# SCIENCE

Friday, January 5, 1934

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## THE SOCIAL ADVANTAGES AND DISADVANTAGES OF THE ENGINEERING-SCIENTIFIC APPROACH TO CIVILIZATION<sup>1</sup>

By HENRY A. WALLACE

SECRETARY OF AGRICULTURE

I suppose you are all more or less familiar with that concept of the cyclical rhythm of civilization which has been popularized in recent years by Petrie, the Egyptologist, and Spengler, the German philosopher. According to this analysis, a civilization takes its origin in a profound, but as yet unexpressed new attitude on the part of a virile, agricultural people toward the universe. This profound, original feeling gives the bias to subsequent events throughout the life of the civilization. First, it manifests itself in great cathedrals and sculpture, next in painting, literature and music, followed by science, mechanics and wealth, and finally it manifests itself in dissolution, which comes because of a lack of faith in the worth-while-

<sup>1</sup> An address before the American Association for the Advancement of Science, Boston, Massachusetts, Decomber 29, 1933.

ness of the original attitude toward the universe and because of disgust with the material results which have finally been inspired by that attitude. According to this analysis we have now come to the late fall, the eventide of this civilization, and the coming of the engineer is like the coming of Indian summer in late October just before the cold and dreary days of winter.

Philosophical analysis of this sort, even when backed up by archeological research, can of course be merely suggestive. But after our experience with the world war and the depression of the past four years, we are led to question the American credo, based as it has been on faith in progress unlimited, derived from endless mechanical invention, improved methods of mass production and ever-increasing profits. Without accepting either the implicit pessimism of the Spenglerian twilight philosophy or the Pollyanna optimism

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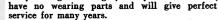
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