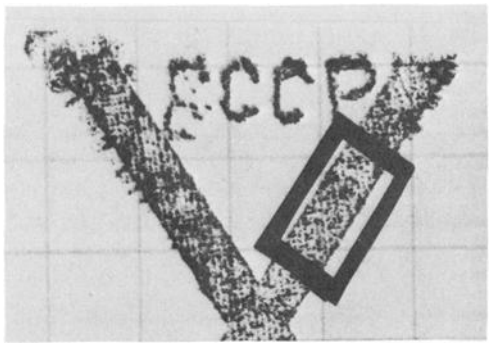

FIG. 4—*Rubber cachet with definite rubber pattern visible under magnification.*

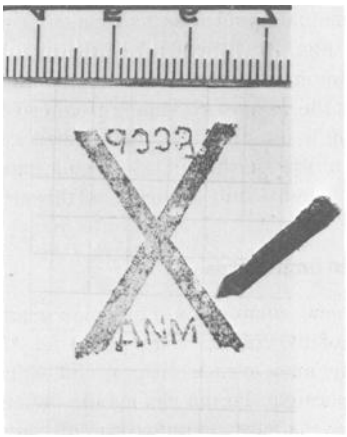

FIG. 5—*Rubber cachet where spots without ink were caused by dirt on the rubber. 1 in. = 25.4 mm.*

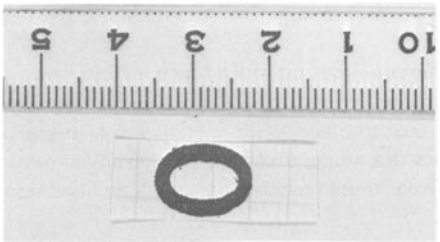

FIG. 6—*Heavy inking has covered the porous characteristics of the rubber. 1 in. = 25.4 mm.*

FIG. 7—*Forgery: the original cachet was well worn when it was forged. There was no attempt to clean the signs of wear in the forgery. (The cachet is illustrated in part. Only a very limited number of impressions were made from the forgery.)*

tached either by adhesive or by nails. The appearance in an impression of a nail is ample evidence to conclude that the impression was made by a metal cachet (Fig. 8).

In some hot metal methods of molding a cachet, uneven cooling of the cachet can result in excess points appearing on the cachet surface (Fig. 9). This happens much less frequently in rubber cachets. The presence of the flaws can be considered class evidence suggestive of metal cachets, and the exact position of the flaws is sometimes an individuality that can differentiate different pieces of metal. In either case, however, someone looking at impressions and not at actual stamps should be careful not to confuse random ink spots with excess metal points. An examiner should also be careful to distinguish a spot that appears on the

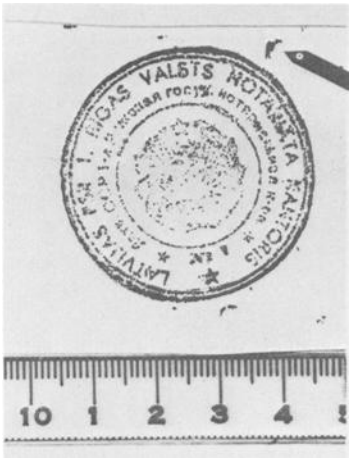

FIG. 8—*Note the impression made by a nail. This is specific proof that the impression was made by a metal cachet. 1 in. = 25.4 mm.*

FIG. 9—*The random points were made by excess metal points on the cachet. 1 in. = 25.4 mm.*

original model or artwork (and, hence, appears on all cachets drawn from that model), from the excess metal points that are manufacturing defects and individualities in a specific cachet.

Individuality

The wearing down of cachets is certainly a factor that can individualize a particular stamp. Bending or breaking can likewise be considered individual. With all of these considerations, however, one should be certain to have sufficient points of individuality before reaching a firm conclusion. In certain circumstances, various cachets can be used in similar ways, possibly resulting in similar defects [*2*].

Particularly in metal cachets, the untrimmed or poorly trimmed edges of the cachet or both can print when inked (Fig. 10). When traces of edges appear at perpendicular angles in a cachet impression, this is usually indicative of a metal cachet rather than plastic or rubber. When cachets are handtrimmed, the exact characteristics of the trimming constitute indi-

FIG. 10—*This impression was made by a metal device into which letters are placed, then permanent cachets are made. The outer circle is not individual; it is an impression from the holder around this device. 1 in. = 25.4 mm.*

viduality which can identify the exact cachet. Handtrimming of the cachet can generally be distinguished from the edges of the mount because of the random, though possibly quite small, irregularities of a manual procedure (Fig. 11).

Variation Factors

Many aspects of cachet usage are variable, resulting in a complex situation for an examiner looking at an impression. The quality and detail of an impression can change because of factors as different as the formula of the ink used or the mounting of the cachet (Fig. 12).

A cushion between the holder and stamping rubber aids in giving a clear impression. On the other hand, the opposite effect is achieved when a metal cachet is applied to a piece of paper resting directly on a hard surface.

It is essentially impossible to list all of the factors possibly affecting the way cachets are applied. It can only be stressed that these factors must be taken into consideration before an opinion is formulated.

Forgery

Cachet impressions can and have been forged. These forgeries have ranged from famous philatelic cancellations to the common cachets associated with daily business.

It is usually possible for an examiner to detect a forgery by determining the cachet material, by examining the cachet for details of design, and so forth.

On the opposite side, however, a cachet can constitute a very limited questioned document. Although one document person has written that "comparison of the cachets of the original and the one in question will lead to a definite conclusion of identity or difference" [*3*], reality and experience both point to numerous cases in which there has been insufficient basis not only for a "definite conclusion," but for *any* conclusion at all.

Conclusion

To reach conclusions about cachet impressions can be one of the most difficult parts of questioned document examinations. There certainly are cases in which reaching a firm deci-

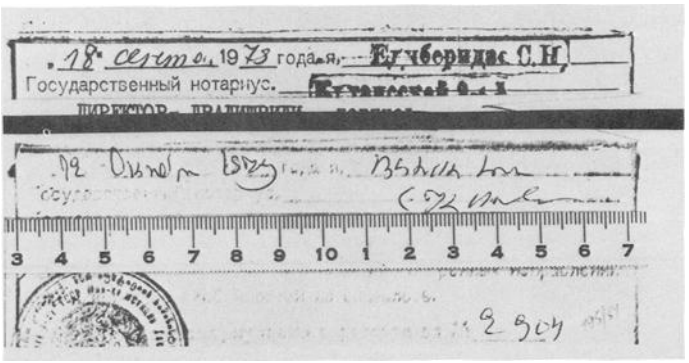

FIG. 11—*Trimming: in these two cases, the text of the two cachets was identical, however, the difference in the top of each cachet shows that the impressions were made by two separate pieces of metal. 1 in. = 25.4 mm.*

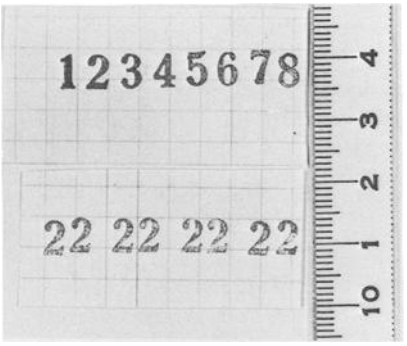

FIG. 12—*Numbering cachet: these impressions were made with the same cachet. The bands were moved manually to change spacing. 1 in. = 25.4 mm.*

sion is not unusually difficult; however, there are many cases in which the limited nature of cachet impressions and the wide variabilities in their application preclude firm decisions. Conclusions couched in such generalized terms as "apparently," "probably," or "usually" are unfortunately very often the correct approach. And, sometimes, even these terms must be rejected in favor of an honest assessment of even less certainty.

References

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