The Rise and Fall of the Old Shot Tower

The tallest, strangest building in late 19th-century New Orleans somehow evades our collective memory

by Richard Campanella  New Orleans Times-Picayune InsideOut section, April 11, 2014

For 20 years around the turn of the 20th century, an eerie medieval-looking turret loomed over the gritty late-Victorian cityscape of downtown New Orleans. Despite its renown, the Old Shot Tower floundered economically and structurally, went curiously unrecorded by photographers, and ranks today, 109 years after its demise, as one of the least-remembered major elements of the historical cityscape.

Shot towers, an ingenious invention of the late 1700s, exploited physics to manufacture buckshot without specialized machinery. At the top of a high hollow tower, molten lead would be poured through a sieve and dropped more than 100 feet. The plunge exerted surface tension upon the globules, which cooled into spheres and plunged into a tank of water, where they were sorted and re-melted if irregular.

Smaller pellets would be used for buckshot; larger ones—which needed a coarser sieve and more drop time, and thus a higher tower—might end up as grapeshot for artillery.

Philadelphia erected the first major American urban shot tower in 1808, and by 1813, three big towers were operating near St. Louis.

In subsequent years, shot towers advanced technologically and spread across the nation. Steam elevators would replace staircases, cast iron frames would buttress brick walls and rail lines would supplant mule-drawn carts.

A shot tower of unknown dimensions operated in New Orleans from the 1830s to the 1840s on the Carondelet Walk (now Lafitte Street) along the Old Basin Canal. Little is known about this and subsequent towers, probably because of their small sizes and improvised construction.

Fifty years later, investors from New York and New Orleans detected an opportunity. While 10 shot towers processed lead mined from Colorado, Missouri and Arizona, none were located south of St. Louis, despite that most product was shipped down the Mississippi. Hoping to boost profits by saving on freight, they bought two lots at St. Joseph and Foucher (now Constance) streets and made designs for a massive New Orleans operation.

We call it the Warehouse District today, but in the late 1800s, this neighborhood was dedicated more to making things than storing things. Here toiled skilled workers in foundries, machine shops, engine and boiler yards, chain and rope makers, even an electric light manufacturer. Industry was drawn here by the
spur connections with the Illinois Central Railroad and extensive wharf-side shipping access, as well as for the steam-powered generators and water service. A shot manufacturer fit in perfectly.

Completed in 1883, New Orleans’ Shot Tower, run by the Union and later the Gulf Co., was impressive. A stout 900 square feet at its base, the 214-foot-high octagonal tower bore its massive load with cast-iron and wooden beams plus citadel-like brick walls rested up a cypress matt topped with an iron plate for stability.

Cauldrons and water pools filled the ground floor next to the polishing casks and sacking rooms. The cylinder’s interior comprised two chambers, one for the steam elevator to lift tons of molten lead to the dropping stations, and the other for the free-falls. A new rail spur coming up St. Joseph Street connected the operation to the wharves.

Its prominence and the novelty of its purpose made the Shot Tower locally famous. Citizens used it as a spatial reference (e.g., “near the Shot Tower,” ”between the Shot Tower and Lee Circle”), as we use landmarks like the Superdome or the High Rise to orient ourselves today.

Sometimes it was used as a neighborhood nickname. Few things struck more fear in New Orleanians than the Shot Tower Gang, the notorious hoodlums who terrorized this area from the 1880s to the 1900s.

The tower’s unique form also invited innovations. When the Muller Co. started manufacturing high-powered electric light bulbs on the same block, its owner in 1884 arranged to illuminate the Shot Tower’s window-filled interior with 132 bulbs and its summit with a 36,000-candle-power arc lamp. The first-of-its-kind light show dazzled residents far and wide.

Not just a marketing stunt, Muller’s experiment tested the best way to illuminate a city, whether by a few gigantic spotlights mounted aloft or by hundreds of smaller street lamps. The first option initially won out, and by the 1890s enormous steel light towers were erected along Canal and Poydras streets. They eventually proved impractical and were replaced by the streetlamps we have today.

As the only shot tower in the lower South, the New Orleans outfit seemed poised to control regional demand. But because its proprietors also owned towers elsewhere and worried about cannibalizing its own market, the New Orleans asset ran only sporadically. So idled, operators in 1885 switched to the tourism industry.

For 20 cents, pleasure-seekers could ride the elevator daily from 9 a.m. to 5 p.m., much like any tourist attraction. An 1885 tour guide described the summit as “decidedly the best view obtainable of the city, (where) old canals known from childhood, when looked down upon from above, insist upon running in tangents to their supposed course[,] streets curl up and decline in almost semicircles, (and the Mississippi) staggers about in loops and curves....”

The Shot Tower ranked as the highest building erected here until the Hibernia Bank Building was completed in 1923. One writer in 1897 called the tower “one of the 12 or 15 highest structures in the world,” and ranked it among the loftiest “ever erected by man in ancient or modern times.” (It should be noted that he also called Avery Island “quite mountainous.”)
When the Shot Tower actually performed its eponymous function, it was no leisurely spectacle. Roaring fires, boiling lead, rickety elevators and molten metal flying through the air made for an abundance of occupational hazards. In 1883, for example, a worker had his heel so badly mangled by the steam elevator he eventually died of lockjaw. In 1887, an electrical fire spread beyond the reach of fire hoses, creating a terrifying spectacle. The blaze destroyed interior timbers, knocked iron columns out of plumb and threatened neighbors with falling debris.

The tower was eventually repaired, but its reputation was not. Dangers, coupled with a national outcry against tower companies and other industries for forming trusts and colluding, made New Orleans' Shot Tower something of a neighborhood nuisance. One Daily Picayune editorialist hoped to kill two birds with one stone by wishing “the shot tower should fall on the gang of hoodlums that infest its base.” It almost did fall in 1895, when a freight train on St. Joseph Street “acting as a battering ram, pushed (a) derailed car through the (Shot Tower) and sent the bricks (upon) a dozen men.” People started called the landmark the “Old” Shot Tower.

By that time, the property was owned by the American Shot and Lead Co., a trust that had, once again, idled the plant for the benefit of its other holdings. In 1904, it sold the asset—or rather, liability—to the United Lead Co. for $10,000, which in turn sold it to a New York-based meat-packing company in need of a cold-storage facility. Having no need whatsoever for what a Picayune journalist called a “grim old tower...most familiar of all of the old city's landmarks,” the firm had the curious edifice demolished in 1905.

Construction materials were reused elsewhere. The cypress timbers, for example, were unearthed and used in 1913 as a platform to construct the Queen and Crescent Building on Camp Street, and bricks from the tower’s walls likely remain in the Warehouse District today, perhaps even in the former cold-storage facility that still stands on St. Joseph and Constance.

Shot towers faded from the American landscape later in the 20th century, the result of new manufacturing techniques. But the concept persisted. An ammonium nitrate pelletizing plant, complete with a shot tower, was built in Luling in 1954.

One would think that such a conspicuous landmark would attract legions of photographers. At least one man did lug a camera up to capture a bird’s eye vista published in an 1892 sketchbook, and George Francois Mugnier captured it from a distance later that decade. It had previously appeared in a well-known 1885 Currier & Ives lithograph of the city.

Other depictions are exceedingly rare, particularly close-range photographs. Perhaps this oversight can be explained by its industrial use and isolation from the romanticized fame of the French Quarter. Whatever the reason, the Old Shot Tower stands alone among the city’s historic structures in its fall from fame, having been universally known in the late 1800s and all but forgotten by the early 1900s.

Too bad, because had it survived, it would have become today a nationally recognized signature of the New Orleans cityscape.

Site of the Old Shot Tower today, occupied by the now-vacant cold-storage warehouse that replaced it in 1905. Photograph by Richard Campanella

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