

UNITED STATES GEOLOGICAL SURVEY

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ARTESIAN WELL PROSPECTS

IN THE

ATLANTIC COASTAL PLAIN REGION

BY

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NEW YORK CITY.

There are many deep wells on New York island which yield large volumes of water, but it appears that the greater part of the water contains either mineral or surface contaminations which greatly diminish its usefulness. The deep wells are in the granite-gneiss, mica-schist, or limestone, which are near the surface north of Fortieth street, but southward are more or less deeply buried beneath sands and clays of Pleistocene age. There are also many wells 20 to 80 feet deep in the superficial beds. Nearly all the data I have for the New York City wells were obtained through the kindness of Mr. W. d'H. Washington, of New York, who has sunk many of these wells. All those of which I have learned are listed in the following table:

List of wells in New York City.

| Location. | Depth. | Size. | Capacity per minute. | Remarks. |
|---|--------------|----------------|----------------------------|-------------------|
| | <i>Feet.</i> | <i>Inches.</i> | <i>Gallons.</i> | |
| Washington Building..... | +1,000 | | Many. | |
| Manhattan Life Insurance Co..... | 760 | 8 | 100 | |
| Liberty and Nassau streets..... | 720 | | 80 | |
| New York Life Insurance Co..... | 500 | | | |
| Holt's well, Fulton Market..... | 626 | | | Rock at 126 feet. |
| West and Barclay streets..... | 48 | | | In sands. |
| Broadway and Houston streets..... | 42½ | | 2,600 | |
| Broadway and Bleeker streets..... | 448 | 7 | 80 | 42 feet to rock. |
| Houston and Attorney streets..... | 45 | | | |
| Lafayette and Barnard streets..... | 700 | 8 | 80 | |
| West Tenth and Washington streets (7 wells)..... | 500 | 6 | 600 | |
| West Tenth and Washington streets (6 wells)..... | 50 | 6-4 | 500 | |
| West Eleventh and Greenwich streets..... | 1,047 | 8 | 10 | Rock at 40 feet. |
| Twenty-eighth street near Broadway..... | 500 | 8 | 100 | |
| Forty-seventh street and Fourth avenue..... | +600 | 8 | 100 | |
| Fifty-ninth street and Eleventh avenue..... | 700 | 8 | 100 | |
| Dakota flats, Seventy-second street and Eighth avenue..... | 1,200 | 8 | 8 | |
| Hotel Savoy, Fifty-ninth street and Fifth avenue..... | 500 | | 80 | |
| Hoffman House..... | 300 | | 25 | |
| Manhattan Athletic Club, Madison avenue and Fourth street. | 306 | 8 | 40 | Flows. |
| Ringler brewery, Ninety-second street and Third avenue. | 685 | 9 | 300 | |
| One hundred and sixteenth street and First avenue (3 wells). | 40-50 | | 600 | |
| Mount Morris Park..... | 90 | | Many. | |
| One hundred and twenty-fifth street and Sixth avenue.. | 45 | | Many. | |
| One hundred and fifty-fifth street and Seventh avenue (12 wells). | 50-60 | | 450 | |
| One hundred and Forty-fifth street and Eighth avenue. | 1,045 | | 120 | Fine water. |
| One hundred and twenty-eighth street and Tenth avenue. | 605 | 10-8 | | |