The book of trades; or, Familiar descriptions of the most useful trades, manufactures, and arts practised in England: and the manner in which the workmen perform their various employments.. undated, ...

London: A. K. Newman, undated, inscribed 1829

Presented to
Thos. Trunman
for his Superior
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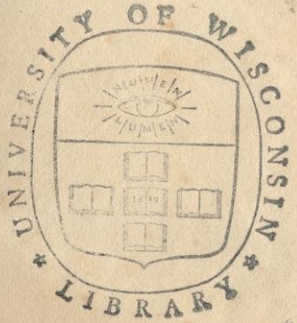

THE BOOKBINDER.

page 7.

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And the manner in which the Workmen perform their various Employments.

EMBELLISHED WITH

EIGHTEEN NEAT ILLUSTRATIVE ENGRAVINGS ON WOOD.

LONDON:

PUBLISHED BY

A. K. NEWMAN & Co. LEADENHALL-STREET.

Price 1*s.* 6*d. half-bound.*

THE APOTHECARY.

In London, the Apothecaries are one of the City Companies, and have a very fine Hall in Blackfriars, from which all the Surgeons' chests are supplied for the British Royal Navy. The Apothecaries are obliged to make up their medicines according to the formulas prescribed in the College Dispensatory, and are liable to have their shops visited by the Censors of the College, who are empowered to destroy such medicines as they think not good. In the 55th of the late reign an Act was passed for regulating the practice of Apothecaries; by which it is necessary that every person acting in that profession must undergo an examination at Apothecaries Hall, and must produce satisfactory testimonials of having served five years apprenticeship before they can obtain their certificates.—The charitable dispensation of medicines by the Chinese is well deserving notice: they have a stone erected in the public squares of their cities; on this stone are engraved the names of all sorts of medicines, with the price of each; and when the poor stand in need of any relief from physic, they go to the treasury, where they receive the price each medicine is rated at.

THE AUCTIONEER.

The business of an Auctioneer is to sell by Auction certain Lands, Houses, Household Furniture, or other Effects, which may be consigned to him for Public Sale. The Romans, by whom it appears Sales were first instituted, originally performed it under a spear, which was stuck up on that occasion, when the public Crier came forward and offered the Goods, attended by a Magistrate, who was bound to see them safely delivered to the highest bidder. In England, sales have become very common of late years; which may be principally owing to the numerous Bankrupts that have appeared in the Gazette. The Auctioneer generally proceeds by first taking an inventory of all the goods, which he afterwards puts in Lots, which are described by a printed Catalogue. The Sale is most frequently Advertised in the public Newspapers. On the commencement of it, the Auctioneer ascends a pulpit erected at the end of a spacious Room, where he reads the conditions, and then proceeds to sell to the highest bidder, who is bound to take his purchase, or forfeit a certain deposit: when this occurs, the lot is generally put up again and re-sold, and the deficiency made good by the defaulter.

THE BOOK-BINDER.

At what period Book-binding was first invented, cannot be ascertained; but it appears, that the glue first used in fastening the leaves of a book together, was the invention of an Athenian, named Phillatius. The first process of binding is to fold the sheets according to the size intended by the printer, the guide for which is the signatures or letters placed at the bottom of certain pages; the leaves are then placed together, and beat with a hammer on a stone, and then sewed in a sewing press upon cords or packthreads, called bands, which is, as also the folding, principally performed by women. The bands are drawn through holes in the boards, which is afterwards beat flat down, the book is then pressed between two boards and the edges cut in what is called a plough; the mill-boards are squared with iron sheers; and the edges sprinkled. The book is now ready for covering, which may be done in calf, or any other leather, by wetting it in water; then cutting it to the size, it must be pasted and pulled tight over the boards and put in a press, the back being warmed by the fire, and rubbed down with a bodkin; after pasting down the linings, the book is polished.

THE BLEACHER.

By means of water, the sun, and air, the Bleacher clears those manufactures which have vegetable substances for their raw materials, from all colouring matter, or accidental stains. The machinery and utensils used in Bleaching are various, according to the articles which are bleached. Where linen or heavy cotton cloths are whitened, and the business becomes extensive, the machinery is then both complicated and expensive, consisting chiefly of a water-wheel, sufficiently powerful for giving motion to the wash-stocks, dash-wheels, squeezers, &c. &c. After washing by the dash-wheel, the water is compressed from the cloth by means of squeezers. The boilers used in bleaching are of the common form, having a stop-cock at bottom for running off the waste lye. They are commonly made of cast-iron, and contain from 300 to 600 gallons of water. The materials for bleaching are chiefly pot and pearl ashes, soda, soap, manganese, oxymuriate of potash, ditto of lime, muriatic acid, and sulphuric acid. The common operations of bleaching consist of steeping, boiling, bucking, immersion in the oxymuriatic acid, washing, scouring, &c.

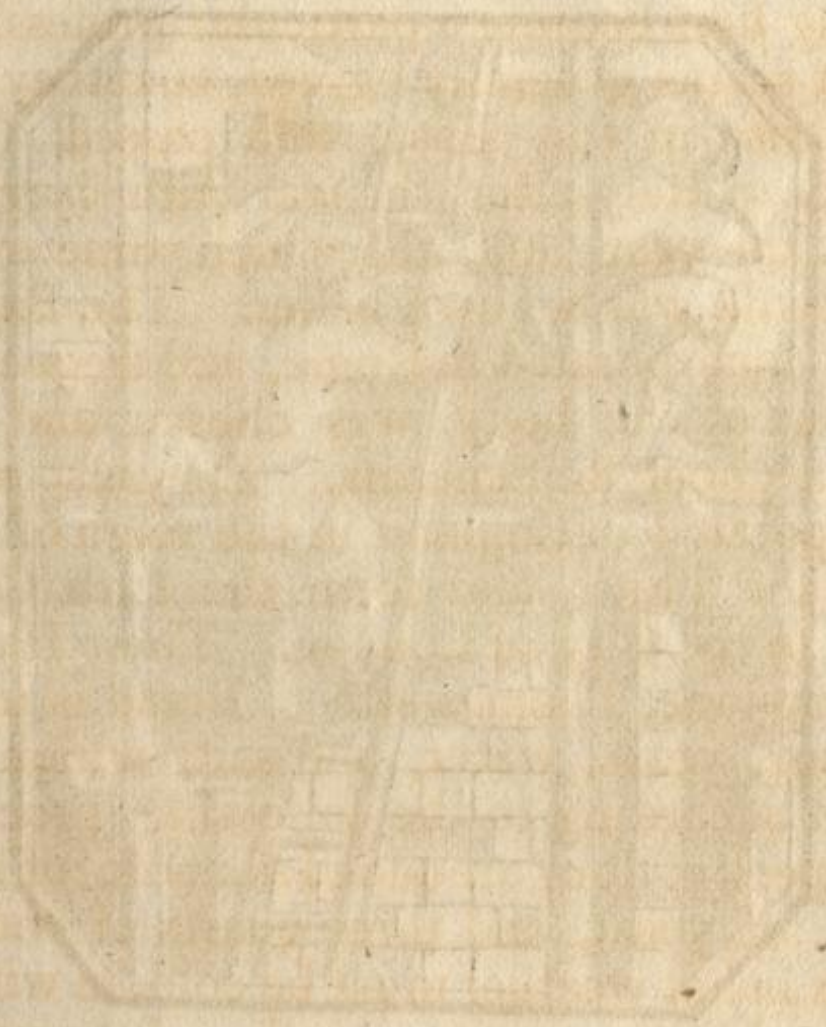
THE BLACKSMITH.

THE BLACKSMITH.

This is a laborious employment, but of great utility to society. He works on iron, which is previously made red hot by fire, and from that metal manufactures a variety of articles useful in the general business of life, and of great importance to domestic comfort. His shop contains a forge, an anvil, and block, a vice fastened to an immoveable bench, besides hammers, tongs, files, punches, and different sorts of pinchers. The forge is the chief article; this is a sort of furnace, by means of which the iron is heated in such a manner as to become malleable, and fit to be rendered into various shapes. Behind the forge is a bellows, worked by means of a rocker, with a string or chain fastened to it, which is pulled occasionally, and which kindles the fire to any degree of heat that is required. Near the forge is a trough of water for the purpose of wetting the coals, to make them throw out a greater heat. Blacksmiths are the common smiths; White-smiths or Bright-smiths, polish their work to a considerable nicety. Some are chiefly employed in the manufacture of locks and keys; and others include bell-hanging. In the sacred writings, Smiths are called "workers in iron."

THE BAKER.

THE business of a Baker consists in making Bread, Rolls, Biscuits, &c. The learned are in great doubts about the time when baking first became a particular profession; but it seems generally agreed, that they had their rise in the East, and passed from Greece to Italy after the war with Pyrrhus, about the year 583, till which time every housewife was her own baker. The Bakers were incorporated in Rome, and frequently one out of the body was chosen and admitted among the Senators. They also were incorporated in England in the reign of Edward the Third, and form the 19th Company in the City of London. Their Hall is in Harp-lane, Thames-street. Bread is made of flour, yeast, water, and salt, which are mixed according to the following process: To a peck of flour are added a handful of salt, a pint of yeast, and three quarts of water; which in hot weather must be cold, in winter hot, and in temperate weather lukewarm. The oven must be heated more than one hour before the bread is introduced, which will take three hours to bake it properly.—The baking business is a very laborious one, they generally work from eleven o'clock at night till four o'clock the following evening



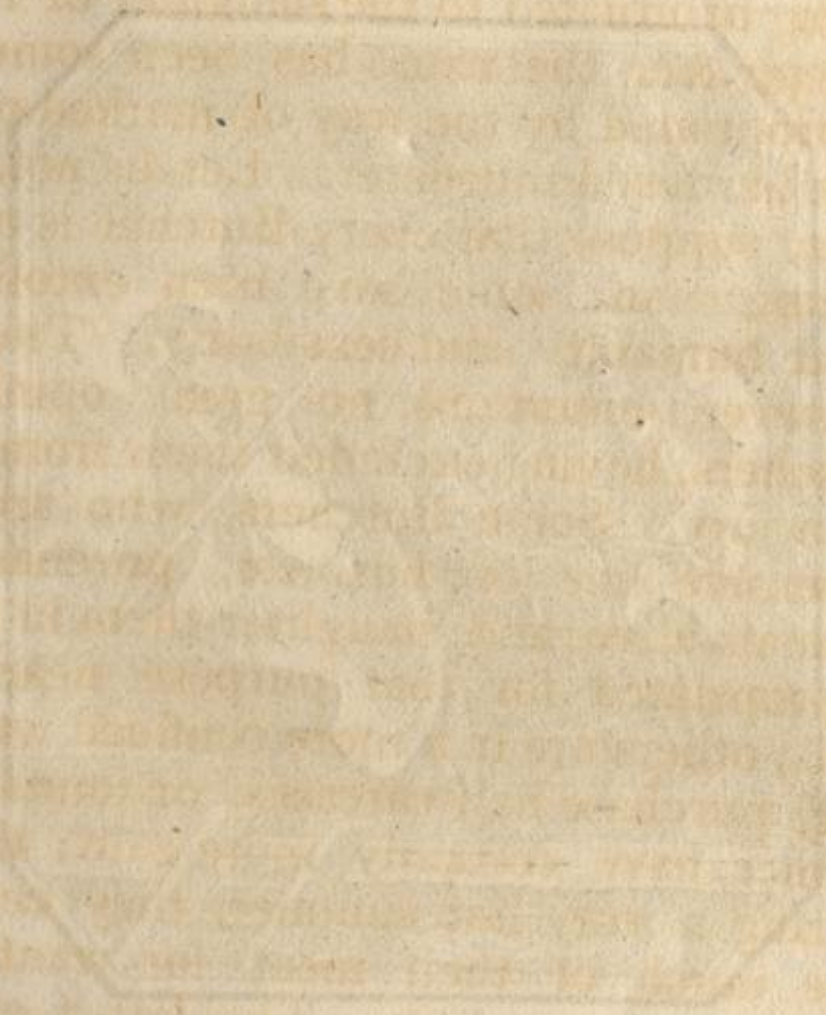
THE BRICKLAYER.

THE BRICKLAYER.

The antiquity of this business is recorded in the Scriptures in the time of Moses.—And that bricks have been in use for many centuries in our own country, need no further proof than looking to many of our places of antiquity, such as St. Alban's Abbey, built by the Saxons; the Rye House, in Hertfordshire, built in the reign of Henry VI; and Lollard's Tower, at Lambeth Palace, built in 1454; and many others. The materials chiefly used by Bricklayers, are Bricks and Mortar, the latter of which is made from lime; tiles, slates, laths, nails, &c. They also require at times very high ladders, with which they ascend the tops of houses. In laying of bricks, a plumb line is used to get the building exactly upright: a line is also used in getting the rows of bricks even. It is computed that a Bricklayer, attended by his labourer, will lay about one-thousand bricks in a day. A journeyman will earn about six or eight-and-twenty shillings per week; and his labourer, about eighteen shillings. In buildings, the bricklayer is obliged to erect scaffoldings, consisting of poles of various sizes, in the construction of which, much care is necessary to prevent accidents.

THE BUTCHER.

Though a Butcher is a very useful person to society, yet he is far from being respected. Being habituated to the slaughter of beasts, sheep, &c. the name has been sometimes appropriated by the way of marked odium, to a hardened murderer. Let us not, however, suppose that every Butcher is an unfeeling man; some have been extolled for their humanity and sensibility. The law, however, entertains no great opinion of butchers, having excluded them from being on a jury. Some Butchers, who are in an extensive line of business, purchase the animals alive, and slaughter them in a yard appropriated for that purpose near their stall; others are in a more confined way, and only purchase half-carcases, or joints. The former have certainly more gain; though, during a very hot summer, they certainly lose much of their meat for want of a speedy consumption. The latter class of Butchers generally reside in streets or roads by themselves. Considerable nicety is required in severing the joints; and besides a knife and steel, they are obliged to use a chopper, and frequently a saw; also a number of skewers to make the joints look handsome.



THE BREWER.

THE BREWER.

BREWING is the art of producing porter, beer, or ale, which is a vinous liquor made from the sugar obtained by infusion from many sorts of farinaceous grain, but barley is in general preferred. The flavour depends upon the aroma, the extractive matter of the vegetable, and a portion of essential oil, either in the vegetable itself, or in the matters added to the liquor during the process of making it, or afterwards; the hop, for instance, is one of those additions. Malt liquor, in general, is composed of water, malt, hops, and a little yeast; and the great art is to find out the proper proportions of each ingredient, to what degree of heat the water must be raised before it is poured on the malt, and how best to work it afterwards. The operation called Mashing is performed with a large circular vessel having a false bottom, pierced with holes, about six or eight inches above the real bottom. There are two side openings between the bottoms, one of which conveys water into the vessel, and the other draws it off. The Brewer is obliged to have coppers, coolers, (which are shallow tubs) working tun, and barrels.

THE BRUSH-MAKER.

A Brush-maker, according to his appellation, makes brushes, hair and carpet brooms, mops, &c. He is generally the manufacturer of wooden coal-hods, and of measures for corn and coals. The art of brush-making is very simple. The wooden part of brushes is generally of oak or elm, which is cut to a proper size by a large knife fastened down to a block with a staple at one end, in such a manner that it is moveable up and down, to the other end is a handle. This knife is very sharp; and when the wood is cut to its proper size, it is then drilled with as many holes as necessary, into which the hair is put. The hair consists chiefly of hog's bristles, vast quantities of which are imported every year from Germany and Russia. Whalebone, split, very fine, is often substituted for bristles, particularly in black coloured brushes, where it is mixed with black hair. Sometimes brushes are made with whalebone entirely; these are sold cheaper, but soon wear. Brushes consist of various sorts, shapes, and sizes, but they are all made in the same manner. When the bristles are sorted, combed, and picked, they are tied together, and then doubled and fastened into the wooden stock with a cement.

THE BASKET-MAKER.

THE BASKET MAKER.

The Ancient Britons were noted for their ingenuity in making Baskets; which they exported in large quantities. Baskets are made of twigs of various kinds, such as osier, wicker, &c. It is a business that requires but little capital or ingenuity; for which reason it has been fixed upon as a proper employment for the indigent blind in the Asylums, where the art is carried to a surprising degree of perfection. Coach-makers have of late years introduced them to form the bodies of Gigs, Mail Carts, &c. and many of the more expert workmen have given us some neat specimens in work baskets, fruit baskets, table mats, &c. The Basket-maker, in performing his operations, generally sits on the ground, except in cases where the basket is too large for him to reach in that position. The osiers, of which they are manufactured, after being cut down, are stripped of their bark, when intended for white work, such as baskets used in washing, &c. Hampers and other coarse work are made of osiers without any previous preparations, except soaking. Juvenal mentions baskets in his time as forming the most expensive part of the Roman table furniture.

THE BUTTON MAKER.

THERE are several kinds of buttons; some are manufactured of gold and silver lace; others of mohair, silk, horse-hair, thread, glass, metal, &c. The metal buttons are the most common that are made, and the process is very simple after the metal comes out of the founder's hands. The pieces of metal are either cast or cut to the proper size, and then sent to the Button-maker, who has dies or stamps according to the pattern wanted. The dies are fixed in a machine, and, by means of a pulley, a man raises a weight, to the lower part of which is fixed another die, and by letting the weight fall down upon the metal, he effects his object. After this operation they are to be shanked, which is performed by means of solder: they are then polished by women.

The wrought buttons in silk, mohair, thread, &c. are chiefly made at Macclesfield, and form the staple commodity of the place. These are chiefly wrought with needles. Shirt-buttons are made in considerable quantities at Axminster in Devonshire. Metal-buttons are chiefly manufactured in Birmingham.

THE CABINET-MAKER.

THE Cabinet-maker furnishes chests of drawers, desks, scrutoires, bureaus, chairs, tables, book-cases, sofas, and bedsteads. Indeed the business of a Cabinet-maker, and that of an Upholsterer, are now generally united. The Cabinet-maker uses a variety of wood for the formation and ornament of his goods, particularly mahogany; a species of cedar, growing in the warmest parts of America, and very durable. The art of the Cabinet-maker differs from most others in many particulars; for the articles made by him are not only very numerous, but there are not, even from the same shop, two articles of the same description, which do not vary in their form and manufacture. Hence it appears that considerable taste is necessary, as well as ingenuity; for fashion is continually changing the forms of furniture. The tools, woods, &c. of a Cabinet-maker are similar to those of a Carpenter. Veneering is a kind of inlaying, and marquetry may be properly called painting in wood. A man in this business should have some talents for drawing and designing.

THE CALICO PRINTER

THE art of Calico printing, or cloth printing, that is, of dyeing in certain colours, particular spots of the cloth, while the ground shall be of a different colour, or entirely white, is undoubtedly a branch of chemistry. The pattern is first drawn on paper the whole breadth of the cloth intended to be printed; the workman then divides the pattern into several parts according to its size, each part being about eight inches broad, by twelve inches long; each distinct part or pattern thus divided, is cut out upon wooden blocks, and this is the most curious part of the process. The manner of printing with wooden prints is very easy if there be only two colours, as green and blue; or black and a white ground; then the block requires only to be dipped in the printing ink, and impressed on the cloth. When more colours are used they are then laid on with a brush or brushes and impressed with the hand.

The machines used in Calico printing are of two kinds, the flat press and the rolling or cylinder press. The flat press was originally confined to one colour, but modern improvements have extended it to two or three.

THE CARPENTER.

THE CARPENTER.

THERE are two kinds of Carpenters, the House Carpenter and Ship Carpenter. The wood which they principally make use of is deal, oak, elm, and mahogany; but chiefly deal. The rules in Carpentry are much the same as those in Joinery; the only difference is that Carpentry includes the larger and rougher kinds of work, and that part which is most material to the construction and stability of an edifice; while Joinery comprehends the interior finishing and ornamental wood-work: but most of those who are brought up to the trade are both Carpenters and Joiners.

The Carpenter makes use of a variety of tools, such as saws, planes, chisels hammers, hatchets, axes, awls, gimblets, &c. Common workmen are obliged to find their own tools, a set of which is worth from ten to twenty pounds, and upwards: but for different kinds of mouldings, for beads and fancy-work, the master Carpenter supplies his men with the necessary implements, and also furnishes them with a quantity of different kinds of screws, nails, hooks, &c. This art consists in planing, sawing, mortising, scribing, moulding, &c.

THE CHEMIST AND DRUGGIST.

THOUGH the Chemist may be defined the maker of medicines, and the Druggist the seller of them, yet they are now generally combined in the same person who provides medicines for the apothecaries. An apothecary (as he frequently acts like a physician) should know the proper use of medicines and be capable of prescribing. The Chemist and Druggist can only make up prescriptions, as he is not authorised to give advice. Chemistry is the science which treats of those events or changes in natural bodies, by which new bodies are composed, or compound ones divided: its principal object is, to ascertain the principles or elements of which bodies are composed, and the laws by which the simple atoms of matter unite together and form compounds. Formerly the preparations of drugs were divided into two classes, termed *chemical* and *Galenical*; but these distinctions are now annulled. The Chemist and Druggist usually makes some of his articles, even if he be only a retailer; he also sells numerous quack medicines which he finds very profitable.

THE CONFECTIONER.

THE Confectioner, who is generally combined with the pastry-cook, makes sweetmeats, tarts, cheese-cakes, pies, preserves of various kinds, jellies, jams, conserves, candies, comfits, gingerbread, &c. He generally lays in, during the winter, a competent supply of ice, preserved in a proper receptacle, to furnish his customers with the agreeable treat of ice-cream in the summer months. The London confectioners are famous for the elegance and size of the Twelfth day cakes: several days previous to this period their shops are decorated with a great variety of them, made of different shapes, and with various devices; some weighing several hundred pounds. There are also various forms and preparations of gingerbread.

The Confectioner is generally as busy a man as the cook in the preparations for a grand dinner or supper: he is, in fact, the caterer of superfluities. Some of the London Confectioners bake joints of meat, like the bakers, for those who give the preference to their shops, but their charges are double. They also deal in mock-turtle, dried tongues, &c.

THE COMB-MAKER.

A Comb is an instrument made of ivory, tortoise-shell, horn, &c. and is used in separating and adjusting the hair. Combs are made both for ornament and use, and are sometimes set with a variety of precious stones. The common sort of Combs are made of bullock's horns, prepared in the following manner:—The tips are first sawed off, they are then held in the flame of a wood fire till they are nearly as soft as leather; they are then split open on one side, and pressed in a machine between two iron plates, then put into a tub of water, from which they come out hard and flat; they are then cut with a saw according to the size required. In cutting the teeth, the piece is fixed into a claw. The maker, sitting on a stool to his work, has placed under him the claw that holds the horn, ivory, &c. that is to be formed into the comb, the teeth are cut with a fine saw, and finished with a file; a rasp is used in reducing the horn to a proper thickness; and when completely made, they are first polished with charcoal and water, and lastly, with powder of rotten stone. A journeyman comb-maker usually earns from twenty-five to thirty shillings per week.

THE COOPER.

THE COOPER.

THE Cooper, in the manner of a carpenter, manufactures casks, tubs, pails, and various other articles in domestic concerns, as well as vessels for carrying all kinds of liquids and many dry wares. He principally uses oak cut up into narrow pieces, called staves, and occasionally employs other woods, as deal and beech. Those staves are kept together by means of iron hoops, or hoops made of hazel and ash: sometimes the Cooper places between each stave split flags, which swell with moisture, and effectually prevent the vessel from leaking; but this is more commonly done in repairing old casks. This trade in London is divided into several branches, and the persons carrying it on, as well as the journeymen, confine themselves to the different branches respectively. There are Butt Coopers, who make casks for breweries, and the puncheons and hogsheads for distilleries. Dry Coopers who manufacture casks for dry produce, particularly sugar. White Coopers, who make only domestic utensils for the dairies, washing, brewing, &c. And Wine Coopers, who are employed in drawing off, bottling and packing wine, spirits, &c.

THE CORK-CUTTER.

THIS is a very simple employment, as the Cork-cutter has only to cut the bark which is stripped from the cork-tree, into a variety of large and small round pieces for the purpose of stopping casks, bottles, phials, &c. His chief instrument is a sharp knife, and his great care is not to cut his fingers. He varies the sizes, some casks requiring very large ones, as well as some bottles.—The corks for bottles must be long and sloping, in order to be driven in; those for casks are not long, but broad and cylindrical; and are forced in with a hammer. The corks for phials are small but of different sizes; these are continually wanted at apothecaries' shops.

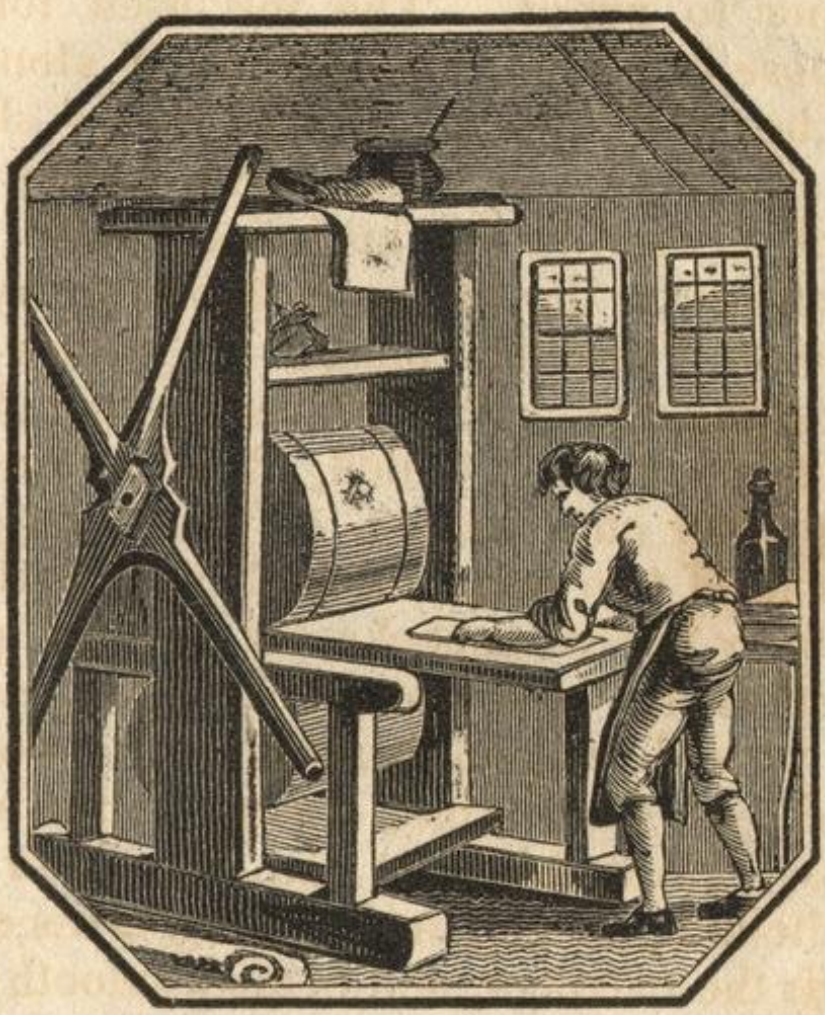
The cork-tree is a species of oak, but of a pliable nature: it grows thirty or forty feet high, having a thick, rough, and fungous bark. The bark is taken off by making an incision from the top to the bottom, and likewise one at each extremity round the tree. The tree still lives, and in about six years a succeeding bark being again fit for use, it undergoes the same curious operation for removing the cork or coating of the tree.

THE COACH-MAKER.

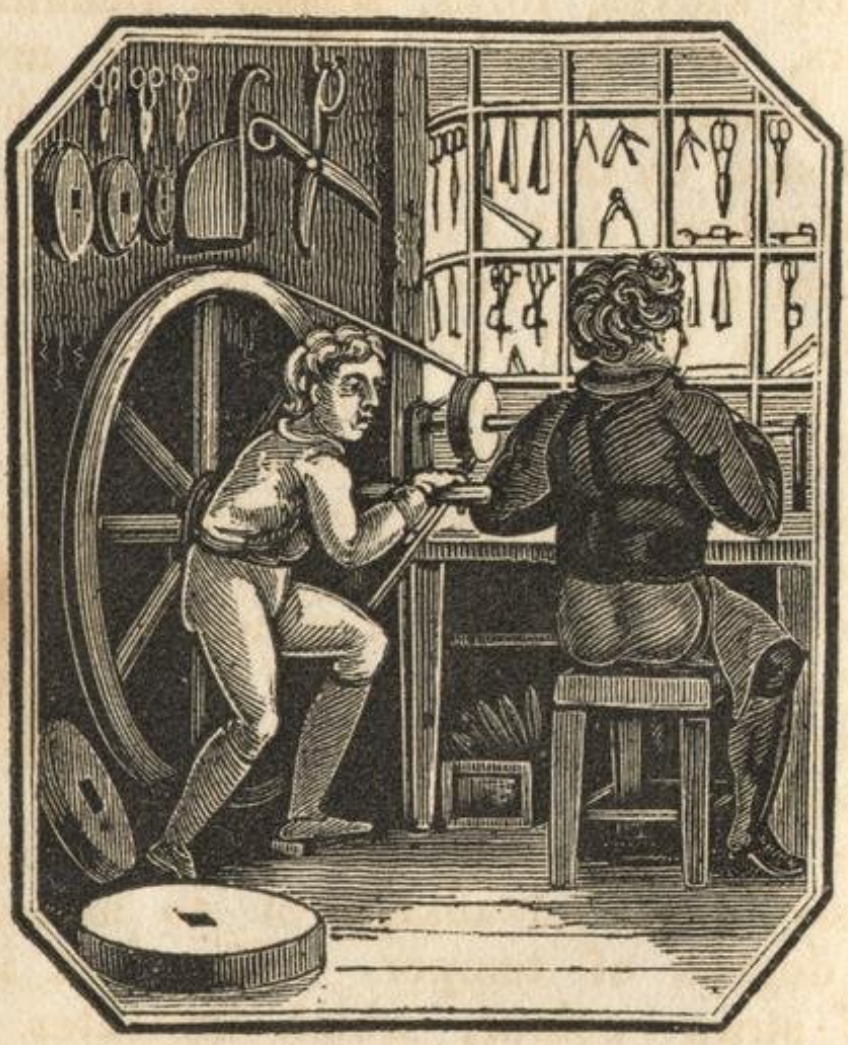
Ccaches, Professor Beckmann inform us, were made about the beginning of the Sixteenth century, at which time the use of them were confined to women, it being considered disgraceful for men to ride in them. According to Stow, Coaches were first introduced into England from Germany, by the Earl of Arundel, about the middle of the sixteenth century. There is no article of luxury in which greater improvements have been made than in Coaches; which seem, at the present time, to want nothing either with regard to ease or elegance. The body of the Coach is built chiefly of ash; but the pannels are generally made of mahogany. The upper part is covered with highly varnished leather, and the insides generally lined with woollen cloth stuffed with horsehair. Coaches requiring to be finished in a higher style, are sometimes lined with velvet, silk, or morocco leather. The business of a Coach-maker is divided into different branches, such as the body makers, the carriage makers, the trimmers, the body and herald painters, and smiths. A Coach-maker is obliged to have a licence, and give an account of all the carriages he makes and to whom he sells them.

THE COPPERPLATE PRINTER.

THE Copperplate Printer transfers portraits, landscapes, and a variety of other pictures, and writing, from engravings on copper to paper. The ink used for this purpose is a composition made of stones of peaches and apricots, the bones of sheep, and ivory, all well burnt; and, as the best which is used in this business, comes from Frankfort on the Main, it is known by the name of Frankfort black. It comes over in cakes, and being mixed with nut oil, that has been well boiled, it is ground by the printer on a marble. The rolling-press consists of two parts, the body and carriage; the body has two cheeks, or upright posts joined at top and bottom by cross pieces, and placed perpendicularly on a wooden stand or foot, which sustains the whole press. From this foot rise four other perpendicular pieces, joined also by cross ones; this is the carriage, and bears a smooth even plank upon which the engraved plate is placed. When the plate is inked, the great art is in wiping it clean without taking the ink out of the engraving. Over the plate is placed the paper, previously moistened, and the arms of the cross are then pulled.



THE COPPER-PLATE PRINTER.



THE CUTLER.

THE CUTLER.

THE Cutler makes all those articles denominated edge tools, but more particularly knives, forks, scissors, penknives, razors, and swords. The chief art in this business consists in softening hardened steel by the application of a heat not greater than that which was employed in hardening it. For this purpose it is gradually heated according to the temper required, and cooled again either gradually or rapidly, this making no difference; after which the steel is found to be softened or tempered exactly in proportion to the heat which it has undergone. While the steel is tempering, its surface displays a variety of colours, in proportion as it becomes more and more heated, which the workmen ingeniously take advantage of to ascertain the degree of temper. The first is a light-straw colour, which indicates the highest or hardest temper; after this a full yellow; then a brown, then a reddish blue, a light blue, and lastly a full deep blue, passing into black; which being the other extremity of the series, denotes the lowest degree of temper in this metal.

THE CURRIER.

THE Currier prepares hides which have been under the hands of the tanner, for the use of shoe-makers, saddlers, coach-makers, book-binders, &c. In dressing leather for shoes, it is first soaked in water till thoroughly wet; then the flesh side is shaved on a board called a beam-board; and the Currier uses a knife which has two edges, the blade rectangular, about twelve inches long, and from four to six inches wide. The skin is thrown over the beam with the flesh side outwards, and the man keeps it in its position by the pressure of his knees, as he leans over the beam. The knife is then applied horizontally to the leather, and by repeated strokes downwards it is reduced to the substance required. After shaving, scouring is performed by rubbing the grain or hair side with a piece of pumice-stone, or some other stone of a good grit. When the skin is quite dry it undergoes other operations; then whitening or paring succeeds: it is then boarded up or grained again, when it is fit for waxing, which is performed by rubbing it with a brush. After other operations it is curried.

THE DYER.

THE business of a Dyer is to tinge cloth, stuffs, or other substances, with a permanent colour. The colour must penetrate in order to be lasting. A Dyer ought to possess some knowledge of chemistry; he ought to know what colours will admit of a change; and if changeable, what colours are best to be substituted; and how to prepare them. In dyeing there are but three simple colours, red, yellow, and blue; all others are compounded of these. Different shades or tints of the same colour are produced by using different drugs, or by varying the quantity of colouring particles.

A dye-house should be spacious, well lighted, and near a stream of water. It should be floored with plaster, and proper means should be adopted for carrying off the water. The size and position of the caldrons are to be regulated by the nature and extent of the operations for which they are designed.

Excepting for scarlet, and other delicate colours, in which tin is used as a mordant, the caldrons should be of brass or copper. The coppers or caldrons must be well cleaned for every operation.

THE ENGRAVER.

ENGRAVING is one of the fine arts by which different subjects are represented on copper, wood, stone, &c. It is performed either with the graver, the dry point, or with aqua-fortis. There are several species of engravings on copper, as engraving in aqua-tinta; in the chalk manner; in mezzotinto with aqua-fortis; and in lines, which is the original art of engraving. The tools necessary for engraving in lines are gravers, a scraper, burnisher, an oil-stone, a sand-bag, an oil-rubber, and some good charcoal.

Etching is a method of engraving on copper in which the lines or strokes, instead of being cut with a tool or graver, are bit in with aqua-fortis or nitrous acid.

Engraving on wood is a process exactly the reverse of engraving on copper. In the latter the strokes to be printed are sunk or cut into the copper, and a rolling press is used for printing it; but in engraving on wood, all the wood is cut away, except the lines to be printed which are left standing up like types, and are printed like letter-press. Box wood is used for this purpose.

THE ENGRAVER.

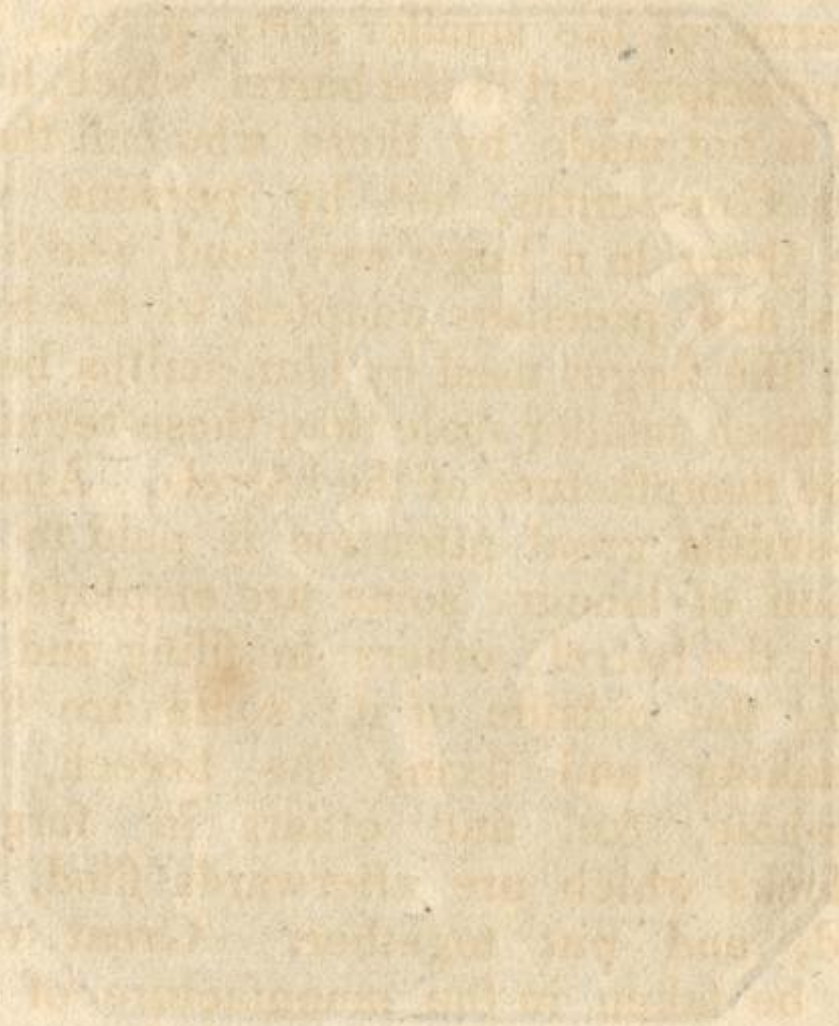
THE FISHMONGER.

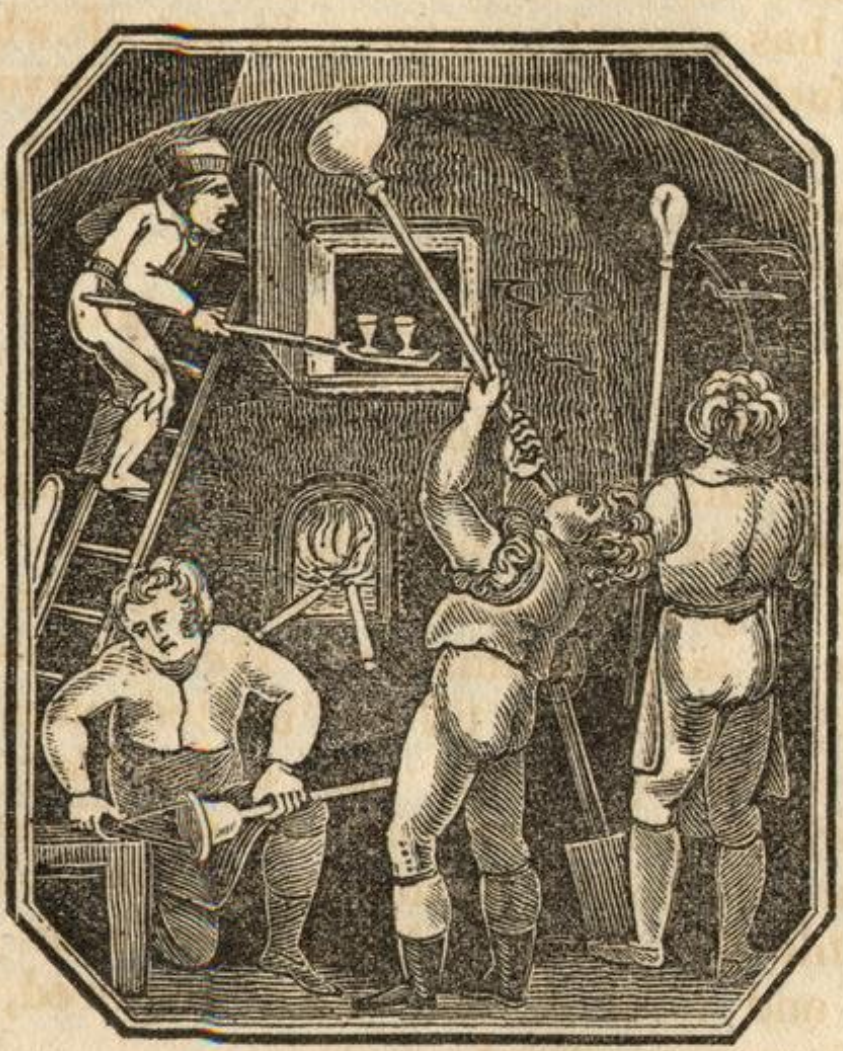
FISHMONGER.

THIS business in London is very profitable and extensive. Early in a morning the Fishmonger supplies his shop with whatever bargains he can procure from Billingsgate. He ought to have the best and largest fish; as the refuse is hawked about by women, and those who send to Fishmongers naturally expect the prime. Like the butcher he experiences some losses when he has not a good consumption; but at night he generally disposes of his small fish, soles, pieces of cod, salmon, &c. on reasonable terms to the humble class. A Fishmonger must be provided with slabs, or tables of stone, formed like a writing desk, with a kind of a gutter, for the purpose of carrying off the water, which they continually throw on the fish in order to make it retain its freshness as long as possible. These slabs at the grand Fishmongers are made of nice white marble; but wood is frequently substituted at the petty ones. Crimp cod is that which has slices all over, it being cut in this manner as soon as taken out of the water for the purpose of rendering it more firm. It is a cruel practice, but epicures disregard cruelty

THE GUN-MAKER.

The business of the Gun-maker is the manufacturing of fire arms, particularly Guns, according to his name, fowling pieces and arms of the smaller sorts, pistols, &c. The principal part is the barrel, which, however, is not made by those who call themselves Gun-smiths, but by persons who forge them in a large way, and who have forges and premises adapted to the business; the forges used by Gun-smiths being on a much smaller scale than those required for the manufacture of the barrels. Among Gun-smiths great attention is paid to the division of labour; some are employed in boring the barrel; others in filing and polishing the outside of it; some are busy in making and fixing the breech, the touch-hole, &c. and others in forging the locks which are afterwards filed, polished, and put together. Great care must be taken in the manufacture of the gun-lock; and before any of the pieces are appropriated for service, it is necessary that each barrel should undergo a particular trial of its soundness, before a person authorised for that purpose, called the Proof-master. Gun-flints are made in larger quantities.





THE GLASS-BLOWER.

GLASS BLOWER.

GLASS is a very ancient invention; the furnace in which it is melted is round, and has several apertures, in one of which the fuel is introduced; the others serve to lade out the melted matter. When the ingredients are perfectly fused, and have acquired the necessary degree of heat, part of the melted matter is taken out at the end of a hollow tube, about two feet and a half long, which is dipped into it and turned about till a sufficient quantity is taken up; the workman then rolls it gently upon a piece of iron to unite it more intimately. He then blows through the tube till the melted mass at the extremity swells into a bubble; after which he again rolls it on a smooth surface to polish it, and repeats the blowing till the glass is brought as near the size and form of the vessel required, as he deems expedient.

There are three principal kinds of glasses, distinguished by the manner and form of working them; viz. round glass, (as bottles, drinking glasses,) table or window glass, and plate glass. There are also several kinds of table glass.

THE HAIR CUTTER.

THIS business consists in cutting and dressing ladies' and gentlemen's hair: also in making wigs and braids; and in most cases the business includes the art of shaving. The man who performs these operations is generally called a hair-dresser. He requires different kinds of scissors, combs, head-brushes, curling tongs, powder and pomatum, razors, and a strap and hone. Eminent hair-dressers generally keep shops and sell those articles with perfumery. He ought to know how to set razors, as he is frequently applied to for this purpose. Gentlemen in general find their own powder and pomatum, and even their shaving utensils, not choosing to be *lathered* with the shaving brush that has been applied to the faces of so many two-penny customers.

Journeymen hair-dressers earn from fifteen shillings to a guinea per week; but those who work on wig making and the wearing of false hair may earn much more. Previously to the year 1795 (when the annual tax was laid upon wearing hair-powder) this business was much better than it is now.

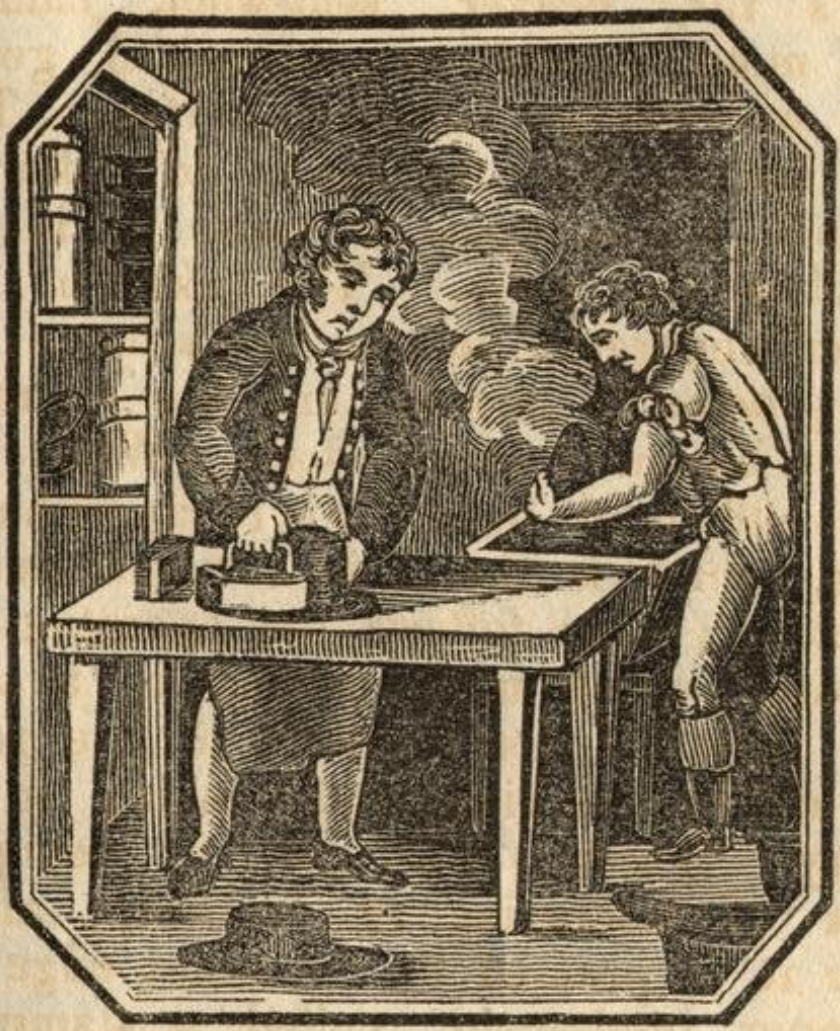
THE GOLD-BEATER.

THE Gold-beater, according to his name, continually beats gold or silver in thin skins, upon marble, with a hammer that is large and heavy; reducing those metals into very thin leaves for the purpose of gilding or silvering copper, iron, steel, wood, and other materials.

For the farther extension of gold plates into fine leaves, it is necessary to interpose some smooth body between them and the hammer, in order to soften the blow, and defend them from the rudeness of the immediate action; as also to place between every two of the pieces, some intermedium which, while it prevents them from uniting together, or injuring one another, may suffer them freely to extend. For this, Gold-beaters use three kinds of membranes for the outside cover, common parchment made of sheep-skin; for interlaying with the gold the closes are vellum made of calf-skins; and afterwards finer skins made of a thin substance stript off from the gut, slit open and curiously prepared for the purpose; hence the name of Gold-beaters' skin. The beating of the gold is performed on a smooth block of marble fitted into the middle of a wooden frame.

THE HATTER.

THE materials now generally used by hat-makers, are lamb's wool, rabbit's and hare's fur, beaver, seal-wool, camel's hair, monkey stuff, or neuter wool, goat's hair, or estridge silk and cotton. The best fur is from the backs of different animals; it decreases in value as it approaches the belly. The skin of the beaver undergoes various operations; the first process is bowing, and the quantity that is bowed is called a batt. When the batt is sufficiently bowed it is ready for hardening, which is the first commencement of felting; then follows the operation of basoning, which is succeeded by a still more effectual continuation of the felting, called working and soaking in a battery. Water is only used in the operation of fashioning or blocking, after which it is pressed by the blunt edge of a copper implement, called a stamper. The last dressing is given by the application of moisture and heat, and the use of the brush and a hot iron. Thus softened the hat is drawn upon a block and the judgment of the workman is employed in further moistening, brushing, and ironing the hat in order to give and preserve the proper figure.



THE HATTER.

THE IRON FOUNDER.

IRON is employed in three states, each having peculiar properties, by which it is applicable to various purposes; the first is cast iron; the second wrought, or malleable iron; and the third is called steel. In a cast iron manufactory there is a large furnace. As soon as the metal is melted, the founder takes a ladle full of the liquid for the purpose of casting some article, the form of which is moulded out in stiff sand. It must be readily conceived that this business requires great strength, and a constitution that will bear a vast degree of heat. In summer time it is very laborious, and the men who are employed are obliged to have a plenty of beer. The furnace is filled with ore and charcoal or coke. The metal is generally made so hot that it will keep boiling for some time in the sand. For chimney backs, hearths of ovens, fronts of stoves, and other small articles, the founder takes the metal out of the receiver in large ladles, from which he pours it into moulds of fine sand. For the more intricate cases of Iron foundry, moulds are formed of loam or clay, which are made nearly as the mouldings of plaister for busts, &c.

THE JEWELLER.

The name Jeweller is now commonly applied to all who set stones, whether real or artificial, but, properly speaking, it belongs only to those who set diamonds and other precious gems. According to the general application of the term, Jewellers make rings of all sorts in gold, lockets, bracelets, broaches, ornaments for the head, ear-rings, necklaces, and a great variety of trinkets composed of diamonds, pearls, or other stones. The diamond was called by the ancients adamant: as a precious stone it holds the first rank in value, hardness, and lustre, of all gems. The goodness of diamonds consists in their water or colour. The most perfect colour is white, or rather a clear crystalline quality which admits the rays of light very readily. The defects in diamonds are veins, flaws, specks of red and black sand, and a bluish or yellow cast.

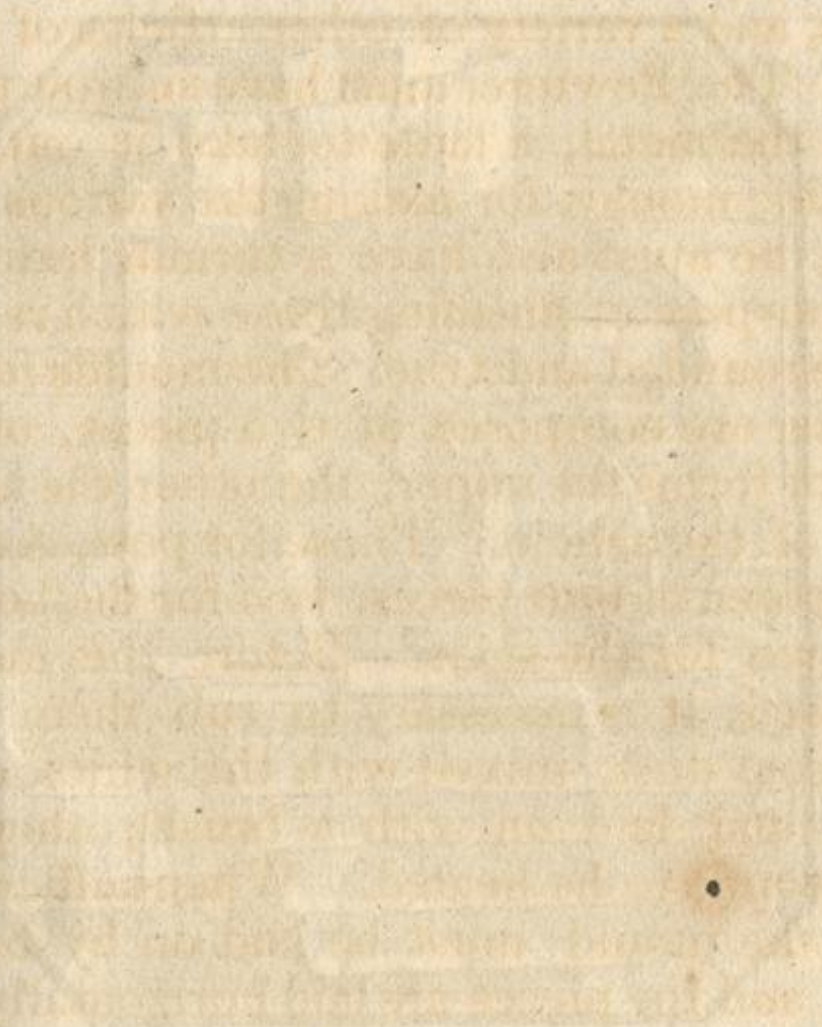
The jeweller was formerly a very profitable and genteel business; but, like most others, has lately become much deteriorated; yet steady ingenious workmen who have a taste for their profession, and a knowledge of design, in general can find a sufficiency of good employment.

THE LOOKING-GLASS MAKER.

This business consists in laying tin foil on polished pieces of glass by the assistance of quicksilver, so as to produce reflection by effectually obstructing the rays of light; and afterwards fitting the glass to frames of various sizes, either for the use of chambers or dressing-rooms, or for the purposes of decoration in the houses and mansions of the great. The polishing of the plates for this business is usually effected by other hands before they come to the Looking-glass Maker. The usual mode of making glass smooth, and in every respect proper to receive the tin foil and quicksilver, is to use first of all fine sand water, then emery of different degrees of fineness, and lastly, colcothar of vitriol, or, as it is more commonly called, crocus martis, or purple brown. The polishing instrument is a block of wood covered with several folds of cloth and carded wool, so as to make a fine elastic cushion. This block is worked by the hand. The plate is then fastened to the table with plaister, covered with colcothar; and the polisher finishes his operation by working it backwards and forwards. This trade is in very few hands, and therefore profitable.

THE PEWTERER.

This trade consists of making plates, dishes, pots, syringes, funnels, worms for stills, and a variety of other articles of pewter. The Pewterer must have an iron pot to melt the metal, a ladle to take it out, and suitable moulds for making the various articles; he must also have a turning lathe for the purpose of finishing those which require to be rounded and true. The moulds for flat pewter are composed of two pieces, one of which forms the upper, the other the under part of the article. Those for pots, &c. are composed of four pieces, two for the bottom and two for the sides. Before the moulds are used, it is necessary to rub them with fine coal dust, mixed with the white of an egg, and laid on with a brush; they are afterwards to be heated. When sufficiently hot, the mould must be laid on by bits of hats, and the pieces are laid horizontally one upon the other; they are then fixed firmly together by an iron ring prepared for the purpose. The mould is then placed edgeways, so that the hole of the mould, having a funnel shape to it, may receive the pewter. Pewter plates and dishes are not in such general use now, as they were in former times.



THE PAPER-MAKER.

THE PAPER-MAKER.

PAPER is made of linen rags; and the first thing to be done towards the formation of it is to put the rags into a machine formed of wire, which is turned round with great velocity. They are then sorted according to their different qualities, and afterwards put into a large cistern or trough perforated with holes, through which a stream of clean water constantly flows. In this cistern is placed a cylinder about two feet long, set thick with rows of iron spikes; at the bottom of the trough are corresponding rows of spikes. The cylinder is whirled round with great rapidity, and with the iron teeth the cloth is reduced to a thin pulp. The fine pulp is put into a copper of warm water and becomes the substance of paper ready for the mould. The coucher receives the mould, and places the sheet of paper on a felt or woollen cloth, during which the workman makes another; it is then sized in order to bear the ink. The size is made of shards and parings collected from the tanners, curriers, and parchment makers; and a quantity of alum added to it. The art of paper-making is very ingenious and of great utility, being of help to the art of Printing.

THE PAINTER.

The common Painter is generally joined with a Plumber and Glazier; but a person who paints portraits, landscapes, animals, historical pieces, sea pieces, shipping, &c. is properly distinguished by the name of an Artist. Some painters have peculiar talents for one department, and some for others; but it rarely happens that one man excels in more than one or two. A portrait painter, in oil colours, is frequently an historical painter; but an artist, who paints in miniature, is often unacquainted with any other part of the profession. Each department requires different knowledge. The implements made use of in this art are a stone and a muller, to grind the colours: an operation which is sometimes performed with oil and sometimes with water; hence the distinction between painting in oil and painting in water-colours. A palette and palette knife are required; likewise pencils, or brushes made of camel's hair, badger's hair, or hog's bristles. Also, in order for the painter to rest his right hand and keep it steady, he should have a stick about a yard long, with cotton or wool tied up in soft leather round the end to prevent its scratching the picture. The canvass is placed on a wooden frame.

THE PLUMBER & GLAZIER.

A Plumber is properly a person who casts and works lead, who furnishes a cistern for water and a sink for the kitchen, and who makes pipes of all sorts and sizes. The Plumber and Glazier, however, under present notice, is he who is employed to put panes of glass into window-frames. He must be provided with a measure, putty, pegs, awl, and a diamond to cut the glass. Not only the business of a plumber and glazier are united, but also that of a painter. The plumbing trade alone is reckoned a very good one, but very unhealthy on account of the fumes of the lead. The business of a painter is equally unhealthy. The chief reason why those trades are commonly united, is on account of the Glaziers and Painters being precarious; particularly the latter, as there is little or no painting in the winter time. A Glazier likewise cleans windows, having a machine so fixed as to enable him to stand or sit outside. Many accidents, however, have lately happened.—If a Glazier be not very experienced in his business, he will be apt to break or crack the glass, particularly when applying the pegs and hammer: the utmost caution is therefore necessary.

THE POTTER.

The Potter makes vessels capable of holding liquid and various other utensils, of clay of different kinds mixed with a variety of ingredients. This trade is divided into several branches—the Stone-ware Potter, the Delf-Potter, the maker of Portugal or Brosely Ware, the common Earthenware Potter, the maker of Queen's Ware, and many others. Clay and flints are the principal substances, and the wheel and lathe the chief instruments. The wheel is intended for large works, and the lathe for small. The former is turned by a labourer, but the latter is put into motion by the foot of a workman. When the clay is properly prepared and proportioned to the size of the vessel to be made, the potter places one of the lumps upon the head of the wheel, which he turns round while he forms the cavity of the vessel with his finger and thumb: and while putting it into a proper form the wheel is kept in constant motion. The feet and handles of the vessels are made by themselves. When the vessel is finished, it is taken from the rest of the clay to dry. St. Paul, we find, alludes to the Potter in one of his Epistles, proving the clay like the human body, subservient to the maker's pleasure.

THE LETTER-PRESS PRINTER.

THE PRINTER.

In this business there are two kinds of workmen employed. Compositors, who range and dispose the letters into words, lines, pages, &c. according to the copy before them in certain portions, the manuscript being on those occasions divided for the sake of expedition; and the pressmen, who apply ink to the same, and take off the impression. The letters, or types, are made of mixed metals, and are disposed in cases with separate divisions, called boxes. When the compositor fills his composing stick, he empties it into a frame of wood, called the galley; when a page is formed, it is tied up; and when all the pages are ranged in order, they are fastened together in a frame, called a chase, with wedges of wood; this is called imposing. There are two forms required for every sheet. As mistakes will occur, a sheet called a proof, is printed off and given to the corrector of the press; who examines it, while a boy reads the copy to him. In order to make these corrections, the compositor unlocks the form, by loosening the wedges or quoins; and when corrected, the form is again fastened, and a revise sent to the corrector. The pressman is assisted by another to ink the form.

THE PIN-MAKER.

Pins are made of brass wire, with a head at one end and a point at the other. When the brass wire is first received, it is generally too thick for the purpose of being cut into pins; it is therefore wound off from one wheel to another with great velocity, and made to pass between the two through a hole in a piece of iron of smaller diameter than the wire itself is: which operation is called wire-drawing. When properly reduced, the wire is strengthened and cut into lengths, every length being sufficient for six pins; each end of these is ground to a point, which is performed by a boy, who sits with two small grinding stones before him, turned by a wheel. Thus pointed, a pin is taken from each end, and this is repointed till cut into six pieces. The next operation is that of forming the heads, which is termed head-spinning. This is done by a spinning-wheel: one piece of wire being wound round another with astonishing rapidity. There is scarcely any commodity cheaper than pins, and but few which pass through more hands from their first to their last state. Hence, it is obvious that the employment of pin-making is not very lucrative, and is therefore confined to young people.

THE PRESS & MANGLE MAKER.

This is a modern invention for the purpose of rendering linen smooth and glossy, without the use of a hot iron. The iron has been used by washerwomen for many years; in a song to one of Shakspeare's Plays, we read, " and with a smoothing-iron she *fired* my heart." The present machine takes up a considerable deal of room; it consists of rollers placed on a smooth piece of wood like the top of a long table. The top part is rendered very weighty; and by means of pulleys and a handle can be moved backwards and forwards. In fixing the machine for use, a clean cloth is laid on the table-part on which is placed the linen to be pressed or mangled. In the motion, the linen is wound up on the roller, and it is rendered perfectly smooth and glossy.—These machines have been lately improved, and can be worked now with greater facility. Small articles, however, such as caps, ruffles, &c. require the use of the iron; but for sheets, &c. the Press and Mangle is an excellent invention. Some think that mangling wears out the articles; but let it be recollected, that by the iron they were generally discoloured, and sometimes scorched. Besides, a considerable deal of time is saved.

THE ROPEMAKER.

The Ropemaker twists several kinds of materials, particularly hemp, into yarn, and afterwards several strings of such yarn, assisted by a wheel, into a large and more compact cord. When the article is of a small description, it is called a cord; when larger, a rope; and the largest is called a cable. Ropes of all kinds are generally made of hemp twisted or spun, something after the manner of the spinning of wool. The places in which ropes are made, are called rope-walks, and are sometimes a quarter of a mile or more in length, in the open air, and have a row or rows of trees planted beside them for shade, or are covered with a slight shed to keep the workmen from the inclemencies of the weather. At the upper end of the walk is a spinning-wheel, which is turned round by a person who sits on a stool or bench for the purpose. The man who forms the rope, has a bundle of dressed hemp round his waist; from this he draws out two or more ends and fixes them on a hook; the wheel is then turned, and the threads are twisted; and as the spinner walks backward, the rope is lengthened. This is a very ancient trade, though boasting of no great ingenuity.

THE SHIPWRIGHT.

THE SHIPWRIGHT.

A Shipwright is a person who builds ships, in which three things are necessary to be considered. First, to give the vessel such a form as shall best adapt her for sailing and for the service for which she is designed; secondly, to unite the several parts into a compact frame; and thirdly, to provide suitable accommodations for the officers and crew, as well as for the cargo, furniture, provisions, guns, and ammunition. The outside figure of the ship includes the bottom, or the hold, and the upper works, which are also called the dead works. The first is that part which is generally under; the second are those which are usually above it, when the vessel is laden. Ships are built principally of oak timber, which is the strongest wood. The caulking of a ship consists in driving oakum (which is old rope untwisted, and the substance pulled or beaten into hemp), into the seams between the planks, to prevent the ship's leaking. It is afterwards covered with melted pitch or rosin, to prevent its rotting. To enable ships to sail well, the outsides, in contact with the water, are frequently covered with copper. The masts are made of fir or pine.—This is not a common business.

THE SHOE-MAKER.

This is a useful and profitable trade, though very extensive. Leather is the chief article he uses for shoes and boots; but he has sometimes other materials, such as silk, jean, nankeen, &c. for ladies' shoes. In order to join the upper, leather to the sole, he must have, on a bench near him, his knife, his awl, and a stone to sharpen his tools; before him, on his right, a hammer and lap-stone; and on the other side, a tub of water in which he keeps a quantity of wax in balls. He sews the leather with thread waxed over, and thereby made a strong and durable substance, called a wax-end. To each end of this thread is fastened a hog's bristle, which guides the thread through the holes made in the leather with an awl. Both bristles are put into each hole, and one wax-end is worked like two. Shoe-makers' wax is commonly made by melting together about equal parts of pitch and yellow rosin; in warm weather it is necessary to have a greater proportion of rosin than in the winter. For ladies' light coloured shoes and other fine work, different wax is used. The best and strongest thread for an end, is made of hemp. Shoes and boots are made on lasts, pieces of wood imitating the feet.

THE STONE-MASON.

THE STONE-MASON.

The Pyramids of Egypt remain as monuments of the ingenuity of man; it is said to be at least three thousand years since they were erected. If we trace history, we shall find this to be one of the most ancient arts; and indeed the ancients brought it to such perfection, that we seem in the present time even desirous of imitating them. The working or cutting of stone is divided into several branches. The sculptor, or statuary, ranking among the highest. Specimens of some of our artists may be seen in St. Paul's, and other public places; but they are not generally considered much to surpass those of the sixteenth century, at which period lived Michael Angelo. When the stones are large, the business of cutting them belongs to a stone-sawyer, while the mason is more immediately employed in hewing the stone to its proper dimension and placing it on the building. The level, square, plumb-line, bevel, compass, hammer, chisel, mallet, saw, and trowel, are the principal tools used by a Mason. Stone-Masons generally charge for their work by measure.—The journeymen usually earn about twenty-six shillings per week. This business is one of the most laborious.

THE TAILOR.

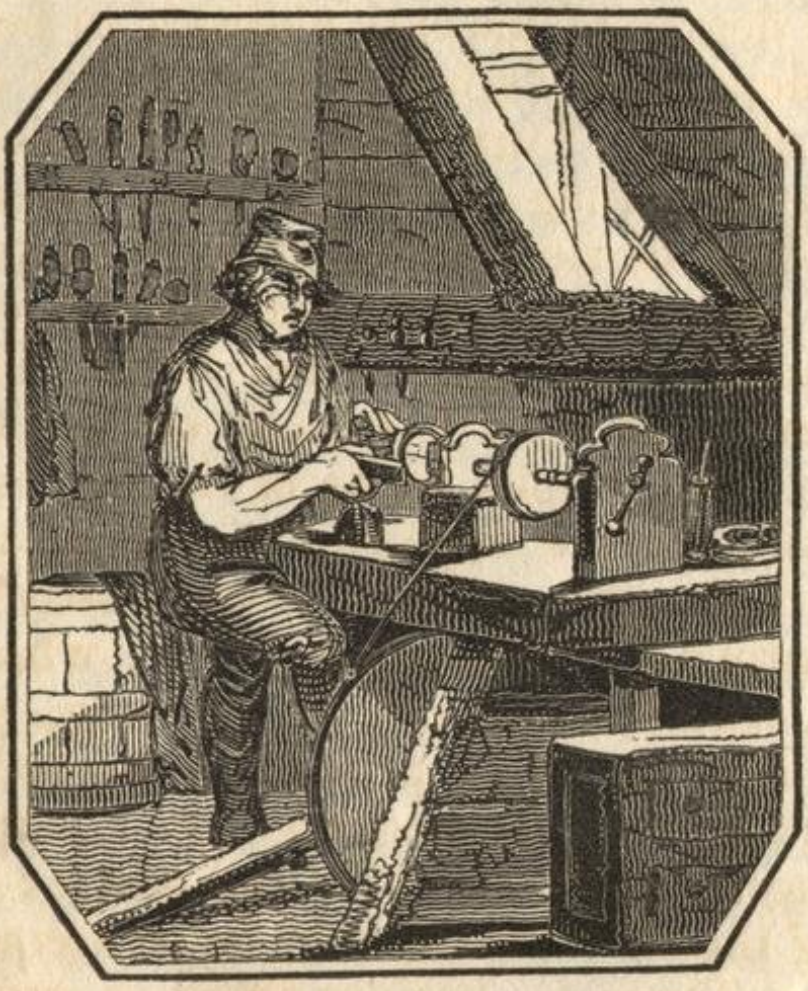
History affords us some account of the various dresses used by the Ancients. Skins appear to be the earliest dress we have any account of, and the thread used in sewing them together were made from the gut of different animals. The savages of Africa and America use for the same purpose the sinews of animals, fish-bones and thorns supplying the place of needles; but after various attempts, mankind have at length acquired the art of preparing wool, from which they make cloth; and, by the skill of the Tailor, we are now furnished with dresses at once elegant and useful. In shops where much business is carried on, a foreman is generally employed, whose business is to take measure and cut out, while the workman sits cross-legged sewing all day. A pair of scissors, needles, thimble, and a goose, are the necessary appendages of this profession; and to make a clever tailor, a writer observes, he ought to have a quick eye to steal at one glance the pattern of a neat cut sleeve, flap, &c. any bungler being able to cut out when a pattern is laid before him. The trade of a Tailor has become very common, and there are generally a number out of employ.

THE TALLOW-CHANDLER.

We have every reason to believe this trade is of very ancient date. In France, prior to the year 1450, the Grocers and Tallow-chandlers formed but one trade, but afterwards were divided, the Tallow-chandlers not being allowed to sell any other article than what they manufactured. In the country, the trade of a Tallow-chandler is frequently united with that of a Soap-Boiler; but in London, they are quite distinct branches. A Tallow-chandler in London, frequently unites with his own the business of an Oilman; but those in a more extensive way, generally confine themselves to their own profession. Candles are composed of a cotton wick loosely twisted, which is dipped into the vat containing the tallow, and when cold, it is dipped again, and so continued till it becomes a proper thickness. These are termed dipped candles; the other sort, being made in a mould, are called mould candles. Rush and cotton lights, are only once dipped, and are exempted from the duty, the others being subject to a duty of one penny per pound. Those who carry on this trade, are obliged to take out an annual license, and submit to the constant visits of Excisemen.

THE TINMAN.

TIN-PLATES appear to have been first made in Bohemia, from whence the art was brought into England in the year 1681, by ANDREW YARRONTON. They were, however, not brought to perfection for about fifty years after that period. The principal tin mines in the world are those of our own country; and it is well known that the Phœnicians visited these islands for the purpose of obtaining tin many years before the Christian æra. The mines in Cornwall produced but little in the time of King JOHN, who, as Earl of Cornwall, had the sole right of working them at that period. About a century ago they were estimated to produce about thirty-five thousand pounds per annum, but at the present time they produce five or six times that amount. The King's eldest son, as Duke of Cornwall, receives about ten thousand pounds per annum from these mines. It is the business of a Tinman to form the sheets of tin into various articles, such as saucepans, kettles, canisters, milk pails, &c. It is a profitable business for the master; and a journeyman may, with care, earn about thirty shillings per week. It is a very unwholesome business, the journeyman being generally near a charcoal fire.



THE TURNER.

THE TURNER.

The art of Turning, both ornamental and useful, is of great importance in many businesses, and requires a man possessing some degree of natural abilities to become an adept at it, as very few are to be found even able to Turn an oval. Turning appears, according to Pliny and others, to have been carried to a degree of perfection very early. He gives an account of vessels of the most valuable kind, being Turned and enriched with a variety of ornaments. There are various kinds of lathes used in Turning; some require the aid of a man to turn the wheel; but those mostly used, are turned by means of a treadle which the man, who is employed in Turning, works with his foot. The principal thing to be acquired by a young beginner, is a complete management of his chisel and gauge; these being the two instruments most frequently used. There is, besides these, a great variety of tools necessary; and which, together with some of the lathes used in Turning finer work, cost a considerable sum. A journeyman, on inferior work, can earn thirty-shillings per week; and those on fine work, by close attendance, as much as fifty shillings.

THE WATCH-MAKER.

The most ancient mode of obtaining a knowledge of time was by means of a sun-dial. It is not correctly known to whom we are indebted for the invention of clocks with wheels: some attribute it to Boethius, about the year 510: others ascribe the invention to a native of Verona, named Pacificus, who lived in the ninth century.—The French annals mentions a water clock being sent by Aaron, King of Persia, to Charlemagne, about the year 807, which seemed to bear some resemblance to the modern clocks. It is stated, on the authority of an inscription engraved on a plate in the vestry of St. Paul's Church, Covent Garden, that an artist in London, named Richard Harris, constructed a pendulum clock as early as the year 1641. The first repeating clock was invented by one Barlow, about thirty-five years afterwards. A variety of alterations and many improvements have since been made. Robert Bruce, King of Scotland, is the first person we read of having a watch; which is now in the possession of his Majesty. And one belonging to Oliver Cromwell, is deposited in the British Museum. When watches were first made, the whole was performed by one man.

THE WEAVER.

The origin of this art is very ancient, and is frequently mentioned in the Scriptures; but, like all other professions, has undergone a variety of improvements. England, however, does not stand in such high reputation for this article of manufacture as some other nations, particularly in the silk and figure weaving. The cotton weaving of this country nevertheless stands unrivalled. The art of spinning and silk weaving is said to have been brought first to England about the fifteenth century; at which period a company of women, called silk women, first established this art in London. Soon after, men began to engage in it, and our silk manufactories soon arrived at great perfection. Common weaving requires very little abilities; but weaving of damasks, velvets, flowered silks, &c. require a person possessing some talent; and those who are able to draw their own patterns, find it of great advantage. Journeymen weavers can earn from twenty to thirty shillings, with industry, per week; but this greatly depends on their work. The spinning and throwing of silk is principally performed by women and children; in some of our manufactories a great number, of all ages, are employed.

THE WHEELWRIGHT.

This is one amongst the most useful trades we have, as it contributes so largely to the transfer of most of our supplies. There can be no doubt but this business must be amongst the most ancient, as necessity would naturally suggest to man the use of some kind of carriage, and which must have wheels of some description. The improvements that have been made in wheels of late years, has been very considerable; and at the present time, our carriage wheels are manufactured on better principles, and by far neater executed than in any other country. In London, the manufacture of wheels for pleasure carriages, is a distinct branch; but in the country towns, a wheelwright not only makes all description of wheels, but also carts, waggons, and other carriages not requiring fine workmanship. This business is a very laborious one; and as it requires great strength, lads of delicate constitution are not fit for it. The wood chiefly used by them is oak, ash, and elm; and their tools are much the same as those of a carpenter. The wheel is principally composed of two parts, the nave, into which the spokes are placed, and the rim, on which the tire is fixed.