129. *Elephas bombifrons*, Falc. and Caut. [Siwalik.
130. —— *Clifti*, Falc. and Caut. Siwalik.
131. *Mastodon sivalensis*, Caut. Siwalik.
132. —— *perimensis*, Falc. and Caut. [Siwalik.
133. —— *latidens*, Clift. U. and L. ,,
134. —— *pandionis*, Falc. ,, ,,
135. —— *angustidens*, Cuv. L. Siwalik.
136. —— *var. palæindicus*. ,,
137. —— *Falconeri*, Lyd. U. and L. [Siwalik.

zzz. Family DINOTHERIIDÆ.

138. *Dinotherium indicum*, Falc. U. and [L. Siwalik.
139. —— *pentapotamiæ*, Lyd. (*ex* Falc.) [U. and L. Siwalik.
140. —— *sindiense*, Lyd. U. (?) and L. [Siwalik.

V. Order EDENTATA.

Sub-Order SQUAMATA.

zzzz. Family MANIDÆ.

141. *Manis sindiensis*, Lyd. L. Siwalik.

In the foregoing synopsis, Mr. Lydekker states that he has endeavoured to follow in the main the nomenclature adopted by Professor W. H. Flower, in his Catalogue of the Mammalia in the Museum of the Royal College of Surgeons (London, 1884). Under each genus is given the reference to the work where it was originally named, and under the species, the work in which the name was first applied and also that in which the fullest description of each species may be found.

1. The Primates (Anthropoidea) are present in these deposits and are represented by					2	families,	4	genera and	5	species.
2. The Carnivora, by	...	...	...		6	,,	16	,,	33	,,
3. Rodentia, by	...	...	...	...	4	,,	4	,,	4	,,
4. Ungulata, viz.										
A *Artiodactyla*, by	...	...	...		11	,,	39	,,	67	,,
B *Perissodactyla*, by	...	...	...		3	,,	5	,,	15	,,
C Proboscidea ...	...	...	...		2	,,	3	,,	16	,,
5. The Edentata, by	...	...	...		1	family	1	genus and	1	,,
Making 5 Orders	...	...	...		29	families,	72	genera and	141	,,

It is interesting to observe that the deposit which at present has yielded the richest series of Fossil Vertebrata in India is that of the Siwalik Hills in which the late Sir Proby T. Cautley and Dr. Hugh Falconer laboured with so much success more than thirty years ago, and whose remarkable fossils occupy the fine series of folio plates known as the "Fauna Antiqua Sivalensis," the only descriptions of which are to be found in "Falconer's Palæontological Memoirs," so carefully edited by the late Dr. Charles Murchison.

When we bear in mind the unfavourable nature of the climate, the vast and varied character of the country embraced in our Indian Empire, and the very small number of workers actually engaged on the preparation of these publications, including both those at home and those out in India, many of the latter of whom are out in the field most of the year, we cannot but confess our astonishment at the brilliant results which this small army of geologists and palæontologists have accomplished.

CORRESPONDENCE.

ON "FAULTS."

SIR,—Prof. Blake has pointed out that Figures 8 and 9 in my paper on Faulting (p. 209) are incorrect. It was careless in me to draw them so; and I send amended copies. The text requires no

alteration. Of course Figure 9 is generalized, and the details might be varied; as, for instance, by some of the faults bifurcating or by step faults.

I think it possible that "our science" is more in danger of "losing caste" by the Professor's critique, than by my article. It seems to be the especial misfortune of Geology, that questions relating to it cannot be discussed dispassionately—I had almost written with courtesy. I can only hope that some of your readers have understood my meaning better than Mr. Blake has done. O. Fisher.

Fig. 8.

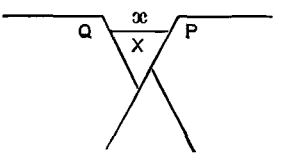
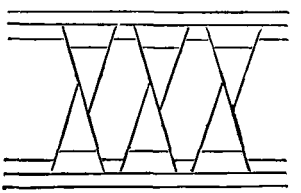


Fig. 9.



13 Aug. 1884.

REPLY TO PROF. BLAKE'S CRITICISM ON FAULTS.

Sir,—Having been much interested in the two suggestive papers by my friend Mr. Fisher on the subject of Faulting, Jointing and Cleavage, lately published in this Magazine, I was naturally somewhat surprised at being told last month, on the authority of Prof. Blake, that the papers in question were a "mischievous" compound of mere "chaff." I have, therefore, carefully gone over the original papers again (including the equations which the Professor condemns as erroneous), with Prof. Blake's article as a guide; the result being that the whole of the long and somewhat violent criticism shows itself to be a mixture of errors and misapprehensions so extraordinary as to make one wonder what the Professor can have been about in writing such an article for publication. He certainly points out the obvious error in Figs. 8 and 9; but even in doing this he has allowed himself to fall into the mistake of giving an obviously imaginary reason for this error. The figures are easily corrected; and when this is done, it will be seen that there is no need for any correction in the text, nor any alteration in the argument; so far is it from being true, as the critic asserts, that the error in the figures is "the result of attempting to form faults" either in the way suggested by Mr. Fisher, or in the parody thereof suggested by the critic. Again, on p. 212, l. 26, Mr. Fisher has omitted the letter x after λ (unless, indeed, he here uses the symbol λ merely to identify the force spoken of, which appears to me the probable explanation). This, which is at worst a mere clerical error, cannot have caused any confusion except perhaps in the critic's mind. But Prof. Blake has seized the opportunity to "run full tilt" at the whole paper in consequence. One other criticism offered by Prof. Blake may appear to some to be of some weight, when he doubts (on p. 368) whether Mr. Fisher is right in assuming that the resis-