

## A MOTHER'S LOVE.

Some years ago, some English officers camping in the vicinity of Mulkapoor, went out tiger-hunting, and bagged a splendid tigress.—Whilst returning home with the trophy, they found, in a secluded spot, in the lee of a jagged rock, what evidently was the lair of a tiger, for there lay bones of both human and brute kind, and shreds and rags of clothing.—More interesting than all, however, was the discovery of a tiny kitten not more than a fortnight old, coiled in a corner, winking and blinking and gaping at the intruders. The hunters at once decided that this must be the cub of the beast they had slain, and willingly took charge of the little orphan.

Tiger kittens are not captured every day, so when the hunters returned to their quarters, the excitement in their tents was considerable. The newly-acquired kitten was provided with a tiny dog-collar and chain, attached to the tent-pole, round which it gamboled, to the delight of an audience numbering nearly twenty. About two hours after the capture, however, and just as it was growing dark, the good people in the tent were checked in the midst of their hilarity by a sound that caused the bravest heart to beat rather irregularly.

It was the roar, or rather the combination of shriek and roar, peculiar to the tiger when driven mad with rage. In an instant the gamboling kitten became every inch a tiger, and strained, with all its baby strength, at the tether, while it replied, with a loud wail, to the terrible voice outside. The company were panic-stricken. There was something so sudden and unearthly in the roar, that it seemed as though the great tiger, brought in an hour before, had come to life again. Certainly, the tiger in question was already flayed, but the picture conjured up, became not the more pleasant for that. There was, however, not nearly so much time for speculation to the scared company as writing these lines has cost; for almost simultaneous with the roar, there leaped sheer into the center of the tent, a bold tigress, and without deigning to notice a single man there, she caught her kidnapped baby by the nape of its neck, and giving it a jerk, snapped the little chain, then turning for the tent door, trotted off at full speed. After all, it appeared, that the little thing did not belong to the tiger that was slain, but to the brave mother that had tracked and recovered it.—Sanguinary man eater as she may have been, one can be scarcely sorry to hear that not a gun was leveled at the great rejoicing creature, as she bore off her young one, and that she got clear off.—[*Ex.*]

## MANUFACTURE OF PENS AND PINS.

Mr. Babbage, in a work published in 1832, tells how ten persons had to work seven hours and a half in order to produce a pound of pins. Now nearly everything is done by a machine, and hand labor is employed only in guiding this machine. "An almost semi-intelligent thing of iron and steel, a machine with innumerable cranks and levers, rams and hammers, and a cylinder, toothed file-like, receives from a horizontal drum the end of a hank of brass wire, pulls sufficient for a pin into its voracious maw, and swallows it; the work of digestion goes on; a clicking and rapping sound is heard; the previously straight bit of wire reappears with a head, and drops down into a slit, the head uppermost, the point downwards, to be against a revolving steel roller, the surface of which is toothed; the friction of the roller causes the pins to rotate while the end of the wire is being sharpened and converted into a point. The pin now made is forced out, and drops into a receptacle prepared for it, a perfect pin, to be cleansed by boiling in a solution of tartar, and made white and silver-like by being boiled in a solution of tartar and tin, and, after papering, to be selected—the boiling, whitening, and selection being the only operations in which human labor or intelligence is required in the making of a pin." Pens, in the present stage of manufacturing art, require a greater share of hand labor than pins.

At Birmingham a hundred and twenty million pens are made each year by machinery guided by four hundred women and a hundred men. The steel is procured from Sheffield. It is first cut up into narrow strips, and is carefully pickled by immersion in diluted sulphuric acid, and then reduced to the proper thickness by being passed through metal rolls. In this condition it is fit to be made into pens, and for this purpose it is passed into the hands of a girl, who, with a punch fitted into the screw

of a hand-press, and a corresponding bed, speedily cuts out the blank. The next process, namely, that of perforating the small hole which terminates the slit, and removing any superfluous steel likely to interfere with the elasticity of the pen, is also done by a female. The incipient pens are now in a condition to have their maker's name and any ornamental device stamped upon them. For this purpose they are annealed in large quantities in a muffle, and, after being cooled, they are placed under a large stamp, in which is held the device to be impressed cut in steel; the hammer of the stamp falls, and the marking and ornamentation are complete. Up to this stage the future pen is a flat piece of steel. It is then transferred to another female, who, by means of a press and die, makes it concave if it is to be a nib, and forms the tube if it is to be a barrel pen. Hardening follows. By this process a number of pens are put into an iron box, which is placed in a muffle; when the whole is of a uniform red heat, they are plunged into oil; and then the superfluous oil is removed by agitation in a revolving cylinder. At this stage the pen is as brittle as glass, but the tempering which follows imparts elasticity. After that the pens are again placed in a revolving cylinder, with pounded crucible sand, or some other cutting substance, the abrasion of which, by the revolution of the cylinder, speedily discloses the natural colour of the steel. Next follows the grinding of the nib by submitting it to the emery-wheel. The pen is then in a condition to be slit, the slitting being the most peculiar of the many processes of steel pen making. A chisel or wedge with a flat side is fixed to the bed of a press, and the descending screw has a corresponding chisel or cutter attached to it, which passes down, and is most accurately fitted. The pen is laid on the lower chisel, the screw is made to come down, and with it the upper chisel, by which the slit is made, and the pen completed. The last stage is the colouring, brown or blue. This is done by placing the bright steel pens in a revolving iron cylinder, under which is a charcoal stove, until the desired colour is arrived at. The final brilliancy is imparted by immersing them in gum-lac dissolved in naphtha.

## OX YOKE.

"C. W." asks:—"Will some correspondent give directions for making a good ox yoke' medium size?" Yes I will. My oxen always, as long as I used an ox team, pulled under a good ox yoke. They liked it; so did I; and I am of the opinion that C. W., and even so many more, would like just such a yoke, if they will only put on courage to face their neighbors, and progress a peg.

I learned, when a boy, that with a down sweep to the yoke, and the drop of the staple and ring below that, that a pull on the ring canted the yoke; bringing the pressure on the bottom of the bow, drawing it into the ox's gullet, choking him unmercifully, and the heavier the draught the more malicious the murder; causing the poor animal to gasp and wheeze, and loll and blow, and I guess, cutting down his pulling power about one-half.

So I made my yoke light, four feet four inches long, flat and broad on the neck, and sweeping upward instead of down. The staple I put through the yoke horizontally, instead of vertically, and brought the weight of the draught on top of the animal's neck, instead of dragging the bow into his throat, and choking half his life out, while I shall get only half his strength. The bows I sheathed, or rather lined inside with ordinary horse collars, secured around the bows with thongs. Didn't my oxen laugh, and bless me for that yoke. There was no more gurgling, gasping, wheezing, panting and staggering with my oxen. But there was much more work done.

I think all the neighbors would have put their oxen under my yoke, only they didn't understand it so well as my oxen and I did. They said it was only one of Charley Garnet's salt-water "fly-by-nights." Wouldn't work on landmen's oxen. But this is a right way to make an ox yoke, C. W., in my honest opinion.—[*Country Gentleman*].

CENTRAL PACIFIC RAILROAD.—A correspondent of the *Alta* says:

Three hundred kegs of Santa Cruz powder, costing four dollars a keg, are daily used in blasting. About 1,200 horses or mules are employed—and this stock is kept in the best condition. Where heavy cuts or tunnels occur, work is kept up by three regular gangs, on the seven days of the week, day and night.

LANCASHIRE.—A noble county, be assured, is that of Lancashire, notwithstanding its tall chimneys, and black-mouthed coal-pits, and smoke-begrimed faces, and smarmy artisans, and cotton covered operatives. The Southern shrinks from it as a pestilence. The Londoner would almost as soon be stuck up to the neck in a Tipperary bog, as be fixed in a manufacturing town. But, over the wide world, point out to us a district of the same extent as Lancashire with the same properties of greatness. In this much maligned county there are fields as green, and landscapes as fair as eyes can rest on. Nowhere is agriculture, in its science and practice, advancing more rapidly. From beneath its surface coal is dug out by brawny arms to turn the machinery of the monster factory, and to cheer the fire-side of the humble cottage. From its mountain sides the stone is quarried in abundance. Along its picturesque valleys the dancing water-fall is made available for turning the wheels of the mill, and the wild beauties of nature are trained to the service of the practical and useful. Railways intersect the country like net-work affording unusual facilities of transit. On the rivers float the argosies of a hundred lands; and from its ports are borne its manufactures to the four corners of the earth. Its inhabitants are characterized by a sterling intellect of Saxon parentage, polished and whetted by the daily attrition of commercial dealings. Many a strong mind has struggled up from the weaver's loom, till it has enriched the literature of the day, or increased the comforts of the day by its practical inventions. A county indeed not without its failings; but still a county "whose merchants are princes," whose women are said to be "witches," and whose people generally, though rough and gnarled in their outside bark, are in the main sound at the core!—[*Fraser's Magazine*].

DRESS REFORM.—The National Dress Reform Association was held at Syracuse, N. Y. June 20, which was presided over by Dr. Mary E. Walker, of Oswego. Officers were chosen for the ensuing year, the President being Dr. Mary E. Walker, of Oswego. Resolutions were adopted changing the name of the organization to "National Dress Reform and Equal Rights Association," urging the necessity of a change of style in the dress of American women. In the evening Dr. Walker delivered an address, which was forcible and suggestive. It gave a minute account of her recent arrest in New York for "wearing men's clothing," and her final vindication of the right to dress as she pleased. Her account of said arrest was interesting, and in her remarks regarding the policeman and justice connected with her arrest and trial, she uttered some sharp things, showing that she has no particular love for the manner in which justice is dispensed in the great metropolis. She next discussed the elective franchise, and predicted that in less than ten years the women of America would walk side by side with the men to the ballot-box and deposit their ballot for their choice of officers, and that many of the offices would at that time be filled, ably and acceptably, by the women of our country. She stated that in the South, at the present, woman was accorded more of her inalienable rights than at the North; and she further predicted that before one Northern State gave to woman equal rights, three or four of the Southern States would have done the same thing. She proposed to punish Jeff. Davis by dressing him in the hoop and long style of dresses of the present day, and require him to do the work of a forty-story house, and be made to go up and down stairs seven times a day, which punishment she knew would exceed any other that could be devised. She spoke strongly against the custom of wearing corsets, and gave good physical reasons for their being discarded, and closed her remarks by urging an immediate adoption of a dress reform, as the only means of preserving the perpetuity of the American nationality.—[*N. Y. Sun*].

PAPER PULP FROM WOOD.—A company has been formed with a capital of \$500,000 for preparing this new pulp; and on the 12th ult., they met to examine the works, which are situated on the Schuylkill, near Philadelphia. A poplar tree taken from the hillside was converted into clear, white, soft paper, in the space of five hours. In the evening a banquet was given by Messrs. Jessup and Moore, at the Continental Hotel. About two hundred guests were present, and speeches were made by the Mayor of Philadelphia and other prominent gentlemen.—[*Scientific American*].

RUSSIAN MARRIAGES.—Generally, without asking the children, the parents on both sides arrange the affair between themselves, to which arrangement succeeds the bridal promenade, whereat if the young people are not already known to each other, they are conducted, as if accidentally, into the same walk, and introduced. The father of the young man then sends a kind of female confidante, or go between (very useful on such occasions), to the father of the bride; and if he declares himself willing, the young couple, the parents, relations, bridesmaids, &c., all meet together, when the arrangements are concluded; and in these the dowry is never overlooked. Then follows the betrothal; on which occasion the elect pair kneel down upon a fur-skin mat and exchange rings, during which scene the bride's father holds over the head of the bridegroom a saint's image, and the mother holds over the head of the bride a piece of bread, as a sign of abundance. The bridesmaids then sing several national songs, appropriate to the ceremony, and the guests are entertained with various sorts of beverage, during which many a good-humored joke circulates. The remark that the wine is bitter and must be made sweet, is always construed as a challenge for the betrothed couple to salute each other. The guests then make diverse presents to the bridal pair; and the bridegroom afterwards takes his leave, whilst the companions of the bride sing a song, wherein they invite him soon to return. Now begins for the lovers—or rather for the future wedded pair—a new life. Every evening until the nuptials, the betrothed husband must visit his intended partner, bringing her presents of sweet cakes, bon-bons, &c., of which the Russian ladies are extremely fond. On the nuptial eve the bride entertains her female friends, and receives from the bridegroom a gift of various articles necessary for the toilette-table, with a certain sum of money. The maiden then retires to the bath, and on her return the bridegroom re-appears, is received with music, and has handed to him the marriage portion, respecting which, however, these are often serious disputes. On the wedding day, the bride-maids unbraided the lady's hair, and she receives her swain with flowing locks. After the marriage ceremony, performed according to the rites of the Greek Church, a dinner is given—at which, usually, the parents are not present—and at its conclusion the young couple are conducted in triumphal procession, with vocal and instrumental music, to their apartment. The old custom of the bride, on the evening of the wedding-day, taking off her husband's boots in pledge of obedience, is still retained in some parts of the country, as also that of the husband depositing in one boot a sum of money, and in the other a small whip; if the young wife happens to hit first upon that containing the money, she keeps it—if not, her husband gives her two or three light cuts with the whip. On the day after the wedding, the parents of the husband give as handsome a dinner as their circumstances will permit; and now the banqueting continues during an entire week, which by any but a Russian might be considered rather too severe a trial.—[*Russian Customs*].

WALK ACROSS EUROPE BY A BOY.—A feat of courage and perseverance has just been accomplished by a French boy of thirteen. Three months ago, dissatisfied with his treatment by his uncle in Paris, he started from the capital with sixty francs in his pocket to go to his mother, who is married to a second husband, a French workman in the employ of the Shar at Teheran. With the aid of a map and guide-book he tramped across Europe, receiving such hospitality by the way that, on reaching Constantinople, he had still nearly half his francs remaining. After a short rest in Pera, he crossed the Bosphorus, on his way to Persia, but, a little beyond Scutari, was stopped by some Turkish policeman and brought back till an interpreter could be found. His story being thus learned, he was passed over to Pera and placed in charge of the French Consul, in whose custody he now is, unable to understand why he should be interfered with, and angrily impatient to pursue his journey.—[*N. Y. Sun*].

CHINESE PIRATES.—A parliamentary return shows that during the command of Vice-Admiral King in the Chinese seas—between June, 1865, and February, 1866—seventy-one piratical vessels have been captured. Thirty of these vessels were burnt and twenty-three given up to mandarins.