Designer, \$3,000. Should preferably be a graduate with 4 years' experience, and should be familiar with the mathematics and practice of the branch of work in question.

Draughtsman, \$1,800. Should be high school or preferably a college graduate, and should be able to plot accurately from field notes and produce correct working drawings from designer's sketches and

computations.

Inspector, \$2,100. Should have a thorough knowledge of the class of work that he is employed to inspect, and in the case of steel or reinforced concrete structures, should be a man of sufficient intelligence to understand the elementary principles of design and realize the necessity for close adherence to plans, and must be able to read and interpret plans correctly.

Instrument Man, \$1,800. Should be high school or preferably a college graduate and should have sufficient training in the use of level or transit, or both, to do accurate work at a reasonable rate of speed, and should be thoroughly grounded in the mathematics required for the proper reduction and application of the instrumental work. In case of construction he should understand the special requirement for the class of work in question.

Chainman or Rodman, \$1,200. No previous experience 10. required.

Tracer, \$1,200. No previous experience required. 11.

## **Industrial Schedule**

Chief Engineer, \$10,000 down to \$3,600.

Research Engineer, \$10,000 down to \$3,600. Should preferably be a graduate from an engineering school recognized by the Institute, with from 10 to 15 years' experience in his special line.

1c. Mechanical Engineer, \$10,000 down to \$3,600. Same qualification as for Research Engineer.

1d. Electrical Engineer, \$10,000 down to \$3,600. Same qualification as for Research Engineer.

Chemical Engineer, \$10,000 down to \$3,600. Same 1e. qualification as for Research Engineer.

Metallurgical Engineer, \$10,000 down to \$3,600. Same 1f. qualification as for Research Engineer.

Assistant Chief Engineer (in large industries only), 2a. 75% of salary of Chief Engineer, with a minimum of \$3,000. Preferably technical graduate with from 5 to 10 years' experience.

Engineer in general charge of all outside construction, 75% of salary of Chief Engineer, with a minimum of \$3,000. Preferably technical graduate with

from 5 to 10 years' experience.

Efficiency Engineer (usually a consulting engineer, but 20. occasionally on the permanent staff), 75% of salary of Chief Engineer, with a minimum of \$3,000.

3a. Designing Engineer, having responsible charge of all design in mechanical engineering, 50% of salary of Chief Engineer, with a minimum of \$2,700. Should preferably be a technical graduate with 5 years' practical experience in his special line, or, should be a high school graduate with 10 years' practical experience, and should have a good general knowledge of mathematics and the fundamental physical laws used in engineering.

3b. Designing Engineer, having responsible charge of all design in electrical engineering, 50% of salary of Chief Engineer, with a minimum of \$2,700.

Same qualification as for mechanical engineering. Designing Engineer having responsible charge of all 3c. design in structural engineering, 50% of salary of Chief Engineer, with a minimum of \$2,700. Same qualification as for mechanical engineering.

Designing Engineer having responsible charge of all design in heating and ventilating engineering, 50% of salary of Chief Engineer, with a minimum of \$2,700. Same qualification as for mechanical engineering.

4a. Engineer in charge of estimating, figuring costs, etc., 35% of salary of Chief Engineer, with a minimum of \$2,400. Should preferably be a technical graduate with 3 years' practical experience in his special line, or, should be a high school graduate with 8 years' practical experience, and should have a good general knowledge of mathematics and the fundamental physical laws used in engineering.

4b. Testing Engineer in charge of tests, 35% of salary of Chief Engineer, with a minimum of \$2,400. Same qualification as for Engineer in charge of esti-

mating.

Resident Engineer on construction, 35% of salary of Chief Engineer, with a minimum of \$2,400. Same qualification as for Engineer in charge of estimating.

4d. Chief Draughtsman responsible for all working drawings, 35% of salary of Chief Engineer, with a minimum of \$2,400. To be qualified by training and experience for the special work required of him.

4e. Designer, assistant to Designing Engineer, 35% of salary of Chief Engineer, with a minimum of \$2,400. Should preferably be a technical graduate with 2 years' practical experience, or should be a high school graduate with 4 years' practical experience, and should have a good general knowledge of mathematics and the fundamental physical laws used in engineering.

5a. Estimator, assistant to Engineer in charge of estimating, \$2,400. Should preferably be a technical graduate with 2 years' practical experience, or should be a high school graduate with 3 years' practical experience, and should have a good general knowledge of mathematics and the fundamental physical laws used in engineering.

5b. Squad Boss in charge of small squad of Draughts-men, \$2,400. Should be a high school graduate with 3 years' practical experience, 1 year as checker, and should have a good general knowledge of mathematics and the fundamental physical laws used in engineering.

6a. Chief Shop Inspector in charge of shop inspection, \$2, 100. Should preferably be a technical graduate with 1 year's experience, or should be a high school graduate with 3 years' experience as inspector, and should have a good general knowledge of mathematics and the fundamental physical laws used in engineering.

6b. Checker, responsible for the correctness of working drawings, \$2,100. Similar qualification as for

Chief Shop Inspector.

7a. Draughtsman, making detailed working drawings, \$1,-800. Should preferably be a technical graduate, or 3 years' experience in drawing, tracing, etc.

7b. Shop Inspector, \$1,800. Should have some practical experience in the class of work that he is employed to inspect, and have sufficient intelligence and firmness to enforce carrying out of specifications.

Field Inspector, \$1,800. Same qualification as for Shop Inspector.

Tracer, \$1,200. No previous experience required.

## Public Utility Schedule

Chief Engineer, \$12,000.
Assistant Chief Engineer, \$9,000.
Departmental Engineer having charge of surveys, specifications for and design of hydraulic structures, drafting and engineering records, and hydrometric records, \$7,500. Should preferably be a graduate from an engineering school recognized