As a local problem it is a matter of considerable interest, but the method of dealing with the question, the making and placing of floats, the system of recording position of floats, and the general deductions are of interest to those having similar conditions to investigate.

THE ENGINEER A GOOD GUESSER.

The number of disasters, failures and law suits that have grown out of the phrase, "I guess," are legion, and yet the engineer must be a good guesser, must train the faculty of guessing, and frequently use it.

There are times when the public demand too much from the engineer in the way of a guess. Sometimes they expect him to view the location and then give an estimate. Clients write an incomplete letter, believing they can get an estimate by return mail. All this may be very absurd, yet the engineer requires to be a good guesser.

He may prepare his plans, his detail drawings, write specifications in detail, and complete his bills of material. For his estimate he must guess.

Sometimes the guess is a good one. Recently in a large public work the estimate was $450,000. The contract price was $442,750—a pretty good guess. We also know of work where the estimate was $150,000 and the contract price about $46,000. The guess was not so good. On a $50,000 bridge the tenders ranged from 20 per cent. below to 20 per cent. above the estimate. All this goes to show that the engineer requires to be a good estimator, but that at best he is frequently only a guesser—sometimes good, sometimes not so good.

It is not enough that the engineer be skilled in design and specification writing. He must be able to estimate with a reasonable degree of accuracy, and to do this he must study the contractor's methods and view the work from his point of view. He may take the average of a dozen similar works, and yet fail to consider the one item that may put this particular work in a class by itself. Erratic estimating makes it difficult for the contractor and difficult for the engineer. In view of this, we would say to the engineer: "Train yourself to be a good estimator, a good guesser."

Among the innumerable subjects, from steel under stress to the extermination of mosquitoes, with which the engineer is supposed to be familiar, dependable guesswork should not be neglected.

EDITORIAL NOTES.

The twenty-fourth annual meeting of the Canadian Society of Civil Engineers will be held at Ottawa, Ont., on Wednesday, Thursday and Friday, January 27th, 28th and 29th, 1910. We hope to be able to say more about the details of this meeting in the near future.

* * * *

Christmas time has many special calls. The columns of this journal are devoted exclusively to engineering problems, but once a year we remind you of the suffering little ones in the Hospital for Sick Children, Toronto. Mr. J. Ross Robertson, chairman of the Executive, will be very glad if you will co-operate with the hospital authorities to help in making life brighter and easier to bear for the thousand and more unfortunate little ones who come to them for help and healing.

* * * *

The question of scientific forestry is again receiving much attention in Canada. Two of the largest Canadian Provinces are actively enquiring into the forestry problem and its solution. British Columbia have a commission of three, who are engaged in gathering information as to administration and conservation of forest wealth, and Quebec expects that at the coming meeting of the Legislature provision will be made for a School of Forestry in that Province.

COMING MEETINGS.

American Society of Refrigerating Engineers.—December 6. Annual meeting in New York City. Secretary, Wm. H. Ross, 154 Nassau Street, New York City.

Montana Society of Engineers.—January 6-8. Annual meeting at Butte, Mont. Secretary, Clinton, H. Moore, Butte.

American Institute of Chemical Engineers.—December 8-10. Annual meeting at Philadelphia, Pa. Secretary, J. C. Olsen, Polytechnic Institute, Brooklyn, N.Y.

American Association for the Advancement of Science.—December 27. Annual meeting at Boston, Mass. Secretary, L. O. Howard, Smithsonian Institution, Washington, D.C.

American Society of Agricultural Engineers.—December 28-29. Annual meeting at Ames, Iowa. Secretary, L. W. Chase, University of Nebraska, Lincoln, Neb.

Association of American Portland Cement Manufacturers.—December 14-15. Annual meeting at New York City. Secretary, Percy H. Wilson, Land Title Building, Philadelphia, Pa.