

Register for the competition on the form at <http://www.cipher.maths.soton.ac.uk/registration>

National Cipher Challenge 2009, part 3A

August 21st 1834

My Dear Miss Lovelace,

Without your cheerful support I might already have abandoned our project and devoted my life entirely to the mathematical sciences at Cambridge. The election in Finsbury did provide a diversion, though my dismal placing as fourth of four candidates leads me to the conclusion that parliamentary life is likely to elude me. On a happier note my plans for a Statistical Society appear to be reaching fruition and I have real hope that such an association may well be founded this very year.

Your proposal that we should continue to work on the Analytic Engine in secret brings me great cheer. There is nothing like a conspiracy to give life sparkle, and I believe your suggestion has much to recommend it. It is increasingly apparent that Lord Pennylaine's actions, while they may be innocent, are greatly inhibiting progress on the Difference Engine, and I am coming to agree with you that, in all likelihood, his efforts are not entirely innocent. Given that he may be acting against the interests of the government as well as against us, I am concerned for our safety. It may depend on the adoption of more sophisticated cyphers than those we have hitherto used. I flatter myself that I should be able to decypher any cryptic message you care to choose, and I have great confidence that you will be able to decypher mine without knowledge of the key. But in order to avoid embarrassment may I propose that our next communication should be encoded by use of that most elegant affine cypher to which you alluded in our conversation? The arithmetic is attractive in its simplicity, and I feel sure that Pennylaine would be defeated by it.

I would also propose that we appear publicly to despair of ever completing the Difference Engine, allowing all attention to focus upon it while we direct our real efforts to the design of the secret Analytic Engine.

Yours truly, Charles Babbage

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National Cipher Challenge 2009, part 3B

August 17th 1834

Mon cher Pennylaine,

My colleagues and brothers in arms are most interested in your proposition. I firmly believe that we should be able to come to an agreeable arrangement that should satisfy both parties in this unusual transaction. The device that you are proffering to us has the potential to revolutionise human knowledge in the same way that the heroic insurrectionists of July Fourteenth revolutionised human affairs and political life.

As a gentlemen I am happy to accept your assurances that you are in a position to fulfill our bargain. However, not all of my colleagues are as accustomed to the honour of the English Gentleman, and I regret that they feel it is necessary to take further precautions to ensure that you complete the rather lengthy transaction upon which we are now embarking. They are all too aware of the sentiment in your Parliament at present, which, shall we say, lacks a certain affection for the Republic. My companions seek further assurance that you do not have ulterior motives for contacting me with such an interesting proposition, and they have proposed that you might provide written details of your Cabinet deliberations concerning France and her allies as a sign of your good faith.

Given the great risk to you in this affair. Might I counsel you to use a rather stronger method of secret communication in your reply? Perhaps employing a keyword cipher of some strength?

Vive La France, Monhier.

