

same spot. It occurs in cut diamond and also in opal. It appears to the greatest advantage in sunshine, probably, however, even more beautiful in candle light.

5. THE CHANGEABILITY OF THE COLOURS.

This phenomenon occurs on more places, and in larger spots than the preceding; the colours are mostly simple, but sometimes many occur together, which are, however, distinctly separated, and do not run into each other, nor is the change so rapid as in the appearance called the play of the colours.

We distinguish two kinds of this phenomenon.

- A. That which is observed by looking in different positions on the mineral, as in Labrador stone.
- B. That observed by looking *through it*, as in the common opal, which shews a milk white colour when we look *on* its surface, but when held between the eye and the light is wine yellow.

6. THE IRIDESCENCE.

Here the change of colour is in great patches or parties, and the colours are of the same kind, and are arranged in the same order as in the rainbow, and they are distributed in more or less numerous and broken stripes. It is to be observed by

- A. Looking *on* the mineral, as in the variety of calc spar called Iceland or duplicating spar, adularia, beryll, &c. and
- B. Looking *through it*, as in rainbow calcedony.