

THE THIMBLE.

The thimble is a Dutch invention that was first brought to England in 1695 by one John Lofting, who began its manufacture at Islington, near London, gaining thereby both honor and profit. Its name was derived from the words thumb and bell, being for a long time called thumble, and only lately thimble. Old records say that thimbles were first worn on the thumbs; but we can scarcely conceive how they could be of much use there. Formerly they were made of brass and iron only, but of late years steel, silver, gold, horn, ivory, and even pearl and glass have all been used for making thimbles. I saw some very beautiful ones in China that were exquisitely carved of pearl and bound with gold and the end also of gold. These pearl thimbles are quite as costly and far prettier than those made entirely of gold. A thimble owned by the queen consort of Siam is shaped like a lotus bud, this being the royal flower of that country, and almost everything about the court bearing, in a greater or less degree, some impress of the lotus. This thimble is of gold, thickly studded with diamonds that are so arranged as to form the lady's name and the date of her marriage. It was a bridal gift from the king, who, having seen the English and American ladies at his court using thimbles, took this method of introducing them among his own people. In Naples very pretty thimbles, composed of lava from Mount Vesuvius, are occasionally sold, but rather as curiosities than for real utility, being, from the extreme brittleness of the lava, very easily broken. I hear also of thimbles made of asphaltum from the Dead Sea, and of one composed of a fragment of the old elm tree at Cambridge, Mass., under which General Washington stood when taking command of the United States Army in July, 1775, but I do not suppose that any of these were ever intended to be used in sewing. In the ordinary manufacture of gold and silver thimbles thin plates of the metal are introduced into the die and then punched into shape. But in Paris the French have a way of their own, quite different from ours, for making gold thimbles that are said to be much more durable than those made in the usual way. Pieces of very thin sheet-iron are cut into disks of about two inches in diameter. These, after being heated to redness, are struck by means of a punch into a succession of holes of a gradually increasing depth, to give the proper shape. The thimble is then trimmed, polished and indented around its outer surface with tiny holes. It is next converted into steel by a process called cementation, then tempered, scoured and brought to a blue color. After all this is

completed, a thin sheet of gold is introduced into the interior and fastened to the steel by a mandrel, while gold leaf is attached firmly by pressure to the outside, the edges being seamed in a small groove made to receive them. This completes the thimble that will last for years. The steel used in its construction will scarcely wear out in a long lifetime, and the gold, if worn away, is easily replaced.—*Dorcas Magazine.*

LITTLE JAPANESE.

Here is something interesting I found about the habits and dress of the children in Japan. In the first place the character of the Japanese houses saves much trouble about children. There are no stairs to tumble down, no furniture for them to tumble over, no sticky food with which to bedaub themselves. So there is seldom need to reprove them. They are rarely heard to cry; but when they do break forth, they make a tremendous racket, yelling with great fierceness. In his travels through the country, Prof. Morse only once saw boys fighting; and then they were only slapping each other. The dress of the Japanese children is the same as that of an adult. The sleeves are open on the inner edge, with a pocket on the outer side. The dress is very simple, easy and free, with tucks to let down as the child grows, so that, as the fashions never change and the dress is made of strong silk brocade, or silk and cotton, it will last from ten to twenty years.

The children's shoes are made of blocks of wood, secured with cord. The stocking resembles a mitten, having a separate place for the great toe. As these shoes are litted only by the toes, the heels make a rattling sound as their owner's walk, which is quite stunning in a crowd. They are not worn in the house, as they would injure the soft straw mats with which the floor is covered. The Japanese shoe gives perfect freedom to the foot. The beauty of the human foot is only seen in the Japanese. They have no corns, no ingrowing nails, no distorted joints. Our children's toes are cramped until they are deformed, and are in danger of extinction. The Japanese have the full use of their toes, and to them they are almost like fingers.

The babies are taken care of on the backs of the older children, to which they are fastened by loose bands. You will see a dozen little girls with babies' asleep on their backs, engaged in playing battledore, the babies heads bobbing up and down. This is better than crying in the cradle. The baby sees everything, goes everywhere, gets plenty of pure air; and the sister who carries it gets her shoulders braced back and doubtless some lessons of patience. It is funny to see the

little tots, when they begin to run alone, carrying their dolls on their back.

Where we have one toy the Japanese have a thousand. Everything in art and nature is imitated in miniature. Toys can be bought for half a cent, and elegant ones for eight or ten cents. There are stands on the streets kept by old women, where little girls can buy a spoonful of batter and bake their own top cakes. Then, along comes a man with a long bucketful of soap suds, of which he sells a cupful for the hundredth part of a cent (they have coins as small as that), to children who blow soap bubbles through bamboo reeds. The babies make mud pies and play at keeping house just as ours do. They are taught always to be polite, and say, "Thank you." If you give a child a penny, he will not only thank you at the time but whenever he meets you again.—*Ex.*

HOW GUN BARRELS ARE MADE.

The beautiful waved lines and curious flower-like figures that appear on the surface of gun barrels are really the lines of welding, showing that two different metals—iron and steel—are intimately blended in making the finest and strongest barrels. The process of thus welding and blending steel and iron is a very interesting one. Flat bars or ribbons of steel and iron are alternately arranged together and then twisted into a cable. Several of these cables are then welded together, and shaped into a long, flat bar, which is next spirally coiled around a hollow cylinder, called a mandrel; after which the edges of these spiral bars are heated and firmly welded. The spiral coil is now put upon what is called a welding mandrel, is again heated and carefully hammered into the shape of a gun barrel. Next comes the cold hammering, by which the pores of the metal are securely closed. The last, or finishing operation, is to turn the barrel on a lathe to exactly its proper shape and size. By all the twistings, weldings and hammerings the metals are so blended that the mass has somewhat the consistency and toughness of woven steel and iron. A barrel thus made is very hard to burst. But the finishing of the inside of the barrel is an operation requiring very great care and skill. What is called a cylinder-bored barrel is where the bore or hole through the barrel is made uniform size from end to end. A choke-bore is one that is a little smaller at the muzzle end than it is at the breech end. There are various ways of "choking" gun barrels, but the object of all methods is to make the gun throw its shot close together with even and regular distribution and with great force.—*Manufacturer and Builder.*

TWO WAYS OF LOOKING AT IT.

An ox, feeding, as is the manner of oxen, upon grass, and being therefore of a placid nature, was much shocked at the conduct of a serpent of its acquaintance, when it saw the serpent first stare at it with its baleful eyes, and then proceed to swallow a poor frog.

"How could you be so cruel?" said the mild-eyed ox.

"My dear friend," replied the subtle serpent, "if the frog had hopped one hop away from me, or made a single croak, I would not have eaten it for the world; but, as you saw, it had not the slightest objection, and there is no injury where there is consent."

The ox, though a thoughtful, is not a swiftly thinking, animal. It had browsed for some time, and the serpent had slipped away for its noontide sleep of digestion, before the ox bethought itself of the reply that it might have given to the serpent—

"Yes, fear is often mistaken, or pretended to be mistaken, for consent."

A horse who had heard the conversation between the serpent and the ox made a match shrewder remark; but with the shrewdness that is gained from suffering, he made it in soliloquy, as is the custom with that patient creature, the horse—

"That is the way with my master; because I am silent he thinks, or pretends to think, like that hypocrite of a serpent, that I do not suffer when he is cruel to me."—*Brevia.*

ADVANTAGE OF LEARNING A TRADE.

—The advice of Benjamin Franklin, to give every child a trade by which he can earn a living, if necessary, comes of a human experience older than his. In some countries this has been the law; in others a common custom. St. Paul, though educated in the law at the feet of Gamaliel, also acquired the important Oriental handicraft of a tentmaker, by which he was able to earn his living while prosecuting his mission. It is a good and wise thing to do. You may be able to leave your children fortunes; but "riches take to themselves wings." You may give them finished educations, and they may be gifted with extraordinary genius; but they may be placed in situations where no education and no talent may be so available as some humble, honest trade, by which they can get their living and be useful to others.—*Ex.*

PURITY, sincerity, obedience and self-surrender, are the marble steps that lead to the spiritual temple.

IF YOU would create something, you must be something.—*Goethe.*