## Seeking Higher Ground

## **Early Chicago Rises from the Muck**

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Even for a toddlin' town famous for making "no small plans"—such as, for example, reversing in 1900 the Chicago River to secure clean drinking water, or rebuilding itself seemingly overnight after the devastating "Great Chicago Fire" (1871)—to physically—and successfully — elevate itself as much as 14 feet above its original ground level defies not only description but credulity.

But it happened. And here's how: jack screws-lots and lots of jackscrews.

First, some history behind the history is required. While being founded on the banks of a Great Lake, i.e., Michigan, certainly has its advantages, Chicago was actually built on a marsh-like area along the lakefront. And as reported in "Raising Chicago" by WBEZ-Radio reporter John R. Schmidt, "As the population grew, this became a public health problem. Cholera outbreaks were frequent. In 1854 alone, the disease wiped out 1 in 20 Chicagoans.

"City officials decided to construct a sewer system that would take care of the deadly waste. But drainage would be difficult, since Chicago sat only a few feet above Lake Michigan. There were two options: (A) abandon all of downtown and start over on higher ground, or (B) jack up all the buildings where they were."

Thank goodness they chose "B" or we wouldn't have a Power Play.

The work began in earnest in 1856 (and would last 20 years); one of the very first of many major contractors was an enterprising young guy from New York by the name of George Pullman, presenting himself as a cabinet maker. According to the WBEZ piece, "Pullman contracted to raise an entire block on Lake Street. He had 6,000 jackscrews put under the buildings, and hired 600 men to take charge of ten jacks each. On the signal, each man turned the screws on his ten jacks, one notch each; the buildings went up a fraction of an inch.

Some buildings were reportedly elevated up to fourteen feet. The "B" option also many times included the actual relocation of the building, deeming the original location no longer desirable. The moved buildings would then receive new foundations at their new locations. New sewers and streets were

then laid atop the old street level; the land was filled in to meet the new levels. Last was actual paving of the new streets on top of the fill.

The following excerpt from Wikipedia captures the flavor of that time in Chicago:

"Consequently, the practice of putting the old multi-story, intact and furnished wooden buildings - sometimes entire rows of them-en bloc-on rollers and moving them to the outskirts of town or to the suburbs was so common as to be considered nothing more than routine traffic. Traveler David Macrae wrote incredulously, 'Never a day passed during my stay in the city that I did not meet one or more houses shifting their quarters. One day I met nine. Going out Great Madison Street in the horse cars we had to stop twice to let houses get across.' (As mentioned above) business did not suffer; shop owners would keep their shops open, even as people had to climb in through a moving front door. Brick buildings also were moved from one location to another, and in 1866, the first of these—a building of two and a half stories - made the short move from Madison Street out to Monroe Street. Later, many other brick buildings were rolled much greater distances across Chicago."

In the mid-nineteenth century, most buildings were of course still construct-



Raising a block of buildings on Lake Street (Photo Wikipedia).

ed of wood. So it wasn't until two years later, 1858, that the city felt confident enough to lift and move the first masonry building - a four-story, 70-footlong, 750-ton brick structure situated at the northeast corner of Randolph and Dearborn Streets. The structure was hoisted with 200 jackscrews to its new grade — or 6 feet 2 inches higher than the previous level—all with no damage to the building. It would be the first of more than 50 similar properties to be raised and/or moved that year.

One of the most notable raisings was that of the Tremont House Hotel at Lake and Dearborn Streets, led by the team of Ely, Smith and Pullman. The brick-constructed edifice, "luxuriously appointed," was six stories high on a one-acre parcel. Incredibly, and something like a Titanic scenario in reverse (among hotel guests were several VIPs and a U.S. Senator) as hotel guests went about their business, the engineering crew (500 men operating 5,000 jackscrews) went about theirs—lifting the Tremont House a full six feet above its existing foundation without incident. However, one patron was in fact puzzled to note that the front steps leading from the street into the hotel were becoming steeper every day. When he checked out, the windows were several feet above his head. When he checked in, they were at eye level. Cue Twilight Zone theme. PTE