

"1.—What forms of construction will satisfy the traffic in the most satisfactory manner?

"2.—What will be the cost of such structures?

"3.—What mileage should be constructed in the first year after the war?

"4.—What methods should be adopted to ensure the work being carried out? and

"5.—What are the best methods of financing the scheme?"

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Labor and the Engineer

Sir,—Dr. Mann, in his report on engineering education, makes note in passing:—"Back in 1914 most people believed that the war could not last long because money enough could not be found to finance it. But three years of experience has made it clear to everyone that, although money is plentiful, it is useless if there is nothing to buy."

A simple and homely illustration that may serve to illuminate another phase of the same idea. Assume that ten men start out together in our Canadian North country to make homes for themselves. They have each a thousand dollars in cash. They are of different trades and callings. The country into which they go is capable of yielding up the necessities of life. They co-operate by performing each the task for which he is best trained and adapted. Each is paid by his fellows for work he does for any of them according to a prearranged schedule of wages. We imagine them isolated from the outside world.

At the end of a reasonable period of time we may imagine them surrounded by buildings, furniture, etc.,—everything, in fact, which their peculiar skill and the neighboring resources would permit them to create. Taken collectively, the working capital would evidently be the same as at the outset, though differently distributed among the individuals. We notice that it served a very useful purpose in making adjustments amongst the different individuals and in carrying over value from one period to another but we must admit that, backed by confidence in one another they could have attained the same identical result without it. From this we might concede the time honored conclusion that, while capital is helpless without labor, labor is far from helpless, though handicapped without capital.

We might further suppose, that by laying tribute against the circulating medium in the way of interest or other artifice, one man, like the banker of a roulette wheel, would eventually get control of all the money in the hypothetical community.

We could go on complicating our simple problem by introducing new considerations until we had a case as complex as that of actual present day conditions without gaining much from the viewpoint of our present discussion. We have gone far enough to emphasize the fact that the actual things which these imaginary men created by the work of their hands for their future enjoyment arose without the absolute necessity of the employment of money. We have raised the question of the legitimacy of the private control of the circulating medium and we might suggest that its autocratic control might be neutralized by the simple expedient of letting it alone.

Private supply and control of circulating medium, might be illustrated by the performance of a number of

isolated pumping stations, pumping water from individual reservoirs to supply a community living on a hill. We must impose that the water so energized loses nothing in volume in its travels and returns eventually, after use, to one or other of the reservoirs. We commence with reservoirs full and permit no additions from outside sources. We can imagine the operators of the individual plants at great pains to see that the same amount of water gets back to the tank from which it left and that none be permitted to go dry.

To illustrate Government control of circulating medium we need only imagine the reservoirs connected by pipes in such a way that they have always a common water level. In such a case individual worries would at once be eliminated for the simple reason that all the water would eventually get back to the connected reservoirs because it could possibly get no place else.

Private supply of capital, among other restrictions, carries with it the idea of loss of income to individuals who are capable of feeling in their persons, therefrom, embarrassment, penury and want. No such conception is possible in connection with Government supply. Our illustrations seem to show that it is impossible for a Government to suffer loss in the same way as individuals or yet feel it if it did.

In the mere presentation of the idea, we would not insist that a Government could not bring about much distress by a foolish manipulation of capital and tampering with the amount. Unfortunately, the amount necessary to accomplish a given result under given conditions has never been made the object of public investigation. Until Governments undertook war financing, the amount of money available has been arbitrarily decided, in relation to the amount of gold. Nor do we propose to state that Governments could not suffer loss in their dealing with outside parties.

I suppose that here someone will rise to state that we are not a self sufficient country, and that it would be foolish and impossible to try to be so. The answer must be that, until we have discovered some new form of slavery or mechanical perfection in work, we must be to a great extent self sufficient. It remains to be pointed out and clearly defined just in how much we can be self sufficient and how much we need to depend on outside sources for the things we consider worth while; and having done so to indicate how we are to look upon and govern ourselves in our different relationships and adopt policies to cover the distinct cases.

Having defined our self sufficient relationships, let us look further into what may be expected from a pooling of our capital resources. If we agree that under such conditions no part of our circulating may evaporate and its corollary that the only things we can waste, after all, are time and energy, does it not bring us to some new conceptions of the possibilities of the work of our people? In times of general unemployment, can we not, then, go ahead and develop our doubtful mineral resources? Can we not hire uneducated people to go to school? Can we not pay those in semi-criminal occupations to sit idle? In short, can we not safely embark on the thousand and one enterprises which we all realize to be for the general good of humanity but in which private capital would not be justified in looking for immediate profit? We ask ourselves, in other words, if it is possible to destroy an idle man's time? Can we destroy something that does not exist? We now act as if we believed this possible. Is this fact alone not sufficient to raise the suspicion that there has been operative somewhere a false premise?