INTRODUCTION.

To trace the history of the art of working in clay, from its rise amongst the oldest nations of antiquity till the period of the decline of the Roman empire, is the object of the present work. The subject resolves itself into two great divisions, which have engaged the attention of two distinct classes of inquirers; namely, the technical or scientific part, comprising all the details of material, manipulation, and processes; and, secondly, the historical portion, which embraces not only the history of the art itself, and the application of ancient literature to its elucidation, but also an account of the light thrown by monuments in clay on the history of mankind. The inquiry, therefore, is neither deficient in dignity, nor limited to trifling investigations, nor rewarded with insignificant results. A knowledge of the origin and progress of any branch of art must always be of immense importance to its future development and improvement; and this is particularly true of the art of working in clay, both from its universal diffusion, and from the indestructible nature of its products.

It is impossible to determine when the manufacture was
INTRODUCTION.

invented. Clay is a material so generally diffused, and its plastic nature so easily discovered, that the art of working it does not exceed the intelligence of the rudest savage. The baking of it, so as to give it an indestructible tenacity, must have been a great stride in the art, and was probably discovered by accident rather than by design. In few countries is the condition of the atmosphere such that objects of sun-dried clay can survive a single winter; and, however applicable to the purposes of architecture, such a material was unavailable for vessels destined to hold liquids. Egypt, Assyria, and Babylonia, the triple cradle of the human race, have alone transmitted to posterity the sun-dried products which represent the first efforts of the art.

From the necessity for symmetrical buildings arose the invention of the brick, which must have superseded the rude plastering of the hut with clay, to protect it against the sun or storm. In the history of the Semitic nations, of the Babylonians, and of the Phoenicians, the brick is classed amongst the earlier inventions of the art, and has descended, with various modifications, from the building of the Tower of Babel to the present day. It is essential that bricks should be symmetrical, and their form is generally rectangular. From their geometrical shape, they have preserved the canon of ancient measure; while the various inscriptions with which they have been stamped have elevated them to the dignity of historical monuments. Thus the bricks of Egypt not only afford testimony to the truth of Scripture by their composition of straw and clay, but also, by the hieroglyphs impressed upon them, transmit the names of a series of kings, and testify the existence of
INTRODUCTION.

edifices, all knowledge of which, except for these relics, would have utterly perished. Those of Assyria and Babylon, in addition to the same information, have, by their cuneiform inscriptions, which mention the locality of the edifices for which they were made, afforded the means of tracing the sites of ancient Mesopotamia and Assyria with an accuracy unattainable by any other means. When the brick was ornamented, as in Assyria, with glazed representations, this apparently insignificant, but imperishable object, has confirmed the descriptions of the walls of Babylon, which critical scepticism had denounced as fabulous. The Roman bricks have also borne their testimony to history. A large number of them present a series of the names of consuls of imperial Rome; while others show that the proud nobility of the eternal city partly derived their revenues from the kilns of their Campanian and Sabine farms.

From the next step in the progress of the manufacture, namely, that of modelling in clay the forms of the physical world, arose the plastic art; to which the symbolical pantheism of the old world gave an extension almost universal. Delicate as is the touch of the finger, which the clay seems to obey, and even by its servility to comprehend the intention of the potter's mind, yet certain touches which required a finer point than the nail, caused the use of pieces of horn, wood, and metal, and thus gave rise to the invention of tools. But modelling in clay was soon completely superseded by sculpture in stone and metal, and at length only answered two subordinate ends; that of enabling the sculptor to elaborate his first conceptions in a material which could be modified at will; and that of
INTRODUCTION.

producing in a small form, and in a rapid and cheap manner, for popular use, copies of the master-pieces of ancient art. The invention of the mould carried this last application to perfection, and the terra-cottas of antiquity were as numerous and as cheap as the plaster casts now sold by itinerants.

The materials used for writing on have varied in different ages and nations. Among the Egyptians slices of limestone, leather, linen, and papyrus, especially the last, were universally employed. The Greeks used bronze and stone for public monuments, wax for memorandums, and papyrus for the ordinary transactions of life. The kings of Pergamus adopted parchment, and the other nations of the ancient world chiefly depended on a supply of the paper of Egypt. But the Assyrians and Babylonians employed for their public archives, their astronomical computations, their religious dedications, their historical annals, and even for title-deeds and bills of exchange, tablets, cylinders, and hexagonal prisms of terra-cotta. Two of these cylinders, still extant, contain the history of the campaign of Sennacherib against the kingdom of Judah; and two others, exhumed from the Birs Nimrud, give a detailed account of the dedication of the great temple by Nebuchadnezzar to the seven planets. To this indestructible material, and to the happy idea of employing it in this manner, the present age is indebted for a detailed history of the Assyrian monarchy; whilst the decades of Livy, the plays of Menander and the lays of Anacreon, confided to a more perishable material, have either wholly or partly disappeared amidst the wreck of empires.
INTRODUCTION.

The application of clay to the making of vases probably soon caused the invention of the potter's-wheel, before which period only vessels fashioned by the hand, and of rude unsymmetrical shape, could have been made. But the application of a circular lathe, laid horizontally and revolving on a central pivot, on which the clay was placed, and to which it adhered, was in its day a truly wonderful advance in the art. As the wheel spun round, all combinations of oval, spherical, and cylindrical forms could be produced, and the vases became not only symmetrical in their proportions, but true in their capacity. The invention of the wheel has been ascribed to all the great nations of antiquity. It is represented in full activity in the Egyptian sculptures; it is mentioned in the Scriptures, and was certainly in use at an early period in Assyria. The Greeks and Romans have attributed it to a Scythian philosopher, and to the States of Athens, Corinth, and Sicyon, the three great rivals in the ceramic art. The very oldest vases of Greece, some of which are supposed to have been made in the heroic ages, bear marks of having been turned upon the wheel. Indeed, it is not possible to find any Greek vases except those made by the wheel or by moulds; which latter process was applied only at a late period to their production.

Although none of the very ancient kilns have survived the destructive influence of time, yet among all the great nations baked earthenware is of the highest antiquity. In Egypt, in the tombs of the first dynasties, vases and other remains of baked earthenware are abundantly found; and in Assyria and Babylon, the oldest bricks and tablets have passed through
the furnace. One of the poems of the Homeric age, addressed to the Samian potters, details in heroic bombast the baking of earthenware. The oldest remains of Hellenic pottery, whether in Asia Minor, as at Sipylus, or in the Peloponnese, as at Mycenae, owe their preservation to their having been subjected to the action of fire. To this process, as to the consummation of the art, the other processes of preparing, levigating, kneading, drying, and moulding the clay, must have been necessary preliminaries.

The desire of rendering terra-cotta less porous, and of producing vases capable of retaining liquids, gave rise to the covering of it with a vitreous enamel or glaze. The invention of glass has been hitherto generally attributed to the Phoenicians: but opaque glasses or enamels, as old as the XVIIIth dynasty, and enamelled objects as early as the IVth, have been found in Egypt. The employment of copper to produce a brilliant blue coloured enamel was very early both in Babylonia and Assyria; but the use of tin for a white enamel, as recently discovered in the enamelled bricks and vases of Babylonia and Assyria, anticipated by many centuries the rediscovery of that process in Europe in the 15th century, and shows the early application of metallic oxides. This invention apparently remained for many centuries a secret among the Eastern nations only, enamelled terra-cotta and glass forming articles of commercial export from Egypt and Phœnia to every part of the Mediterranean. Among the Egyptians and Assyrians enamelling was used more frequently than glazing, and their works are consequently a kind of faience consisting of a loose frit or body, to which an enamel adheres after only a slight
INTRODUCTION.

fusion. After the fall of the Roman Empire, the art of enamelling terra-cotta disappeared amongst the Arab and Moorish races, who had retained a traditionary knowledge of the process. The application of a transparent vitreous coating, or glaze, over the entire surface, like the varnish of a picture, is also referable to a high antiquity, and was universally adopted either to enhance the beauty of single colours, or to promote the combination of many. Innumerable fragments and remains of glazed vases, fabricated by the Greeks and Romans, not only prove the early use of glazing, but also exhibit in the present day many of the noblest efforts of the potter’s art.

In the application of form in art, the Greeks have excelled all nations, either past or present. The beauty and simplicity of the shapes of their vases have caused them to be taken as models for various kinds of earthenware; but as every civilised people has received from other sources forms sanctioned by time, and as many of the Greek forms cannot be adapted to the requirements of modern use, they have not been servilely imitated. Yet, to every eye familiar with works of art of the higher order, the cleverest imitations of nature, and the most elegant conceits of floral ornaments, whether exhibited in the efforts of Oriental or European potters, appear coarse and vulgar when contrasted with the chaste simplicity of the Greek forms.

By the application of painting to vases, the Greeks made them something more than mere articles of commercial value or daily use. They have become a reflection of the paintings of the Greek schools, and an inexhaustible source for illustrating the mythology, manners, customs,
and literature of Greece. Unfortunately, very few are ornamented with historical subjects; yet history receives occasional illustration from them; and the representations of the burning of Crœsus, the orgies of Anacreon, the wealth of Arcesilaus, and the meeting of Alcæus and Sappho, lead us to hope that future discoveries may offer additional examples.

The Rhapsodists, the Cyclic poets, the great Tragedians, and the writers of Comedy, can be amply illustrated from these remains, which represent many scenes derived from their immortal productions; and the obscurer traditions, preserved by the scholiasts and other compilers, receive unexpected elucidation from them. Even the Roman lamps and red ware, stamped with subjects in relief, present many remarkable representations of works of art, and many illustrations of customs and manners, and historical events; such as the golden candlesticks of the Jews borne in the triumph of Titus, the celebration of the secular games, and the amusements of the Circus and Amphitheatre.
PART I.

EGYPTIAN AND ORIENTAL POTTERY.

CHAPTER I.

Antiquity of the art—Unbaked bricks; material, size, fabric; stamps and inscriptions—Figures and other objects in sun-dried clay—Baked clay; red unglazed terra-cotta; bricks; sarcophagi; sepulchral cones; inscriptions; sepulchral figures; sepulchral vases—Vases for liquids, &c., pots, bottles, amphorae—Mode of manufacture; lamps; architectural ornaments; polished pottery; red variety.

The inquiry must commence with Egypt, since the earliest specimens of the art belong to that country, and are of a period when Central Asia offered no material proofs of civilisation. There is a gulph of several centuries between the Pyramids and the palaces of Nimroud, while all that can be traced of Babylon belongs to an age still more recent.

In Egypt the art of pottery is attributed, like the other arts and sciences, to the invention of the gods; an unequivocal proof that it was in use before the historical period. Thus Thoth, or Hermes, taught man speech and writing; Neith, the use of the loom; Atheta, music and
dancing; Anubis, the craft of the embalmer; Isis, husbandry; Osiris, the method of making wine; whilst Num, the directing spirit of the universe, and oldest of created beings, first exercised the potter's art, and moulded the human race on his wheel. He had previously made the heavens and the earth, the air, the hills and streams, whence sprung the terrestrial gods; and hung the sun and moon betwixt "the green sea and the azure vault," which Pthah, the artisan-god, had formed upon his lathe in the shape of an egg. Man was the last of his productions, whom he modelled out of the dark Nilotic clay, and into whose nostrils he breathed the breath of life.

There is evidence that the existence of earthen vessels in Egypt was at least coeval with the formation of a written language. Several hieroglyphs represent various kinds of vessels of red earthenware; and these signs date from the remote period of the third and fourth dynasties, whose epoch may be placed between B.C. 3000—2000. In sepulchres of the fourth and subsequent dynasties earthenware vessels are represented as employed for the ordinary purposes of domestic life; as jugs for water and other liquids; jars for wine and milk; deep pans or bowls to serve up dressed viands; and conical vessels on stands, round which is twined the favourite or national flower, the lotus. A series of monuments enables us to trace the development of the art from this period to that of the Roman empire; whilst the manner in which it was exercised is practically illustrated by abundant specimens of many kinds of pottery. Vast mounds, or montes testacei, which lie around the ruined cities and temples, mark at once their former magnificence and grandeur,