On our second Saturday, the eleventh day from Liverpool, Cape May was sighted, and during the afternoon we steamed up the Delaware. We were hoping to land that evening, but when only twenty minutes from the landing-stage our vessel ran on shore owing to the efforts of the pilot to escape collision with an oyster boat. Two tugs could not pull us off, so we were obliged to remain in the channel the whole evening. When the tide rose we got away, and on Sunday morning we landed. Before we were allowed in the open a medical officer carefully scrutinised each one of us and government agents inspected our records. We were obliged to produce what money we had, and to satisfy the officials that we had the making of good citizens in us. Those who cannot pass this ordeal are sent back at the expense of the company who brought them out.

The remainder of the journey was made by rail and ferry-boat. Not many hours later we crossed the Hudson, and as we stepped ashore on Cortland Street, New York, our thirty-six shilling trip was done.

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**Terra-Cotta Painting.**

By Mrs. RANDOLPH-LICHTFIELD.

As a material for domestic uses and decorative purposes terra-cotta (a term literally signifying clay baked) is of the greatest antiquity.

In many Etruscan tombs vases 2,000 years old have been found, still bright in colour, unusual, and uninjured. These were painted red, buff, yellow, or black, many of them being gilded, their ornamentation consisting generally of representations of domestic scenes, mythological subjects, or flowers and foliage, especially those of the honeysuckle and ivy.

In Egypt and many parts of Sicily and Greece terra-cotta vessels of the early Greek type are frequently found. It was about 150 years B.C. that the art of making these became extinct.

For architectural purposes, however, terra-cotta was much employed in the seventeenth century, and there were manufactories for it in several parts of Italy.

Many of the English brick mansions of the Tudor period were elaborately adorned with ornaments of this material, and Italian artists, including the celebrated Bramante, were employed in their production.

The manufacture of terra-cotta was revived in England about 1770, by Wedgwood, to whose untiring efforts and patient investigation, aided by the sound scientific principles on which all his experiments were conducted, we owe the rapid and immense improvement made in all varieties of English china and earthenware since that time.

Wedgegwood, among other artistic inventions, introduced a terra-cotta which he made to resemble many of the most beautiful stones of the silicious and crystalline species, such as porphyry, granite, Egyptian pebble, &c., and Flaxman, the celebrated sculptor, was employed in their decoration.

In Denmark the manufacture of modern terra-cotta is carried to its highest perfection, and our increased intercourse with that country has, doubtless, been one of the greatest causes of its extended use for decorative purposes.

The discovery in the south of Devon of a vein of fine red clay, of which terra-cotta ware is made, has greatly facilitated the production and improved the quality of that made in England.
The terra-cotta of the present day, the decoration of which forms a branch of art as interesting in its pursuit as it is effective in its results, may be obtained in three colours, black (melas), red, and creamy (leuko).

The black may be used for either oil or water-colour painting, but is useless for china colours, as it will not bear firing.

The red and creamy will also receive either oil or water-colours, and as they admit of firing, may be painted with china colours also. The enamelled terra-cotta is prepared for firing, and over glaze china colours are used for its decoration.

The surface of terra-cotta is both easy and pleasant to paint on, and the fact that it may be decorated to the greatest perfection, and with durability, without the tediousness and danger incidental to firing, makes it a very favourite subject for amateur art. Of all the varieties of terra-cotta, oil colours on black Danish ware is by far the most effective and by far the easiest of accomplishment.

The colours being opaque, every tint tells effectively on the black background, and the finest strokes are as distinctly shown as the broadest.

**PAINTING IN OIL COLOURS.**

The materials required are: red sable and bristle brushes of various sizes, tubes of oil colours, and mezzetin, or, if preferred, Roberson's medium, to dilute the colours.

The design must be sketched in white, either paint or chalk, taking great care to have it correct and clearly defined. The painting is treated exactly as if on canvas, the processes of first colouring, shading, &c., being thoroughly similar.

Any inaccuracies or spots of paint may be rubbed off with a piece of cotton wool, so long as they remain moist; but when dry, turpentine will be required to remove them, and must be applied with the greatest care.

Oil painting on red cream terra-cotta is accomplished in a similar manner and with the same materials.

On the red and cream coloured grounds the subject may be sketched with lead pencil; the marks may be rubbed out, but in this as in all other drawing, it is far better to expend a little time and care in drawing the design in the first instance than to make alterations afterwards.

The oil colours require mixing with a body colour like flake white. Roberson's medium being used for the purpose; they are then painted on rather thickly, but evenly, and allowed to thoroughly dry. All after-painting and finishing is done without the admixture of flake white, the medium still being employed.

When quite dry the pencilled outlines may be effaced with india-rubber. A slight coat of copal varnish, applied after the painting is thoroughly dry, will bring out the brilliancy of the colours, and enable the terra-cotta to be washed with impunity.

**PAINTING WITH WATER-COLOURS.**

The application of water-colours to terra-cotta is more tedious and complicated than that of oil, the colours being transparent, necessitate an underglaze to conceal that formed by the ware. For this purpose it is requisite to coat the design—whether black, red, or cream—with size. This may be obtained of any artists' colourman, or a preparation of lavender balsam, diluted with turpentine, used as a substitute.

After the ground is sized, or prepared with the medium, which must be done smoothly and carefully, and sufficient time has been allowed for it to dry properly, the design must be sketched with Chinese white, and all the portions that are to receive bright colours must have a preliminary coat of the Chinese white made into a thin paste tried the experiment of laying a bright colour on the terra-cotta thus prepared, and a stroke or two of the same without the underlayer of Chinese white, you will conclude the few moments' extra work amply repaid by the enhanced brilliancy of the tints. This coat of Chinese white must be laid on evenly and thickly with a flat red sable brush, which must not be too full, great care being taken not to go beyond the limits of the design.

When the white has become perfectly dry, the colours may be painted, moist water colours mixed with the medium being used for the purpose, the details of their shading and finishing being precisely those of ordinary water-colours.

Before the introduction of Chinese white, the whites used for similar purposes were made of lead or zinc, the consequence being their turning black in a few years, or even a shorter time, whether used alone or with other pigments.

After the painting is perfectly dry, it should have a smooth coat of the medium,
and when this in its turn becomes dry, other of varnish may be applied.

The best copal or white spirit varnish is the best for the purpose. I prefer the former; it should be applied thinly, and should be brushed with a small flat brush, which should be used as dry as possible.

The work surface may be varnished, but the effect is far preferable if the painting only is thus treated, the bright design showing to the greatest advantage on the dull ground. If this method is chosen, great care must be taken in applying the varnish, that it is not too thick to spread in the least beyond the painting; if this is successfully achieved the design will appear enameled and slightly raised on the dull surface of the terra-cotta.

**PAINTING WITH CHINA COLOURS.**

For this purpose the blackened terra-cotta is useless, as it will not bear firing; the red or cream must therefore be selected, and the ground sized or covered with the medium. When this is quite dry the under glaze china colours may be applied exactly as they would on biscuit china, taking especial care to have the design perfectly complete before commencing the colouring.

Enamel or over glaze colours may be used in precisely the same manner on unenamelled terra-cotta, and the whole article glazed together; but the effect is not so good, as it merely has the appearance of ordinary glazed ware, and loses its distinctive character.

The colours must be used with as dry a brush as possible, and laid on quite smoothly with a fine brush. Where white is employed it must be the white enamel, which must be put on rather thickly.

The painting will require what is technically called a "great fire kiln" for the firing, the ordinary "muffle" heat, which generally suffices for china painting, being inadequate in this case. This, however, is a detail that will be understood by any experienced firm to whom you may entrust your terra-cotta.

**ETCHING ON TERRA-COTTA.**

This may be done either before or after the terra-cotta is fired; in the former case the wax must be procured in its soft state, and the etching wax is executed with the unbaked clay. Baking of vessels is required for the work. Correct drawing is absolutely necessary for this work, and some care is needed to avoid omitting the desired effect, each stroke must be sharp and clear, and deep enough to "take" the clay, great care being required while etching this to avoid ending the stroke with a little dent or too deep an impression. Should this however, take place, it may be partially rectified by being carefully smoothed over with an etcher's brush.

Etching may be treated in the same manner, but it is better to take extra care to avoid their commission than to be forced to correct them afterward.

Black or brown glaze colours are employed for any shading that is required, and the whole work must be completed before "firing." As the clay dries in firing, and therefore shrinks slightly, allowance must be made for its doing so in the execution of the design. During the work the terra-cotta must be kept damp, and whenever left it must be covered with a damp cloth, or it is certain to crumble.

Etching on the fired terra-cotta is much pleasanter work, and with a little care will produce very fine results.

The materials required are etching pens, a bottle of syderotype, instead of ink, and a crayon stick.

The pen must be carefully and firmly held, so as to draw steadily and correctly, taking the precaution to take off the smaller syderotype at a time for fear of making a blot, which would induce poorly upon finishing.

The designs are executed in precisely the same manner as adopted for a pen and ink drawing.

If the composition the design should not appear sufficiently dark, the effect may be considerably increased by a little of the crayon stick being gently rubbed over it with cotton wool; this, however, must not be attempted under twenty or thirty minutes after the etching is finished.

Another method of etching on fired terra-cotta is very easy of accomplishment and very effective. All the implements required, and are used with lampblack mixed with a little, very little gum. This should be gum Arabic if the etching is to be shiny, and gum tragacanth if it is to be dull. Considerable effect may be obtained by putting in any extra depth of mass or colour with a fine brush.

Etching with Indian Ink and very fine pens is also very simple work, and a few "high lights" put in with Chinese white greatly enhance the effect. Terra-cotta thus decorated requires either being varnished with a fine brush, the gold being cut on a cushion specially prepared, a palette knife being used for the purpose. The brush should be passed lightly over the hair, which causes the gold-leaf to adhere to it; the leaf must be laid on very carefully, great care being taken that it does not curl or crease in the application.

A far easier method of gilding than this, and very nearly as effective, is the painting with liquid gold, really prepared for the purpose. This must be mixed with a little refined oil, and laid on smoothly and carefully with a brush. Whichever method may be selected, gold-leaf brushes are the best for the purpose.

If you should wish the gold burnished, which adds considerably to its effect, a burnisher made of agate will be required. When the gold becomes dirty or tarnished, as it may be from being exposed to the air, or a variety of other causes, it can be cleaned with white lead or acetic acid, i.e., white wine vinegar.

The three beautiful vases shown in the illustration are the property of Messrs. Howell, James and Co., by whom they have been exhibited.

The illustrations will give some idea of the variety of forms in which terra-cotta is made. Besides numerous styles of tazza, vases, &c., used for decorative purposes, there are plaques of every style, size, and form, and to the designs for these offer a foundation there is practically no limit. The plaques may be let into cabinets and sunk in the centre of small tables, or formed into jardinieres by being framed in wood. Set into shield-shaped pieces of wood, covered with velvet, they make remarkably attractive wall ornaments.

I saw a few days ago a very elegant arrangement of terra-cotta plaques over a mantelpiece. The mantelpiece proper was covered with dark green velvet, and above this was a shelf to correspond, attached to a shaped piece of wood, forming a back, and fastened to the wall; into this frame were fine circular plaques of terra-cotta, the centre one large, the others decreasing in size. The paintings were in oil on the blackened clay, and the designs therefore were not at all rare, and the most perfect of paper specimens.

In both cases the blackened varnish were being employed; one was a "Gloire de Dijon" rose, and the other a round plaque in diameter; the other, an oval vase, sixteen inches in height, with gracefully curving handles. This had a band of honeysuckle, apparently thrown casually, and over one handle and beneath the other.

**GILDING ON TERRA-COTTA.**

This process is by no means beyond the power of an amateur, and may with accuracy be applied to all and every article in this ware.

The rim of the vase or plaque, the handles, or whatever portion is selected for decoration, must be well rubbed with pumice stone; when made perfectly smooth by this means it must be coated with gilder's size, and when this begins to get "sticky," leaf-gold is applied...