

government, but is reached sooner than at that point.

What will be the precise sociological changes in the future is of course hazardous to prophesy, as it is impossible to lift even a small corner of the curtain suspended over the unknown future. But in these days of general doubt and disappointment, it may be worth while to review a few of the high spots of the enormous progress made by our civilization in the last century and a half. A local picture shows that since the French Revolution, the population of the United States has increased more than thirty times and that of Greater New York 250 times. But these are merely conspicuous examples of the growth of the only real unit there is, viz., world economy. Relatively speaking, the development of the backward countries from a state of semi-savagery to a civilized state is even more spectacular than that of New York.

Today this world of ours has two billion people spread over a land area of fifty-one million square miles. A network of railroads covers over three-quarters of a million miles and transported in 1929 almost four billion tons of freight, that is, about two tons per capita. Something like 125 pounds of steel were consumed per inhabitant, and 300 billion kilowatt hours, or 150 per capita, were burned up. To realize what electrical power meant in the progress toward industrial mechanization as well as a comfort of living unknown even in the palaces of Versailles and Fontainebleau, it may be worth while to mention that the total mechanical horsepower installed in this country has a pulling power considerably in excess of that possessed by all the men in the world if they were working as slaves. What an impossible dream for even the most imaginative prophets of the Bible!

Of course, it is not only the pulling power but the nature, form and quality of this power—electric lights, radios, etc.—that counts.

In 1929, this world was doing an international trade one way of \$100,000,000 per day, or \$17 per capita per annum, a figure almost as large as the per capita annual income of some of the backward countries. Today this trade, as well as most of the other indices of economic activity, has dropped from 40 to 50 per cent. This race of ours is closely knitted together by 33,000,000 telephones which can now be connected over the major part of the planet, and by a postal service which before the depression handled eighty billion pieces of mail per annum, or forty pieces per capita. These and many other figures that may be cited are an index of the amazing achievements since

the breakdown of the feudal system. They can only be understood in the light of the lowly beginnings of our race which fought in the jungle like allied species—apes, etc.—for food and safety. No single nation has been responsible for this progress. It has been the genius of the race to devise the modern system of communication and co-operation which has practically obliterated national boundaries. Each and every product today has required the efforts of each and every people of the world. For instance, the paper on which this is written has been produced by workingmen who drink coffee grown in Brazil, ride in automobiles or buses which use East Indian rubber, etc., *ad infinitum*. So inter-related and interwoven has the whole economic structure become that it may sound like a platitude, although it is too frequently forgotten, that international economy is a molecular, and not a mechanically divisible, structure. It cannot maintain its present heights if it is dislocated and cut up. It will survive and move to greater heights if the people become world minded.

If time permits, I should like to end my observations with a few suggestions which would supplement those of the distinguished speakers.

1. The large fixed or semi-fixed items of costs make it impossible to reduce expenses in proportion to prices. Yet we must cut the coat to fit the cloth. Present methods, whereby the manufacturer undertakes not only to process goods but to market at fixed prices the various proportions of the products belonging to the various participants in production, from the bondholder and landlord down to the wage earner, make it impossible to resume production when the level of prices is catastrophically shrinking. Our society is basically nothing but a conglomeration, organically knitted together, of industrial co-operatives, in which the participants are partners, although not necessarily equal partners. As such we all produce and earn *not* dollars, but steel, ton miles, automobiles, kilowatt hours, shoes, etc. If we were to be paid in percentages of the final product produced, that is, in kind or due bills, and had organized markets to sell such goods, or clearing houses to exchange them, we could immediately absorb at least some of the unemployed who would produce the things they consume. The economic process is nothing but a matter of filling warehouses (production) and emptying them (consumption). All the producers and participants in production produce all the things they themselves consume. The method suggested would, in addition, lessen the disruptive

influence of the present price inequalities that exist.

2. If in accordance with this system of gross profit-sharing, our books were kept in terms not only of dollars, but in terms of physical goods produced, we should have of necessity, as I have endeavored to show in studies of specific industries, a better visualization of the real costs, including depreciation, obsolescence and other charges. These are today taken out of the book assets by the inexorable market in huge chunks of deadwood, instead of piecemeal annually, as would be the case under the bookkeeping methods that more nearly tell the truth. All this may sound a bit literary and academic, and so perhaps it is, but the right theory is still the only instrument in our possession.

As a practical, immediate proposition, I should like to summarize some of the concrete suggestions which I have made in some of my writings on this subject:

1. The formation of a National Economic Board. This Board should rest on our trade organizations. These in my opinion are today the only bodies on which an effective system of co-operative individualism could be rapidly built. In another place, I defined co-operative individualism as "a happy blend of the dynamic power of individualism and the equipoise of social self-control." The Board would immediately set to work to: (a) Find out how to employ all the employable people, if need be by taxing each one of the employed into taking on an assistant. Ours is a *paper civilization* based on confidence and trust. We must re-establish this confidence at any price if we are to achieve anything. Nothing but employment will apparently do the trick. After we have spread whatever employment there still is, and thus done away, to a large extent, with the most destructive and ugly expression of the present depression, viz., the fear of those who are still employed and the humiliation and sense of futility and despair of the unemployed, we can begin to plan on how to increase the economic activities and national income. (b) Find out how to overcome the price inequalities and their paralyzing effect on the utilization of our productive facilities, if need be by special equalization sales taxes. (c) Prepare plans for a speedy formation of a Public Welfare Industry.

2. An International Economic Council that would aim to stop the present process of decomposition of international economy and gradually rehabilitate it by stabilizing world currencies and world exchanges. This could be done by the resumption of international

lending, under governmental auspices at least at the beginning, by the revision of international debts in accordance with the capacity to pay—a principle of which everybody speaks—and the capacity and willingness to receive—a principle which few care to mention—and by general liberalization of international economic intercourse.

The above is not what our so-called "natural" and "free" economist would endorse. But then I do not believe in the good graces of Nature. One of the most common natural phenomena which I have seen is death, and of course the human race is not ready to surrender to this kind of Nature. We do not need to.

Royal Meeker.* Virgil Jordan has presented a thought-provoking analysis of the causes and the cures for the present depression.

He attributes our economic woes to the hangover of "deficit-economy" ideas in a "surplus-economy" age. By "deficit economy" he evidently means a system of laborious production and niggardly consumption in which it is necessary for the great masses of men to work long hours at short wages to produce insufficient food, clothing, shelter and fuel to enable men to live in comfort or decency, even if total production is shared equally. By "surplus economy" he apparently means a system of power-machine mass production which has the potentiality of producing so abundantly that every worker who is willing and able to work can have all necessities, many comforts and some luxuries so that living becomes much more interesting and worth while than the ancient "struggle for existence." Under "surplus economy" men have surplus goods and leisure to think and develop arts instead of devoting their whole energy and waking lives to the business of keeping a hungry, shivering body and a dwarfed, starving soul linked together.

Mr. Jordan declares that "surplus economy" has broken down because modern improved methods of production have produced the surpluses but ancient unimproved habits of "saving" have prevented men from consuming the rich and varied products their ingenuity and industry have produced. Instead of enjoying a richer and more leisurely life men go on adding to the existing oversupply of plants and tools for producing more goods to be wasted.

Man, the rational animal, behaves in the most unreasonable manner. Making things which are not, or cannot be, used is inexcusable folly. Most of us have

*With Professor Irving Fisher, New Haven, Conn.