

'Reasoning Machine' (pub. 15.04.13-13:23). Quote in M. Bergman & S. Paavola (Eds.), *The Commens Dictionary: Peirce's Terms in His Own Words. New Edition*. Retrieved from <http://www.commens.org/dictionary/entry/quote-logical-machines>.

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**Term:** Reasoning Machine

**Quote:** Every reasoning machine, that is to say, every machine, has two inherent impotencies. In the first place, it is destitute of all originality, of all initiative. It cannot find its own problems; it cannot feed itself. It cannot direct itself between different possible procedures. [—] This, however, is no defect in a machine; we do not want it to do its own business, but ours. [—] We no more want an original machine, than a house-builder would want an original journeyman, or an American board of trustees would hire an original professor. If, however, we will not surrender to the machine, the whole business of initiative is still thrown upon the mind; and this is the principal labor.

In the second place, the capacity of a machine has absolute limitations; it has been contrived to do a certain thing, and it can do nothing else. For instance, the logical machines that have thus far been devised can deal with but a limited number of different letters. The unaided mind is also limited in this as in other respects; but the mind working with a pencil and plenty of paper has no such limitation. It presses on and on, and whatever limits can be assigned to its capacity today, may be over-stepped tomorrow. This is what makes algebra the best of all instruments of thought; nothing is too complicated for it. And this great power it owes, above all, to one kind of symbol, the importance of which is frequently entirely overlooked - I mean the parenthesis.

**Source:** Peirce, C. S. (1887). Logical Machines. *The American Journal of Psychology*, 1, 165-170.

**References:** W 6:70-71

**Date of** 1887

**Quote:**

**URL:** <http://www.commens.org/dictionary/entry/quote-logical-machines>