

give pleasure to some of your readers. Speaking of the Russian slain, Mr. Lushington says :—

Lay them there like soldiers—
Men that did not blench.
Many a sad serf-mother
Yearns for these at home ;
Yet she thinks, " My children
Never more shall come.
Few, alas, of many
Come back from the wars.
There they die, fulfilling
God's will and the Czar's !"

Oxford, May 23

G. ROLLESTON

Carp and Toads

IN reference to *Bufo calamita* attaching itself to the carp, and pressing its thumbs into the fish's eyes (see NATURE, May 12th), I would mention that the male Batrachia in the spawning season often attach themselves to any object, pressing the hands, on which is developed, at this season, a peculiar, black, wart-like structure, into the object which they seize—a stick, a human finger, or a carp as it appears, being sometimes hugged with spasmodic violence. A curious illustration of the reflex nature of this movement, and the inhibitory function of the cerebrum in regard to reflex actions, was witnessed by me lately, on cutting through the neck of a male toad. My finger was between the animal's fore legs, but on account of fright, or some other cerebral operation, no hugging action took place ; but directly the connection between the spinal cord and cerebrum was severed, the arms joined closely upon my finger, the thumbs being pressed into it in the usual way, and the headless body held firmly to me with considerable muscular power. Just as the leg of the brainless frog is withdrawn more rapidly from acidulated water, than is that of a perfectly sound and healthy specimen, so did the hugging action of the forearms fail to be brought about by contact of the extremities with a foreign body whilst the animal was whole, but took place immediately upon the severance of the cerebrum from connection with the rest of the cerebro-spinal axis.

Hampstead, May 16

E. RAY LANKESTER

WITH reference to the disease existing amongst the carp at the Château de Montigny, and its presumed connection with "the first days of spring," and the animosity of the toad for the carp, permit me to take up the cudgels, not for the early spring but for the poor maligned toad, which like other possessors of jewelled heads has already but too many enemies. On two occasions I have noticed the curious train of symptoms detailed by M. Duchemin, commencing with blindness, and ending in death. One occurred in Norway, and the trout and grayling were the only fish affected ; the other in Lord Bathurst's park in this town, when the pike only were attacked whilst the perch and tench escaped. In both these instances I instituted a series of experiments to ascertain the probable cause of death. No intestinal worms were discoverable, nor did any of the tissues appear congested or otherwise diseased, with the exception of the eyes, in which the cornea became opaque and friable so that on very slight pressure the crystalline lens escaped. The long duration of this blindness before death supervened, rendered it probable that starvation was at least usually the cause of death. In both cases spring was the time of the attack, but in neither were toads observed in proximity to the diseased fish ; indeed, in that part of Norway where the disease existed, toads are almost unknown. One cause only has as yet suggested itself to me, and that is the presence of diffused mud in the water. As both in Norway and Cirencester, works had been undertaken, just previous to the outbreak of the disease, which had had the effect of introducing a large amount of clay into the water, and the "early days of spring" were so far implicated that they were days of rain and melting snow, and thus the products of degradation were added to the mischief caused by the hand of man.

Cirencester, May 14

W. D. CROTCH

Meteorological Phenomenon

ON the afternoon of Sunday, the 22nd, a very curious appearance was noticed by many. The sky was hazy, and the sun was seen through the haze of a pink colour, inclining to purple. I see by a newspaper that the same was noticed at Dublin. A red or orange sun is common, but I never before saw its colour on the purple side of red.

JOSEPH JOHN MURPHY

Old Forge, Dunmurry, Co. Antrim, May 24

Keen Sight of Fish

THE following extract from the remark book of Captain Robert A. Parr, of H.M.S. *Lyra*, may be of interest to your readers, bearing, as it does, such remarkable and trustworthy evidence of the keen sight of fish :—

"December 17th, 1867.—At noon, in lat. 0° 33' S., long. 46° 13' E., caught an Albacore, with 28 pistol bullets in its stomach. The ship's company had been exercised at pistol practice during the forenoon."

G. F. M'DOUGALL

Hydrographic Dept., Admiralty, May 24

THE MULBERRY TREE

AN effort is being made to introduce once more into England the cultivation of the mulberry tree, and as the leaves of either the white or black variety (but especially those of the former) afford food for the silkworm, and both kinds will flourish in a tolerably mild and moist climate, there seems to be no reason why we should be altogether dependent upon foreign sources for a supply of raw material for the looms of Coventry and Macclesfield. Certainly the present is a favourable opportunity for making the experiment, as the price of silk has been largely enhanced by disease amongst the worms in the south of Europe, and by the destruction of the mulberry trees in China during the rebellion. At Yately, in Hampshire, Captain Mason has for the last three or four years been successfully engaged in rearing silkworms, and he calculates that if his mulberry plantations had been made upon a sufficiently extensive scale, a profit of 10% an acre might have been easily realised. King James I. preceded him in this speculation, and imported ship-loads of mulberry trees from France with the view of encouraging the production of silk in England. In 1629 Walter Lord Aston was appointed "to the custody of the garden, mulberry trees, and silkworms near St. James's, in the county of Middlesex." But the scheme, like many others framed by the same monarch, proved abortive, and within a few years the mulberry garden became, in the words of Evelyn, "the only place of refreshment about the town for persons of the best quality to be exceedingly cheated at." Pursuing its history a little further we find the gardens converted into the site of Buckingham House, and in our own time Dr. King's allusion, written a century and a half ago, is a good deal more true than when he penned it :—

The fate of things lies always in the dark ;
What cavalier would know St. James's Park ?
A princely palace on that space does rise,
Where Sedley's noble muse found mulberries.

Within our own memory a similar experiment was tried in the neighbourhood of Slough, but it failed, not from any deficiency in the supply of food, but from the difficulty and expense incurred in tending the worms and carding the silk. Mechanical processes have now, in a great measure, removed these drawbacks, and the whole process of cultivation is one which would afford suitable employment for women and children.

The vicissitudes of fortune experienced by the mulberry tree in England belong to a curious chapter in the yet unwritten history of Botany. In common with the vine and several other trees, the mulberry has been alternately fostered and neglected : but in spite of royal favour and many intrinsic merits (for its fruit is wholesome and its timber valuable), it has now become a rare tree in Britain. The specimens at Sion House enjoy the reputation of being the first planted in England ; but the probability is that the mulberry was introduced by the Romans, for the Saxon name for the tree "mor-beam," is little more than an echo of the Latin *morus*, which again can be traced to a still more Eastern source. The Sion House trees were, perhaps, some of those imported by James I., but their interest is far inferior to that which attaches to the celebrated tree planted at Stratford by Shakespeare's own hand, and ruthlessly destroyed by a Goth of modern times.

C. J. ROBINSON ;