

healing properties have, says Prof. Barrois, from the most remote antiquity, attracted patients suffering from eczema, arthritis of every kind, and other afflictions. But, with regard to Prof. Gudger's ingenious explanation of the miraculous draught of fishes, coupled with Lortet's description of the behaviour of grebes over a shoal of large Chromids and Canon Tristram's account of their dorsal fins as seen at the surface, surely the wonder is that experienced fishermen like St. Peter should have needed outside assistance, let alone superhuman aid, as is implied in the narrative of St. John's Gospel.

T. R. R. S.

Tunbridge Wells, October 30.

IN the passage from Lortet's work on the Lake of Tiberias, quoted in Prof. Gudger's interesting letter in NATURE of October 28, p. 572, the scientific title of the crested grebe is given as *Podiceps cristatus*. This misrendering of the true name of the genus *Podiceps* may be traced, I think, to Yarrell, for it appears in his "History of British Birds," published in 1845. Yarrell was not a classical scholar; but it is strange that the late Lord Lilford should have slipped into the same error in his splendid "Coloured Figures of British Birds." The difference in form is important, because *Podiceps*, if it means anything, means "rump-headed"; whereas in coining the word *Podicipes*, meaning "rump-footed," Linnæus indicated the posterior position of the feet so characteristic of the genus.

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PROF. E. W. GUDGER's letter on this subject in NATURE of October 28, p. 573, is interesting from the natural history point of view, but it misses the most suggestive point in the narrative. That point is the number—one hundred and fifty and three. What is the meaning of this very definite figure? It will scarcely be contended that the number is merely the simple statement of a historic fact—that the fishes caught did actually number one hundred and fifty and three, neither more nor less! The naïve literalism of such an explanation is totally blind to the true significance of the story.

Obviously, the story is a parable. The lake of Genesaret is the world. The fishes are the souls of men. The net that is not broken is the Church. And the number? That is a problem, but an explanation I heard given in a sermon by my father, the late Rev. R. B. Drummond, of Edinburgh, seems to meet the case. Where he found the solution I do not know. It was not original.

The Jews, as is well known, attached a mysterious significance to numbers, and if they met a definite number like this, they would not pass it by unheeding, but would try to discover its meaning. Well now, this number is what is called the perfection of the number 17; that is to say, it is the number arrived at by adding all the consecutive numbers from 1 to 17 inclusive. And the number 17 itself is the sum of the two sacred numbers 7 and 10. These again (here I am a little vague as to why) stand respectively for the Jews and the Gentiles. Hence the story means that the net of the Church is able, without breaking, to gather together not only, as some contended, Jews and those who became Jews, but all sorts and conditions of men of every race and tribe.

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November 1.

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PROF. GUDGER's communication under this heading in NATURE for October 28, p. 572, has brought back to me a vivid recollection of a fishing incident in the north-west of Ireland. About a dozen years ago I spent a week-end at Ballina, County Mayo, and as the express to Dublin did not leave until after mid-day, I devoted Monday forenoon to a ramble along the banks of the Moy river. Observing several men, with a boat and draw-net, making a succession of fruitless attempts to land fish, I crossed the river and made my way to them. It was true—they had toiled and had caught nothing. They were putting out to make another attempt, and I offered them five shillings for the next haul. They declined. The net was hauled in, and there was not a scrap of anything in it. They put off again, and I repeated my offer, which was rejected, and the net came in empty, as before. With all their futile endeavours the men were not in the least put out. Calmly the boat and net were again got ready, and I was told it would be no use offering to buy the haul. When the net was landed it was found to have brought in one little fish—a sprat in size! Apparently this was looked upon as a good sign—a command to try again, for, still undaunted, the men persevered—they rowed off cheerfully, let out the net, then returned to shore and hauled at the net, but evidently it was harder work than on any previous occasion. When the operation was completed, hundreds—the men said eleven hundred—salmon had been landed! A school from the sea had come up on the rising tide.

HY. HARRIES.

October 28.

On the Reality of Nerve Energy.

I HAVE only to-day seen Dr. Adrian's letter of September 30 in which he states with great clearness the present-day physical explanation of the nature and transmission of the nerve impulse.

It seems to me that it is the relation of this nerve impulse to nerve energy that stands in need of elucidation. My present concern is not so much to recommend the more extensive use of the term nerve energy as to make sure that when physiological or medical writers use it, we shall have some more accurate notion of what they mean by it. Evidently, from what Dr. Adrian says, sometimes they mean mental energy. Surely mental energy is not what is meant in the following paragraph, "In defæcation, when all the nerve energy of the cord is directed into one channel . . ." (Verdon, "Angina Pectoris," Brighton, 1920, p. 357). The late Sir William Osler wrote: "An organisation which is defective in what, for want of a better term, we must call nerve force . . ." ("Principles of Medicine," 1895, p. 1032).

Prof. Halliburton, in reviewing von Monakow's "Die Lokalisation im Grosshirn" (*Physiol. Abst.*, Nov. and Dec. 1918), thus expressed himself, "The introduction of a change in the quantity of nervous energy (Hughling's Jackson) passing over a given system of Conduction paths . . ." In his "Text-book of Physiology" (London, Churchill, 1912, p. 1211), Prof. Starling wrote: "During the second stage (of asphyxia) there is a discharge of nerve energy which spreads throughout the whole central nervous system, beginning in the Bulbar Centres . . ." In none of these quotations is it a synonym for mental energy, unless, perhaps, we except Osler's use of it.

(To recognise "mental energy" as a real existence in the sense of being a *vera causa* of neural processes is, I believe, necessary, but it involves grave difficulties both in psychology and metaphysics.)

The authors just quoted are surely not indulging