ing from north of west clear across the sky, almost to the zenith, down to south of east, made a very beautiful and impressive sight. It was very much admired by those I called out to see it.

I should like to know if this display was noticed in other parts of the country and if others have observed similar phenomena at other times.

G. IRVING GAVETT UNIVERSITY OF WASHINGTON, SEATTLE, WASH., May 2, 1919, at 11:30 p.m.

THE HISTORY OF SCIENCE

To THE EDITOR OF SCIENCE: I have read with much interest Dr. Felix Neumann's article published in your number of April 4 and I heartily agree with him that the creation of a new section of the American Association for the Advancement of Science, to be devoted to the history of science, would be most desirable.

I think it is hardly necessary to demonstrate the necessity of such historical studies, but I beg to submit the following arguments in support of Dr. Neumann's proposition.

1. The history of science has a real and full signification only for scientifically trained people, and it appeals equally to scientists of all kinds, hence it is natural that its study be promoted by such an association as the American Association for the Advancement of Science.

2. Such historical studies, however, are very different from scientific studies proper; they require a special turn of mind, a special equipment and special methods without the use of which no high standard of accuracy can be obtained, hence it is necessary that they be promoted by an independent section.

3. Such independent sections have been organized many years ago by the Versammlung deutscher Naturforscher und Aerzte and by the Società italiana per il Progresso delle Scienze, notwithstanding the fact that societies exclusively devoted to the history of science exist both in Germany and in Italy.

GEORGE SARTON

CARNEGIE INSTITUTION OF WASHINGTON

QUOTATIONS

THE OBSTRUCTION OF MEDICAL RESEARCH IN GREAT BRITAIN

THE passage through a standing committee of the House of Commons, without amendment, of the so-called "Dogs' Protection Bill" has rudely awakened to a danger too lightly regarded, every one who in any way realizes the importance of the issues involved. In the Times of April 8, Sir Philip Magnus tells how the past master of parliamentary tactics who introduced the bill was able to bring it up for second reading unexpectedly, at the close of a sitting and to secure, almost without discussion, its reference to a standing committee. The committee was aparently composed in the usual way, mainly of members selected with reference to their political affiliations, without any regard to their competence to deal with an essentially scientific question; three or four medical members were added and a contingent of nominees of the members in charge of the bill, who could be trusted to know his own supporters. In two short sessions, and with the help of the closure, the bill passed through this committee without amendment. The next stage will be that it will come before the House for third reading at the next opportunity, which may occur any week.

The effect of the bill, if it should pass into law, is plain enough. It would render any one who made an experiment of any kind upon a dog liable to prosecution. Its enactment would cripple progress, so far as this country is concerned, in some of the most important fields of medical investigation. The whole weight of informal opinion must be brought to bear to prevent such a calamity. Letters of protest and warning have appeared in the Times of April 5, 7, 8 and 9, from Sir Edward Sharpey Schafer, Dr. Thomas Lewis, Dr. Leonard Hill, Professor Langley and Professor Starling. The Morning Post of April 7 published under the heading, "A Blow to Medical Science," an admirable statement of the case against the bill. The lay press is fulfilling a valuable function in thus enlightening general opinion.

So far as our own readers are concerned, we are preaching to those who need no conversion, but it may be doubted whether the medical profession as a whole has fully realized its responsibility to the public in this matter. The unscrupulous agitation, which has at length come so perilously near to achieving an instalment of its purpose, has been aided by the prevalent ignorance of the public, and by the power of appeal to a sentiment which is strongly developed in all Englishmen--in medical men as in others. The dog has established a proper claim on man's sympathy and affection, and the public have the right to inquire whether its use for experiment is essential for the progress of medical science, and to be satisfied that the practise involves no significant amount of pain. The materials for assurance on both points are in the hands of every medical man who has thought about the matter and has made himself acquainted with readily accessible facts. The Research Defence Society has done valuable work, but the ordinary man or woman has more confidence in the friend with expert knowledge than in the publications of societies. He has the right to expect that his feelings, harrowed by an insistent campaign of misrepresentation, shall not be treated merely with good-humored tolerance. The plain facts of the case are easily made clear, and would be accepted by the vast majority of laymen from the medical advisers whom they trust. If lay opinion had not been left so much at the mercy of a mendacious agitation, it is incredible that even a tired and apathetic remnant of the House of Commons would have allowed this bill to pass its second reading almost without discussion .- The British Medical Journal.

SCIENTIFIC BOOKS

The Game Birds of California. Contribution from the University of California, Museum of Vertebrate Zoology. By JOSEPH GRINNELL, HAROLD CHILD BRYANT and TRACY IRWIN STORER. University of California Press, Berkeley, 1918. Large 8vo. Pp. i-x + 1-642, 16 colored plates and 94 text-figures. Price, cloth, \$6.00 net.

While the conservation of the wild game of a state is one of the most important problems

with which the commonwealth has to deal, it is rarely that it receives the expert attention that it should and that is usually possible. Too often the fish and game committees of the legislature and the game commissions are composed of men who are merely sportsmen, interested of course in the preservation of game according to theories that they as shooters of game have conceived, but not cognizant of the more fundamental principles which only the trained zoologist or conservationist understands.

California is to be congratulated upon securing the services of such competent zoologists as Dr. Grinnell and his associates at the University of California—Dr. Bryant and Mr. Storer —in preparing this admirable volume upon the game birds of the state.

The plan of the work is well conceived and is carried out with a painstaking regard for accuracy and uniformity of treatment. Under each species we have full descriptions of the various plumages, with special emphasis on "marks for field identification," the call notes, nest and eggs are then described and a statement of the distribution of the species in general, as well as in California, is added. Then follows a general account of the life history of the bird, its food, actions, etc., with now and then pertinent extracts from the works of various authors. This systematic portion of the work naturally forms the bulk of the volume, and is a repository of information which will benefit readers far beyond the boundaries of California, since the list of game birds of the various states of the union includes many of the same species, and Dr. Grinnell and his associates have spared no pains in gathering together all the information that was to be had. The published literature and manuscript records have been exhaustively studied and the museums of the whole country have been visited in order to secure descriptions of the various plumages that game birds present at different ages and seasons.

The earlier chapters of the work discuss the more general problems of game preservation and their careful study by those framing game legislation in all parts of the union will be well worth while.