

The failure of this pier was of somewhat the same nature as that of the last, but the brickwork held together better under the ultimate load.

CEMENT PIERS.

Pier No. 13:

Description.. Yorkville, 1st class, white color, laid in cement mortar.

Size of pier, $8\frac{5}{8}" \times 8\frac{5}{8}"$	area, 74.4 square inches.
Length, 8 courses	24 inches.
Weight	110 pounds.
Age	2½ months.
Ultimate load	79,000 pounds.
" " per square inch	1,062 pounds.
" " " foot	76.5 tons.

The pier held together well, and did not show much sign of failure until the highest load was reached; the pier was destroyed in the test, probably owing to the brittle nature of this brick.

Pier No. 14:

Description.. Yorkville, 2nd class, color white with pink tint, laid in cement mortar.

Size of pier, $8\frac{3}{4}" \times 8\frac{3}{4}"$	area, 76.5 square inches.
Length, 8 courses	24 inches.
Weight	111 pounds.
Age	2½ months.
Ultimate load	78,000 pounds.
" strength per square inch	1,018 pounds.
" " " foot	73.3 tons.

This pier was well built, and shows the value of a cement mortar for laying brickwork, as its binding qualities allows the brick to develop nearly its full strength.

Pier No. 15.

Description.....Humber, 2nd class, laid in cement mortar.

Size of pier, $9" \times 9"$	area, 81 square inches.
Length, 8 courses	24 inches.
Weight	124 pounds.
Age	2½ months.
Ultimate load	91,600 pounds.
" strength per square inch	1,131 "
" " " foot	81.4 tons.