

each, running through the walls, and properly anchored, all the Downies, Recept posts, and Breast timbers, must be rabbitted, to receive the ends of the face planks, and sheathing, The planking on the breast, and head walls, must be connected with the Sheet piling, which is to extend thirty feet on each side, at such angle as the Engineer may direct, and also with the side piling, which will extend 15 feet back from the head corners of the Lock, — All the piling must be carried five feet below the Lock bottom, if required,

The facing of the Lock will consist of two inch pine plank, sheathed with 1 inch boards, both partly seasoned, carefully joined, and so arranged as continually to break joints — The plank are to be spiked to the uprights and posts, with five inch spikes, having at least one spike in each upright, to every three inches rise, the boards to be well secured to the plank with 20 penny nails — Previous to sheathing the sides, a second course of 2 inch plank (carefully jointed) shall be laid in the bottoms, so arranged, as to break joints with the first course, and well secured with five inch spikes, The tops of all the uprights and posts, shall be morticed into a Cap of White Oak, or Pine Timber, which shall extend the entire length of the Lock, above the lower Downie posts, and which shall be neatly planed & squared, — The lower Downies shall be covered with a stone Coping 4 feet square, and one foot thick, — Foot bridges two feet wide, will be required, across the head and foot of the Lock, — The form of the Lock gates will be the same as represented on the plan (planed and carefully jointed) They are to be constructed of White Oak, free from sap, shakes, or other imperfections, and will be framed with double or single tenons, as the Engineer may direct, — Three Cast iron valves will be required in each main gate, together with all the necessary fixtures. The Castings will be furnished the Contractor at his

Expense, — The gates, Caps, and Foot bridges, to be painted, with at least two coats of paint, of such colour, as the Engineer may approve, — All the puddling used about the Lock, shall be of the best quality, and executed in a careful manner, —

The Lock shall be finished by an Embankment, of not less than 20 feet in width, on each side, Two snubbing posts will also be required, on the towing path side of the Lock's chamber, —

The valve rods, wrenches, eye bolts, pihots, and other fixtures, not specified, shall be made of such form as the Engineer may direct, and all materials used in the construction of the Lock, or any part thereof, must be of the best quality, and subject to the approval of the Engineer, Should it be decided to use Cement, in the head walls of the Lock, the Cement will be furnished by the Commonwealth, but said must be procured, and the work of mixing and using done without extra charge,

Ms. B. 16, c. 1

Submitted December 1855, with Plans,
by — Edw. J. Gay
C. Engineer