NIH and other agencies—that is really directly related to the drug

field?

We know what the total research budgets are. We have received some material from time to time indicating expenditures by Federal agencies of hundreds of thousands or millions of dollars, part of which was spent in research on a particular drug or testing of a drug, but the amount spent on the drug alone was not clearly isolated so you could specifically identify it.

Are you aware of any studies, reports, by anyone who has attempted to identify the amount of money that goes into research that you would

say is related rather directly to the drug industry?

Or to put it another way, research of the kind that the drug indus-

try does?

I am not talking about molecular manipulation or anything like that.

Are there any studies of that kind?

Dr. Steele. Unfortunately, I do not know of any. All the ones I know of share the defect you have just described. They refer to project research. Only a small proportion of the project may be devoted to evaluating the particular drug.

Senator Nelson. We intend at some stage to have testimony from the various Government agencies on this but I though perhaps somebody had done a study and made some breakout of the funds spent in

this area. You are not aware or any such study?

Dr. Steele. No, I am afraid I am not. On page 3, Professor Whitney states that:

"* * * \$3 of additional stockholders money per dollar of net worth in 1950 went into drug manufacturing for every \$1 in all manufacturing * * *."

Stated in this manner, it sounds as if new stock issues were sold to

raise the three additional dollars. Actually, as Whitney explains in a footnote (without appearing to appreciate the significance of this factor), most of the increase came about from reinvestment of earnings. Professor Whitney is trying to have the best of two worlds: the Adam Smith world of atomistic competition, and the modern corporate finance world of noncompetitively high prices and profits, and discretionary plowbacks of retained earnings by management. On pages 2 and 3 Whitney implies that the first function of profit is the allocation of investment, which is true in the classical sense. But the classical theory of consumer sovereignty applied also to investors; in principle, all profits in a corporation, under this theory, should be paid out to shareholders, and the decision as to whether to reinvest in the same enterprise or in others should be made anew upon the receipt of each dividend. This would insure a more impartial appraisal of alternative uses of dividends; whether for reinvestment or for consumption spending, than does the modern system of having managements, rather than owners, decide upon the reinvestment of about half of total earnings. (The obvious tax disadvantages of higher dividends to high-income stockholders and underwriting costs for new securities have been instrumental in transferring discretion over total profits from stockholders to managers, but this does not alter the basic principle involved.)