Let U be any term; then the determination of U:

$$U = N'U + NU'$$

is equivalent to the proposed equality; for we know it is equivalent to the equality

$$(NU + NU' = 0) = (N = 0).$$

Let us recall the signification of the determination

$$U = N'U + NU'.$$

It denotes that the term U is contained in N' and contains N. This is easily understood, since, by hypothesis, N is equal to 0 and N' to 1. Therefore we can formulate the *law of forms* in the following way:

To obtain all the forms equivalent to a given equality, it is sufficient to express that any term contains the logical zero of this equality and is contained in its logical whole.

The number of forms of a given equality is unlimited; for any term gives rise to a form, and to a form different from the others, since it has a different first member. But if we are limited to the universe of discourse determined by n simple terms, the number of forms becomes finite and determinate. For, in this limited universe, there are 2^n constituents. Now, all the terms in this universe that can be conceived and defined are sums of some of these constituents. Their number is, therefore, equal to the number of combinations that can be made with 2^n constituents, namely 2^{2^n} (including 0, the combination of 0 constituent, and 1, the combination of all the constituents). This will also be the number of different forms of any equality in the universe in question.

44. The Law of Consequences.—We shall now pass to the law of consequences. Generalizing the conception of BOOLE, who made deduction consist in the elimination of middle terms, PORETSKY makes it consist in the elimination of known terms (*connaissances*). This conception is explained and justified as follows.