University of Southampton National Cipher Challenge Solutions

Message 2 Plaintext:

My Dear Charles,

Thank you so much for the splendid meal last night. Please send my sincere compliments to your cook, Mrs Beeton. I was most wonderfully entertained by the street vagabonds playing their instruments under the dining room windows, though the Countess seemed to find them somewhat amusing.

The idea of your Turning Machine is most ingenious and I am sure it could be of great importance to the security of the Empire. On a more serious note, I am afraid to report that a foreign gentleman has



been making somewhat indiscreet enquiries about your work on ciphers. He made no mention of the device, but something about his manner concerned me. I fear we should be more careful. Nevertheless be assured that the draft plans of the Turning Machine that you kindly lent me last night are kept with the greatest security.

Yours, W.

Cipher:

• Caesar Shift by 7 preserving word structure

Notes:

- Mrs Beeton is very unlikely to have been Charles Babbage's cook. She was certainly more "upstairs" than "downstairs" and would have just been a toddler in 1838! Despite being famous for her book "The Book of Household Management" she died young at the age of 28. You can find out more about her at
 - http://www.hatchend.harrow.sch.uk/locality/beeton.html
 http://www.bbc.co.uk/history/society_culture/industrialisation/beeton.shtml
- Charles Babbage was not only a genius but also rather eccentric. Late in life he started a campaign to get rid of organ grinders and street musicians—they retaliated and gathered by his house and played loud music! See Simon Singh's The Code Book for more details.
- Turning machine is an allusion to a Turing machine which is an abstract concept of a computing machine developed by the famous mathematician and Enigma code breaker Alan Turing. You can find out more at http://plato.stanford.edu/entries/turing-machine/

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