

LETTERS TO THE EDITOR

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Wasp and Bee Stings.

As we are now in the thick of the wasp season, it may interest some of the readers of NATURE to know that cocaine is a remedy for wasp or bee stings. It acts apparently not only as a temporary local anæsthetic, but seems also to have the power of destroying the poison of the sting. I happened to have some 1/6th grain cocaine tabloids for hypodermic injection when a lady was badly stung by a wasp a year or two ago. Such stings have a great effect on her, not only producing a very large and painful swelling, but making her feel more or less unwell for two or three days. One tabloid dissolved in a few drops of water, and applied with the finger at once, almost removed the pain; a second, applied an hour or two after, completed the cure. A few days later I found the cocaine equally effective in the case of a young girl who had been severely stung. Since then I have kept a small bottle of a strong solution of cocaine ready for use, and it has always proved effective. It should, of course, be applied as soon as possible, but only two days ago I found that it gave great relief seven or eight hours after the sting.

If any medical man should happen to read this, may I ask him to say whether it would be safe, in case a person were stung on the tongue, and no doctor could be secured at once, to give a hypodermic injection in the tongue of 1/6th grain cocaine, or whether it would be better to apply the tabloid or a solution externally to the place.

J. F. D. DONNELLY.
September 4.

The "Jelly-fish" of Lake Urumiah.

SOME years ago there appeared in NATURE a letter from Mr. P. L. Sclater, drawing attention to the possibility of the occurrence of a species of medusa in the salt lake of Urmi in Persia.

During my present visit I have had several opportunities of examining the fauna of the lake, and have met with a great abundance of the organisms referred to by Mr. Curzon in his work on Persia (vol. i. p. 533) as "jelly-fish." Near land they are present in such countless swarms that they cannot escape the attention of the bather, and are consequently very well known to the inhabitants of the shores of the lake, who, moreover, deny the existence of any second kind of animal in its brine.

These organisms are Crustaceans, belonging to the order Branchiopoda. Without books, I cannot refer them to their exact systematic position; but they seem to me to resemble the *Artemia* group of varieties of the *Branchipus* type, which are specially adapted for life in strong saline solutions.

The Urmi Branchiopods are of two sexes. The females grow to a length of about 13 millimetres, the males of about 10 millimetres; the former have a faint reddish, the latter a faint greenish tinge of colour. The males are, moreover, readily distinguished by the absence of egg sacs, and by the possession of enlarged anterior clasping appendages, by means of which they often hang on to the females and are towed about by them.

In very shallow water I have also found the larva of a fly in which the tracheæ open at the tip of a bifurcated process which is thrust up to the surface when the larva breathes. There is an abundance of an alga forming small dark green gelatinous masses floating freely in the lake, but up to the present these are the sole vestiges of life I have been able to detect in the salt water.

R. T. GÜNTHER.

Urmi, Persia, July 20.

Science and Art Department Examinations.

FOR more than twenty years I have annually sent pupils in for some of these examinations, and, although at times unable to understand the reason for the adoption of some of the regulations, this is the first time that I have ever ventured to call attention to one or two points connected with the working of the Department. Recently, as is well known, the system of payment which has hitherto been adopted has been altered. It is claimed

that this alteration is an improvement, because it is said to substitute payment by attendance for payment by results; but in reality it does nothing of the kind, for the examinational results are still one of the chief, if not the chief, factors in fixing the amount of grant. Also the amount of payment per attendance is so small that a most inadequate remuneration is given to the teacher. The result of this on the Science Classes throughout the country is, that while possibly only a comparatively slight alteration will be made in the total amount of money paid to large classes—such as the classes in large day schools—the amount paid to smaller classes, especially those held in the evening, where higher work is carried on, will be reduced to such an extent as to threaten the existence of many of them. For example, in a class known to me where work of the highest kind is carried on, and which work has been specially commended by the Inspector in two of his annual reports, the earnings this session will be reduced 75 per cent. If this is the outcome of the new policy, the sooner the Department reverts to the old plan the better for all concerned, and especially for the propagation of scientific knowledge. Of course all teachers are aware of the anomalies which occur in examinations, but the following is a somewhat remarkable instance:—A student sat for the examination in May last in the advanced stage of practical organic chemistry. He was required to answer two questions, and to analyse two substances (unknown), as well as to find the halogen element present in an organic solid, and to determine the melting point of this solid. The written questions were correctly answered, the analyses were correctly done, the halogen was correctly determined, and the melting point of the substance was less than 1 per cent. too low. The description of the practical work was also fairly well done; but this student is returned as having failed, notwithstanding that there are two classes of success, first and second class. It would be interesting to know, in the face of this, the standard the examiners require for a first class success. At the last May examinations the other chemistry results show many anomalies of a somewhat similar character.

D.SC. (LOND.).

BOOKWORMS.¹

THE naturalist frequently spends a good deal of time in abuse of his fellow man, considered in the light of a destructive agent; he points ruefully to the reduced faunas and floras of certain islands, to the Dodo, to the Moa, and to various creatures which have been extirpated by the direct or indirect influence of human occupation of the countries where they once flourished. But there is no action without compensation; and while man has sensibly impoverished the fauna and flora of the world in which he lives in some directions, he has unwillingly encouraged and promoted the welfare of many creatures belonging to humbler groups than those which he has thinned or entirely abolished. The average householder, as he takes his nightly rounds with a view to bolts and bars, is probably not aware that with luck and under favourable circumstances he might meet with nearly one hundred species of insects and other allied forms to whom he has not only furnished secure lodgings, but abundant food. Several species of clothes moth batten upon his Sunday coat; two species of cockroach may or do stalk boldly through his kitchen; and, in short, a host of creatures—some of them importations from abroad, destitute aliens in fact—thrive at the expense of the most formidable enemy of the brute creation. Our libraries afford pasturage to quite a number of small creatures, for the most part beetles, which have found in the dry leather and paper (and doubtless, too, on account of the infrequency with which books are apt to be consulted) a more suitable home than the woods which they presumably at one time inhabited. The Rev. J. F. X. O'Connor, whose interesting little book about bookworms is before us, was led to investigate these destructive creatures by discovering one in an old folio belonging to the library of Georgetown College.

Being a lover of books, it is not surprising to find that

¹ "Facts about Bookworms." By Rev. J. F. X. O'Connor, S.J. (London: Suckling and Co., 1893.)