



Cost of Conquest

DRAMATIC enough, to be sure, it is to think how our forefathers, starting at the Atlantic seaboard, swept like a great wave over the whole width of North America to the Pacific ocean. The swarms of early settlers climbing the Appalachian barrier into the Western Reserve country, sweeping away the forests and the Indians who lived in them, the irresistible surge of pioneers over the prairies, the 'Forty-Niners, the emigrants of the Oregon Trail, the trek of the Mormons, the reinforcements pouring in through Ellis Island—it all makes a pageant of the building of a great power that must thrill everyone who shares the American heritage.

We are often called upon to admire this as a peaceful conquest, by orators who conveniently forget such items as the Mexican war and the interminable Indian fighting. However, serious as that bloodshed was, even more serious in the final reckoning was the way our forebears, in the flush and enthusiasm of their youth, all too often bled the land. They cleared and burned millions of acres of forest, they plowed sloping lands, they laid bare the earth to the

attack of erosion that has poured rich topsoil down the rivers and darkened the March winds in the West, leaving the present generation of owners in possession of only the starved bones of the land.

All this is unnecessary, we have learned at the knee of epimethean science. We really know better now, but such is the force of sheer custom and habit, of necessity to meet debts and taxes, and even of eagerness for immediate profit, far too many landowners do not act on the basis of that better knowledge. Our fathers sinned against the land, but they sinned mostly without knowledge. We have the knowledge, so that if we persist in ways of error ours will be the greater guilt.

Conquest of the land does not need to mean devastation of the soil. In many parts of the earth, some of the earliest farmers, scarcely out of the Stone Age, learned that lesson thousands of years ago. Terrace cultivation was practiced in southeastern Asia, in the Mediterranean region, in our own Southwest, on the vine-clad banks of the Rhine, and a hundred other regions where agriculture had opportunity to become a settled and serious art not mere soil exploitation.

It behooves us to learn this rediscovered virtue. For, as Dr. Walter C. Lowdermilk of the Soil Conservation Service aptly paraphrases it: "What shall it profit a nation to gain all the gold in the world and suffer the loss of its soil?"

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PHYSICS

"Science Circus" Housed in Tents Without Inside Supports

HOUSED in a "big top" of a new type, with no internal poles and no outside guylines or stakes, a "science circus," will soon go on the road, playing in many parts of the country, Alfred P. Sloan, Jr., chairman of General Motors, announced. This circus is the "Parade of Progress," incorporating many features from the company's exhibits at the New York and San Francisco World's Fairs, including a section of the famed "Futurama."

War use of the big tent, though not mentioned by General Motors officials, is foreseen as one of its applications. It might form a mobile hangar, which could quickly be transported where needed and erected, either to replace structures destroyed by enemy bombs, or as a new building.

Named the "Aer-o-Dome," the tent consists of a synthetic skin, suspended from airplane aluminum alloy girders.

These are erected by machine, and form the outside of the assembly. The effect, it is said, is that of a silver dirigible balloon hangar or a huge umbrella turned inside out. It has a seating capacity of 1500, in addition to the large stage.

The Parade of Progress will travel in a caravan of 22 streamlined automobile transports and semi-tractor units. In cities where the show is given, these will be set up as side-shows, visitors being admitted to see exhibits that are built within.

In addition to the outdoor show, there will be another, "Previews of Progress," which is designed for indoor performances. This will travel west, playing in smaller cities.

According to Mr. Sloan, these shows will be dedicated "to the vital task of arousing the nation to the necessity of intensifying its research activities."

Our nation should be spending ten or even a hundred times as much as we do now on research, he declared.

"Only a cursory glance at what is taking place in the world today is needed to impress on one the importance of constant search for new products and processes," he stated. "And new products and processes will be equally important to take up the slack of men, money and materials when our present emergency shall have ended."

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