

ENGINEERING-ECONOMICS

# Specialists in Three Fields Would Rule Technologic State

## There Are No Business Men Who Drive for Profits In Plan Developed by Prophets of Technocracy

This is the second article of a series presented to illuminate the backgrounds and objectives of the movement that has found expression in the discussion of Technocracy. The material is given as information and news, not as our opinion or with our endorsement. The next article will tell how the technologic state would operate without stocks, bonds or debts.

**R**ESOURCE engineers, production engineers and production economists would be the triumvirate of kinds of technicians that would rule the economic life of the nation under the "practicable soviet of technicians" visualized by Thorstein Veblen over a decade ago. The ideas of this radical social philosopher are credited with leading to the technocracy movement.

Allocation of natural resources in power, equipment and materials, "for which there has been substantially no provision under the old order" and also the country's transportation and goods distribution systems would be under the same control, according to the Veblen plan which is outlined in his book, "The Engineers and the Price System." Veblen wrote:

"The central directorate will apparently take the shape of a loosely tripartite executive council, with power to

act in matters of industrial administration; the council to include technicians whose qualifications enable them to be called Resource Engineers, together with similarly competent spokesmen of the transportation system and of the distributive traffic in finished products and services. With a view to efficiency and expedition, the executive council will presumably not be a numerous body; although its staff of intelligence and advice may be expected to be fairly large, and it will be guided by current consultation with the accredited spokesmen (deputies, commissioners, executives, or whatever they may be called) of the several main subdivisions of productive industry, transportation, and distributive traffic.

### End to Unemployment Seen

"Armed with these powers and working in due consultation with a sufficient ramification of subcenters and local councils, this industrial directorate should be in a position to avoid virtually all unemployment of serviceable equipment and man power on the one hand, and all local or seasonal scarcity on the other hand. The main line of duties indicated by the character of the work incumbent on the directorate, as well as the main line of qualifications in its personnel, both executive and advisory, is such as will call for the services of Pro-

duction Engineers, to use a term which is coming into use. But it is also evident that in its continued work of planning and advisement the directorate will require the services of an appreciable number of consulting economists; men who are qualified to be called Production Economists.

"The profession now includes men with the requisite qualifications, although it cannot be said that the guild of economists is made up of such men in the main. Quite blamelessly, the economists have, by tradition and by force of commercial pressure, habitually gone in for a theoretical inquiry into the ways and means of salesmanship, financial traffic, and the distribution of income and property, rather than a study of the industrial system considered as a ways and means of producing goods and services. Yet there now are, after all, especially among the younger generation, an appreciable number, perhaps an adequate number, of economists who have learned that 'business' is not 'industry' and that investment is not production. And here as always, the best is good enough, perforce."

The place of the consulting economist or production economist in the Veblen plan is analogous to the part which legal counsel now plays in the maneuvers of diplomatists and statesmen and he described them as something in the way of industrial statesmen of the new order.

### Possibility of Warfare

Explaining the need of the production economists, Veblen said that "the technical training that goes to make a resource engineer, or a production engineer, or indeed a competent industrial expert in any line of specialization, is not of a kind to give him the requisite sure and facile insight into the play of economic forces at large; and as a matter of notorious fact, very few of the technicians have gone at all far afield to acquaint themselves with anything more to the point in this connection than the half-forgotten commonplaces of the old order."

Although repeatedly declaring rule by technicians to be remote, Veblen did not overlook the possibility of warfare between the technicians and the present control of industry.

The powers and duties of the incoming directorate will be of a technological nature, he explained, inasmuch as the purpose of its coming into control is the care of the community's material wel-

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fare by a more competent management of the country's industrial system. And he added:

"Even in the unexpected event that the contemplated overturn should, in the beginning, meet with armed opposition from the partisans of the old order, it will still be true that the duties of the incoming directorate will be of a technological character, in the main; inasmuch as warlike operations are also now substantially a matter of technology, both in the immediate conduct of hostilities and in the still more urgent work of material support and supply." Business men and those contaminated with the businesslike viewpoint would be shunned and excluded from the new order of the rule by technicians, just as royalists are excluded from positions of control in soviet Russia today.

This is a fundamental part of the "soviet of technicians" outlined in 1919 by Veblen.

### Salesmanship Not Wanted

"To avoid persistent confusion and prospective defeat," Veblen wrote, "it will be necessary to exclude from all positions of trust and executive responsibility all persons who have been trained for business or who have had experience in business undertakings of the larger sort. This will apply generally, throughout the administrative scheme, although it will apply more imperatively as regards the responsible personnel of the directorate, central and subordinate, together with their staff of intelligence and advice, wherever judgment and insight are essential. What is

wanted is training in the ways and means of productive industry, not in the ways and means of salesmanship and profitable investment.

"By force of habit, men trained to a businesslike view of what is right and real will be irretrievably biased against any plan of production and distribution that is not drawn in terms of commercial profit and loss and does not provide a margin of free income to go to absentee owners. The personal exceptions to the rule are apparently very few.

"But this one point is after all of relatively minor consequence. What is more to the point in the same connection is that the commercial bias induced by their training in businesslike ways of thinking leaves them incapable of anything like an effectual insight into the use of resources or the needs and aims of productive industry, in any other terms than those of commercial profit and loss. Their units and standards of valuation and accountancy are units and standards of price, and of private gain in terms of price; whereas for any scheme of productive industry which runs, not on salesmanship and earnings, but on tangible performances and tangible benefit to the community at large, the valuations and accountancy of salesmanship and earnings are misleading.

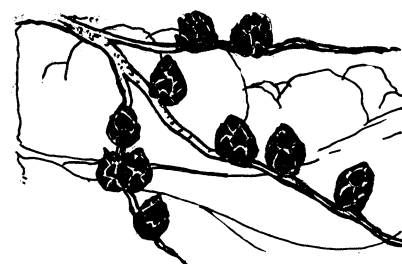
### Even Good Will Useless

"With the best and most benevolent intentions, men so trained will unavoidably make their appraisals of production and their disposition of productive forces in the only practical terms with which they are familiar, the terms of commercial accountancy; which is the same as saying, the accountancy of absentee ownership and free income; all of which it is the abiding purpose of the projected plan to displace.

"For the purpose of this projected new order of production, therefore, the experienced and capable business men are at the best to be rated as well-intentioned deaf-mute blind men. Their wisest judgment and sincerest endeavors become meaningless and misguided so soon as the controlling purpose of industry shifts from the footing of profits on absentee investment to that of a serviceable output of goods."

*Science News Letter, February 4, 1933*

So important are ladybird beetles to California farmers, as an aid in destroying crop pests, that the University of California has asked the public to report where the beetles may be found in large numbers.



### A Leafless Evergreen

WE ARE commonly accustomed to refer to the cone-bearing trees as "evergreens." The title does very well most of the time, for the evergreen habit is strongly characteristic of the group, which includes pines, spruces, firs, red cedars, arbor vitae and a number of other species. But there is one familiar cone-bearer that does not keep its needles all winter long as its kindred do, but drops them like the maples and oaks and hickories. This is the larch, or tamarack.

The native American tamarack is a swamp-loving tree, rarely to be found with its feet out of water. In some parts of the country it forms great forests in the flat wet lands bordering boggy lakes. In such places it is a pioneer, pushing out over the quaking bog ahead of all other trees, and assisting in the slow upbuilding of the drier land required by them. Although its native home is in boggy land, the larch does very nicely on higher ground when planted there, and enjoys some favor as an ornamental tree. For the most part, however, people seem to prefer the European larch, which forms a wider pyramid with its long, horizontal branches and slender, pendulous twigs. The cones of the European larch, also, are much larger than the tiny nubbins of the American species.

The timber of the tamarack was long held in low esteem, for it is rougher and more brittle than that of most other softwoods. But with the lumber famine that has arisen in the land as the result of our earlier greed and recklessness in sweeping off the more valuable trees, larch has found a place of its own in the American market.

*Science News Letter, February 4, 1933*

▼ The Science Service radio address next week will be on the subject

**R** EFFECT OF WORRY ON DIGESTION

**A** by Dr. A. C. Ivy

**D** Professor of Physiology, Northwestern University Medical School, Evanston, Ill.

**I** FRIDAY, FEB. 10

**O** at 12:45 P. M., Eastern Standard Time

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