generally, there are many variously shaped open spaces, the bone forming an irregular reticulation. A medial, longitudinal, arched ribbon of bone is generally retained, but in one specimen there was no bone whatever over the whole protuberance, and the skull, when cleaned and viewed from above, presented the appearance of an open The change in the whole internal form of the skull is surbasin. prisingly great. The brain is modified in a corresponding manner. as is shown in the two longitudinal sections, which deserve attentive consideration. The upper and anterior cavity of the three into which the skull may be divided, is the one which is so greatly modified; it is evidently much larger than in the Cochin skull of the same size, and extends much further beyond the interorbital septum, but laterally is less deep. This cavity, as I hear from Mr. Tegetmeier, is entirely filled with brain. In the skull of the Cochin and of all ordinary fowls a strong internal ridge of bone separates the anterior from the central cavity; but this ridge is quite absent in the Polish skull here figured. The shape of the central cavity is circular in the Polish, and lengthened in the Cochin skull. The shape of the posterior cavity, together with the position, size, and number of the pores for the nerves, differ much in these two skulls. A pit deeply penetrating the occipital bone of the Cochin is entirely absent in this Polish skull, whilst in another specimen it was well developed. In this second specimen the whole internal surface of the posterior cavity likewise differs to a certain extent in shape. I made sections of two other skulls,—namely, of a Polish fowl with the protuberance singularly little developed, and of a Sultan in which it was a little more developed; and when these two skulls were placed between the two above figured (fig. 35), a perfect gradation in the configuration of each part of the internal surface could be traced. In the Polish skull, with a small protuberance, the ridge between the anterior and middle cavities was present, but low; and in the Sultan this ridge was replaced by a narrow furrow standing on a broad raised eminence.

It may naturally be asked whether these remarkable modifications in the form of the brain affect the intellect of Polish fowls; some writers have stated that they are extremely stupid, but Bechstein and Mr. Tegetmeier have shown that this is by no means generally the case. Nevertheless Bechstein<sup>69</sup> states that he had a Polish hen which "was crazy, and anxiously wandered about all day long." A hen in my possession was solitary in her habits, and was often so absorbed in reverie that she could be touched; she was also deficient in the most singular manner in the faculty of finding her way, so that, if she strayed a hundred yards from her feeding-place, she was completely lost, and would then obstinately try to proceed in a wrong direction. I have received other and similar accounts of Polish fowls appearing stupid or half-idiotic.70

69 'Naturgeschichte Deutschlands,' have received communications to a Band iii. (1793), s. 400. <sup>70</sup> The 'Field,' May 11th, 1861. I

similar effect from Messrs. Brent and Tegetmeier.