# E.R.BUTLER & CO. MANUFACTURERS

## Prince Street Works

THE SIMPLE BRICK WAREHOUSE at 53-55 Prince Street is the surviving portion of the legendary Prince Street Works, the silver department of Tiffany & Co. From this building – in use by Tiffany until 1897 – some of the most influential American silver designs flowed.

Deeds and other records indicate that 53-55 Prince Street was erected by silversmith Edward C. Moore (1827-1891) in 1864. An advertisement in The New York Times in 1864 headlined "Steam Power Near Broadway" offered leases on "large rooms, with extra light, power, steam hoistway and heating pipes; a large basement" and directed those interested directly to Moore. Directory listings indicate that Moore also occupied 53-55 Prince Street in part with his own silver business.

Edward C. Moore was a leading silversmith of the period, and in 1868 Tiffany & Co. (established in 1837) acquired Moore's firm, retaining him as one of its directors. Tiffany & Co. had been buying



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silver from outside makers, but was then seeking to expand its grasp on the market. Moore retained ownership of 53-55 Prince Street and leased the building to Tiffany for \$6,000 per year.

Old photographs of the building show what is clearly a factory, but it is hard to place stylistically. Does the Prince Street building echo the Gothic and neo-Grec designs – particularly the segmental arches over the windows combined with the stylized Gothic label mouldings – then emerging in Paris? It is not clear what architect Moore employed, but he was a sophisticated client – and perhaps designed the building himself.

A later plan shows wide bays of iron and glass on the rear, apparently floor to ceiling, to light the workshops; the use of iron and glass was au courant in Paris at the time, and it is tempting to speculate on a relation between the two. The easterly extension at 49-51 Prince Street was built in matching style in 1879, by Tiffany & Co. itself. The building application for this project lists only the contractor in the space normally reserved for the architect, implying that the design of the extension was done in-house at Tiffany.

An early photograph of both buildings shows a round, dial-like object in the center of their joint facade. It looks like it might be a clock – Tiffany's has usually mounted a clock on the front of its buildings. The present clock on the store at 57th and Fifth was at one time mounted on their store on the west side of Union Square, built in the 1850s and in operation during the period the firm used the Prince Street Works.

Tiffany apparently adjusted Moore's workshops after the 1868 acquisition; the jeweler placed an advertisement in The New York Times of May 8, 1871: "Having enlarged their works at Nos. 53 and 55 Prince St. ... Tiffany & Co. now offer a full stock of table-ware at manufacturers' prices." A plan filed to alter the building in 1904 shows the general ground plan as a T-shape, with the top of the T facing the street and the trunk running toward the rear of the lot, well set back from other buildings and with wide banks of iron-framed windows to provide good light to the workrooms.

The original layout is not clear, but an 1897 account of Tiffany's move from Prince Street to new quarters in Newark gives an idea of how Tiffany arranged its silver operation. The new quarters had a vault for steel dies, designing and modeling rooms, "a library of reference work on art objects and collections of natural history objects" to use as models for animals, grasses, fruits and other elements. The new factory also had "an isolated room for modeling from the nude," a gold and silver vault and rooms for spoonmaking, stamping, rolling, chasing, gilding, turning and similar functions.

While on Prince Street, Tiffany & Co. evolved into the leading edge of silversmith innovation in America, wresting silver design from the copying of European styles. For instance, they sought a uniquely American aesthetic in their "Mackay service" produced in the 1870s. The mine owner John W. Mackay shipped silver from his mine in Nevada's Comstock Lode directly to New York – most certainly the Prince Street Works. Tiffany & Co. produced a dinner service of 1250 pieces in American wild flowers and oriental plants. It appears the service has been broken up – a sauce boat sold at auction for \$19,000 in 1996.

The 1897 account of Tiffany's new factory in Newark also referenced the closing of the old location on Prince Street. After the equipment was removed, the floors were taken up, burned and refined, recovering about 1300 ounces of silver and 600 pennyweights of gold. In 1904 the portion at 53-55 Prince Street was extensively altered to accommodate a new owner, Hawley & Hoops, a candy maker. They were well known for "French Mixed Cremes," chocolate Teddy bears and chocolate cigarettes and cigars. Later ownership records indicate that 53-55 Prince Street was owned by the candy company into the 1940s, and after that time it was occupied by a miscellany of small businesses. In 1982 53-55 Prince Street was converted to A-I-R use, in an alteration designed by the architect Alexander Neratoff. The 1879 annex, 49-51 Prince Street, was demolished in 1904 and replaced with a six story tenement, and leaving 53-55 Prince Street, the original building of the Prince Street Works, the oldest structure of the legendary Tiffany empire still standing in Manhattan.

## -Christopher Gray, Office of Metropolitan History

It is just half a century ago today that C.L. Tiffany started in a modest way the business which, under the able management of himself and of his associates, has developed to proportions which clearly entitle it to be ranked as the first establishment of its kind in the world. There can therefore be no more appropriate time than this for the publication of the first complete description of the house that has ever been prepared, and for an exposition of the methods which have largely contributed to its phenomenal success. The intelligent reader will find in the article a double interest. It suggests many an idea which might with profit be applied to the smallest business; while by no means of elaborate description and illustration it gives an insight into this modern Aladdin's Palace, which does not fall very much short of the splendors depicted in the old romance.



Prince Street, circa 1880s. More Photos

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IN OUR PREVIOUS PAPERS we have described visits to every department in the Union square establishment, with the exception of those occupied by the box-makers and clock repairers, which we were obliged to defer, owing to the lateness of the hour.

This time we arrive in the early forenoon, and once more crave the indulgence of our former conductor. The freight elevator creaks for a minute or two, and we step out on the fifth floor. The familiar singing of the diamond wheels reminds us pleasantly of our former visit and enter the door leading into the box-makers' shop.

#### Among the Box Makers

About us, in all stages of completion, can be seen the boxes of all sizes which will cause the eyes of some fair one to sparkle with anticipation. Some are still all wood, others partly leather or plush, and at a counter near the windows we see the cutters busily cutting patterns from thick layers of these materials.

Everything found in the shop of a carpenter or cabinet maker is here. Band-saws, planers, sand papering wheels, cutters and even the insatiate buzz saw, all play prominent parts. Mirror frames, opera-glass cases, and the various wooden articles which present such a handsome appearance when covered with bright-colored plush, are all made here.

Farther back in the Fifteenth street extension are the leather sewers and pasters, every one of them busily at work with a pile either of pocket-books or card-cases before him, or sewing away at some larger article of leather.

As we come out and wait for the elevator, in order to descend to the floor below, we have time to inspect a large case of leather samples containing specimens of probably every skin ever tanned.

The elevator having by this time responded to our ring, we are shortly landed on the floor below, just outside the bric-á-brac repairing shop.

## The Clock Making and Repairing Department

We enter the door leading into the Fifteenth street annex and find ourselves in the clock making and repairing department, as the numerous tall time pieces all around inform us without the necessity of any further enlightenment. Twenty skilled workmen are kept constantly employed here, and then can only just keep pace with their work. Everything in the shape of a clock, whether it be a tiny ornament of a lady's boudoir or the tall guardian of some aristocratic hall, is manufactured here or comes up here for repairs.

This department completes our tour of the Union square establishment and we now proceed, still in company of our guide, to board a passing Broadway car, from which we alight at Prince Street.

A two minute walk brings us to the Prince Street works, a five-story building,  $100 \times 100$  feet, in which Tiffany & Co. manufacture nothing but sterling silverware and all of which is disposed of over their counters at retail.

## The Work Rooms for Sterling Silver

We enter the office, and as soon as our guide states the objects of our visit, an intelligent foreman is told off to attend us.

Passing through the office we descend into what are apparently the infernal regions, for the din from the enormous die-presses is something awful; swarthy, half-clad workmen dodge about, now in the half darkness of the corners, anon in the fierce and ruddy glare of the melting pots, in which silver is alloyed to sterling fineness. Here it assumes the shape of a flat plate, about an inch in thickness and foot in length and breadth, technically known as a skillet. The crucibles used are of sand and plumbago, and a large rack against one of the walls is stacked with them all in all sizes. For the manufacture of spoons and forks a piece cut off the ordinary ingot is rolled and re-rolled lengthways and crossways until it begins to resemble a squat and foreshortened sketch of the article it is intended to represent. If it is to be a spoon the bowl is pressed with a die, and, if a fork, a burring wheel rapidly removes the metal between the times. But we are anticipating. On the other side is the engine room- but our conductor is leading the way upstairs and we must follow. Arriving on the first floor we take the elevator up into the fifth story and make our way toward the east corner, fronting on Prince Street. This is the etching room.

## In the Etching Room

The article to be etched is painted over with a protective varnish wherever the acid is not desired to act, and is then deposited in the etching tray. The effects which are produced by this process are far superior to the best work of the engraver.

Card-case corners are undergoing various processes of ornamentation, in addition to the etching, such as gilding, oxidizing, &c.; niello also plays quite an important part, especially on some of the larger pieces. One very handsome specimen of silver and niello is a loving cup, having a peculiarly shaped bowl, from the bottom of which, equidistant, spring three curled ram's horns, the points of which almost touch the bowl at the top; they also serve as handles.

In another corner is an enameling-room conducted on the same principle as that in the jewelry shop. Behind the etching-room is the packing-room, the photo- dark room and the burnishing room. In the packing-room are nimble-fingered girls deftly tucking away brightly gleaming knives, forks and spoons in soft white tissue paper. Close by them are several girls engaged in "saw piercing," that is cutting out a name or design from a piece of metal by the aid of a peculiar bracket saw. After being finished the pate is used for stamping the particular name or design it might bear upon either leather or plush.

#### How the Designs Are Made

We now cross over to the room on the opposite side. Our first impression when we enter is that we have strayed into the Museum of Natural History. All around are well preserved counterfeits of birds, and smaller animals, as also gourds, ears of corn, grasses, etc, all of which have already served, or will serve, as studies. Running back the entire length of the long, light room are drawing-boards, at which sit busy designers, while about them hang plaster casts, models and electro-types of designs which have graced work previously done. Several large sketches, nearly six feet high, and roughly drawn in charcoal, as scenic artist draws his picture, gives us some idea of the method employed by the artist for the silver worker.

## Repoussé Work

The fourth floor is our next objective point, and here we see the operation known as "bumping" or "snarling" to the workman, or repoussé work to the buyer. One thing which leaves a favorable impression on the visitor is that every department is under the charge of a competent foreman, who has at his fingers' end everything connected with the particular branch of which he is the head.

But to return to our "snarling." If the design be a figure, for instance, it is first "snarled" out roughly, then filled with pitch, the outlines traced, and the work completed from the outside by the aid of very small chisels and tools. The entire west wing of the fourth floor was filled with the repoussé workers and chasers. At the extreme back simmered three cauldrons of melted pitch, reminding one of a ship-caulker's shed.

In the opposite L of the same floor were the diesinkers and steel engravers, making dies for special figures and rollers for pressed borders. The entire Prince Street front on this floor is devoted to actual silversmithing, and many were the handsome pieces in the process of completion.

Descending another flight of stairs we find ourselves on the third floor. The first department is known as the "spinning" room. A circular sheet of metal is here held against a "chuck" of any desired form in a lathe, and by the aid of long-handled, burnished steel tools, it is "spun" or pressed against it until it has assumed the desired shape, the chuck forming the core. Close by several lathes at which the wooden chucks are being made. The spinning room is on the east side of the building, fronting the street. Behind it in the L are tiers upon tiers if pattern, molds, and chucks, both iron and wood, to which more are constantly being added.

On the Westside, fronting the street, are more silversmiths, and we are initiated into the mysteries which attend the production of a vase, and the rough drawing of the outline of the future decoration, prior to its being "snarled."

## A Troop of "Redskins"

Another descent and we find ourselves on the second floor; the first man who passes us looks extremely red, but we pass over his appearance in silence. The second one however, is apparently a full blooded Indian, minus only his war paint and feathers, and we apprehensively feel our back hair when the back of our conductor is turned. He does not seem to see anything remarkable in the number of redskins about and acts perfectly unconcerned.

We have made up our mind that he has formerly been in the employ of Buf – the Hon. Wm. F. Cody, when we enter the polishing room and the mystery is cleared up. Before large cantonflannel buffs stand a long row of polishers; they are only putting a faire luster on, however, by use of hard rouge, and it is the rouge, flying everywhere in minutes particles in spite of the powerful exhausts, which gives the polishers the appearance of full blooded redskins.

In the adjoining room the minute scratches which the hard rouge leaves are made to totally disappear in a twinkling by means of soft rouge and a buff that annihilates space by making 3,000 revolutions per minute.

The east end of the Prince street front is occupied by a corps of engravers, and the Ls are occupied respectively by a stock room and another batch of silver finishers, who take the cast silver, and by means of water of Ayr and pumicestone grind off the main irregularities.

Now we visit the first floor once more. The east end is occupied by the factory office, in which about fifteen employees are constantly busied.

#### Knives and Forks

The western end contains the rolling presses, at which the knives, forks and spoons are roughly molded, and in the L behind it are silversmiths, busily hammering knife blades in order to give them both strength and elasticity, for the metal itself when cast is quite soft and the blades can be easily bent. A few moments' hammering at the hands of one of the brawny operators, however, gives the blade almost the elasticity of steel.

Close by the hammerers is an operative busily engaged at something within a little glass case, which rests upon the stand before him. A closer inspection shows us that by the aid of a steel bur file he is engaged in cutting the spaces between the tines of a fork. The glass enclosure is simply to prevent the silver filings from scattering.

As we pass into the hall to make our final call upon the engineer in his den we come upon a rack filled with small brass checks.

"That," explains the conductor, "is the time board, and that little office right before it is the time-keeper's office. Every man, as he arrives in the morning, drops the numbered check which he has into the timekeeper's box. At the proper time that person takes them out and credits the man who represents the number which the check bears with a full day. If the check is dropped in at any other time during the day the workman is credited with just the number of hours actually put in, as the check box is emptied every half hour. In the afternoon all the checks are hung upon this board, and as the men leave each take his proper check for use the next day."

## Engine and Dynamos

In the basement the jolly-faced engineer received us into his cozy quarters with a hearty welcome. "That's an 80 horse power Harris Corliss," he says, pointing to the engine, "and the steam is furnished by those two boilers you see there under the sidewalk; and, by the way, we have one of the best things in a damper regulator that has ever been invented. My fireman has only to shovel coal on the fires; that regulator will keep the gauge to sixty five pounds just as steadily as though it were a man who had made it his life long business. It is worked entirely by

the steam pressure, and, taken in conjunction with the governor, gives the engine not the slightest chance to play any pranks."

Through the windows at the rear end of the engine room we caught a glimpse of something, which, on going around, we discovered, sure enough, to be a corner which had escaped us. It held two dynamos, used in gilding red, green and yellow gold plating solutions, electrotyping jars and the den of a plaster modeler, who makes molds of designs for electrotyping.

Upon the ground floor once more we bid good-bye to the foreman who has safely piloted us through the mazes of the factory and take our departure. After the stifling heat and atmosphere of the basement, with its glowing furnaces, which we have just left, the pleasant breeze blowing outside send new life through every artery.

#### The Plated-Ware Factory

But one thing is still unexplained. In the showrooms of the Union square establishment was a stock of plated-ware. Where was this made? "Our plated-ware" said the guide, when the question was pronounced to him, "is all made at our Newark factory. It consists of a well equipped, three story brick building and employs an average working force of about eighty men. All our other departments and shops we have thoroughly gone over, and I doubt if a square foot has escaped unobserved."

At this the representative of the *Weekly* folded his book and hied himself away, with many thanks to his late conductor, and in the articles of which this is the concluding one he has endeavored to give as completely as possible in the space at his disposal a description of his pleasant and instructive ramble through the largest and best known jewelry house in the world, which from the comparative obscurity has risen to its present exalted position.







