

## HAMILTON PUMPING ENGINE.

Double Cylinder Beam Engine, the Steam Cylinder placed at one end of the Beam, the Low Pressure Cylinder outside of the High Pressure. The Pump is worked from the Beam inside the High Pressure Cylinder; the Crank Shaft at the opposite end of the Beam from the Steam Cylinders.

Diameter of Low Pressure Cylinder	- - - - -	42 inches
Stroke of Piston	- - - - -	8 ft.
Diameter of High Pressure Cylinder	- - - - -	24 inches
Stroke of Piston	- - - - -	6 ft.
Diameter of Pump	- - - - -	24 inches
Stroke of Pump	- - - - -	4 ft.
Revolutions of Engine	- - - - -	10 per minute
Height of column	- - - - -	185 ft.
March—131 hours pumping, quantity	- - - - -	7,043,369 gallons
Consumption of fuel	- - - - -	53,880 pounds
Consumption of fuel as compared to the Montreal		
Engine,	56,880, 7,043,369	=19,455,115=148,833 "
Deduct for raising steam	- - - - -	8,400 "
Quantity per 24 hours	- - - - -	1,289,625 gallons
Consumption per 24 hours	- - - - -	9,871 pounds

## CHICAGO ENGINE.

Two Single Cylinder Condensing Beam Engines, connected to one crank shaft. The Steam Cylinders connected to one end of the Beam and the Crank Shaft to the other. The Pumps are worked from the Beam inside the Steam Cylinders.

Diameter of Steam Cylinders	- - - - -	44 inches
Stroke of Pistons	- - - - -	9 ft.
Double acting Plunger Pumps		
Diameter of Pumps	- - - - -	34 inches
Stroke of Pumps	- - - - -	5 ft. 6 inches
Height of column	- - - - -	100 ft.
Consumption of fuel pumping	17,465,115 gallons	58,700 pounds
Relative duty to Montreal Engine	- - - - -	107,000 "
Height of column	- - - - -	100 ft.