Account number	Assets		Liabilities	
100, 101	Fixed capital	$100,000		
102	Depreciation of structures and equipment reserve (red)	10,000		
	Depreciated plant .... value	90,000	Stock ...... Bonds	$100,000
113	Depreciation replacement funds..	10,000		
		$100,000		

Then the answer is plain.

Since preparing the foregoing, the author's attention has been called to the decision of the Indiana Public Service Commission, Re: United Public Service Company of Rochester, Ind., P. U. R., 1918-F, page 316. In passing upon the matter of depreciation the commission comments as follows:—

"The commission is confronted with the fact that, after five years' operation of the law in Indiana, the intent of the depreciation provisions has not been realized. The practice, both in this state and elsewhere, is to dissipate these moneys.

"In estimating allowances to be made to cover depreciation, the Public Service Commission of Indiana adopts a rate allowance which presupposes that moneys provided to meet deferred depreciation shall not lie idle. Such moneys create the 'depreciation fund.' If this fund compounds itself, then the rate of allowance to cover depreciation may be made lower than otherwise. In other words, a fund so administered means a lower rate to the patrons or consumer than if such fund is not interest bearing. For the utility, the creating of such an actual depreciation fund constitutes an asset that should favorably influence its credit. In times of stress or disaster a utility having such a fund may be able to either borrow from this fund or convert or pledge securities held in such fund, and thus be relieved of heavy discounts otherwise incurred.

"Sound and desirable as is the theory, the practice in this and other states is almost universally different. Depreciation moneys are paid out in dividends or used in other ways. The result is that in many cases the 'depreciation fund' is a meaningless bookkeeping account. There is no reserve fund, though the patrons have provided money for such a fund. The public utility is, instead of being financially fortified, reduced to the practice of merely charging off annually on its books a certain amount of the value of its property, reducing rather than maintaining its property value. Often this is finally reflected in poor service. The consumer who has provided proper funds is penalized in service because of improper administration.

"The appended order provides that this utility shall take out of its revenues—the same as it will take moneys for operation, taxes, interest, and dividends—the money allowed and collected under the law, for depreciation; that it will pay such moneys into a depreciation fund; that such funds shall be held intact and separate at all times; that there shall be paid out of such funds all cost—including labor as well as materials—of replacing depreciation; that the funds shall be administered with proper accounting; that interest on such depreciation funds shall accrue not to the utility, but to the fund; that petitioner itself may, with limitations, borrow from the fund, but in such event shall place in said fund its own obligations, in the form of notes or bonds bearing interest payable to the fund.

"The order does not contemplate that, when depreciation funds are borrowed by the utility itself, there shall be a mere bookkeeping account. In other words, the moneys derived from allowances to cover depreciation that are made in rates are to be regarded as a trust fund provided, as prescribed by law, by those served for the benefit of the utility, but not in reality belonging to it until such moneys are translated into actual plant replacements; and such fund must be handled, at the utility's risk, to the best advantage of the consumers and patrons and stockholders and bondholders."

UNIT PRICE CONTRACTS vs. PERCENTAGE CONTRACTS*

By W. L. Darling

IN construction, one or more of three different methods are employed:—

First, company force;

Second, unit price or an agreed sum, with a provision for a percentage, to be increased or decreased as the cost of the work decreases or increases, compared with the agreed cost;

Third, a percentage based on the actual cost of the work.

In the present state of the art, I think it can be safely assumed that the first method should be used only when the work is too small to contract, or when the local or emergency conditions are such that it is not practical to contract, or when the owner has experts in a certain specialized line that are superior to those of the contractors.

The main question, therefore, is: Shall the second or third methods be used, and if the third, will it affect the art, and, consequently, the public?

Energy the Greatest Asset

To discuss it, it is necessary to examine the effort of the contractor himself. The great incentive is to make money, and it is this incentive that has created his value to the owner and to the public. The overcoming of obstacles, financial as well as physical, has produced energy and versatility that could have been acquired in no other way, and, to my mind, energy is his greatest asset. What use is it if he has all the intellect and physical qualities in existence if he has not the energy to use them?

He must have a knowledge of men and plant; where labor can be readily obtained and the plants available; he must know about his supplies, where they can be obtained and how best transported; he must know the market conditions and have an intimate knowledge of the work to be done.

If the work is done on unit price basis, the owner gets the results of the judgment and the experience of many men and many firms. One will see better where supplies are obtainable; another may have a better plant for the job; another may have a better method of doing the work, and it is the pitting of all these men, one against the other, that the owner gets the advantage of.

By the percentage method a man or firm is selected for managing the work; hence the owner gets the benefit of one man's knowledge, and the wrong man may have been selected. I have known men to make a bid on a piece of work by merely sizing it up, and knowing where the necessary outfits were and the men to whom it could be sublet. If he has made a bad guess, he simply has to find some way or means to back up his judgment. I believe some men become so familiar with work that their guess is as good, if not better, than some men's figuring. At any rate, the difficult tasks that they set for themselves bring out all the surplus energy that is in them, and this is what the owner gets the benefit of, and what he will not get should competitive methods be eliminated.

Turning Loss Into Gain

The contractor working on a unit price basis has not only a reputation, but also his very livelihood at stake. We have often seen a man take work at unit prices so low that a heavy loss seemed inevitable, but by using new methods, new tools and exerting surplus energy, he has been able to turn an almost certain loss into a profit for himself, and a much greater profit for the public, as these new methods can be used on further work and by other men.

Contractors, I believe, can materially improve the art of drawing closer lines between their business and the

*From an address delivered March 27th at an organization meeting of the Northwest Association of General Contractors, St. Paul, Minn.