

## PROGRESS IN LIGHTING

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It is a fact, that once upon a time, people used to go to bed almost at sunset and rise just before dawn, which means that practically there was no need for lighting. The first material lights came, when man succeeded in discovering a method of producing fire by rubbing together pieces of dry timber, and later using flint. With the invention of baked clay and pottery the first oil lamps were made, lighted with a wick in animal or vegetable oil. These oil-lamps were very simple, being generally a round, concave structure, pinched at the end where the wick was to be inserted. In time they became more elaborate with various designs characteristic of the various epochs, especially when ceramics came in vogue. The invention of these lamps is attributed to the Mediterranean region, consequently in Malta we find Neolithic, Punic and Roman examples. Some oil lamps were made of brass, silver, and exceptionally of gold, often with more than one wick. The brass ones with two wicks are relatively rare, while the commonest have three wicks, with a good number having four. These brass oil lamps were complete with snuffer, scissors, pin, and in many cases had a shade.

At some time during the use of the prehistoric oil lamps, candles were developed, and to the present day have continued to be widely used. These were often decorated with flowers, as the ones donated during the candleman ceremony. With candles came the use and development of candle holders and chandeliers.

Candles and lamps are used symbolically in churches for divine worship. The ceremonial use is associated with the idea that light is a sign of the Divine Presence, and has a somewhat similar meaning in pagan rituals. In Christian Churches candles and lights

have been used symbolically since the 4th century. Candlesticks merit a study of their own, so varied and elaborate are their shapes and sizes, according to their uses, depending on whether they are to be used on the floor or on furniture; some are pillar shaped, other branched, including lamps. Some of the latter had a reservoir to supply fuel to the branches. Great masters at all times, have designed pieces still admired today, and ancient Roman examples were often elaborately carved.

During the nineteenth century, kerosene came into use, and kerosene lamps were produced artistically in many ways, nowadays avidly sought after by collectors.

On the introduction of gas in Malta in 1854, home lighting for many, used gas, till electricity came to stay round about 1882. In 1860, in fact, petroleum began to displace all other lamp fuels. Coal gas was used for lighting by Murdock in 1792, and in 1886 the incandescent mantle introduced by Welsbach revolutionized coal gas illumination. The electric arc lamp was developed round about 1845 and the invention of the dynamo became a commercial proposition. Incandescent electric lamps with a filament of carbon were devised by Edison in 1879 and by Swann in 1880. Early in the twentieth century, the substitution of the carbon by a metal filament, and the use of gas-filled bulbs caused striking improvements in this form of lighting.

Street lighting was unknown in Malta before 1745, and "The darkness at night could be cut through with a knife" as the Maltese put it. The origin of street lighting, in fact came about, so to say, by pure chance. In 1745, A German Grand Prior of the Order of Saint John, Count Filiopo Guglielmo Nesselrode embellished the Jesuit's College and Church at Valletta by erecting the four statues of saints on the four corners of the building, and a fifth on the main door of the college. Lamps were lighted in front of each statue to honour these saints, and besides the devotion expressed by the donor, the nightly illumination inspired the Valletta

inhabitants to procure the necessary means for street lighting.

In fact, in all street corners, statues of Saints started to find an honoured niche, and Valletta became discreetly lighted up that night, to the desperation of loiterers and thieves.

The use of corner lights in honour of saints soon spread to Rabat and other villages in Malta, followed closely by Gozo.

It may be concluded, that the Saints honoured at street corners in Malta, were the pioneers of street lighting. Here we also find that these lights were fuelled by oil, followed by petroleum, and later replaced by gas and electricity.

Following these events, we naturally come to festa time in Malta, honouring patron Saints, when buildings and street lighting became the major attraction. The first festa illumination involved coloured glass cups with a projecting top rim, round which a thin piece of wire was wound to support it on a nail or on ornamental pyramids decorating the streets, alternating with tall flagpoles bearing colourful banners. These colourful glass cups were filled with oil and a wick inserted, and the glasses being of various colours, patterns were formed, creating a marvellous effect. Imagine the sight of a church facade, with its belfreys and dome covered with hundreds of these coloured cups, with the twinkling light in each of them, giving one the impression of a living architecture, a hymn on glory to God and a feeling of happiness on oneself. I remember only one such sight, the facade of the Public Library so illuminated on the occasion of the Royal visit many years ago. and to this day, I still see in my inner mind the beautiful effect of such an illumination; I assure the reader that there is a great difference between this kind of lighting and the modern electric bulbs, which has got to be seen to be understood; but of course, one has to march with the times, and today's festa is illuminated by electricity.

Another way of illumination which has come to us from old times and still used today, is the lighting of a number of tins (originally clay vessels) with lard or candle material and a wick inserted in it. These tins were placed side by side on ramparts, terraces, or cornices of public buildings, and when lit offer a pleasing effect which helps to render more attractive such festivities. In connection with festas, one must not forget the lights used for band marches and during band programmes. Before the use of electricity, Wagner lamps or acetyline lamps were used for both marches and band stands. Band stands are nowadays lighted by electricity, but band marches are still accompanied by mantle lamps with gas or petroleum.

We have seen the progress of material lighting; but what about mental lighting? Have we progressed as well, or are we still far behind the desired standards which renders humanity more prone to justice and peace, than it was during the days of slavery or in the middle ages?

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