The solution is

$$t = (A + a)\ (B + b)\ (C + c) \dots + u\,(A'a + B'b + C'c + \dots).$$

The resultant is verified by hypothesis since it is

$$ABC \dots = 0,$$

which is the resultant of the given equation

$$f(x, y, z, \dots) = 0.$$

We can see how this equation contributes to restrict the variability of t. Since t was defined only by the function φ, it was determined by the double inclusion

$$abc \dots < t < a + b + c + \dots .$$

Now that we take into account the condition $f = 0$, t is determined by the double inclusion

$$(A + a)\ (B + b)\ (C + c) \dots < t < (A'a + B'b + C'c + \dots).$$ [1]

The inferior limit can only have increased and the superior limit diminished, for

$$abc \dots < (A + a)\ (B + b)\ (C + c) \dots$$

and

$$A'a + B'b + C'c \dots < a + b + c \dots .$$

The limits do not change if $A = B = C = \dots = 0$, that is, if the equation $f = 0$ is reduced to an identity, and this was evident *a priori*.

42. The Method of Poretsky.—The method of BOOLE and SCHRÖDER which we have heretofore discussed is clearly inspired by the example of ordinary algebra, and it is summed up in two processes analogous to those of algebra, namely the solution of equations with reference to unknown quantities and elimination of the unknowns. Of these processes the second is much the more important from a logical point of view, and BOOLE was even on the point of considering deduction as essentially consisting in the *elimination of middle*

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[1] WHITEHEAD, *Universal Algebra*, p. 63.