The formula of analogy is as follows:-

\[ S', S'', S''', \text{ and } S'''' \text{ are taken at random from such a class that their characters at random are such as } P', P'', P'''. \]
\[ t \text{ is } P', P'', \text{ and } P'''. \]
\[ S', S'', \text{ and } S'''' \text{ are } q; \]
\[ \therefore t \text{ is } q. \]

Such an argument is double. It combines the two following:-

1
\[ S', S'', S'''' \text{ are taken as being } P', P'', P'''. \]
\[ S', S'', S'''' \text{ are } q. \]
\[ \therefore (\text{By induction}) \hspace{5pt} P', P'', P''' \text{ is } q. \]
\[ t \text{ is } P', P'', P'''. \]
\[ \therefore (\text{Deductively}) \hspace{5pt} t \text{ is } q. \]

2
\[ S', S'', S'''' \text{ are, for instance, } P', P'', P'''. \]
\[ t \text{ is } P', P'', P'''. \]
\[ \therefore (\text{By hypothesis}) \hspace{5pt} t \text{ has the common characters of } S', S'', S'''. \]
\[ S', S'', S''' \text{ are } q. \]
\[ \therefore (\text{Deductively}) \hspace{5pt} t \text{ is } q. \]

Owing to its double character, analogy is very strong with only a moderate number of instances.


References: W 2:46-47; CP 2.513

Date of Quote: 1867

URL: http://www.commens.org/dictionary/entry/quote-natural-classification-arguments