

in correlation with the elongated and reversed feathers on the back of the neck, which form the hood.

The hoofs and hair are homologous appendages; and a careful observer, namely Azara,¹¹ states that in Paraguay horses of various colours are often born with their hair curled and twisted like that on the head of a negro. This peculiarity is strongly inherited. But what is remarkable is that the hoofs of these horses "are absolutely like those of a mule." The hair also of their manes and tails is invariably much shorter than usual, being only from four to twelve inches in length; so that curliness and shortness of the hair are here, as with the negro, apparently correlated.

With respect to the horns of sheep, Youatt¹² remarks that "multiplicity of horns is not found in any breed of much value; it is generally accompanied by great length and coarseness of the fleece." Several tropical breeds of sheep which are clothed with hair instead of wool, have horns almost like those of a goat. Sturm¹³ expressly declares that in different races the more the wool is curled the more the horns are spirally twisted. We have seen in the third chapter, where other analogous facts have been given, that the parent of the Mauchamp breed, so famous for its fleece, had peculiarly shaped horns. The inhabitants of Angora assert¹⁴ that "only the white goats which have horns wear the fleece in the long curly locks that are so much admired; those which are not horned having a comparatively close coat." From these cases we may infer that the hair or wool and the horns tend to vary in a correlated manner.¹⁵ Those who have tried hydropathy are aware that the frequent application of cold water stimulates the skin; and whatever stimulates the skin

¹¹ 'Quadrupèdes du Paraguay,' tom. ii. p. 333.

¹² On Sheep, p. 142.

¹³ 'Ueber Racen, Kreuzungen,' &c., 1825, s. 24.

¹⁴ Quoted from Conolly, in 'The Indian Field,' Feb. 1859, vol. ii. p. 266.

¹⁵ In the third chapter I have said that "the hair and horns are so closely related to each other, that they are

apt to vary together." Dr. Wilckens ("Darwin's Theorie," 'Jahrbuch der Deutschen Viehzucht,' 1866, 1. Heft) translates my words into "lang- und grobhaarige Thiere sollen geneigter sein, lange und viele Hörner zu bekommen," and he then justly disputes this proposition; but what I have really said, in accordance with the authorities just quoted, may, I think, be trusted.