In fact, we have the following formal implications:

$$(N + X = 0) < (N = 0) < (NX = 0),$$
$$(N'X' = 1) < (N' = 1) = (N' + X' = 1).$$

Applying the law of forms, the formula of the consequences becomes

$$U = (N' + X')\, U + NXU',$$

and the formula of the causes

$$U = N'X'U + (N + X)\, U';$$

or, more generally, since X and X' are indeterminate terms, and consequently are not necessarily the negatives of each other, the formula of the consequences will be

$$U = (N' + X)\, U + NYU',$$

and the formula of the causes

$$U = N'XU + (N + Y)\, U'.$$

The first denotes that U is contained in $(N' + X)$ and contains NY; which indeed results, *a fortiori*, from the hypothesis that U is contained in N' and contains N.

The second formula denotes that U is contained in $N'X$ and contains $N' + Y$ whence results, *a fortiori*, that U is contained in N' and contains N.

We can express this rule verbally if we agree to call every class contained in another a *sub-class*, and every class that contains another a *super-class*. We then say: To obtain all the consequences of an equality (put in the form $U = N'U + NU'$), it is sufficient to substitute for its logical whole N' all its super-classes, and, for its logical zero N, all its sub-classes. Conversely, to obtain all the causes of the same equality, it is sufficient to substitute for its logical whole all its sub-classes, and for its logical zero, all its super-classes.

47. Example: Venn's Problem.—*The members of the administrative council of a financial society are either bondholders or shareholders, but not both. Now, all the bond-*