

Failing in this, with a dexterity worthy of the Knight of the Shears it cut the worm in two, letting about three-fourths of it fall to the ground. The remainder was then easily dragged to the surface of the leaf, where the wasp spent some fifteen minutes in cutting down, trimming, and reducing it to a globular mass of about an eighth of an inch in diameter. Then resting for a few minutes, and taking a fresh hold of its booty, it flew briskly away.

J. T. BROWNELL
Lyons, N.Y., August 13

Treatment of Hay Fever

SOME years ago Prof. Helmholtz, in a letter to you, gave an account of a remedy he had found for "hay fever." This was simply to treat the part of the nose, which seems to be the seat of the trouble, with sulphate of quinine solution by pouring it into the nose with a pipette, while lying on a sofa with the head turned upside down. Having had the most enjoyable part of summer destroyed by hay fever ever since I can remember, I have tried every remedy I have heard of, including internal doses of arsenic, and I have found them all to fail. Prof. Helmholtz's method only gives me relief for ten minutes or so, and cold water does the same. I have tried solutions of sulphate of zinc and tannin, and many other astringents, but all to no purpose. As many others knew that I was experimenting upon myself in this matter, I have had several patients trying all the remedies that I have tried, and I can therefore say with certainty that no remedy yet published will cure hay fever. I have however succeeded in finding a method which is a really effectual cure, and as I know that many are rendered miserable during the most enjoyable part of the year, I hasten to give them the benefit of the result of my inquiries. One thing which misled me was that my eyes were often very much inflamed and pained during an attack, and I often tried remedies for my eyes (which have sometimes gone wrong when I had no hay fever) when they were only affected in sympathy with my nose. I found that the only thing required was to prevent the entrance of the pollen grains into the nose. When there are not many in the air, as during or after rain, it is simply necessary to stop the nose with a spring clip. I have used a piece of brass or steel ribbon bent double, and having only sufficient spring to close the nostrils without undue pressure. This causes the patient to breathe by the mouth, but one soon gets accustomed to the inconvenience. I found that to stop the nostrils with cotton wool was far too irritating, especially as those afflicted with hay fever are so owing to the tenderness of the internal coating of the nose. When going amongst hay a further precaution must be taken, viz., plugging the ducts from the eyes. I used for this purpose dumb-bell shaped pieces of glass, which are easily slipped into the ducts, and can be removed when wanted. Thus protected, any one who is troubled by hay fever can go into the camp of the enemy and stir up hay in a field with as much impunity as one not troubled with this "sixth sense." The season for hay fever is nearly passed now, but I hope that the publication of this note will be the cause of relief to many during next summer, and on that plea I ask its publication in your valuable journal, and I hope that medical men in the South of England, where hay fever is common, will give it a trial and report upon it next summer. In Scotland hay fever is practically unknown.

J. B. HANNAY
Cove Castle, Loch Long, N.B.

Red Rainbows

PROF. S. P. THOMPSON'S letter (p. 459) makes me recall that when on September 2 last year I crossed Wales westwardly from Hereford, on a fine sunny day, the train ran into a misty shower after 6 p.m. at Machynlleth, and out of it as we neared the viaduct at Barmouth. The sun had been obscured for some time, when it suddenly shone out through a chink between sea and cloud, causing in the east a very beautiful red rainbow. Like Prof. Thompson, I was under the impression that the phenomenon was of no uncommon occurrence, so did nothing more than note it in my diary.

HENRY MUIRHEAD
Cambuslang, September 16

Infusorial Parasites on Stickleback

ONE day in June, when examining a very small stickleback under the microscope, I was surprised to find it infested by numbers of infusoria, evidently parasitic upon it. This led me

to examine others from the same water, viz., a pond very rich in infusorial life generally, as also specimens from the river close at hand. Every specimen from the pond was similarly attacked, while none of those from the river were so. The parasite is apparently *Trichodina pediculus*, which is stated to be parasitic upon *Hydra vulgaris*. Want of literature on the subject has prevented me from following the matter up, but it seems that I have found, if not a new species, at least a new host for a known species. I shall be glad if any of the readers of NATURE can give me any information on the subject.

N. H. POOLE
Charterhouse, Godalming

Photographing Diffraction Rings—Optical Phenomenon

THE peculiar character of the photographs of an opening to the sky in the dark Cyclopean gallery at Tiryns, to which Mr. W. J. Stillman calls attention (NATURE, vol. xxiv. p. 260), finds an obvious explanation in the well-known optical phenomenon of diffraction rings, produced when a beam of light is transmitted through a small circular aperture, and viewed by means of a lens. Had your "Cecropian" correspondent examined the image of the illuminated opening by the assistance of a lens, the phenomenon of concentric coloured rings would, doubtless, have been recognisable to the eye. Hence the only point of interest in the phenomenon observed by Mr. Stillman is the significant fact that in securing the fleeting images of the rings on the gelatine plate—the actinic rays being alone effective—alternate dark and bright concentric rings are produced, as in the case of homogeneous or monochromatic light, instead of the coloured rings seen by interposing a lens between the aperture and the eye. In other terms, the impressions on the gelatine plate being due to the action of the monochromatic actinic rays, the theory of diffraction shows that the concentric rings should be alternately dark and bright. This is an important circumstance in the applications of photography to such investigations.

Berkeley, California, August 16

JOHN LE CONTE

A Primitive Diving-Bell

IN NATURE, vol. xxiv. p. 201, it is stated that Herr Budde has found a description of a primitive diving-bell in a work of Bartolini, 1674. The inventor appears to have been Franciscus Kesler, 1616. This description of Kesler's diving machine will also be found, together with representations of the same, in Schwenter's "Deliciae Physico-Mathematicae," 1636, a very rare and curious volume; so rare indeed that it is stated in *Cosmos*, January 27, 1860, "it is not to be found in the Imperial Library, nor in any of the public libraries of Paris." J. van Lennep, in *Notes and Queries*, December 15, 1859, p. 503, says "there is a Dutch translation of Schwenter, 1672; of this rare volume I fortunately possess a copy."

N. S. HEINEKEN
Sidmouth, September 11

ITTAVIO LAUDI.—Messrs. Trübner, publishers, London, might be able to help you to get copies of the Chinese translations mentioned in Mr. Fryer's articles on "Science in China."

FREDERICK CURREY, M.A., F.R.S.

THE late Frederick Currey, whose death was announced in last week's NATURE, p. 475, was born at Eltham on August 4, 1819, educated at Eton and Trinity College, Cambridge, there obtaining a scholarship, and attaining his B.A. in 1841; three years later he proceeded to M.A., and was called to the Bar, afterwards practising as conveyancer and equity draughtsman.

His first public performance as a scientific writer was a translation of Schach's "Das Mikroskop" in 1853, a second edition of which was called for within two years. In the *Microscopical Journal* for 1854 he published some observations on two new fungi, and by the same channel he afterwards communicated several papers, chiefly on the obscure points in the reproduction of the lower cryptogams. The Greenwich Natural History Club was established in 1852, Mr. Currey being one of the earliest members, and the next year he read a paper on the