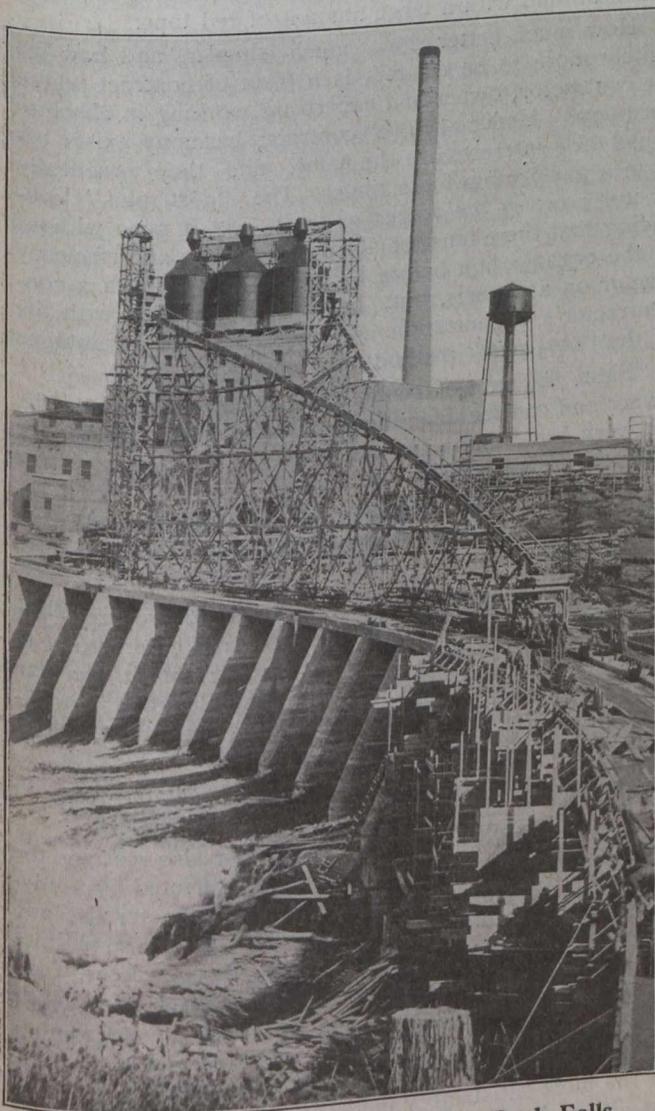


"LUMP SUM" VS. "COST PLUS" CONTRACTS*

By Fred. A. Jones

UNLESS a close analysis, based on actual experience, is made, the old-style "lump sum" or "spotter" method of contracting, apparently has a great many advantages.

It is generally thought that the "lump sum" contract is a protection against graft, and especially in public work, due to the publicity given to the lettings, and because of the stringent clauses in the contract or specifications by which the architect or engineer becomes a representative of the owner, and closely watches to see that the contract is performed in all respects. Another supposed advantage is in the idea that the exact cost can be determined better in advance than by estimating, and



Building the Concrete Dam at Smooth Rock Falls
(See Preceding Article)

further, the "lump sum" form of contracting enables the owner to avoid the embarrassment of selecting one contractor from among several, which at times, due to friendships or business reasons, might be awkward.

From the contractor's viewpoint there is a general feeling that more money can be made out of "lump sum"

work than under the "cost plus" method, and the average contractor likes the gamble, because all savings that can be effected are his, adding just that much to his profits, whether these savings are effected by actual economy in operation, change of the market condition, change of plans (which usually brings added profits), or by obtaining especially good treatment from the inspectors.

The objections to the "lump sum" contract from the contractor's point of view, are not as commonly supposed, due to hazards, because the hazards can be reduced to a minimum, if the contractor has ample capital, a good organization, and never submits proposals without having a double-checked estimate, with a reasonable margin of profit. I mean by a double-checked estimate, two separate and independent estimates made by two estimators, and handed to the construction manager, who compares them and makes up his cost figures from his experience and the two independent estimates. Of course, the contractor should be able to use good judgment in the selection of architects, engineers and owners, with whom he figures, because it is very easy for unfairness on the part of those with whom he deals to cause him large losses, but the only real hazards, other than poor management, are the elements, unscrupulous or careless bidding of competitors and unfairness of architects, engineers or owners.

There is another hazard that can be reduced to a minimum by good judgment, and that is in the letting of sub-contracts, for it must be remembered that even though a sub-contractor has furnished a good and adequate bond, yet, if the sub-contractor fails, the owner is looking to the general contractor entirely, with probably a penalty for delay in completion. The general contractor cannot call on the bondsmen of the sub-contractor until he can show a loss and the amount of the loss, which can only be done at the completion of the job; when the time arrives to show the loss and collect from the bonding company, you very seldom collect any money on a bond of this character, for, in the desire to rush work to completion, more money will be paid to the sub-contractor than is due him, or the bond violated in some other way.

A serious objection from the contractor's point of view, to "lump sum" contracting is that no matter how much time and money he has spent on his organization, he is usually classed with any other contractor who can furnish satisfactory bonds. This is due to the lack of appreciation by the average layman of the fact that there can be a very material difference in the structure when completed, as between two different contractors, in spite of all reasonable inspection, although apparently the plans and specifications have been complied with in both cases. This lack of knowledge and experience on the part of the average layman makes it possible for bids to be received, at times, from those incompetent to do the work in hand. Naturally, it frequently happens that a good job is spoiled for a good contractor by unintelligent bidding of others, and is spoiled for the owner because he does not receive that for which he pays, and, in addition frequently has law-suits and other troubles in connection with his work. But this is not the most serious objection. There have been so many chances taken in the past, and so much "rule of thumb" method used in estimating, together with real and unavoidable losses, due to "acts of God" or other causes beyond the control of the contractor, that very few contracting concerns really have a good standing with the banks. Lack of sufficient funds, by reason of this poor standing, frequently causes a loss in what should be a profitable contract. It is impossible for banks to check an estimate and determine whether at the end of a job the

*Abstracted from paper read before a state meeting of the American Society of Civil Engineers.