# OUR WORKING GIRLS IN Pittsburg

## THE STORY OF A COMMONPLACE HINGE.

### How Fair Females Fashion a Useful Article Out of Raw, Rough Iron.

The common, every-day hinge, that little contrivance which enables lovers to swing to and fro on the much-abused gate in the moonlight alone, has a history. For the purpose of learning the true story of this useful article I visited the works of the McKinney Manufacturing Company, Ridge avenue, Allegheny. At this establishment the hinge's history is intimately associated with a topic in which I—and your thousands of readers also, I trust—am just at present deeply interested, viz., women's labor in industries. For the third illustrated paper on this far-reaching subject, then, we will pick the hinge and its fair manipulators.

Few persons, I suppose, have ever considered how much work is required to make a hinge. It is a very simple article to bear marks of close thought at least fifteen times before it leaves the factory. Even the commonest hinge will cost fifteen cents, and then some of them will sell for 5¢ a cent. In the first place the iron is brought from the mills in long strips twelve to fourteen feet in length. On arrival at the hingeworks the strips are pickled in vitriol, then in lime water. This gives the iron a glossy and bright appearance. "Blank cutters," always men, by the aid of machines, cut these slats into the desired size. These blanks are then taken to the second story of the works, and by the small hands of girls the hinges are made.

Better order cannot be found even in a church than was maintained by the 50 girls in these two work rooms. Each was in her place attending strictly to work; not one head was turned to see who the visitor was. Harsh measures are not used to enforce this conduct, for they all have the greatest regard for their foreman, and, indeed, a more kind and sympathetic one man can be found in the two cities. The first operation "blanks" goes through after reaching the second floor of the hinge-making machine. It is run by steam. The necessary number of steel punches is set in dies.

The "punch" then "presses" lifts up a "blank" from a box by her side with the left hand, conveys it to her right, and places it sideway on a plate. The punches come down and go through the blank, which moves forward and falls through the machine into a box placed beneath. The "puncher" places in another blank, and the machine is in this way constantly fed. Hinges of this description are "punched" by this method, the machine being set to the kind and size. "Punching" by putting round holes in blanks, so that when the hinge is finished it can be fastened by nails or screws wherever it may be need.



*Counter Sinking.*

After the blanks are punched they are taken across the room to the "counter sinking machine." This is a thing of beauty. Long steel drills that look like silver stand upright in the centre. A little girl sits by a sink from which she picks up the punched blanks and lays them side by side on a long plate fastened to a width of the hinge. Different numbers can be put on, according to their size, and shape. This girl gives to the operator who passes beneath the drills. They descend—this machine is automatic—and the four punched holes are smoothed and countersunk on one only. By this process the head of the screw or nail used to hold the hinge can be driven so as not to project, but will fit perfectly. As the operator "counter-sinks" the one she hands the helper this another, thereby preventing any waiting. This work is very light. The "helpers" are the prettiest girls in the room. The foreman states that it is not their custom to take such young girls, but mothers come with tears in their eyes and beg work for them to help along at home. Upon investigation, if their story is found to be correct, the firm employs the little ones. This is undoubtedly act of kindness and charity, and if this rule has lived up to by all employers of child labor in the two cities many a home would be cheered and to many worthy ones extended helping hand.



*Splitting Machine.*

After the counter-sinking machine has completed its work the places are taken to another part of the room ready for the "splitting" machine. This work is splitting each plate, making two parts, hich, in the end, forms one hinge. The "splitter" resembles the punching machine and works the same way. The operator lifts up a plate with the left hand and places it in position with the right. The machine forces sharp knives back and the side is cut or split. Should the plate be good in crooked or uneven, the "splitting" will be spoiled. Although one-half might be split properly, it is useless, for there would be no other half to form the perfect hinge; consequently it is thrown aside as scrap or waste. Necessarily these operators are required at these machines or profit would be eaten up by loss.

SERIAL COMPANY.

"Do you like your position?" was asked an operator.

"Yes, very much. The work is easy and as clean as any place can be. We have a nice room, kind foreman and employers, and all the girls like it here. I can find no fault with anything."

As the dinner whistle blew the writer asked permission to sit by the fair worker as she ate her dinner. The request was graciously granted and acquiesced in by a companion who had joined her. One hospitably offered to divide her dinner.

"Do you always bring your dinner?" was asked the new comer, a dark haired girl.

"No'm; I can go home, as we live just apiece away. But when it is so cold mother always sends it to me."

"Have you been employed here long?"

"Yes; a good while. There are two girls who have been here longer than I am in here to-day, the other works right up there." pointing to a pattern machine, "but she has gone home for dinner."

"Have you a father living?" was asked the little haired first speaker.

"No, he is dead. My mother is spared me yet."

"Yes, and she has two elegant brothers," chimed in the dark-haired one. "One is 15 and the other 18, and they bring every cent home on pay-day to help their mother. That can be said of few boys."

"Very true. Do you expect to work here always?"

"Oh, no'm; only until April!" (mentioning a date), and she dropped her eyes in embarrassment. The writer pondered, and at length asked:

"What are you going to do then; get married?"

"Yes'm."

"How can you keep house?"

"Oh, my mother taught me; besides, we will live in the same house with her, and we will do everything we can to help."

The conversation—quite a lengthy one—proved both to be good, intelligent girls, and the young man, from appearances, Sections of the one is to be congratulated in the choice of a partner.

Split plates are taken to the "nipping machine." The girls picks up a plate, puts it in the "nipper," and it is thereby given a round curve. She removes and places it in deposit box, while, with the other hand, she puts in another, working over-hand all the time, apparently without confusion or effort. The next operation is conferred on the "binding machine," which gives the plate the final curve that admits the wire or pin which holds a hinge together. The reason plates must be "nipped" before "binding" is that in the binder straight they are bent back instead of round, as is required. When "nipped" and given a round start there is no trouble in "binding" the hinge together. The "nipping" and "binding" machines are made in one piece, with two girls at each end. The "nipper" lifts a nipped plate and puts it with the left hand and takes it out with the right. The "binder" reaches the left hand under the right arm of the "nipper" and conveys the plate to the right hand, which places it in and takes it out of the machine. They work very rapidly in this way.

*A Type.*

COUNTRY AND CITY.

Side by side, working together, were two girls. The "nipper" had been raised in the country, and her city friend visited her October. The "binder" was born and raised in this city and never had been to the country.

"Is it not difficult to work so close together?" was inquired.

"Oh, no'm, not a bit; it looks hard, but we are never in each other's way," answered the "binder."

"Would you rather do housework than work in a factory?"

"I would not," quickly spoke up the "Nipper," "To be bossed by a woman who forgets you are human like herself, to have her entirely after you and nagging and saying this and that is done wrong, compelling a girl to work from early in the morning until late at night, scrimping food given her to eat! I wouldn't work for any woman. Here we have a kind foreman, we do our work as it is to be done and we never get a black look or cross word. We work our 10 hours a day, and in the evenings and Sundays we can do as we please. If sick we can stay at home, I will take the factory in preference."

"There are some people who think factory girls are horrible," was suggested.

"Well, they are good and the ones that look down on them," was quickly answered.

"If you should get married, how would you keep house?"

"We could learn," answered the "binder," with a smile.

"I do know how to keep house," said the "nipper," "and once learned it can never be forgotten. I was brought up on a farm, and consequently this is new to me."

"What do you do in the evenings?"

"I read when I can supply myself with books. I like to read anything I can get."

This binder, although born and raised here, has never been inside the Opera-house, museum, at a ball or a picnic.

PLEASURE PAINS OR BANES.

When the plate comes "punched" pieces of iron are pushed out of place and the hinges will not go together. For this reason it must be taken to the "punching machine," which is in the form of a long table. At each side are the dies. Two girls sit at each machine. A long sink directly in front of them holds the hinges. The "presser" picks up a hinge with the right hand and puts it in the dies, which press one side. She puts it in the other side and the "presser" evenly. While she finishes one with her right hand she takes another in the left, working both hands in rapid time. The girls sit there so nicely. The girls at the same machine may work on different kinds of hinges, as they can be seen by looking at the dies.

"Are you not afraid of getting your fingers hurt?"

"No, I cannot," and she placed her fingers in the machine where the hinge is pressed. "Don't you see, I could not if I tried; besides, my fingers have no business in there."

"Do you like your work?"

"Yes, I have only been here three days. A girl in the other room got me the place. I was engaged at housework before, and worked from 7 in the morning to 8 at night for $3 a week. I don't know how much I can make now, but I know I shall be satisfied with less even, for the work is easier by a great deal. I can sit down, and to stand all day; here I can rest my pleasure, and sit or stand, just as I please."

"Is the work not dirty?"

"No, indeed; no one knows just how dirty stores are until they are put behind the counter."

"What stores were you employed in, and what such long hours and little salary?"

"In the 5 and 10 cent; they make lots of money, too."

The hinges being pressed they are put into a galvanizing barrel, mixed with sawdust. The barrel is closed, a lever is pulled and the barrel revolves rapidly. In the space of half an hour the hinges are polished and free from all oil and dirt. After the sawdust is sifted from the hinges they are given to the "wire drivers," who sit at a long table, the hit finger in their mouth; another will squeeze it; or one will wrap it up tightly, another will fling her hand and jump around until it quite aching. Of course we all feel sorry, but it's funny and we can't help laughing."

One said she had been employed before in coffee establishment. She was sick continually, and since she came here she has not had one day's sickness and has grown hearty and strong.



*Wire Driving.*

ter or drive the wire truer than these dainty hammerers.

After this process this hinge works stiffly. It cannot be opened or shut. To cure this defect they are taken to the "swedging machines," which are but little less hammers, such as used in rolling mills. There is a round groove in the hammer and one in the plate, in which the joints of the hinge are placed and which prevent the hinge from flattening. A hinge is placed on the plate, the hammer descends and a crease is formed along each side of the joints, causing them to shut or open easily and making them work perfect.



*Swedging Machine.*

After the wire is driven and the hinge "swedged," round edges of wire stands from each end of hinge. To trim them they must be taken to girls at the "burring" or "heading" machines. The hinge is closed and placed in jaws. The operator presses a pedal (the only machine used that is not automatic) and rolls out each side going in opposite directions form a round head or burr on the wire. This fastens the wire permanently. Hinges are sometimes ordered with loose wire, so they may be taken apart at the will of the one using them. When so ordered they go through the same work as has been described, even to "wire driving" and "swedging." The necessary for this is that they must be "swedged" to work easy, and if it was attempted without a wire being passed through the joints would be flattened, making the hinge useless. When "swedged," instead of being taken to the "burring machine," they are taken to a small upright machine, where the wires are forced out with a punch and cut loose from the hinge. These wires are all strung together, and after being taken from the machine in twenty minutes, they are tossed out as bright as silver dollars. After they are separated from the scrapings they are taken to the "burring" girls. A who examine all and cast aside any with a blur or blemish. Then they go to the packers, who place them in paper tubes and put each box one dozen pairs of hinges, 24 in all. This is the last operation, and they are ready for shipment.

A nicer or better class of girls cannot be found even in the privacy of home than are employed here. Girls desiring a situation must have reference, or some one known to the foreman or owners to speak for them. While this is a rule to be commended, yet in thousands of instances worthy girls seek employment who have not a friend or acquaintance in the city to say one word in their favor. They need support more than the ones that have some one to help them. It would be well, if a hand is needed and an unknown applies, to give it. It would take but a few days to see if she would do, and if unsatisfactory she could be discharged, leaving no one the worse for it.

THE ACCOMMODATIONS.

The building is well lighted and ventilated and heated by steam. The pipes are lowered a few feet from the ceiling instead of being placed around the wall, as in the majority of places. This makes the warming of coffee an impossibility, but the stove in the room could be supplied with a wide iron plate over the top, on which coffee cans and buckets could be placed, which would make a vast improvement on noon-day dinners. A nice dressing-room is on the third floor, and if the bath-room, instead of being down where they work, was also on the third floor, it would be a vast improvement. If the girls were allotter there—as the employers say they would—they should be discharged. They would not be much trouble on this score from piece-workers, as other places have proven. Taken all in all, this shop is the most pleasant and clean yet visited.



*Take My Picture.*

THE WAGES MADE.

The wages received are as follows: "Punching," $2 to $2.50 per week; "counter sinking," $1.00 a day; three "helpers," $2.00 weekly, "nippers" $2.00 weekly, "$3.50 to $5.00; "presser," $3.00; "wire drivers," $5.00; "swedging," $3.50; "burring," $1.10 a day. The figures represent average earnings. Work is made by piece-work, except the helpers, who are paid by the week, as also the inspectors and packers—$4.00. The foreman should rather have girl operators than boys, as they are better interested and attend to their work better. At noon he allows them to dance and sing, both of which they do well. Their hours are from 7 to 6, same as in other places. On Saturday they close at 4.

Among the wire drivers are two girls who have left school and are drive just as well as the right-handed ones. One pretty little wire driver said: "When I came here first I was disgusted, and felt like I went home that night mother says 'How do you like it?' I said, 'Very well.' And then they all passed me about graduating in one day; so I got spunky and went back next day, thinking I could work until 6 that day. Well, I got acquainted, liked it and have been here ever since. While I was working in the daytime I did not feel tired, but when I would get home at night I could hardly lift my arm. Now I never feel tired. My arms never get stiff or sore. We pound our fingers sometimes, and it is laughable to see the motions that are made from throwing it. She smiled roguishly, bringing to view a pretty dimple and lovely pearly teeth. "One hit click the hit finger in their mouth; another will squeeze it; or one will wrap it up tightly, another will fling her hand and jump around until it quite aching. Of course we all feel sorry, but it's funny and we can't help laughing."



*Take My Picture.*


## HOW BOOKS ARE MADE.

### Lots of Work Before Publication Can Be Begun.

After the copy is prepared it is sent to the printer, who, if it is a book of any length, will have it set up in type, and a proof taken from the type. This proof is sent to the author, who corrects it, and returns it to the printer, who makes the corrections and sends back the proof to the author, who corrects it again, and so on until the book is ready for the press. The printer then prepares the type for the press, and it is placed on the press and a few copies printed. The author reads these copies and marks the pages for the binder, who folds the sheets and sends them to the stitcher, who sews them together. The book is then sent to the trimmer, who trims the edges, and then it is ready for the publisher.

Publishers do not always have books printed in their own establishments, but often have them printed by other publishers who have the facilities for doing the work. The publisher then sends the sheets to the binder, who binds them in cloth or leather, and they are then ready for the market.

Publishers do not always have their own stores for the sale of their books, but often have them sold by other dealers who have the facilities for selling them. The publisher then sends the books to the dealer, who puts them on his shelves for sale.

Nearly all the work on a book is done by machinery, and it is a very complicated business. The publication of a book is a very expensive undertaking, and it is only a few publishers who can do it successfully.


## How Lincoln Earned a Nickname Which Stuck to Him All His Life.

It was very fitting, he says, says Isaac N. Arnold, that Lincoln acquired the nickname of "Honest Abe," which stuck to him all his life. It was while he was acting as clerk of a country store. Several incidents illustrate an integrity so marked, it seems, the customers could not have been habituated. One evening he found his cash overrun a little—a discovery which we fear sometime excites a disagreeable sensation, yet, over the phenomenon, concluded that his making change for his last customer, a little woman who had come a little before sundown, he had given her too little. Although the sum was small, it was a loss of two cents, he forthwith took it to her house. At another time he found on the scales a short weight, which he had used unjustly just before closing the store on the previous night, but which was lighter than the one he meant to use, and which, when he came given a purchaser a few ounces of tea less than he been paid for, and he immediately sent the quantity to make up the deficiency.

The local popularity enjoyed by Lincoln—on one occasion when a candidate for the Legislature he received every vote, and always ran far ahead of the other names upon the ticket—seems the more remarkable when we learn that he neither smoked, drank nor gambled, and that he was long so very poor as to be not in a position to offer the smallest pecuniary favors.

### Wilkes Booth as an Actor.

Philadelphia Times.)

Writing of actors and actresses recalls John I. Ford. I saw him only a few days ago. He has not been in Philadelphia years. I power in amusement business in this country. He must be over 60, fully 40 years of which have been spent in theatricals. Yet he looks simply fresh as ever, and you would not take him for 40. "Yes, I have managed all the Booths that have ever been on the stage. I began with Junius Brutus Booth, John and Junius Brutus have played for me. I regard Wilkes as the greatest of them all. He had more physical beauty and intellectual power than any of them. As *Raphael*, in "The Marble Heart," he was the *Raphael* I saw ever dreamed of. As *Richard III.* has never been approached. Yet you remember I spoke of him as a young man beginning his career. I was an actor when he died. I would have paid him $20,000 a year for his services in his work. He had made with me more than that sum per annum."

### Smoke-Consuming Locomotives.

In the West Albany shops, Superintendent Buchanan, of motive power, and his men have devised a smoke-consuming locomotive attachment, which is being tested on No. 238, one of the engines drawing the "Flyer" from Albany to Syracuse. It is simply an arrangement whereby four one-sixteenth of an inch jets of steam are forced into the fire-box from opposite ends above the coals. This device causes the smoke to burn and the creation of additional heat. Three tons of coal are saved on each trip to Syracuse and return by using the consumer. The new 60-inch per hour engines now are being constructed at West Albany have the consumer attached.

### Trees That Bear Soap.

There are a number of soap trees growing in Tallahassee. In the yards of Dr. G. W. Betton and Mr. Ralph Stebbins, the former on McCarty and the latter on Duval street, fine specimens of this tree, in bearing, may be seen. They are prolific fruiters, the berries being about the size of the ordinary marble, having a yellowish, soapy appearance, with a hard black seed, from which the trees are propagated. Little farm hold the fruit to make soap, but Judge Van Valkenburg says people in China, Japan and other tropical countries the berries are used as a substitute for soap just as we are taken from the trees.

### Queer Kentucky Custom.

A novel custom prevails among the ladies of Winchester, Ky., which is highly commendable. It is modeled after the Indian custom of bestowing the name. The mother of a certain young lady, being very much pleased with the Mikado Pinafore, in which the Mikado proposed to kilt a "yellow" for "it, but the young lady declined, saying she had confidence in the bewitching cricket, and preferred the natural coloring of the fellow.

### Leprosy in San Francisco.

A Chinese leper was placed in the shed in the rear of the San Francisco morgue, recently, and it was said he would him there until he could be removed to the pest-house. While he was in there he was visited and taken away by some of his countrymen, who tore off a corner of boards in the side of the shed. The Chinaman had no sense of feeling in his limbs, and did not wince when a needle was run into the calf of one of his legs, nor give vent to any expression of pain when a hot stove-lid lifter was laid on the flesh.

### What the Blind Tiger of Dixie Is.

A Calhoun country man, says the Calhoun *Times*, during a recent visit to a prohibition town in this very State of Georgia ran upon what is known as a "blind tiger." The "blind tiger" is a house where people can get whisky, but do not know from whom they buy it. There is a hole in the side of the house with printed instructions above it. You place your bottle and money in the hole and both disappear, but in a few minutes your bottle returns full of whisky. No word is spoken and not a sound is heard except the rolling of the bottle.

## THE BEAUTIFUL.

"Its a beautiful thing, this beautiful snow
It seems from a whisper and yet do you know
How deep and how wet and how cold it can be
If one must wade through it, in cold misery?
And what does one care for those other days so bright,
Its they ever so soft, or ever so slight,
Its as safe for a car and stately this wet fret
Till echo resounds through the desolate street?
Its says to Himself: "Let dull science take care
Of these beautiful flakes, I know they make so rare,"
As he trudges along, and the evening air
Catches up a strange sound and—"Its not a prayer;
For these little flakes, like the sand on the shore,
Are counted by millions, aye! millions and more,
And each little one will do all that it can
To worry and bother a drowsy man.
They circle and whirl, each one waiting till chance
Throws him on their mercy, then each, will advance
To touch some one spot, nothing more nor less
Till their victim cries out in helpless despair,
Just a fancy—a thought—and I'm lost in the snow,
"Its a beautiful thing, this beautiful snow.

PITTSBURG, February 24, 1885. BERT.