

As for the little parenthesis which offended me, I am sorry I noticed it, and hope Mr. Venn will forgive the passing irritation which it produced. What he means by the words "I knew that he was very anxious that the fact should be known," I do not quite understand; but the matter is too unimportant for further comment.

With regard to the "crowning triumph" quotation or misquotation, I can only congratulate Mr. Venn on the adroitness with which he eluded the dilemma in which I quite thought I should place him. In my simplicity I expected that he would answer *Yes* or *No* to my question; but Mr. Venn was not thus to be caught.

It is but fair to own that the critical remarks which I made on Mr. Venn's book in my last letter, though perfectly just as far as they go, are somewhat one-sided. As I only spoke of points on which he and I differ in opinion it could not well be otherwise. His book contains much other matter which I did not touch upon at all, and of which I entertain a very high opinion. His diagrammatic method especially is most ingenious, and his exposition of it is lucid and attractive. The limits of its application in actual practice are, as he himself points out, rather narrow; but within those limits, and for purposes of illustration and verification, it is undoubtedly an important contribution to the science of logic.

HUGH MCCOLL

Boulogne-sur-Mer, July 2

### How to Prevent Drowning

THOSE who have followed the correspondence commenced in NATURE by Dr. MacCormac may be interested in the following extract from an essay, "Pourquoi les Bêtes nagent naturellement," which occurs oddly enough in a book entitled "Observations sur les Plantes et leur Analogie avec les Insectes," published at Strasburg in 1741 by Guido Augustin Bazin, a physician of that place:—

"Lorsqu'un homme qui n'a point appris à nager tombe dans l'eau, il n'y a point de doute que s'il pouvoit tenir son corps dans une position verticale et fixe, et porter ses jambes en avant, comme il fait lorsqu'il marche sur la terre, il ne pût nager naturellement aussi bien que, les bêtes, les habiles nageurs le font souvent pour leur plaisir. Nous connoissons un peuple entier qui ne nage pas autrement, ce sont les Hottentots; voici ce qu'en dit Mr. Kolbe, dans une bonne description qu'il nous a donnée du Cap de bonne Espérance:—"Aussi faut-il avouer qu'ils (les Hottentots) sont les meilleurs et les plus hardis nageurs que j'aye jamais vû. Leur manière de nager a même quelque chose de frappant, et je ne sçache pas qu'aucune nation s'y prenne de la même façon. Ils nagent tout droits; leur col est entièrement hors de l'eau, aussi bien que leurs bras, qu'ils étendent en haut; ils se servent des pieds pour avancer, et pour se mettre en équilibre, mais je n'ai jamais pu sçavoir comment ils les font jouer. Tout ce qu'il y'a de sûr, c'est qu'ils avancent très vite. Ils regardent en bas, et ont presque la même attitude que s'ils marchaient sur terre ferme." Mais cette attitude est impossible à un homme qui ne s'est pas point exercé à la prendre, parce que les mouvements de l'eau, et l'incertitude de son corps, toujours vacillant dans un liquide, le tirent à tout moment de la direction verticale, et l'entraînent malgré lui en avant ou en arrière" (pp. 44, 45).

W. T. THISELTON DYER

### Resonance of the Mouth Cavity

I HAVE not tried Mr. Naylor's experiment, but from the account which he gave of it I could not see that any novel fact was involved, nor do I now see that the fact of "the different rates of vibration being *already in the air*" alters materially the conditions of the case. Whether the sounds are produced by the clatter of wheels, the impact of the thumb-nail upon the teeth, or by the vibrating tongue of a jew's-harp, the part played by the mouth-cavity in selecting the notes of a tune is substantially the same.

GEORGE J. ROMANES

### Storage of Energy

LIKE many others, I have given much thought to the accumulation of force, and have felt much astonished at the account of Faure's battery, if it is to be so called, although of course such a development was to be expected from the time that Planté made his.

I see that men immediately rush to waterfalls, rivers, and tides to obtain the power for accumulation when they leave coal and

wood; my ideas are rather in the direction of wind; and I have often pictured our country covered, like that around Zaandam, with windmills. The wind is not constant, but more so than most of our efficient streams, and it is found at every spot. The power is quite unlimited, and we can moderate the action of the machinery whenever we obtain the requisite force. Storage has hitherto been required. I have imagined our windmills pumping up water to great reservoirs, but we have not yet learned to make reservoirs for water except at an enormous expense and in unprotected valleys; other imaginings have come into many minds, but if we have a really true and safe storage, such as described, the wind will become our fire to warm us, our steam to drive us, our gas to light us, and our universal servant. The wind will drive our mills, too (except when a fog comes, lasting so long that our stores of power fail), with sufficient storage, inconstancy will cease to trouble us, whilst every valley may have its lights and every mountain-top its beacon, and darkness will scarcely trouble mankind in this new-coming world of light. We have heard of the golden servants of Vulcan and the mechanical slaves of the great Khan. What will be the result when every man has the wind at his command and the lightning at his service by friction, like Aladdin? It seems to me that the wind is the great power that we shall next use, and that Prince—the power of the air—shall be bound to serve us for at least a thousand years.

The Dutch have long made windmills, but when over in Holland a few years ago examining a little, I was unable to find the books wanted on the subject.

The fact that coal can be carried will not affect the question if wind is used. Wind carries itself. We shall seek our power from the heavens instead of the infernal pits, and a race of healthy, ruddy faces will take the place of the blackened and degraded countenances from mines.

I wish to show that we have excess of power in the wind. Will this new accumulator, of which I know nothing from personal experience, serve us to keep it? To keep it a few hours is a great point. Coal becomes secondary if we accumulate the force of the wind, and Niagara itself will be no longer wanted. Of course we need machines to use the wind-power. At present coals are cheaper with us; not so in all parts of Holland, and not so in many other places. However, here we have problems enough to solve; do not let us throw cold water on the discoveries of others, or show, as scientific men so often do, our own opinion to be dear beyond the truth among others.

R. A. S.

### Explanation of the Female Dimorphism of *Paltostoma torrentium*

IN his paper on "*Paltostoma torrentium*, eine Mücke mit zweigestaltigen Weibchen" (*Kosmos*, vol. viii. pp. 37-42), my brother Fritz Müller supposes that this species of Blepharoceridae originally was blood-sucking, but in later times changed its habits and became fond of flower-nectar. In the males, who need only little food, this change of habits and the corresponding change of the mouth-parts was accomplished, my brother supposes, more rapidly and perfectly than in the females, who, maturing eggs and passing the winter, stand in need of more albuminous food than the males do. Whilst therefore in some females of *Paltostoma torrentium* the same change of habits and mouth-parts has taken place as in the males, other females have still more or less continued their original blood-sucking habits and preserved their original blood-sucking instruments.

This explanation given by my brother is not yet proved by any direct observation of *Paltostoma's* habits. He mentions, as an indirect argument for his opinion, that in several Diptera the females have been stated to be blood-sucking, whilst the males take nectar of flowers. It may therefore be worth publishing, that in *Empis punctata* really just the same takes place as my brother's explanation of the female dimorphism in *Paltostoma torrentium* requires to be supposed: males who exclusively feed on flower-nectar, besides females, both enjoying flower-honey and attacking living animals and sucking their blood. Several weeks ago (May 20) a great many males as well as females of *Empis punctata* roved on the flowers of hawthorn (*Crataegus oxyacantha*). The males were exclusively occupied with sucking nectar. Of the females some did the same, whilst others attacked, murdered, and consumed the most clever visitor of flowers among all our Syrphidae, *Rhingia rostrata*.

HERMANN MÜLLER