concentrated solution of its own ions at the bottom, and small crystals of tin will form upon it in the dilute solution at the top.

The specific inductive capacity of the water solution must be much higher than that of the ether solution, even after being decreased by the ions in solution, since that of pure water at room temperature is more than 75 while that of ether is less than 4.5.

The results are quite as striking when lead acetate is dissolved in the water and ether and a lead wire is used for the electrode as the tin with stannous chloride. No doubt any salt that is slightly soluble in ether may be used just as successfully as those named above.

FERNANDO SANFORD

STANFORD UNIVERSITY

HERING'S CONTRIBUTIONS TO PHYSIOLOGICAL OPTICS

TO THE EDITOR OF SCIENCE: In your issue of April 19, page 388, you announce the death of Professor Dr. Ewald Hering and refer to him as "the eminent physiologist." Permit me to add that his chief work, for which he became well known, was in physiological optics and more especially the perception of color by the eye; his work in this direction is well-known and has been frequently referred to in literature in which it was coupled with that of the famous Helmholz, with whom he was for a time a contemporary.

Early in 1911 he was knighted, at the same time that Professor Roentgen was, by having conferred upon him the decoration of the Order "Pour le Mérite" for his creditable work and scientific researches. A description of his collection of experiments demonstrating phenomena in physiological optics, some of which the writer has had the pleasure of seeing in his own laboratories in Liepzig and Prague, would make very interesting and instructive reading and ought to be published.

In one of these a band of light was thrown on a screen, which every one without hesitation would acknowledge was a bright green when, as a matter of fact, there was absolutely no green present; the sensation of green light was a purely physiological effect due to a neighboring band of its complementary color. This peculiar phenomenon has suggested to the writer that there might perhaps be some way of utilizing it to advantage in supplying an additional color to colored moving pictures.

CARL HERING

PHILADELPHIA,

REFORM OF THE WORLD'S CALENDAR

TO THE EDITOR OF SCIENCE: In SCIENCE of April 19 appears a paper advocating "A Common Sense Calendar," by Professor Howard C. Warren of Princeton University. The changes proposed by Professor Warren would certainly prove a great improvement over the present highly archaic calendar that the world is burdened with as a heritage from our remote ancestors. But Professor Warren's scheme could be farther simplified.

The subject of a reform in the calendar was agitated quite widely some half dozen years ago; and about five years ago an international commission charged with the consideration of this subject was located in Berne, Switzerland. This commission sent out invitations to all who cared to do so, to submit suggestions upon the question of reforming the calendar, and this writer had the temerity to offer a scheme for a new calendar.

This scheme embodies one very radical change, which if accepted would reduce the problem to the last degree of simplicity, to wit, the division of the year into thirteen lunar months of four complete weeks, or twenty-eight days each. It was proposed to intercalate a thirteenth month (with the suggested name of Sol) between July and August of the existing calendar.

The extra day in each year should be disposed, as suggested by Professor Warren, that is, inserted between the last day of the old and the first day of the new year. The year might be made to begin on a day more in accord with nature's harmonies, that is, in the beginning of spring instead of the middle of winter; but that is not a vital matter. The extra day to be dealt with every fourth year, to be called "Leap Day," might be conveniently inserted bewteen two of the summer months.

It can readily be seen that this scheme would synchronize the days of the week, the month, and the year, throughout.

The international commission above referred to seems to have faded out with the advent of the war.

T. G. Dabney

Clarksdale, Miss.,

SCIENTIFIC BOOKS

A Check List of North American Amphibians and Reptiles. By Leonhard Stejneger and Thomas Barbour. Cambridge, Massachusetts, Harvard University Press. 1917. 125 pages.

The check list of North American reptiles and amphibians which has recently been published will undoubtedly initiate a new period in the herpetology of the continent, for it appears opportunely and has been carefully prepared by the two foremost students of the subject.

There has long existed an urgent need for such a work. The last check list (Garman, 1884) was superseded by Cope's monographs on "The Batrachia of North America" (1889) and "The Crocodilians, Lizards and Snakes of North America" (1900) which have remained the most recent attempts toward complete lists. Cope's books contain many inaccuracies, and since their appearance the field work of a number of museums and the studies of several investigators have materially increased our knowledge of the subject. The results of recent studies have appeared in excellent monographs, such as Dickerson's "The Frog Book," Van Denburgh's "The Reptiles of the Pacific Coast and Great Basin," and Stejneger's "The Poisonous Snakes of North America," and in numerous, small, widely scattered papers, many of which are only to be found in the large libraries. The result of the unorganized condition of the subject was that only the herpetologist knew what forms were to be recognized, and, owing to the chaotic condition of the nomenclature, only the specialists who had access to the large and older collections were in position to decide upon the names that should be used.

The check list evidently is not a mere list of described forms, but represents an attempt at a rather thorough reorganization of the systematic herpetology of the area which it covers. As stated in the introduction, it "has been prepared generally upon the lines of the American Ornithologists Union Check List of Birds, and, following that example, it has included the species and subspecies which the authors deem valid and of certain occurrence in North America, north of the Rio Grande, and in Lower California, Mexico." Certainly a painstaking attempt has been made to rectify the nomenclature, and just as certainly no two investigators were better qualified for the task than Dr. Stejneger and Dr. Barbour. Their ability, experience and knowledge of the subject, evidenced in their contributions to the field of systematic herpetology, and the fact that they are curators of the two largest and oldest collections of amphibians and reptiles in America are generally known, and their names on the title page will at the same time give herpetologists confidence in the work and give the book an authority that it would not have otherwise. This is very fortunate not only because the check list was needed, but also because it was time that an authoritative work appeared which could by emendations be perpetuated as has been the check list of the American Ornithologists Union.

The arrangement of the subject-matter is excellent. It may be described as follows: The genera and higher groups are in systematic sequence; the species are in alphabetic order and only those believed to be valid are included; the names are followed by citations of their original appearance except in the case of family names, which are formed automatically; the reference to the original description is followed in the case of genera by the type species, in the case of species by a reference to the first appearance of the name in the combination adopted; under each species a reference is then given to Cope's "North American Batrachia" or "The Crocodilians, Lizards and Snakes of North America"; and finally the type locality and the range of each species or subspecies is given.