

From the "Daily Telegraph" of October 26.



HERE was a Golden Age once upon a time, we are told-a Silver Age, an Age of Iron, and one of Bronze; and certainly, if we are to attach any importance to the flint hatchets found in the "drift," there was even an Age of Stone. Critics who wish to appear smartly cynical are even apt to qualify the present epoch as an "Electro-plated Age;" and the philosophy of Mr. Carlyle with regard to shams may be diluted to infinity when we come to descant, with a complacent causticity, on the multitude of makebelieves and "perfect

come to descant, with a complacent causticity, on the multitude of makebelieves and "perfect substitutes" for the precious metals which the discovery of electro-metallurgy has brought forth. I have no ambition to be satirical at the expense of the good people who may choose to wear lacquered guard chains or "imitation" jewellery, or at whose banquets plated side dishes or "electroed" spoons and forks make their appearance. I am not going to turn up the domestic teapot to seek for the Hall mark, or to inquire whether the many bracelets glistening on the arms of my neighbour's wife are of genuine or spurious gold. I am merely desirous of recording some experiences I have recently neighbour's wife are of genuine or spurious gold. I am merely desirous of recording some experiences I have recently gathered concerning the making of electro ware at Bir-mingham—experiences mainly acquired from visits to the workshops of the Messrs. Elkington. Legion, in truth, is the name of the electro-platers and gilders, the bronzists and brassers, of Birmingham. Still, Elkington's, taken as a whole, must be accepted as a typical establishment, not only in the department of the manufacture of electro-ware, but in regard to that combination of fine art with industrial skill which is one of the most marked characteristics of the which is one of the most marked characteristics of the Midland metropolis.

Entering the vast premises of the Elkingtons, the visitor first passes up a lofty staircase between an avenue of imposing bronze statues of the kings of England, and is ushered into extensive show rooms set out with all the industrial and artistic marvels in genuine gold and silver, and electro-ware, *repoussé*, and enamel, with which successive International Exhibitions have made the world familiar. The inquirer, however, anxious to penetrate behind the scenes of all this splendour, and to learn the secrets of the various processes, bastens to enter his name in a visitors' book. His precursor splendour, and to learn the secrets of the various processes, hastens to enter his name in a visitors' book. His precursor as a signatary may have been a Prince of the Blood Royal— in truth, I was very much edified to mark the bold and legible characters in which Prince Arthur had inscribed his name on the Elkington record; and his successor may be a Japanese ambassador, a Russian boyard, or a hardware dealer from the State of Pennsylvania. For all the world must fain come to Birmingham to see how things are made. Presently he is given into the charge of a trim damsel, who will "see him over the works" if he be an ordinary visitor. In special cases, special *ciceroni* of higher status undertake the courteous office. First you see the ware made, be it a spoon or a fork, a

First you see the ware made, be it a spoon or a fork, a teapot, a soup tureen, or a candelabrum; nor, watching the preliminary stages, can you fail to recognise the analogy between the fabrication of these articles and the making of steel pens. Once more you behold the stamping or cutting, and the embossing or raising presses in active requisition, only on a far more extensive, powerful, and complicated scale than in the case of the steel pens. The force of a pound weight at Gillott's is represented at Elkington's by the force of a ton, and often of many tons.

The ware, being finished and ready for plating, is taken to a room where each article is scrupulously weighed, and the weight entered in a book, with the amount of silver which it is intended to deposit registered against it; then the ware is thoroughly cleansed in a solution of caustic

potash to free it from grease. It is afterwards scoured with sand and dried in sawdust, is immersed in "dipping" acid to give it a bright surface, and is repeatedly swilled in clean water. A piece of copper wire having been fastened to it, the ware is plunged into a solution of cyanide of mercury to prevent oxydation, and then the fork, or spoon, or teapot which is to glisten so brightly on the middle-class board, is taken to the plating vat. This vat, or tank, is divided by suspended plates of silver into a given number of compart-ments, and the articles are suspended by their wires on brass rods. and so arranged as to present an equal amount of taken to the plating val. This val, of tank, is divided by suspended plates of silver into a given number of compart-ments, and the articles are suspended by their wires on brass rods, and so arranged as to present an equal amount of surface for the deposit of silver. As much as twenty-four ounces of silver can be deposited in the course of an hour; and this, with the perfect smoothness, hardness, and thick-ness of the silver deposited, may account for the great durability of the articles manufactured by the Elkingtons. When the ware has been in the vat a sufficient time—that is a secret into which the visitor is not initiated—it is taken out, rinsed in cold water, and dried. Then it is again care-fully weighed, and the precise amount of silver deposited upon it ascertained and registered. Electro-gilding is carried on under analogous conditions, the difference in the material being allowed for; and several of the suspended plates of gold I saw in the gilding vat were worth, I was informed, from eighty to a hundred pounds sterling apiece. Being now silvered, or gilded, or brassed—for I saw great bunches of metal buckles receiving a brazen bath— the ware is sent up to be "finished," "bright-hammered," or "handed up." Sometimes the ware has to be elaborately chased, under other circumstances as elaborately engraved, but these processes do not differ from those carried on in the regular gold and silversmiths on a very large scale. A careful survey of these ingenious manufactures, together with some mental reference to social statistics, will not unnaturally lead to the conviction that the most re-munerative department of the electro-plater's business is connected with the production of spoons, forks, and teapots ; while even such apparently trifling articles as electro-brassed buckles are not to be despised, and may be made to yield a very fair margin of profit. But these are not by any means the only ware produced at Birmingham by the Elkingtons. They will fabricate sumptuous shields in *repussé* or xydized s

or oxydized silver or of iron—witness that marvellous Paradise Lost Shield, made by Morel Ladeuil for the Paris Exhibition of 1867, the original of which is now in the South Kensing-ton Museum; they will manufacture the most gorgeous "acc-cups and international trophies; they will produce "surtouts" or table-services in gold, silver, or electro, of a nature to put to shame the famous one made for the Paris Hotel de Ville; they will cast or electro-deposit you equestrian statue twenty feet high, if you desire it: and especially, at the present moment, they are employed in the production of the most exquisite enamels on copper and bronze I have ever seen—not the *cloisonné* enamel of Barbedienne, although in that department they have turned out some choice specimens, but the lustrous, united Japanese enamel, intersected by golden threads. The preparation of all these works, tasteful in design and skilful in manufacture as they are, necessitates the employment of a very large staff of artists, draughtsmen, modellers, sculptors, chasers, engravers, and enamellers. In short, the establishment of the Elkingtons, in addition to being a huge factory, is a vast art studio—the latter being directed by a very accomplished French gentleman, long known in connection with industrial art, M. Willms. To the kindness and courtesy of the managing partners in the firm, and to the kindly intelligence of M. Willms, I am indebted for the opportunity of studying the details of a surprising exposition of human industry, ingenuity, and taste.