

the blood (other than Professor Lawrence Henderson's own students and associates) are specifically mentioned or their work is discussed or both. The names are arranged in descending order of frequency of mention.

Name	Number of different pages on which investigator and his work are named or discussed
Bernard .....	8
Haldane .....	8
Krogh .....	5
Barcroft .....	4
Hasselbalch .....	4
Bohr .....	3
Yandell Henderson .....	2

Surely the facts disclosed by this table give no ground for the grievance that predecessors and contemporaries do not receive adequate recognition. Or do they?

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### THE 1928 SILLIMAN LECTURES

THE last Silliman Lectures at Yale were delivered by Professor L. J. Henderson on a field of physiology to which he has devoted himself during the past twenty years, *viz.*, the relations between the different electrolytes, gases and proteins in the blood, and the alterations in those relations that occur during normal and pathological metabolism. The publication of these lectures in book form has drawn from Professor Yandell Henderson the savage criticism which appeared in *SCIENCE* of January 11. Independent opinions concerning the relative value of the studies presented and of the criticism against them can be formed only by the few who are themselves engaged in the intricate field of research covered. Hence it appears that, in fairness to those readers of *SCIENCE* who lack the concrete knowledge, Yandell Henderson's remarks should be reviewed by another student in the field who has formed quite a different opinion.

Essentially Yandell Henderson's criticisms may be condensed to two: (1) that Lawrence Henderson has failed to give due credit to Haldane's magnificent work, and (2) that the lectures are metaphysical.

The first criticism can be met by any one who refers to the several places where Haldane's work is mentioned in the lectures. In the writer's opinion there is no basis for complaint. The lectures are in their nature a review of Lawrence Henderson's personal work, and where it is based upon Haldane's previous discoveries that fact is acknowledged. Yandell

Henderson, as an example of insufficient appreciation, quotes a paragraph from the lectures which ends with the statement, "This conclusion escaped us all, and it remained for Christiansen, Douglas and Haldane to discover by experiment that the carbon dioxide dissociation curves of oxygenated and reduced blood are different." This statement is, it appears to the writer, a sportsmanlike acknowledgement of a debt due Haldane and his collaborators for solution of a problem which, despite its outstanding importance, had eluded other investigators.

The charge of being metaphysical appears absurd against a work which contains 225 diagrams and 86 tables, presenting chiefly quantitative experimental results obtained in Lawrence Henderson's laboratory, together with an appendix on laboratory technique. The lectures, aside from their value in affording mathematical approaches to hitherto insoluble relationships, constitute a most useful compendium of concrete facts and figures to any worker in the field: so much so that the copy in our laboratory is seldom in its place on the shelf. In the introduction, it is true, Lawrence Henderson presents a view-point concerning the historical development of general biology and concerning modes of attack on its problems; and the concluding chapter is of a broadly reflective nature: both, to the writer, afford stimulating and profitable reading. In between are eleven chapters packed with concrete quantitative observations and calculations based upon them.

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### THE APPORTIONMENT SITUATION IN CONGRESS

THE apportionment problem will probably be considered again by the House of Representatives during the present session of Congress. Because of that fact and because my attitude towards it is not adequately stated in Professor Huntington's article in *SCIENCE* for December 14 (pages 579-582), I am glad to outline briefly the situation as I see it.

Neither the bill defeated last May nor the similar bill introduced at this session is a real apportionment bill. It is a bill authorizing a future apportionment by the secretary of commerce after the results of the census of 1930 or of any subsequent census have been announced and Congress has failed to pass an apportionment bill in the following session. Thus, if the field work on the next census should start in November, 1929, the population of the several states would doubtless be announced before Congress assembled in December, 1930. If no bill on apportionment should