

Mathematics and the Single Tax, by J. J. POT,
Lunteren, Netherlands, Georgist Journal, Spring, 1976.

This is in reply to S.S. Gilchrist's comments in the Spring, Georgist Journal. If R is the site rent in cents per dollar, and 5 is 5% interest rate, then the percentage of rent collected is $R/(R + 5) \times 100$. "As the site rate increases, naturally the prime of title falls," says Mr. Gilchrist. So 100 is no longer 100!

Take his example of a "site worth \$1,000 on the market under present revenue conditions," i.e., after paying the tax. Before paying the tax the real site worth was \$1,200, for, as Mr. Gilchrist writes: "So, out of a total of \$60 worth he is paying \$10 to the community": $\$60 = 5\%$ of \$1,200, shared by the community (\$10) and the owner (\$50).

Mr. Gilchrist is confusing readers in saying that "a site worth yearly can be roughly estimated as one-twentieth (5%) of the market price of the title." For if the tax takes another 1%, the site worth yearly is $5 + 1 = 6\%$. Or, if Mr. Gilchrist nevertheless is right in saying one-twentieth, the real site worth is \$1,200. The share of the tax equals his formula: $R/(R + 5) = 1/(1 + 5) = 1/6$ (\$10 from \$60). At a tax rate of 5 cents per dollar, one has to ask "which dollar?" For 5 cents per dollar from the real site worth of \$1,200 is \$60; so there remains nothing for the "owner" and the title has no "market" price any longer.

Mr. Gilchrist's formula says: If the tax rate is 5%,

then $5/(5 + 5) \times 100 = 50\%$ of site rent collected. So the tax collector gets \$30 and the owner gets \$30. This, he says, is about one-twentieth of the market price. So the market price is $20 \times 30 = \$600$. Apart from a tax of \$30, the tax collector moreover took a property shift of \$1,200 — $\$600 = \600 . Think about it