

8-9 EDWARD VII., A. 1909

PLATE 22.—General diagram of interlocking circuits being principal feature of electrical operation for all single locks.

PLATE 22a.—General diagram of interlocking circuits being principal feature of electrical operation for all flights.

PLATES 22b, 22c, 22d, 22e.—Details of circuits, connections and assemblies of electrical control.

PLATE 23.—Plan, elevation and sections of regulation culvert through bank confining canal level at Verdun lock.

PLATE 24.—Plan and elevation of Stoney sluice regulation at Deux Rivières, showing connection with main dam. Also showing detail elevation of pier, section through gate, and general arrangement of operating machinery.

PLATE 25.—Shows the daily discharge of the Ottawa river at Besserer's Grove for years 1846, 1876, 1881, 1887, 1890, 1905 and 1906. Also precipitation from December to December at points in the Ottawa Valley at, and above the city during 1873-1876, 1880-1881, 1886-1887, 1889-1890, 1903-1906, this discharge data becomes a function in the computation of the curve shown on plate 56.

PLATE 26.—Shows the daily discharge of the Ottawa river at Deux Rivières, Gower Point, Besserer's Grove, and head of Montreal Island continuously from October, 1904, to December, 1906. This discharge forms a function of the curve detailed on plates 55 and 56.

PLATE 27.—Diagrams, (or curves) of flow-over weirs, giving discharge per lineal foot of weir in cubic feet per second for heads up to 35 lineal feet; curves applying to weirs discharging both free and submerged, with formulae used in compilation.

PLATE 28.—Shows daily discharge of Amable du Fond river from May, 1905, through December, 1906, also daily fluctuations of water surface in Lakes Kioshkoqui, Manito, Tea and Three Mile Lake, with rainfall in inches at Kioshkoqui lake from September 1905, through November, 1906; also the volume in cubic feet for 10 foot, 20 foot, and 30 foot storage throughout the above-named lakes. The discharge data is a function of the curve shown on plate 54.

PLATE 29.—Shows in cubic feet per second, the daily discharge of the Summit lakes through Talon Chute, the daily inflow into the Summit lakes available for navigation purposes, and the rainfall throughout the Summit watershed from March, 1905, to December, 1906. Also the surface fluctuations of Summit lakes from March, 1905, to November, 1906, and the volume held within the Summit lakes for 6-foot storage. The discharge data becomes a function in the computation of the curve shown on plate 54.

PLATE 30.—Shows daily discharge of Ottawa river at Besserer's Grove from 1844 to 1846, 1850 to 1906; also the monthly precipitation and mean monthly temperature from 1866 to 1906. The discharge data becomes a function in the computation of the curve shown on plate 56.

PLATE 31.—General map of the area contained within the Summit and Amable du Fond watersheds showing that part of the latter diverted into the former by a feeder canal. Observation points for data collected shown thereon. That part from Lake Kioshkoqui to the head of Sparks Creek containing route of feeder canal shown enlarged on plate 17.

PLATE 32.—Typical plan of upper lock gates in place against sill and in recess when open, with travel of operating arm; also section and elevation of upper leaf, and detail section of shoe showing seal against sill.

PLATE 33.—Typical plan of lower lock gates in place against sill and in recess when open, with travel of operating arm; also section and elevation of lower leaf, and detail in plan and section of anchorage and pivot.

PLATE 34.—Shows type and cross-section of proposed bascule bridges.

PLATE 35.—Eleven plans detailing vessel tracks rounding curve at head of Little Mud lake, St. Mary's river, Mich. Also speed curves of those vessels. Also a summary of dimensions and speed of boats observed and key-map defining location.

PLATE 36.—Diagrams showing speed of vessels in miles per hour, through locks and approaches thereto, St. Mary's Falls Canal, Mich.

PLATE 37.—Map showing location of principal ship canals of Europe, together with outline plans of locks therein and typical cross-sections of prism in excavation.