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## WHEN WAS A SMOKE-DAMAGED DOCUMENT TYPEWRITTEN

JULIUS GRANT

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A sheet of headed notepaper was received from an Insurance Company. On it was typed an insurance policy for a large sum of money. A fire occurred on the day after the date given on the document and the Insurers therefore became liable for the sum assured. The Assured were also the overseas Agents for the Insurance Company, i.e. they had issued their own policy on their own paper.

The document was the letter heading of the Agents, and it was stained dark brown on one side as a result of contact with the smoke from the fire. In view of the peculiar circumstances involved the question thus arose, was the policy typed on the paper before the paper was smoke-stained or afterwards?

Our procedure was as follows:

1. One line of the document was retyped by ourselves, on it as received, using approximately the same typewriter pressure and a ribbon of a similar type to that used by the Agents.
2. Portions of the typescript and the surrounding areas of the document both as typed by our-

selves and by the Agent were treated selectively with bleaching agents. These included calcium hypochlorite, sodium hypochlorite, and hydrogen peroxide, under various conditions.

3. The bleached portions were then examined in; (a) visible light; (b) filtered ultraviolet light.

Since the bleaching agents bleached out the smoke-stain without affecting the ink of the typewriter ribbon one would expect the typescript to appear more intense after the bleaching process in the case of typescript covered with smoke-stain, and no different in the case of our own typescript which was applied over the smoke-stain.

In actual fact this was found to be the case. The difference was apparent to the unaided eye, but in ultraviolet light it was extremely marked since this eliminated the enhancing effect on the typescript of the bleached area of paper surrounding it.

The conclusion reached was that the paper had been typed before being smoke-damaged, and this was completely in accord with other contributory evidence of a different nature.