gradients. (2) On the nearness of the observer to the path of the cyclone centre. (3) On the velocity of translation of that centre.

In a great many cases I have observed, especially in the west of Ireland, that when a rapid fall of the barometer is reported, the wind is much stronger than existing gradients would seem to justify.

From this it would seem than the rate at which the change of pressures is taking place has some influence on the strength of the wind.

3. Prof. Loomis has shown in his examination of the U.S. Weather Charts that in American cyclones the area of rain-cloud extends further in front when these storms are going fast than when they are going slow.

From this it would appear that another element of intensity besides wind, viz., precipitation, is increased when a cyclone centre moves with great rapidity.

It was mainly on these grounds that I based the statement in my former letter. RALPH ABERCROMBY

21, Chapel Street, Belgrave Square, October 5

Deltocyathus Italicus, Ed. and H.

I FIND that Prof. Ralph Tate, F.G.S., President of the Adelaide Philosophical Society, has lately written as follows in an anniversary address. "On the other hand the Geelong coral, *Deltocyathus italicus*, Ed. and H., better known from the Italian Miocenes, is considered by Count Pourtales and Sir Wyville Thomson to be specifically distinct from its living analogue inhabiting the deep waters of Florida—an opposite opinion to that held by Prof. Duncan." During the last conversation I had with the late M. de Pourtales he informed me that after having seen and studied the Italian types, he was satisfied that I was correct in the statement I had made regarding the specific identity of the Tertiary and recent forms.

P. MARTIN DUNCAN

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Temperature of the Breath

MY attention has been directed to a communication under the above heading by R. E. Dudgeon, in NATURE, vol. xxii. p. 241. The speculations therein raised regarding the temperature of the breath are scarcely compatible with ascertained physiological truth. Mr. Dudgeon's friend's explanation, against which he argues, is undoubtedly correct. The great value of woollen clothing in preventing chill after exercise may be explained on the same principles. The hygroscopic state of the atmosphere (and material) is the condition which causes variation in different experiments. Different materials have effects corresponding to their hygroscopic properties. The following results of a few experiments which I recently made speak for themselves :—

No. 1.—Temp. of air, 87° F.—Air moderately dry (dew point not ascertained).
,, breath, 96° in mouth cavity.
,, ,, 102°·9.—Thermometer enveloped in four folds wool.
,, ,, 102°·2.—Thermometer enveloped in four folds silk.
,, ,, 100°·8.—Thermometer enveloped in four folds linen.
No. 2.—Temp. of air, 79° F.—Air very damp, raining heavily.
,, breath, 97° in mouth cavity.
,, ,, 99° ,, through four folds of silk.

Time occupied in each observation, three minutes.

Madras, September 9 C. J. MCNALLY

Swiss Châlets

I DO not know whether the idea has previously occurred to any one that the modern Swiss châlet is a descendant of the old lake dwelling, but I was strongly impressed with that conviction this autumn. Not only do they actually build the smaller châlets, used as storehouses, entirely on short piles, but very many of the dwelling-houses are still one half on piles, the steps leading up to the gallery passing through a hole in the middle, so that the modern exterior gallery would represent the original platform. In the lake dwelling the probability is (I would suggest) that there was a trap-door in the centre of the platform, inside the inhabited part, with a movable ladder, so that the latter could be drawn up and the trap-door closed if required. At the present day the ladder is represented by fixed wooden or stone steps leading up into the gallery. The house being now on land, the lower part is half or entirely closed in, and so forms an extra chamber, though the family still dwell above the platform (*i.e.* the gallery) as in days of yore. GEORGE HENSLOW

Fascination

FASCINATION originally meant a supposed power in man and snakes of controlling or arresting the movements of various animals by a glance. Your correspondent M. Chatel's personal anecdote, with his comment thereon, suggests that the snake in some way mesmerises his victim, not by its glance but by its movements. His supposition that "the rapid gyratory motion of a shining object" leads on to the debilitating nervous attack, is open to debate. In displays of fireworks such motion occurs before crowds without making any one sick or frightened or inclined to rush into the middle of a catharine-wheel. However then the motions of the snake, whether swift or slow, may avail in attracting and fixing attention, the final catastrophe is probably due to pure fright, according to the old saying, *Multis ipsum metuisse nocet*. We may safely infer that your correspondent himself would have felt no squeezing round his temples had he known at first that the snake was for him a harmless one, and not a viper nearly five feet long!

In the opening letter on this subject the basilisk and the bombshell seemed to be endowed alike with a semi-miraculous power of enchaining the victims that looked upon them. Now, that small birds should be paralysed with terror at the sight of a gesticulating snake is possible or probable enough; but that English officers should be rooted to the ground by mere alarm at the flight of shot or shell is an uncongenial explanation of facts which appear to me capable of interpretation on a different hypothesis.

In moral, as distinct from physical, perils, there is good reason to suppose that too close a concentration of thought upon a danger has a tendency to overpower the will and bend it to the commission of the very acts which the intellect has pronounced unchoiceworthy. But the acts so committed carry with them present gratification. To use the common simile, men fly to them as moths to a candle, not because they are panic-stricken, but because the sense of the danger is lost in the pleasure that attends it.

I am inclined, in the present state of the controversy, to group the effects of so-called fascination under three heads: (1) there is the effect of paralysing terror; (2) there is the effect of indecision; (3) there is the effect of qualities attractive and repulsive accidentally combined in the same object. The first and second effects are perhaps at times combined together in various degrees, and mixed with that absorbing curiosity of which Mr. Hodgson speaks (NATURE, vol. xxii. p. 383), but which by itself seems rather to deserve the name of abstraction than of fascination.

As to fascination in the original sense of the word, its nature may await discussion till observation proves that such a power in reality exists. THOMAS R. R. STEBBING

Tunbridge Wells, September 27

Air-Bladder of Herring

IN NATURE, vol. xxii. p. 520, there was an abstract of Mr. F. W. Bennett's paper on the "Visceral Anatomy of the Herring" (*Journ. Anat. and Phys.*, July 1880). It has escaped the notice of Mr. Bennett that Dr. E. H. Weber described and figured (Tab. vii. 63) the posterior opening of the air-bladder of *C. harengus* into the urogenital sinus in his "De Aure et Auditu Hominis et Animalium," pars i. 1820.

Zoological Museum, Cambridge ALFRED C. HADDON

The "Waiting Carriage"

M. HANREZ' proposed "waiting carriage" (NATURE, xxii. 519) has doubtless been schemed by many readers before now. A simpler form had long ago occurred to me, having the drum of cable in the *train* engine, the cable passing under the carriages and catching the waiting carriage at the tail. The running out of rope could be as well managed at one end of the train as at the other, and only an ordinary carriage without any special engine would be required, which would be dropped just before