

would demand, in a good State of large-scale cultivation employing horses, the use of 333,334 ploughs at 120 acres of land per plough, 333,334 men to manage them, and 40 million acres of land.

This cultivation can, with 5 or 6 billions in advances, be extended in France to more than 60 million acres.

We are not speaking here about small-scale cultivation, executed with oxen, where more than one million ploughs would be needed, and about 2,000,000 men in order to exploit 40 million acres of soil, which would yield but two-fifths of the production that large-scale cultivation produces. This small-scale cultivation, to which the Farmers are reduced (lacking the wealth to establish the original advances) is undertaken at the expense of the same landed properties used in great part for the costs; the excessive annual expenses for the subsistence of the multitude of men occupied with this type of cultivation, require the absorption of nearly the whole produce. This unprofitable cultivation, that results in poverty and the ruin of nations, has no relation whatsoever to the order of the Table, based as it is, on the condition of half of the employment of one plough, where the annual advances can, by means of the fund of the first advances, produce one hundred per cent.

The complete original advances for the furnishing of one plough in large-scale cultivation, and for the first fund of expenses in animals, instruments, seed, food, upkeep, wages, etc. (in the course of two years' work before the first harvest), are estimated at 10,000 liv.; thus the total for 333,334 ploughs is . . . 3,333,340,000.

The interest on these advances ought to bring in at least 10 per cent, because the products of agriculture are exposed to ruinous accidents; every ten years, at least, destroy the value of the crop of one year. Moreover, these advances demand much maintenance and many renewals; thus the total interest on the original advances of the establishment of the Laborers, is . . . 333,322,000.

The meadows, the vineyards, the lakes, the woods, etc., require few original advances on the part of the Farmers. The value of these advances can be reduced, by including the primitive expenses of the plantations and other works executed at the Proprietors' expense, to . . . 1,000,000,000.

But vines and horticulture demand many annual advances which, cited jointly with those of the other parts, can, on an average, be included in the total annual advances shown above.

The total annual reproduction of the net produce in annual advances with their interest, and in interest on original advances (rated in agreement with the order of the table) is . . . 2,543,322,000.

The territory of France, with advances and sales, could produce as much and even much more.

In this amount of 2,543,322,000, there are 525 millions that are half of the reproduction of the annual advances used for the feed of animals. There remains (if the whole tax goes back into circulation, and if it does not affect the advances of the Laborers), 2,018,322,000.

That is, for the expense of the men on an average, there are 504,580,500 for every million family heads, or for one family head 562 liv., which risks reduce to about 530 liv. At this rate a State is rich; and the people live there in comfort.

The soil that produces annually in profit to the people, 2,543,322,000, of which 1,050,000,000 is the net produce, being estimated at the rate of 30 deniers (farthings), is from this point of view a wealth of 33,455,000,000, to which one must add the 4,333,340,000 of original advances; the total is 36,788,340,000, joining to it the 2,210,500,000 of annual produce.

The total, expenses included, of the wealth of the class of productive expenses will be 40,331,660,000.

The value and the product of cattle have not been estimated sepa-

ately because they have been included in the advances to the Farm and in the total of annual products.

We put lands here, because, relative to their market value, one consider them in some way as personal wealth, in that their price subject to variations in the condition of other wealth necessary cultivation; for lands deteriorate, and the Proprietors lose on market value of their landed properties in the proportion that wealth of their Farmers declines.

We are speaking of a rich nation using the advances described that bring her annually—without waste—1 billion 50 millions of produce. But all this wealth maintained in succession by the annual produce can be destroyed, or lose its value, in the degeneration of agricultural nation through the simple waste of the advances. Inductive expenses can make great inroads in a short time through eight principal causes:

1. Poor form of taxation, which would bear on the advances of the Cultivators. *Noli me tangere*; this is the motto of advances.
2. Overcharge on the duty for the expenses of collection.
3. Excess of the luxury of ostentation.
4. Excess of litigation expenses.
5. Want of foreign trade for products of the landed properties.
6. Want of liberty in interior commerce in the provisions of soil and in cultivation.
7. Personal hardships of the inhabitants of the land.
8. Lack of return of the annual net produce to the class of productive expenses.

Comment on the Table

By DUPONT DE NEMOURS

THE more one penetrates this immense study, comprising that can multiply or destroy wealth, increase or diminish well-being of mankind, the more one is confronted with problematic cases to be solved by calculation. It is not sufficient to know how to calculate in general, and even to own the Formula of the Economic Table. One must be strongly attentive to the manner of putting or problem, and of assembling the facts for it. For without the most scrupulous attention to the facts that one applies, and without precise inquiry into all other facts that are, or may inseparably be bound to the former, one will come only to spurious results that could be very dangerous guides in practice. The reason for this is that the Arithmetical Formulas are only means to assist the mind, by registering in measure, a range of consequences too multiplied for the intellect alone to follow their march to the last. These Formulas are excellent instruments to deduct with exactness and ease the results of given conditions; but like the alembic, they return nothing but what one puts into them; and it is an art to discover the facts, to grasp their relations, to assemble them in a regular order to discover the science of political arithmetic. A lofty science whose principles depend only on their own evidence, assures their consequences in the fidelity of the deductions.

In order to offer an example of the procedure that one ought to follow for the solution of economic questions (all the more embarrassing as they are interlaced) . . . for one who wants to know the immutable truths of the most advantageous physical order of mankind united in society, the author of the Economic Table has chosen as his object the price of products; for it is as much by the price of products as by their quantity that one can judge the to