

detail. The second part glances at the same facts, so far as they are found manifested in the lower animals, more especially in the Arthropods, Mollusca, and Worms. Many of the woodcut illustrations are from original drawings, and of these those representing the muscles engaged in prehension and mastication are very good.

*Animal Life on the Farm.* By Prof. G. T. Brown, Agricultural Department, Privy Council. (London: Bradbury and Agnew.)

THIS is the last of a series of eight convenient hand-books covering the whole field of agricultural study. Dr. Masters's "Plant Life on the Farm" is ably followed by the excellent little book from the pen of Prof. Brown; and what may at first appear in the light of omissions in a treatise upon animal life as seen upon farms is at once corrected by the previously-published account of the live stock of the farm. Thus, while the subject of crops of the farm and live stock of the farm were ably treated, there was still room for more purely scientific writers, such as Dr. Masters and Prof. Brown, to treat of life more as biologists than as practical farmers. Accordingly, what is true of life on the farm is in many respects true of life in the forest and life in the city; but this does not detract from the value of facts about life wherever it may be found. It was probably an agreeable task to the writer to put this little volume together. It is full of matter with which he is very familiar, and which he is able to present with that admirable clearness and precision which has always characterised both his oral and written teaching. Commencing with the two opposite conditions of life, and death, as abstractions, we are pleasantly led to the consideration of the beginnings of life in the egg, and by a natural progress to a popular, but at the same time accurate, description of tissues, organs, and functions, which carry the reader through about two-thirds of the book. The remaining third is devoted to the peculiarities of domesticated animals, and in fact becomes more thoroughly specialised upon the farm. The variability, the precocity, the delicacy, the plasticity of domesticated animals are each dealt with by a master hand, and illustrated by examples taken from the experience of breeders and our great agricultural societies.

#### LETTERS TO THE EDITOR

[The Editor does not hold himself responsible for opinions expressed by his correspondents. Neither can he undertake to return, or to correspond with the writers of, rejected manuscripts. No notice is taken of anonymous communications.]

[The Editor urgently requests correspondents to keep their letters as short as possible. The pressure on his space is so great that it is impossible otherwise to insure the appearance even of communications containing interesting and novel facts.]

#### Iridescent Clouds

IN a letter published in NATURE for January 7 (p. 220), I tried to describe the appearance of the iridescent clouds as seen here on the afternoon of December 28. The phenomenon was repeated on December 29 and 31. On December 30, and again on January 1, the sky was overcast, but since then, though I have looked for them at different times of the day, and especially about sunrise and sunset, I have seen no further trace of iridescent clouds.

What struck me as most remarkable about them was, not the prevalent colour which they have been said to possess (see pp. 199, 219), for I cannot point out any as being peculiar to them, but the changes of colour undergone, often rapidly, by each individual cloud. As a record of these changes in the few instances I am able to give may perhaps help to throw some light on the nature and origin of these clouds, I trust I may be excused for occupying so much of your space.

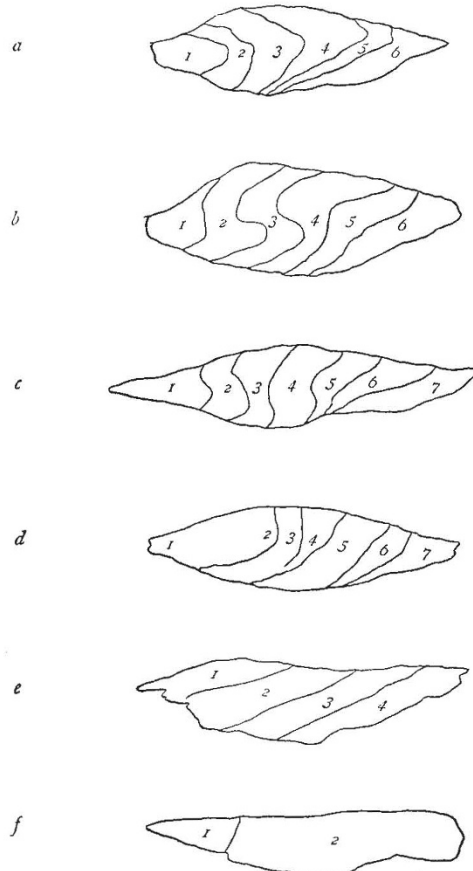
December 29.—3.15 p.m., the sun a few degrees from setting, light cloud partly covering the sky, heavy snow-clouds near the horizon. At about 10° north of the sun and at an altitude of

about 25°, there was a small cloud, 5° in length, consisting of four or five narrow bands nearly parallel to the horizon, all of a faint, but beautiful, violet colour. Soon after this, it was hidden by snow-clouds.

3.44.—This cloud was again visible, showing iridescent colours, no longer consisting of bands, but oval in form and slightly inclined to the north. Half a minute later, a branch of the same form and size, but rather more inclined to the north, appeared on the right, very faint, but increasing rapidly in brightness, until it equalled that of the original cloud. The new branch was at first violet, but in part tinged with rose-colour. The original cloud soon, however, began to fade, and by 3.47 had disappeared, the remainder being then green, except the upper edge slightly tinged with pink.

3.50.—The colours almost gone, but I believe the cloud was at this time covered by a thin haze. At 3.52 the cloud was very faint, and white.

Fig. 1.



3.55.—The colours again appeared, in three bands, blue on the left (nearest the sun), green in the middle, and on the right pink. But, immediately, the colours began to change, the blue and pink to fade, the green band becoming wider and brighter, until, in a few seconds, the whole cloud was green. It grew brighter and brighter until, at 3.57, it shone out a pure beautiful green almost of rainbow-brightness. But, at this moment, the snow-clouds, which had been rising rapidly, passed over it, and heavy driving snow began to fall.

At 4.18 the snow-storm was over, and in nearly the same place as the cloud just described were two small clouds, each about 5° long, at altitudes of about 20° and 25° respectively. They were faint, and had a slight trace of indefinite colouring. By 4.26 they had both disappeared.

4.28.—The two clouds again visible, the lower green, and the upper rose-coloured. But the clouds began to fade at once, and a minute later both had disappeared finally, the sky being now, and continuing, quite clear.