

## Pumping Engine

On the opposite page is shown a Horizontal Double-Acting Crank and Fly-Wheel Plunger Pump under construction for the City of Fredericton, N. B.

The capacity and principal dimensions are as follows:—

Capacity, 1,000 gallons per minute, and 3,000 gallons per minute.

Pressure, 40 pounds and 60 pounds.

Steam Pressure, 100 pounds.

Vacuum, 26 inches of mercury.

Rotative speed at rated capacity, 18 R.P.M. and 54 R.P.M.

Piston " " " 72 and 216.

H. P. Steam Cylinder, 14 inches diameter and 24 inches stroke.

L. P. " " 28 " " 24 " "

Pump Plungers, 14<sup>5</sup>/<sub>8</sub> " " 24 " "

Fly-Wheel, 12 feet diameter, weight, 12,000 pounds.

Condenser, Jet type.

Duty, 88,000,000 ft. pounds per 1000 pounds of dry steam when pumping at rate of 1000 gallons against a total pressure of 45 pounds, including suction.

Duty, 75,000,000 ft. pounds per 1000 pounds of dry steam when operating at rate of 3000 gallons against a total pressure of 85 pounds, including suction.