

Economics and Engineering By WALTER F. SWANTON (W. Henrietta, New York)

Ever since graduating from MIT in 1933, I've been trying to apply my engineering training to economics. Currently, I am estimating Economic Rent via computer.

Edward J. Dodson's Guest Editorial in the Spring GJ caught my eye. It's an old story, the blending of land into capital. John Bates Clark's Distribution of Wealth (c. 1906) was sparked by the fuss made over Henry George. Eliminating land as a separate factor was the only way Clark could overcome George's logic.

How to combat this glaring error in the face of acceptance by almost all professional economists baffled me until I hit on the following concepts:

- 1) The existence of three interconnected systems (real or physical, conventional or dollar-valued, and financial or paper claims).
- 2) Two basically different classes of capital (specific purpose or private, and broad purpose or public).
- 3) Five production functions: a) one describing the physical production of goods and services so as to maximize engineering profits; b) one describing how to maximize business profits under institutional restraints; c) one describing how to produce public goods and services so as to maximize political profits under institutional restraints; d) one describing how to upgrade the productivity of natural resources for the common rather than private good; e) one describing how to upgrade the productivity of human resources in the face of religious and institutional restraints.

As Louis F. Post once said, the basics of economics are simple; the details are incredibly complex.

(Mr. Swanton has summarized his work in a booklet entitled Graphical Econometrics which he says "condenses 60 years of reflection into a small package." He has made copies available, and the Georgist Journal will send you a copy for \$1.00.)