

30 W 15<sup>th</sup> St.

N. York, 1886 Dec 30.

My dear Margaret:

I am as deeply touched by  
your generosity, as if you had  
made me a present; and doubt-  
less you think it ~~highly~~ some-  
what problematical when you  
see your money again. Never-  
theless, I have no intention of  
remaining so poor as I am,  
and if there is no other way,  
if the world does not care to  
pay for my philosophy, I will  
abandon that and apply my  
logic to private ends. I mean  
at once to advertise that I will

P.S. If you will send me a copy of your last paper on your machine, I will set to Devil's  
Advocate, by attacking



give lessons to correspondence  
in the art of writing. If this  
idea is as successful as I hope,  
I shall not keep you long wait-  
ing. If not, I have others.

I am very sorry I have mis-  
sed you. I want to talk to you  
about my great Idea in philo-  
sophy. I would gladly go to  
Princeton & do so.

You spoke, when I saw you,  
as if disappointed with the  
reception your machine had  
met with. I wish I could  
see it. My impression is that  
it has two defects; first, I  
believe it only extends to four  
simple terms instead of to six



as it should; and second, I believe it does not reduce the solution to its simplest expression. It ought to perform 4 operations, or 3 at least.

First it should develop any expression as a into  $abcdef + abcdef + abcdef + \text{etc.}$  Second it should reduce expressions; for instance

$abcdef + abcdef + abcdef$   
into  $abcde + abcdef$ .

Third, it should multiply two developed polynomials, if not any two. Fourth, though not absolutely required, it would be well to have it capable of adding. I think you ought to return to



by no means hopeless to expect to make a machine for really very difficult mathematical problems. But you would have to proceed step by step. I think electricity would be the best thing to rely on.

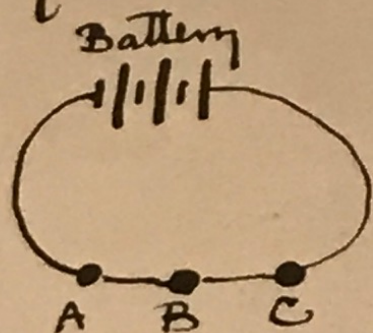


Fig 1.

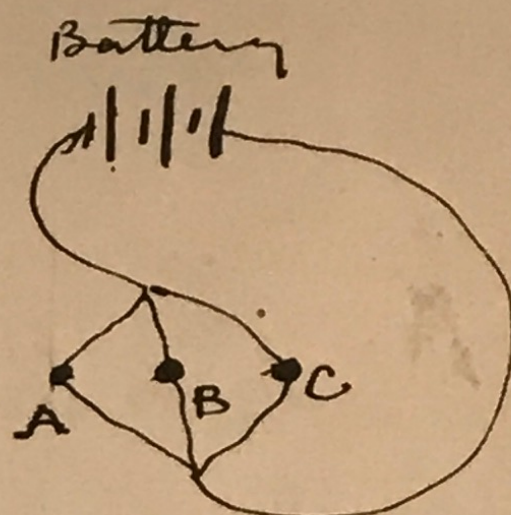


Fig 2.

Let A, B, C be three Keys or other points where the circuit may be open or closed. As in Fig 1, there is a circuit only if all are closed; in Fig. 2. there is a circuit if any one is closed. This is like multiplication & addition in Logic.

Yours faithfully C.S. Peirce



