tourmalines instead of being crossed, are laid parallel, the forms of the ovals are the same, but the colours complementary, and the cross and curved branches white.

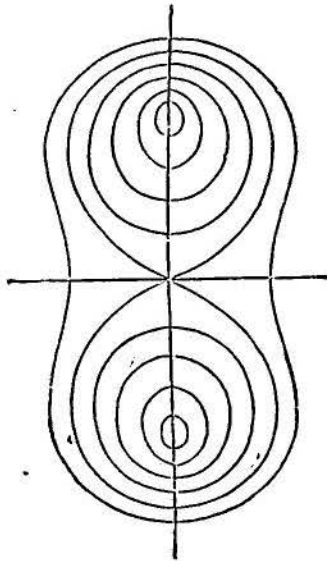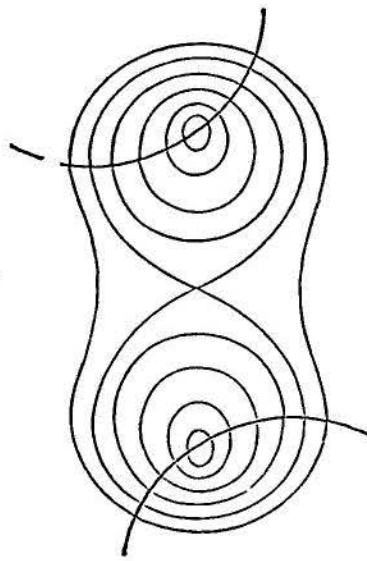(171.) The forms of these curves are governed by a
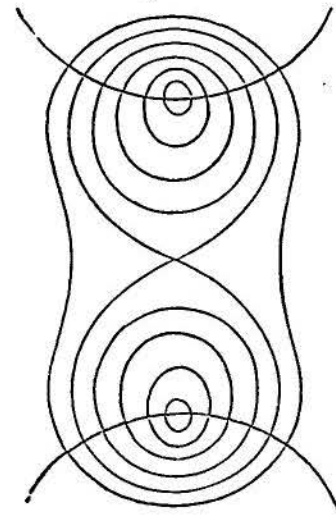

Fig .17.   Fig. 18.   Fig. 19.

very simple and elegant general law, common to all biaxal crystals, and applicable to every angular separation of the axis: and when this separation is small, as in the case before us, they may be regarded as "lemniscates," of which the property is this, that for every point in the circumference of each oval the *product* (not as in an ellipse the *sum*) of two lines drawn to the two centres or foci, is invariable; and for successive ovals proceeding outwards from either focus, these products increase in regular arithmetical progression. When the two foci coincide, that is to say, when the two axes of the crystal coalesce, and it becomes uniaxal, the ovals pass into