



DIAMOND AND ENAMEL MAPLE LEAF SPRAY PRESENTED TO THE DUCHESS OF CORNWALL AND YORK.

THE DIAMOND.

The diamond in its purest condition is colorless and transparent, yet at times it is found colored throughout of almost every possible tint, the colors ranging from bright canary yellow to a deep brown and black, and in very rare instances green, blue, pink and red. Diamonds are found occasionally in Sumatra, India, Borneo, Brazil, North America, British Guiana, Australia and the Ural Mountains, but the South African mines practically supply the world. The following are some of the important characteristics a diamond must possess to be classed as "first water"; it should be absolutely white, that is without the slightest tinge of yellow, free from flaws, and perfectly cut. In speaking of freedom from flaws it must be explained that should a magnifying glass of sufficient power be used, flaws can be found in the most perfect diamond ever discovered. The cutting is a most important feature, frequently overlooked even by dealers, as an improperly cut stone loses much of its fire and brilliancy. In a correctly cut stone, the front, that is the part above the girdle, should be one third, and the back two thirds of the total thickness of the stone. The girdle itself should be sharp and free from the heavy uncut edges seen in many stones.

Composition : Pure Carbon.

Specific gravity : 3.52 to 3.53.

Hardness : 10.

THE RUBY.

The ruby occupies, among precious stones in general, a position which is unquestionably supreme, and from Old Testament times until to-day it has been regarded as the very type of all that was most precious in the natural world. The true ruby is a variety of the mineral species termed *corundum* and can be scratched by the diamond but by no other mineral. It is found in many parts of the world, but the localities yielding the rubies of commerce are practically limited to Burmah, Siam and Ceylon. Even of these localities, it is only in Burmah that the favorite tint, the true pigeon's blood color is found; those of Siam are darker, and those of Ceylon, paler. The price paid for rubies by the Ancients was very high; according to Benvenuto Cellini, in his time, a perfect ruby of a carat weight cost 800 écus d'or, whilst a diamond of like weight cost only 100, the same applies to-day more especially in the larger stones. When a perfect pigeon's blood ruby of five carats is brought into the market, a sum will be offered ten times the price given for a diamond of same weight; but should it reach ten carats or more it is almost invaluable.

Composition : Alumina with traces of Oxide of Iron.

Specific gravity : 4.

Hardness : 9.