

**OUR WORKSHOP GIRLS**



**WHAT CAN BE SEEN AT THE BOLTWORKS**

**How Delicate Hands Regulate Complicated Machinery and Manipulate Iron.**

The field of woman's usefulness has since we were expanding until to-day she does so many new and heretofore mainly menial that the subject is even much thought attention. When men were needed in the battle-field, American women found other duties besides housework could be performed by them. Surprised at their success they ventured on until to-day there are thousands of occupations opened to them. A few years ago it was thought if a woman learned housework it was all that was necessary. Their schooling was thought sufficient if they could read the Testament; to study grammar or geography was wasting precious time. If they necessarily worked strangers that they pay would be two or four a week. Cotton factories were open to them; but to be a clerk or a doctress, or occupying a desk in an office, was an unthought of position.

While there were excellent women in those dark and bloody days, they would not get along very well now. Time changes all things. Once where one bonnet and one dress would do for a year, four and six bonnets and as many more dresses are needed now; and to obtain the same they must earn more than two bits a week. Grammar and geography are as indispensable to the women of to-day as the men. Women realize that they must live and must have a way to gain a livelihood. With a common-sense view they see what men do and show they in the majority of places—will do as well. Hence, in this progressive age there are women as poets, doctors, lecturers, preachers, journalists, editors, teachers and writers, salesladies, stenographers, typewriters, detectives. The least fortunate find employment in wire, cork, coffin, cracker, harness, coffee, tobacco, candy and tinware establishments, at cotton and box factories, in glass houses, printing offices and laundries, as book binders and rag sorters.

**GIRLS AS IRON WORKERS.**

Girls' workshops are to the majority an unexplored region, yet there are few who have not an interest in and a desire to learn how the same are conducted. With a view to furnish the reading public with truthful pen and pencil pictures of the girl workshops in this vast industrial hive, a series of sketches, of which this is the first, has been commenced. Comparative few of the thousands of readers of the DISPATCH know that about seventy-five girls are gaining a comfortable livelihood in the nut and bolt works of Oliver Wood & Phillips, which a few years since employed only men and boys. A day spent in the workrooms set apart for the female tappers proved interesting as well as instructive. What was seen and learned there is given in the matter-of-fact statement that follows:

At the blowing of the boltworks whistle what had before appeared dead and deserted assumes animation; wheels groan and screws, bolts snap as if too weary from labor to begin anew; girls fly hither and thither, roll up their sleeves, tie on their soot-sack aprons, call good-burely back and forward to their companions, and in five or ten minutes after are busily engaged trying to make a big day's work. The bolts and nuts proper are fashioned by brassy men on the first floor of the building. In a crude state they are sent to other departments of the works, where the finishing touches are applied by the delicate fingers of girls.



**Pointing Bolt.**

The crude bolts are first given to girls at the pointing machines. The girl at the machine is known as a "pointer." The machine is not very large, and is worked by a pedal. It is actuated by a belt to the main pulley, and is kept in constant motion. The "pointers" sit down by their machines and with the left hand they place the head of a bolt into a socket so constructed as to hold it firmly. Having the bolt in position, they tread on the pedal, forcing sharp steel knives against the bolt, and in an instant a round point is cut on it. The machines are so constructed as to be set to point any size and length of bolt. After the bolt is pointed it is allowed to drop out of the machine, falling down a slide into an iron pan. A box containing the rough bolts is placed to the right of the machine. With the right hand the "pointer" conveys the bolt to the left, and while placing it in position, takes up another with the right hand, and so on through the live-long day. In this way, after practice, they work very rapidly. They can either stand or sit down, benches being supplied to them. They work as rapidly either sitting or standing. The work is not heavy, though it is with iron they deal. Boys above the bolts, keep the machines in order, the knives sharpened and set properly, leaving nothing for the girl to do except work right ahead and make as much as she can, on half inch down to five-sixteen bolts, from a quarter to 15 inches in length, round and square heads. All heavier work is given to men. "Pointing" is not necessarily dirty work, though some girls looked badly mussed up, more so, in fact, than many at harder and dirtier work.

**NOT HARD WORK.**

"Do you like your work?" was asked a "pointer."  
"Yes, very much."  
"Do you find it hard?"  
"Oh, no; it is easy enough when you once learn how to do it."  
"Do you get tired?"  
"No, not very. When I get tired sitting I stand up, and when I get tired of that I sit down again. We can stop for a while if we wish, but most of us want to make as much as we can in a day, so we work right along."  
"Don't you think the day long?"  
"When I first came I did. I would think it long from morning to dinner hour, and after that was over I would wish for closing

hour. Now it is only too short, when we are anxious to make it of money."

"Are you exhausted when you reach your home at night?"  
"When I was 'new' I would be kept awake at night by the noise of the machinery still sounding in my ears, and my arms felt as if I was still performing my work; but that has left me now, and when some days are ended I don't feel one bit tired. Of course some days we do not feel as well for work, and that makes it harder on us, and we don't make a big day's task."

Bolts, after being pointed, are taken to the cutters, who are at work directly across the building from the "pointers." The cutting machines are much larger than the pointing machines. Two bolts are cut at once. These machines can also be set to cut any size of bolt. The "sink" is full of oil, and a pump placed in the centre keeps it continually dripping on the bolt while being cut. The oil is used to keep the bolts and dies from breaking and wearing. The power to operate the cutting machines is obtained from the main pulley by means of a broad belt. The "cutter" likewise uses her pressure in sitting or standing, but, unlike the pointing machine, the cutter is regulated by the hands instead of the feet. The bolts are placed in the centre of the "sink" directly in front of the cutter. A bolt is placed in the socket and given a shove into the dies. While the thread is being cut another is fixed in a similar position. When the bolt is cut the dies open, the cutter lifts it out and drops it into a large iron vessel placed on the side of the machine. She next pulls the handle back to close the dies, and with the other hand puts another bolt into position, pushes it in the dies, and so on in the same way, keeping the machine constantly cutting. The oil has a disagreeable odor, and besides makes the work much dirtier than "pointing." This work requires larger and stronger girls than the first, although no larger bolts are cut by the girls than are pointed by their fellow workers; yet strength is required to start the bolts into the dies, and to keep both dies going at once. The girls do not seem to mind the oil, though they claim at first they detest putting their hands in it. It appears to leave no bad effect, as the hands look as soft and white



**Threading Bolts.**

as hands in general, though the fingers which catch the bolt are a little hard and rough.

"BETTER THAN POT WEASTARD?" I remarked to a cutter.  
"Your work looks to be very hard?" I remarked to a cutter.  
"But it is not. Some is heavy, but, after all, it is no harder than anything else we might work at."  
"Would you not rather do housework?"  
"No, indeed; when I work here I work 10 hours a day. I use my own pleasure as to what I shall do with my evenings and Sundays; besides, I make more money here."  
"Perhaps you do not like housework?"  
"Yes, I like it well enough—if I had a home of my own. But girls are not treated well by many mistresses. When I am out of work here I go to housework, but I am always glad to come back when they need me."

"Do any girls ever leave here to work in houses?"  
"Yes; one went not long ago. She claimed she could not make a living here, and wanted to try general housework for a while. She was a good worker and never got less than \$12 a pay—a pay is every two weeks. I know she will not make as much at housework, and the labor is harder than here."  
"Well, I suppose you will stay here until you are married?"  
"I don't know as I will ever get married, though many of our girls do; but I will work here as long as they will keep me. You can't always tell how your marriage will turn out. It is better to work here and be happy than to be married, still have to work and be miserable. I'll stay here, I think."

After the bolts are cut, men known as "washers" dump them into perforated zinc buckets and wheel them on little wagons to the centre of the building, where there are large stationary tubs filled with boiling soda water. With this they wash the oil from the bolts. After the washers the bolts are made clean for the nut-tappers and for packing.



**Tapping Nut.**

The large nuts—or burrs, as they are sometimes called—such as 7/16, 1/2, 3/4, and 1, are given to a man known as the dresser, who, by the aid of machinery, removes all rough and broken edges. This is called "dressing nuts." Rough edges are not as a rule found on small nuts. The nuts are then taken to the girls at the tapping machines, the largest of all. These machines have from four to six pulleys and the same number of pedals, and like the cutters the stinks are filled with oil. A pan to hold the nuts runs the length of the machine, and is directly in front of the girl. A stationary sink is at the back to receive tapped nuts. A sheet iron slide runs from the machine to the sink, and the girls, with a piece of steel and in such a form and sharpened so as to leave a perfect thread after cutting through each nut. The girl at the machine puts her foot on a pedal and the tap raises. She then lays a nut directly beneath on a plate. She removes her foot, the tap descends and while it is forcing its way through the "tapper" deals simultaneously with each tap in succession. When a tap becomes full the "tapper" steps on the pedal, with her hand stops the motion of the full tap, loosens it means of a thumb-screw, dumps its contents on the slide behind, replaces the tap and starts it over. This is done by experienced hands quite as fast as it can be told, and by evening their deposit sinks show signs of constant and speedy work. The oil is removed from the nuts by the same process as is applied to the bolts. Tapping, though not heavier work than cutting, is more tiresome, as the girls are compelled to sit all day. At the largest tapping machine, however, the girl must stand.

"Do you like your work?" was asked a tapper.  
"Yes, I do now. At first I did not."  
"You seem to work speedily. How long have you been here?"

"Ever since they have employed girls, four years since."

"You must have been well pleased and a good girl to stay so long in one place?"  
"Well, I can't blame to enjoy my living, and I mind my business and go ahead; that is all that is asked of us."

"I am glad to see you so well pleased."  
"Why shouldn't I be. The foreman is kind; all the men here who have any work to do treat us just as kindly and with respect, and the owner goes through once and sometimes twice a day. He always has some kind, encouraging word for us. Oh, we like him so much. It is not many men employing girls who will treat them kindly and, as if they are human beings like themselves. It is a poor working girl who appreciates kindness when it is shown us, and when we work for a man who speaks kindly to us and is the same day after day we do not forget him."



**Nutting On.**

After the nuts and bolts are washed they are taken to the third floor, and little girls, by the aid of machines, screw the nuts on bolts. The machines are the smallest of any in the factory. They are light and are run after the style of "pointers" by one pedal. On the left is a box for bolts, on the right one for nuts. With her left hand the little girl picks up a bolt and places the head in a pair of jaws. At the same time she takes up a nut with the right hand, lays it on the plate beneath the jaws holding the bolt, presses her foot on the pedal, and the nut runs on the bolt very cleverly. The pressure of the foot is removed, the jaws open and the bolt is thrown into a box back of the machine. "Nutting on" is not at all hard or difficult.

"Why don't you go to school instead of working here?"  
"I'm through school, and father don't make enough money to keep us all."  
"How old are you?"  
"I don't know just how old I am."  
"How old are you?"  
"I don't know; maybe I am."

**THE FINISHING TOUCHES.**

All bolts of extra length are given to "nutting" girls who work at a table, they being too cumbersome to work on the nutting machine. After the bolts are "nutted" they are dumped on a large wooden table around which are seated some 15 girls. These bolts they put in a pile, a certain number to each bench. After piling they wrap, tie and label them. They are now ready for storage or shipping. This work is easy and quiet; the buzz of machinery below is but a faint sound. The girls look clean and cheerful, and the conversation never flags during the day. At one time there were here good singers, and many an English and German song was sung with the good grace and equal vigor of a trained choir. Most of the good singers have gone and new girls are in their places. A large lettered placard bears the words, "Positively No Singing."

The "pointers," "cutters," "tappers" and "nutters-on" work is weighed off every evening. The timekeeper reduces the weight into thousands, and they are paid by this measurement. The report of their work is returned to the office each evening, where it is kept until pay week. When the work is counted up the pay for the same is put in an envelope with the worker's name and the sum received written thereon. These envelopes are taken to the girls' departments and distributed by the head bookkeeper—a very nice girl, who is always a pleasant word for the girls, and all returns is well liked by them.

Many men are employed at the bolt works, but they are off by themselves, yet in the same building. No men are allowed in the girls' departments, except those who keep the machines in order and the same special duties necessarily called them there. The girls have always been treated respectfully by the men, and have yet the first complaint to make otherwise. A member of the firm stated that he had often thought girls could do the work as well as men, and was always so when the latter went out on a strike. He was solved to try the experiment. Four years ago he took in the girls, and has had every reason to be glad he did. They keep better order, are steadier, stay at their work constantly without being driven to it, and they do the work as well as men, and 25 per cent. more than the boys did and they never go on strikes. They get as good wages and the utmost respect is paid them. Every convenience for their comfort is provided. He would not take boys back in their places under any consideration. Girls give such good satisfaction that no complaint can be made.

**THE MONEY MADE.**

"Pointers" make on an average 65 cents a day. This work does not require large or old girls. "Cutters" and "tappers" are larger, older and stronger girls. Their average at the least is \$1.00 and \$1.25 a day. "Nutters on" are small girls and make from 35 to 40 cents a day.

There may be one woman in the works who reaches the age of 45; the youngest looks to be 8 or 10 years old. Their hours are from 7 A. M. to 6 P. M., except Saturday, when they stop at 4. The building is a large brick, well lighted, as well ventilated and clean, taking into consideration the style of work. On the third floor is a dressing and bathroom. The girls always have a special dress to work in, and when on their way home you would judge the majority to be salesladies. Instead of factory girls, they are clean, shiny with hot and cold water are in the bathroom; soap and towels are furnished by the firm. The building is nicely heated throughout by steam. Some girls look delicate, but there is nothing in the work to cause ill-health. Any girl who has improved at all working in there. Taken all in all, the look similar to any crowd of girls that might be joggled together—some fleshy, some lean; some jolly, others sad; some extra clean, others dirty; some intelligent, some otherwise. A few girls, three or four—have been caught in the belts, but have a slight bruise or a big scar, no one was hurt. It is mainly through carelessness that they are caught.

When the whistle blows at noon the girls hastily leave their places, wash their hands, remove their "greasy" coffee-sacks (which the firm furnishes, as they absorb the oil and keep it from penetrating to their dresses) and hurry to their dinner, which they bring in baskets. Most all have coffee-cans. These they place on the heaters some time in the forenoon and by dinner their coffee is boiling hot.

At one time the girls working at the machines would, while working, join in and sing. It was truly a novel sight to see each busily engaged, and everyone, from all parts of the floor, singing, their voices rising above the din of the machinery. It made the place sound jolly, relieving the monotony of hard work. It is now prohibited; reason not assigned. It was also the custom formerly to hurry dinner over, and after to join in the giddy dance, keeping time to the delightful strains of a mouth-organ played by a girl. This also is ruled out. Nearly all the girls are orphans, a few are widows, and the majority have some one depending on their support. On Saturday each employee is given a lot of rags and ravelings, called "waste," with which they clean their machines. The belts are thrown off and all parts of the machine cleaned thoroughly. The building throughout is swept and everything is kept in good order, shining and bright for Monday.  
NELLIE BLY.