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SHERRINGTON ROAD,
(Oxford)

May 31.
1931
9, CHADLINGTON ROAD,
OXFORD.

Dear Denny.

I have been owing you a letter ever since your interesting one sent with McDougall's review of Purkin. His points appeared: but it was several points of your own which first impressed me. I had been reading the Dubrovnik 2 Vols. which have one merit, that they describe the technique of the Petrograd Training of the dogs more fully than I have seen elsewhere. You make the point of completion of satisfaction of the act being so necessary & of full of functional repercussions. This becomes more so in the light of Ishikawa's naive account, revealing a whole day-long train of expectancy, culminating, along an avenue of daily repeated & daily expected circumstances, in the final signal - which last is the only one actually protracted. It seems misleading to term such a reaction a reflex. But, this is a long story, & we will postpone. Yours

THE PETROGRAD SCHOOL

Letter from Sherrington to Dr. D. Denny-Brown, dated 31 May 1931.

Sherrington makes some relevant criticisms of the methods used by the Petrograd School of physiologists in training the dogs used for experiments on conditioned reflexes.

SHERRINGTON ROAD,
(Oxford)

Sept. 20. 1931
9, CHADLINGTON ROAD,
OXFORD.

Dear Liddell,

regarding reflex contraction of the extensor muscle from excitation of its own afferents in amplification of that paragraph (i) if I had got, citing stretch reflex, the pertinent obs. to come at end could hardly be more briefly worded than I find it in *Illus.*. After saying that elect. stim. of a cut branch (afferent) is liable to ^{stimulate} reflex contract. by escape to unit (motor), & that mechanic. stim. of above gives prod. result, it runs: "That mechanic. stim. of the ext. of the knee does however induce reflex contract. of the extensor. This is plainly demonstrable under decerebrate rigidity. All the nerves of the limb being severed, except those to Vasti & crurae, the animal is inverted. & the knee then gently put but fully extended by raising the foot, the thigh being held vertical. The foot is then released, the anterior falls, & in doing so is seen to be suddenly checked by exciting a contraction of the extensor of the knee. This contraction is different from a knee-jerk for it only slowly passes off." For this see R.S. Proc. p. 283. Vol. 76. B. The description is almost repeated R.S. Proc. Vol. 79. It might be boiled down a little further still. But it is quite clear for anyone who has seen it. Yours truly, S. Sherrington

AN EARLY REFERENCE TO THE STRETCH-REFLEX

Letter from Sherrington, written on 20 September 1931 (four years before he retired from the Waynflete Professorship of Physiology at Oxford) to Professor E.G.T. Liddell.

The stretch-reflex was described by Sherrington in 1924. In this letter he quotes a passage from a much earlier paper (published in 1906) which is in effect a description of the phenomenon. The relevant sentence is that beginning 'All the nerves of the limb being severed' and ending 'of the knee'. The second paper to which he refers was published in 1907.