

and there found fame and fortune; the others dispersed; but what became of Spadaro is not known.

In our portrait Spadaro has evidently only taken a one-sided view of Massaniello's character. Although his friend and admirer, he has evidently made no attempt to give him any traits of nobleness or dignity. This is believed by many, that it was not the will, but the way, that was wanting. It was reserved to Salvatore Rosa, who was also familiar with the features of Massaniello, to hand down to us whatever there was of force and gravity in the aspect of the popular hero: from Spadaro we have received only the comic and trivial.

This episode in the history of modern Italy is but one of the many glorious efforts which now and then appear, like words of power and beauty, scattered at rare intervals through the pages of a hideous tragedy. The vices of the Roman Empire seem to have left behind a heritage of curses and misery, which is to cleave to its descendants evermore. The centre of liberty, of litera-

ture, and art, has become the cradle of despots, and the haunt of vice, profligacy and murder.

The history of Naples is hardly instructive, and in many parts is utterly disgusting. Since the downfall of Rome it has been subjected in succession to a series of masters, nearly all of foreign extraction, and has distinguished itself not less by its vices than its patient submission to slavery.

Still, from time to time, might be observed some faint and short glimmerings of the spirit which animated the Roman plebeians in ancient times. Massaniello has furnished a striking instance of what may be achieved amongst the Italians by a courageous and determined man. Perhaps no finer materials ever existed for genius and strength to work upon. Ardent, passionate, enthusiastic, and vain-glorious, they have within them all the materials of revolution, but none of the sober and steady education which facilitates progress and civilisation.

A VISIT TO APSLEY PELLATT'S FLINT GLASS WORKS.

1 1852

How many of the comforts we enjoy in our national and domestic character are due to accidental discoveries! Witness that recorded by Pliny, when some mariners, "who had a cargo of nitrum (salt, or perhaps soda) on board, landed on the banks of the river Belus, a small stream at the base of Mount Carmel, in Palestine, and, finding no stones to rest their pots on, placed under them some masses of the nitrum, which being fused by the heat with the sand of the river, produced a liquid and transparent stream." Some modern writers have been disposed to doubt the truth of this relation; but that the origin of glass is due to some such fortuitous liquefaction, is proved by the fact that imperfect forms of "glass" are usually found in the sides of almost every furnace where sufficient heat has existed to vitrify the bricks, and in the ruins of buildings destroyed by fire. "It might dispose us to a kinder regard for the labours of one another," wrote Dr. Johnson, more than a hundred years ago, "if we were to consider from what unpromising beginnings the most useful productions of art have probably arisen. Who, when he first saw the sand or ashes, by a casual intenseness of heat, melted into a metallic form, rugged with excrescences and clouded with impurities, would have imagined that in this shapeless lump lay concealed so many conveniences of life as would, in time, constitute a great part of the happiness of mankind?" Who, indeed! "And yet," continues the doctor, in his sententious but admirable way, "the first artificer of glass was employed, without his knowledge or expectation, in facilitating and prolonging the enjoyment of light, enlarging the avenues of science, and conferring the highest and most lasting pleasures: he was enabling the student to contemplate nature, and the beauty to behold herself."

It may be as well, perhaps, before speaking of the manufacture of glass—a material which owes its value entirely to the labour expended on its production, the sand, soda, and chalk being almost valueless of themselves—to glance briefly at

THE KNOWLEDGE OF THE ART AMONG THE ANCIENTS.

That in Egypt, the mother of nations and nursery of the arts, a kind of glass was made, is abundantly evident, from the fact of beads, and other vitrified objects, being discovered in tombs; and Sir J. G. Wilkinson adduces three distinct proofs that the art of glass-making was known to the Egyptians before the exodus of the children of Israel, more than three thousand five hundred years ago. There exist at Beni-Hassan and at Thebes rude delineations of glass-blowers at work; and, from the hieroglyphic descriptions of the paintings, it appears that they were executed in the reign of the first Osistesen, who occupied the throne about the period above mentioned. Again, Captain Hervey found, at Thebes, a glass bead about three quarters of an inch in diameter, which Sir J. G. Wilkinson proves to bear the name of a king, in hieroglyphic characters, who reigned fifteen hundred years before the birth of Christ; and lastly, Winckelman, a very high authority in matters of art, is of opinion that the use of glass among the Egyptians was much more common than is generally supposed,

not only for drinking vessels and sacred emblems, in Mosaic work, but even for coffins, but no specimen of the application of glass for the latter purpose has ever appeared among the Egyptian curiosities brought to this country.

That the Hebrews, from their long residence in the land of their captivity, should have become acquainted with the art of making glass, is extremely probable, but whether it was used by them for mirrors is not known. That glass was known to the inhabitants of Alexandria is undoubtedly true, and various specimens of coloured-glass vases, recovered from the buried cities of Pompeii and Herculaneum, are sufficient evidences of their inhabitants having attained a high degree of excellence in the art. No doubt appears to exist of the fact of glass having been used for glazing the windows of the wealthy in Pompeii and Rome. St. Jerome tells us that in his time (A.D. 422) windows were formed of glass; and about a century later, it appears, from the evidence of Paulus Silentiarius, that the windows of the church of St. Sophia, in Constantinople, were glazed with glass.

Frequent mention of glass as a domestic and ornamental appliance appears in the works of the writers of this time; and we may justly infer that considerable skill was shown by the Roman and Grecian artists of the period. It is said that Nero gave 6,000 sesteritia—a sum equal to £50,000 sterling—for two cups with handles, made of a superior kind of transparent glass; and Pliny tells us that vessels of crystal were so highly valued in his time as to have almost superseded the use of gold and silver for such articles in the houses of the wealthy. It is generally believed, however, that the introduction of lead into white glass is of British origin, none of the specimens of Roman manufacture in the British Museum, or elsewhere, possessing any traces of that metal, though coloured and enamelled glass in cups and vases appears to have been by no means scarce.

Of the art among the Venetians, abundant evidences remain; and for many years the supremacy of the glass-makers of that city was acknowledged in all the civilized world. The Venetian ball, long a puzzle to Englishmen, remains to tell of their ingenuity; and in Venice, to be a glass-maker, was to be a gentleman, *ipsa arte*, for the art's sake. In the scale of early European glass-makers, the Bohemians rank next to the Venetians, whose productions they imitated with great success. Thus ornamental glass-ware—more especially those long drinking-cups, into the stems of which were enclosed twisted enamel tubes—has long been celebrated. Many specimens of this kind of work appeared in the late Exhibition. In the present day, Venice manufactures most of the glass beads and bugles for the African market; and the various glass-works in Bohemia afford employment to upwards of 30,000 persons. It is consolatory to think that in our day there is little necessity for the Venetian drinking-vessels, which are said to have discovered the presence of poison by instantly breaking into pieces—a poetical conception, referable, probably, to the lightness of the material, which caused it sometimes to break in the hands of the nervous poisoner.

Among the Chinese, the art of glass-making has been known for centuries. They excelled in the art of imitating gems; and it is said that it was scarcely possible to distinguish the real from counterfeit stones, so exquisitely were the latter prepared. To the Arabians—that singular and little appreciated people, who were once the carriers of the world—our ancestors are indebted for much of the knowledge they possessed of China; and it is curious that the art of glass-making is in much the same state in that vast empire in the nineteenth century, as it was when the Arabs first brought it into Europe. In the form of vases and false gems, rather than useful articles for domestic purposes, Chinese glass almost invariably appears.

According to Pennant, the art of making glass was known in Great Britain before the Norman Conquest; and certainly the secret of making glass-beads, amulets, and "snake stones,"—a kind of glass ring of various colours—was known to the Druids and Anglo-Saxons. Fragments of Roman glass have been frequently found in various parts of the country; and in 1847 there were discovered, in digging for the foundation of the episcopal palace of the Bishop of Oxford at Cuddesden, a pair of glass vases of a pale blue colour, and ornamented with waved lines, which are said to belong to the Saxon period, and of as early a date as the sixth or seventh century; though it was not till the middle of the seventeenth century that glass windows began to be common in England.

We have thus briefly traced the history of glass manufacture in Europe. From the Phœnicians—said to be the original discoverers—the art passed to the Crusaders, who transferred their knowledge to the Venetians in the thirteenth century, by whom it was for many years kept a profound secret. In the middle of the seventeenth century, the great Colbert introduced the blown glass mirror manufacture into France. As early as 1557 the manufacture of window glass was begun in Crutched Friars, London, and various articles in flint glass were soon afterwards made in the Savoy-house, in the Strand. In 1635 the art was greatly improved by the use of coal instead of wood in the furnaces; and in 1673 the first sheets of blown glass for mirrors and coach windows were made at Lambeth, by some Venetian artists introduced by the Duke of Buckingham. What must have been the state of society in Europe two hundred years ago, when glass windows and mirrors, carpets, gloves, and stockings, were known only to the very richest of the people?

The question now arises—which, perhaps, should have been asked before—

WHAT IS GLASS?

Glass—in French, *verre*—is a transparent, homogeneous, solid body, formed by the fusion of silicious (flint-like) and alkaline (fixed salt) substances. Glass is solid at ordinary temperatures, brilliant, always more or less transparent, and invariably brittle. "Many opaque substances are capable of assuming a form more or less vitreous, or glass-like—such as earthen, some acids and salts, and metallic oxides (rusts). In porcelain we see a partial vitrification, for the granular texture is exceedingly fine, and a slight translucency is produced; but complete vitrification never results until after the fusion or melting of the ingredients; and we know of no means by which porcelain clay, or any other earth, in its simple state, may be melted. But when two kinds of earthen are mixed together—or when a silicious earth is mixed with certain crystalline salts—perfect fusion may be produced, and a nearer approach to transparent glass be the result. Again, certain metallic oxides may be made to assume a vitreous form, and, when mixed with silex, to produce a glass possessing valuable properties. We may hence regard glass as resulting from the mixture or fusion of these three kinds of ingredients; and the purpose fulfilled by each may be thus understood:—the silicious substance is the vitrifiable ingredient—the salt or alkali is the flux, by mixture with which the silex becomes fusible—and the metallic oxide, besides acting as a flux, imparts certain qualities whereby one kind of glass is distinguishable from another."

There are four principal kinds of glass, known as crown, plate, common bottle, and flint glass, the base of all of which is sand, and the chief solvent soda or potash. The sand of the river Belus was for many ages esteemed the best for glass-making, and was consequently sought after and exported to many distant countries; but at the present time, the sea-sand from Alum Bay, Isle of

Wight, and from the shore of Lynn, in Norfolk, with some found in Australia, are considered most fitted for the glass-maker's purpose. Flint glass, so called from calcined flints having formerly been used as the silicious material, is composed, according to the formula of Mr. Pellatt, of

Carbonate of Potash, 1 cwt.	Sand washed and burnt, 3 cwt.
Red Lead or Litharge, 2 cwt.	Saltpetre, 14 to 28 lbs.
Oxide of Manganese, 4 to 12 oz.	

The more common or ordinary kinds of glass have little or no lead in their composition; and in the suitable quantities of the ingredients considerable difference exists among glass-makers.

The reader having gone thus far with us, we request the honour of his company to a visit to the flint glass factory of Messrs. Apsley Pellatt and Co., Holland-street, Blackfriars, London, where we shall endeavour to explain to him

THE METHOD OF MANUFACTURING FLINT GLASS.

Premising that our reader has never before had the honour of visiting a glass-house, it will be as well to conduct him through the various departments of these extensive premises—not in the order in which he would be most likely to see them, but in the routine actually observed in making glass.

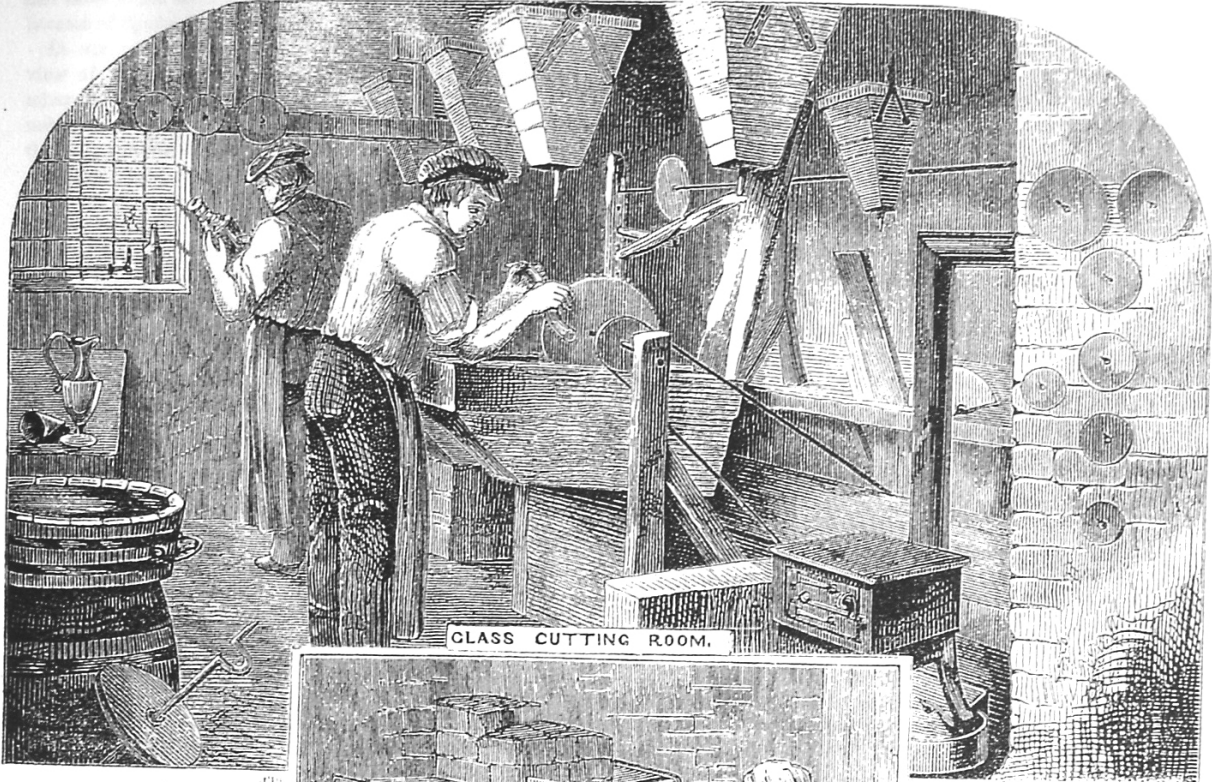
The factory is situated in Holland-street, so called from a woman of by no means the best character, who, in the reign of Charles the First, inhabited the old moated manor-house of Paris Garden, afterwards known as "Holland's Leaguer." It is not the cleanest neighbourhood in the world, but we must not mind that; it is the glass-house we want, not the street; and if we wish for information, we must not travel in shiny boots and white kid gloves. The glass factory, then, of Messrs. Pellatt comprises several buildings necessary to the art, and occupies about three-quarters of an acre. The various buildings consist of a receiving-house, where are stored the sand, cullet (broken glass), &c.; a horse-mill for grinding old melting-pots as one of the ingredients for making new ones; an apartment where the clay, ground or powdered, is kneaded and mixed for the making of the pots; another, where the pots are made; others for drying the pots when made; rooms for storing, washing, and preparing the sand and alkaline salts; a mixing-room, in which the various materials are weighed and combined; two coking ovens, or furnaces, for converting coal into coke; the glass-house, to which all these are subsidiary; the glass-cutting and engraving rooms; show rooms, warehouses, counting-houses, &c. Before the excise regulations were abolished, various vexatious rules had to be observed—rooms were locked up, of which the excise officer kept the keys, and so forth; but such is the force of habit, that much the same routine is followed now that the glass manufacturer is free to pursue his trade in his own way.

The pots in which the glass is fused are made of the finest Stourbridge clay, to which a certain proportion of old pots ground fine may be added. Great care is necessary in the making, drying, and baking of these pots, as upon their trustworthiness in the furnace depends greatly the success of the after process of glass-making. The pot, when filled, contains about 16 cwt. of fused glass—called metal, in the technical language of the workmen. Each pot weighs about a thousand pounds, though its height is not above three feet, by two-and-a-half feet in diameter. In shape it is cylindrical, with a round top and a flat base, having an opening near the top—in fact, it resembles, more nearly than anything else, those earthen vessels which the pigeon-fanciers fix against the walls of their houses as nests for the birds. The pots, when made, are allowed to remain for several months before they are baked, so as to become dry in a short space of time. When completely annealed, they are placed as soon as possible in their place in the fire. This is a very dangerous service, especially if conducted without proper mechanical aids. They who assist are exposed for a considerable time to the whole force of the furnace heat, and it is frightful to witness the sufferings of the workmen exposed to the radiation of the flames. Either in removing a broken pot, or in setting a new one, the whole breast of the fire must be exposed. Dr. Irvine is said to have caught his last illness, while imprudently assisting in this formidable operation.

We now enter

THE GLASS-HOUSE,

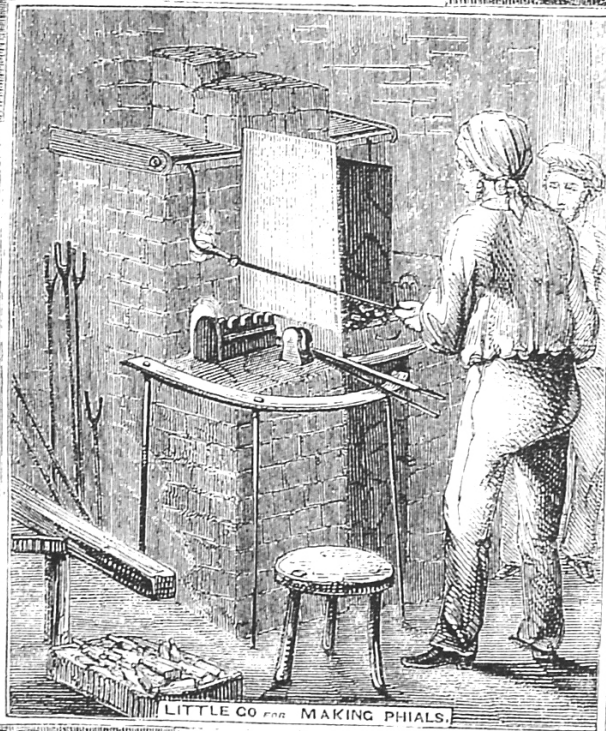
where the actual process of glass-making is being carried on. It is almost impossible to describe one's sensations on entering this building for the first time. In the ordinary way, the visitor is



GLASS CUTTING ROOM.



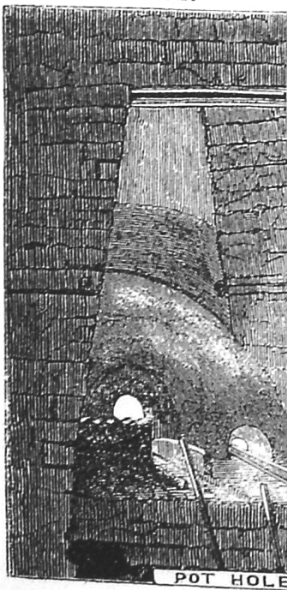
BLOWING.



LITTLE CO FOR MAKING PHIALS.

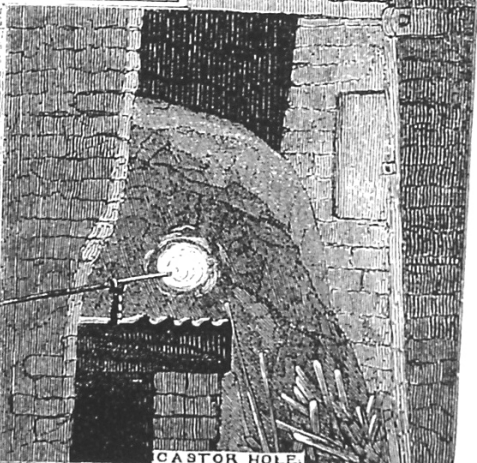


CHAIR.

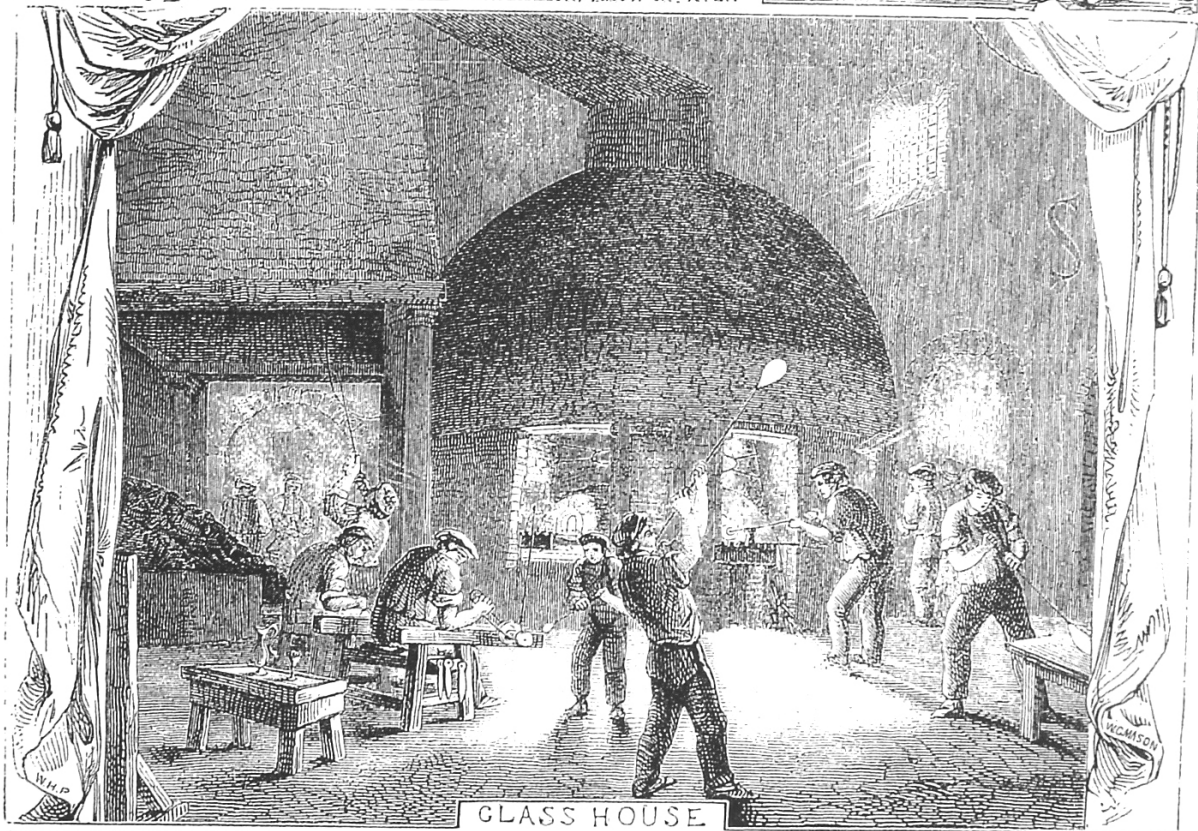
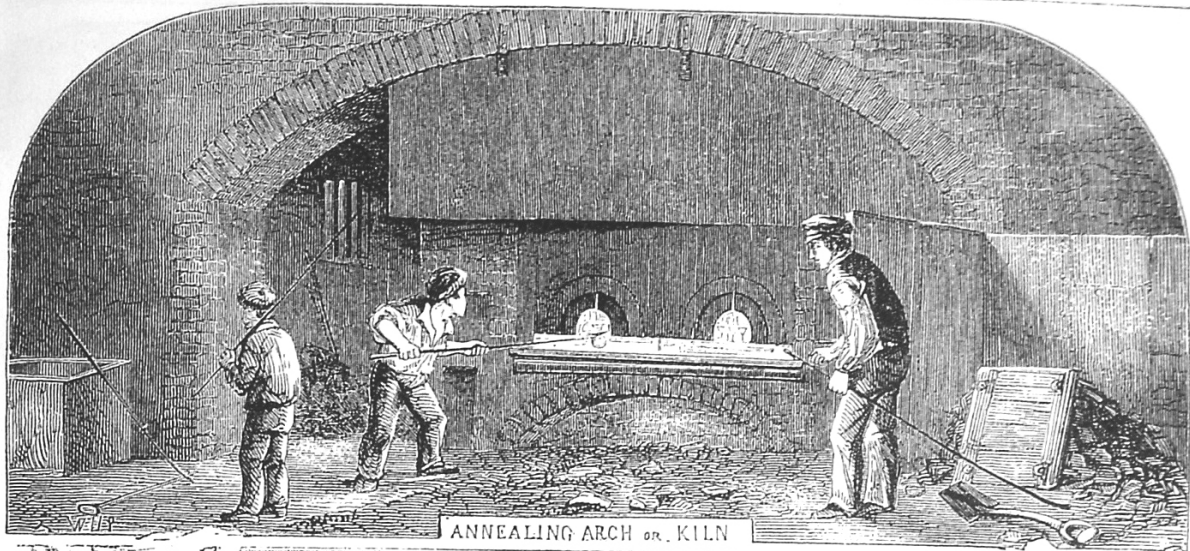


POT HOLE.

MANUFACTURE
OF
GLASS
AT
APSLEY PELLATT
AND COS.,
LONDON.



CASTOR HOLE.



generally shown the glass-house first. He is lost in wonder. He gazes around him upon the dingy walls, in the centre of which is the melting furnace, the chimney of which rises through the iron roof. He cannot reconcile the dimness of the place with the bright glow from the pot-arches, or the dull radiance proceeding from the annealing arch. He feels some little alarm as he sees dusky figures close beside him swinging about great masses of what appears to be red-hot iron. He feels, as he looks upon the vivid light from the opening furnace, as if a hot mask were placed upon his face, and he unconsciously puts his hand up to his brow. A warm perspiration envelopes him, and it is some minutes ere he can recover from his first emotions on witnessing the strange unearthly scene before him. Dark figures flit past him, each bearing a mass of living fire, and he almost regrets his temerity in venturing into the horrid place. But soon this impression wears off; and, at the voice of his conductor, he gazes with wonder and admiration at the operations of one particular set of workmen. But first let us describe briefly the nature of the furnace, the light and heat of which glares brightly on him from a dozen openings. There are two furnaces in this glass-house, but a description of one will suffice.

The furnace, then—the general form of which will be best seen in the engraving—consists of a circular dome, about fifteen feet in diameter and eighteen in height; the internal construction of which may be understood, if we suppose two basins inverted, a deeper one at the top. In the inner and shallower basin are contained the pots and the fuel of the fire. At various parts of the outer wall holes are left, to enable the workmen to get at the pots of glass; and the whole interior of the furnace is lined with fire-proof bricks. The fuel is laid on an iron grating in the centre, in connexion with which, and beneath the glass-house itself, are a series of passages, the purpose of which is to create a very powerful draught, which, passing upwards into the fire, keeps the fuel in an intensely white heat. A flint-glass furnace is so constructed that no heat or flame is allowed to escape from the chimney; and the draught must never be too strong to prevent a pressure of short and vivid flames from the “bye-holes” of the furnace, on each side the pot-mouths. The heat is reverberatory; that is, the heated air and flame is made to return from the roof to the pots, and thus a very high temperature is kept up within the interior. The furnace before us consists of nine large pots and three smaller ones, this size being considered the most economical in point of consumption and working power. The fuel employed is coke, made on the premises; and about 21 tons of coal are consumed weekly.

It sometimes happens that accidents occur to the furnace. The “siege,” or bottom of the furnace, wants repairing—part of the crown of the arch breaks in—or an old pot breaks, becoming vitrified by the heat, and sticks to the bottom of the furnace. In these cases, a new pot must be introduced, the arch must be repaired, or the siege made strong again, without greatly hindering the progress of the work. Once lit, the furnace-fire of a glass-house is never extinguished. The withdrawal of an old pot, and the introduction of a new one, technically called “setting a pot,” is a most fearful operation. The old pot has to be dug out of the furnace in the face of the raging flames, for which purpose the temporary brickwork in front of the arch is pulled down. About six or eight men, each with a bar in his hand about five feet long, like a javelin, steeled and sharpened at the end, rush forward in face of the fiery furnace, guarding their faces with their protected arms, and aim a blow at such of the irregular rocky incrustations of clay as adhere to the siege. This operation is repeated until the whole of the vitrified clay is removed from where the old pot stood. The spot is then repaired with clay and sand, and the new pot, at a white heat, is removed from the annealing pot-arch, and carried upon the end of a two-wheeled iron-carriage by several workmen, who carefully set or tilt it backwards into its proper position in the furnace. The opening is then bricked up as before, leaving only a small hole for the introduction of the gathering-iron. The fatigue and exhaustion of the men engaged in this arduous task may be well imagined, when it is considered that the furnace is kept to a sufficient heat to prevent the other pots in the furnace from cooling in the slightest degree; and that the operation sometimes occupies several hours. The melting-pots seldom last above three or four months, though it is not uncommon to patch up a broken one, which will wear for several weeks. This patching is

performed by means of exposing the pot to the air, when the glass, leaking out, becomes hardened sufficiently for use. The pot is so placed in the furnace that every part of it, except the mouth, is exposed to the flames. If you look into the mouth of the pot, you see before you a mass of fiery whiteness; and you draw back from the heat which the glass-maker faces day and night. This is the glass, or “metal,” in a state of fusion.

Let us now examine the way in which

THE MANAGEMENT OF A GLASS-HOUSE

is carried on in respect to time. It is rather curious. The filling and working out of the melting-pots generally takes about a week. On Friday morning the mixed materials are brought to the furnace in wooden barrows, and there thrown into the pots, which hold about eighteen cwt. each. About four cwt. is thrown in at once; and, after allowing sufficient time for the melting down of the various charges, the process is repeated, till each pot is filled with fused metal. The complete filling of the pots occupies about fourteen or fifteen hours; but the metal does not free itself from air-bubbles and striæ in less than from fifty to sixty hours. When all the pots are filled, the mouth of each is securely clayed up, and the “founding” commences. For this purpose the fire is urged up to the greatest intensity during Saturday and Sunday—for the exigencies of the glass-maker’s trade allow of no rest or stoppage; though it must be admitted that the work is so admirably apportioned as to leave nothing to be done on the Sabbath, but to watch the furnace, a service not requiring many hands. During the progress of the founding or melting, the metal is tested by withdrawing a small quantity now and then with an iron rod. This is called “taking a proof” of the metal. But, beyond this, there are certain infallible signs by which the *tiseur*, attendant, or stoker, may tell whether the metal is in a fit state for working; such as the whiteness of the flame exuding from the furnace on each side the pot, &c. In some glass-houses a vast quantity of scum rises to the top of the metal; but in the making of flint-glass, such is the purity of the materials used—little else but “virgin glass” being made—that very little waste accrues. The shorter the time of fusion the better; and the heat during the process of founding can scarcely be too great. Driven snow is not whiter than the burning coal in the centre of the furnace when it has reached its maximum of intensity. If the glass do not get sufficiently fine during the time allotted, or if it should become “coddled” or “gelatinous,” it never will be fit for the finer work; and all that can then be done with it, is to ladle it into water, and make it into “cullet,” for re-fusion with fresh materials.

We will suppose, however, that no accident of this kind has happened—and such accidents are of rare occurrence—and that we are standing in the glass-house on Monday morning, when the “blowing process” commences. To render what follows more explicit, it will be necessary to describe the tools required. First, then, is the glass-maker’s chair, a “flat seat of timber about ten inches wide, each end being fixed to a frame connected with four legs and two arms, the latter on an incline.” On the arms of the chair is fixed an edging of wrought iron, for rolling the blowpipe backwards and forwards with the fused glass on the end of it, thus causing the rotatory motion of a pole lathe; while the right hand with the pucellas gives the requisite form. The “marver” (a corruption of the French *marbre*, marble having been formerly employed) is a cast-iron slab with a polished face, placed on a wooden stand. Upon this slab the lump of glass is rolled to give it a regular outer surface, so that the result of blowing may be uniform in thickness of metal. The “pucellas” is somewhat like a pair of spring sugar-tongs, the prongs resembling the cutting parts of shears, but which are blunt instead of sharp. The pucellas is used for rubbing the outside of solid or hollow glass, and pressing it into a diminished diameter, at the same time elongating the parts by the chair-rotating process. This tool does a similar duty as the cutting-tool of a lathe, but instead of removing the chips, it simultaneously squeezes and lengthens. This tool is used in opening and widening the mouths of glasses, bowls, vases, &c. The “tongs” are used for laying hold of half-formed handles, &c., and generally to seize the glass in the process of making. The shears are strong ordinary scissors, and are used for clipping off the surplus metal from wine-glasses, handles, &c. The battledore, which is a square piece of wood on a short handle, is used to flatten the bottom of the vessel to be made. These,

with the "pontil" and blowing-iron, are the principal tools used by the glass-makers. The "ponty," or "pontil," is a solid rod of iron, used to support the glass while working, when the blowing-

iron is no longer wanted. The blowing-iron is simply a tube, the size of which varies with the kind of work required.

(To be concluded in our next number.)

EXHIBITION OF THE INDUSTRY OF ALL NATIONS; ABOUT TO BE HELD IN NEW YORK.

THIS EXHIBITION, which it is proposed shall take place in New York early in the ensuing summer, having excited a deep and lively interest, not only in America, but in this country, we have much pleasure in presenting our readers with two views of the building in which the Exhibition is to take place. This we are enabled to do through the kindness of the Commissioner, CHARLES BUSCHEN, Esq. Our engravings are from the original designs of Sir JOSEPH PAXTON, a gentleman whose name is so intimately associated with the building in Hyde-park, which remains a gigantic monument of his enterprise and genius. The designs were presented by Sir Joseph, in the most handsome manner, to the managers of the New York Exhibition.

The form of the building is an oblong square, about 600 feet in length by 150 feet in width. It is to occupy an area of about one-third that of the Crystal Palace. Though presenting many features in common with the design already executed here, it possesses several original beauties. The materials proposed to be used in its construction are, for the most part, similar to those employed in the Great Exhibition, the difference being that *glass* is used to a much less extent, and the introduction of slates in the main roofs, for the purpose of providing against any superincumbent weight of snow, likely to occur in the more inclement seasons of the latitudes of America. The exterior is highly ornamental, having four towers, one at each angle, to contain the staircases leading to the galleries. The building is flanked by a raised terrace, approached by flights of steps, and returning at the ends by stone piers, surmounted by lights. The *tout-ensemble* of the exterior is light, elegant, and in good taste.

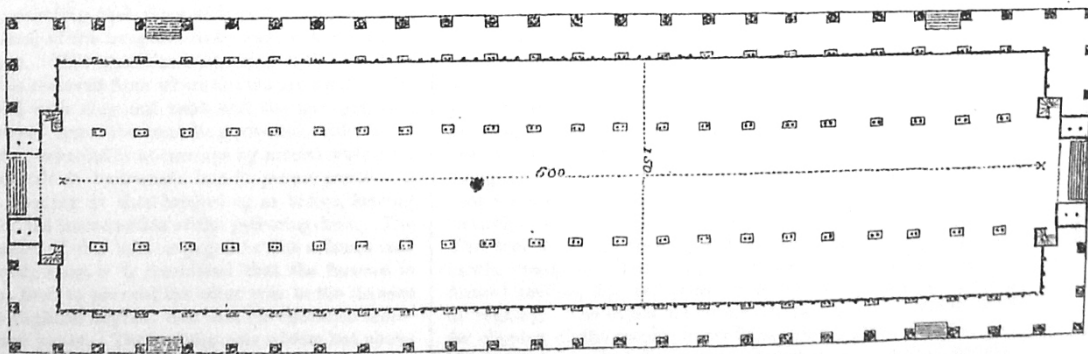
We are much pleased with the design for the interior, which is in every way tasteful and appropriate, but with a due regard to substantial construction. The compartments form a centre, and two side avenues. The main roof is carried by admirably-proportioned segment arches, springing from coupled columns, and rising to the underside of the tie-beams, the interior space forming elegant and appropriate spandrels. The side roofs are carried in a similar way, the arches springing from imposts inserted in the outer wall, a few feet from the ground. The outer and side roofs are further strengthened by strong purlins running the whole length of the building. The ends are lighted from fan-shaped windows, forming panels with circular heads, and richly-ornamented. Under these windows are the principal entrances. The upper roof *alone* is glazed, and partakes strictly of the character of the lower ones. Not the least beauty of the construction is the manner in which the side galleries are kept up, so as not to intercept in any way the admirable perspective of this beautiful composition. The estimated cost of the building is £20,000—a small sum in comparison to its extent, importance, and capabilities of accommodation.

While the contemplation of these elegant designs will, we doubt

not, produce feelings of admiration in all who behold them; the projected Exhibition, with its numerous associations, will tend to increase the good understanding which subsists between England and America. Hitherto, some feelings of discord have marred the harmony which ought to subsist between the great families of the Anglo-Saxon race. Their interests are one—their aims should be one. Both rejoice in a common civilisation and Christianity, and tongue. Last year, America came to our World's Fair, and took no mean place in that illustrious show, and now America invites the world to her shores, that it may better do homage to American enterprise and art. Great, we trust, will be the gathering. More even than ourselves the Americans are sons of labour—more than ourselves, therefore, can they recognise its dignity and blessedness, and worth. There, even more than here, the festival in honour of labour should be held. There, more than here, even, is the spirit of the age paramount. America has no dark past of iron tyranny to look at and to blush for. America has little to unlearn. In Europe we have worshipped the hero who has deluged the land with blood; the priest who, armed with the terrors of the next world, has secured to himself so much of the good things of this. It is only lately that, in Europe, we have learned to honour the people by whom all that is great in the world's history has been achieved—who have bridged over oceans—who have removed mountains—who have planted deserts with busy life—whose works of art, lasting as the sun's glad light, or the air's balmy breath, proclaim what man, in his might and majesty, can do. In America it is otherwise.

We English must rejoice that America has imitated us. Our Exhibition passed off gloriously. We trust and believe that *theirs* will pass off equally as well.

As regards America itself, it is clear, in the knowledge it will disseminate, in the impulse it will give to the industrial arts, such an Exhibition as that proposed will be useful in the extreme. Nor will labour selfishly triumph alone. Peace and human brotherhood, and the soft humanities of life, will share in the honours of the day. Rightly did Milton sing, in immortal verse, of "the arts that humanise and bless mankind." The Exhibition will be a temple consecrated to Peace. As the men of one nation gaze upon the productions of another, they will learn that God has made of one blood all nations that dwell upon the face of the earth, and that, to encourage jealousy or revenge—to fan the flame of mutual hate—to let loose the hell-hounds of war—is forbidden by the common origin we all admit, and the common destiny we all obey. Our common brotherhood will again be owned and felt, and thus once more will be placed palpably before the world a type of that coming time which poetry has sung and prophecy foretold; when the lion shall lie down with the lamb—when war shall be banished back to its native hell—when earth shall bask once more in the sunshine of universal peace.



GROUND PLAN OF THE NEW YORK INDUSTRIAL EXHIBITION BUILDING.