

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

## **National Cipher Challenge 2009, part 1A**

June 9th 1833

My Dear Miss Lovelace,

Our meeting could not have been more timely – my recent travails had brought low my ambition for the power of steam-powered computation but in you I found the enthusiasm I once owned and it has rekindled my determination to finalise the design of the world's first mechanical computing engine; perhaps one which will assist in the task of decyphering your late father's enigma.

Whether I shall be allowed to construct a larger engine of this kind, and bring to perfection the others I described at our meeting, will in a great measure depend on the nature of the encouragement I may receive from the government. In this regard I would most humbly beseech you to maintain your great discretion concerning your reservations about Lord Pennylaine. He has most considerable influence on the Chancellor and our future plans may depend on his support. He showed great interest in our ideas last evening and whatever his motivation, I feel certain it will be to the great benefit of our nation and ourselves to gain his support for this enterprise.

The commission placed upon me, dare I now say, placed upon us, "To bring to perfection an engine for calculating mathematical tables" falls so very far short of our new ambition: to bring about a revolution in our means of computation which may be brought to bear upon problems far beyond current reach and imagination.

Your faithful servant,  
Charles Babbage

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

## **National Cipher Challenge 2009, part 1B**

1833 Diary of Pennylaine - 30th June

Babbage is pressing the Treasury in the matter of the new workshop. He seems most agitated to ensure that the already completed components and drawings should be placed in fire proof storage, and I see many advantages in bringing the production closer, where I might keep a daily eye upon proceedings. Brunel's friend Clement, the chief engineer for the project is most reluctant to agree to the move and I shall ask the Treasury if they might find the means to persuade him.

Met a most interesting Parisian gentleman at the gaming tables last night who showed a marked interest in my access to the Difference Engine designs. Friend of Niepce who worked with Daguerre on their heliograph so his enthusiasm may have been purely mechanical, but I had the impression that his interest was more than passing, and was happy to give him the impression that my relationship to the device might prove to be of great personal benefit. These discussions are always difficult – as much as anything, his English conversation was limited, (though not appallingly, as some Parisians' attempts are) but in all, I believe I may have allowed him to assume that there exists for him, and for all France, the chance of a mutually beneficial arrangement.

First things first. We must settle the issues concerning the construction of the Difference Engine, lest I have nothing to sell. The development of Babbage's more ambitious designs may take many years, and I have debts I must settle now. I have hopes that the DE plans I took from the workshop in Prospect Place might have some value to Niepce's contacts in London, though naturally I merely hinted at the possibility.

