

THE SUPPLY OF IVORY.

Every merchant who has dealt in Ivory goods of any kind for years past, knows that every year the price gets higher and higher, and it is now a question how long will it be before Ivory gets so dear as to get beyond the purchasing reach of the many millions of toilers who now use it as a matter of common convenience. In the article of table cutlery alone the annual consumption is something enormous, and although Ivory-handled cutlery is to-day common, we are strongly of the opinion that in less than half a century from the present time it will be ranked as a curiosity. That some good substitute will be produced by scientific men we have no doubt, but so far, all their efforts have fallen short of the requisite qualifications for a good substitute for elephants' tusks.

If any inventor could discover an inexpensive process of making hard white rubber, he would have a material that would fill the bill as far as cutlery and similar articles are concerned.

The best cutlery handle in the market to-day for practical usefulness, is by all odds the patent hard rubber handle. It is hard, takes a fine polish, does not crack and will stand any amount of rough usage. Its only objection is its color, few people like to have black handled table cutlery, but apart from that objection it is the best material for handles yet placed upon the market. If the objectionable color could only be removed and white rubber produced as cheaply and as perfect as the black now is, it would push all other imitations out of the market and damage even the sale of the genuine ivory itself. Whether this can be accomplished or not, we cannot say, but the day is not far distant when this or some other equally good substitute must be found to take the place of the gradually decreasing supply of ivory.

In this connection the *Trommenger* in the course of a very interesting article upon this subject says:—

"The small supply of ivory, and the consequent augmented prices realised, at the recent sale of that material in London and Liverpool will, doubtless, have a tendency to cause those who are searching for substitutes for it to increase their exertions. Good judges have long been of opinion that the world's supply of elephants' tusks is growing smaller each succeeding year, and now that the "civilisation" of Africa is being so energetically conducted by European travellers

there can be little doubt that good ivory will soon be spoken of in the past tense. Those who have perused the records of the travels of Stanley, Selous, Thompson, and other modern travellers in Africa will have noted the relative scarcity of elephants over wide tracts of country in which they were quite numerous not many years ago. This is especially the case in the Eastern parts of South Africa, where the extension of colonisation and the persistency of exploration have driven away such of the herds of elephants as have escaped the rifles of the hunters. There is, therefore, no need for wonder that prices should rise or that fine ivory should command prices not very remote from 1,000*l.* a ton. It is, further, quite certain that as time goes on the supply will gradually grow smaller, particularly as the demand is concurrently becoming greater. The level will be reached sooner or later, therefore when ivory will become a real luxury for cutlery purposes, and not, as now, an article procurable at a moderate price. When that limit shall be reached it is evident that such cutlery will only be purchased by the wealthy; hence our manufacturers will be compelled to devote themselves to the production of substitutes to replace ivory for lasting uses. Action in that direction has been taken, we are aware, by some manufacturers especially in the United States. In that country xylonite and two or three other kinds of bafts are favourably spoken of, whilst in this country Joseph Rodgers & Sons, and possibly one or two firms besides, have for several years sold table-knives with special handles which deserve to be highly commended. These are at present exceptions: They will ultimately become the rule, albeit the day when ivory shall be wholly superseded, even in ordinary cutlery, may be far distant. That epoch will, and must, come, however; consequently it is but common prudence to recognise its inevitable advent, and to take precautions accordingly. It is rarely safe to prophesy "unless you know," but this appears to be a matter in respect of which it may be safely foretold that the man who provides a cheap and really effective substitute for ivory will not only earn the gratitude of the trade and of the public, but will indubitably fill his own pockets."

Selected Matter.

A ROYAL TESTIMONIAL.

The Emperor of China recently presented the Chinese merchants of San Francisco with a very fine scroll, as a testimonial of his appreciation of the contributions sent by them to the victims of the Chinese famine three years ago. This scroll, which is four feet high and twelve feet long, is described as follows:

"The surface is entirely cross-grained and indented with miniature squares formed by lines running from opposite corners. These squares, uniformly covered with old gold, stand out in bold relief by means of a darker shade of gilt with which the lines are traced. Four large Chinese letters in ebony are carved at regular intervals across the face of the scroll, around which is a rich border of flowers and fruits. The scroll itself is enclosed by a deep, wide frame, upon which is carved a large number of allegorical figures, so wrought and blended together as to appear to have been made of one solid piece of wood. At the lower corners are placed two figures of Chinese gentlemen, each holding a sword, the upper corners being devoted to two maidens, each having a tambourine, and depending from which is a long veil, completely encircling their body. The space intervening between the figures is blocked with dark glass, so that under an artificial light the effect is very beautiful." The imperial present has caused a commotion among the Chinese, and great interest and curiosity is manifested by the public in general.—*Ex.*

BURNISHING.

By burnishing the roughness of an object is flattened down until the surface is smooth and polished like a looking glass. Burnishing is an important operation for electro-deposits, which consists of a multitude of small crystals, with intervals between them, and with facets reflecting the light in every direction. The deposited metal is hardened, and forced into the pores of the underlying metal, and the durability is thus increased to such an extent that, with the same amount of silver, a burnished article will last twice as long as one which has not been so treated. The instruments employed for burnishing are made of different materials, and must be of great hardness and a perfect polish. Such are hardened cast steel, agate, flint and blood-stone. For metallic electro-deposits steel and blood stones are especially employed. There are several qualities of blood stone; its grain should be close, hard, and without seams or veins, it should leave no white lines on the burnished parts, nor take off any metal, and its color should be of an intense black red. The steel must be fine and close grained, and perfectly polished. Should the polish of