



VOL. XXXVII.

MARCH 16th, 1910.

No. 19.

Heredity.

WHAT is heredity? If you will look attentively at the parents and children of any family, you will notice examples of the ties which we speak of as heredity. When children resemble either parent in the colour of the hair or eyes, in complexion, features, walk, or voice, they are said to inherit these characters.

Sometimes, however, children inherit more unusual characters than these—hare-lip, cleft palate, a cast in the eye, or a sixth finger. Sometimes the resemblance to parents is not apparent in childhood at all, but becomes so when the children have reached mid-life. This is particularly true of the lineaments of the face. It is true also of certain internal organs, such as the heart, lungs, liver, intestines and kidneys, anyone of which may show an inherited resemblance in the fact that the same disease may attack the son or daughter at middle-life, just as it attacked the father or mother years before.

Again it is quite well known to physicians that a tendency to certain diseases runs in certain families. Baldness comes on at thirty in some, and not till seventy, or not at all, in others. The same is true of gray hairs. In some families the teeth are nearly all lost by decay before thirty years of age; in others, the teeth are sound up to seventy or eighty. A rheumatic or gouty tendency exists in some families, running through them for generations; and similarly a tendency to disease of the lungs, heart, intestines, kidneys, or blood-vessels.

Coming next to intellectual and moral traits, we may well ask whether these also are inherited. No doubt they are. The Bach family have for several successive generations been celebrated musical composers, the Arnolds have been prominent in literature, and the Rothschilds eminent in finance.

Now while it is generally true that strong parents have strong children, and sickly parents have sickly children, this is not always the case. Nor does it always happen that men of great ability have children of equally great ability. Often the reverse is true; but, on the average, intellectual and moral traits do run in families just as bodily ones do.

But inheritance shows itself not alone in the transmission of sound bodily and mental qualities, it shows itself equally well in the transmission of deformed bodies and weakling minds, that is, in what is generally known as imbecility and idiocy.

Imbecility is a milder form of mental defect than idiocy, and feeble-mindedness is a milder form of mental defect than imbecility.

High intellectual attainments are always associated with the perfection of brain structure, and the lack of intellect, or defective intellect, is invariably as-