If the object of matrimony was only to produce human animals, irrespective of their mental and spiritual nature, I should advocate the prevention of the marriage not only of the deaf, but of some other classes who labor under physical defects. But this is not the case. A true marriage is upon a higher and holier basis than this. Its essential element is in the affections of a pair whose perfect union is necessary to their happiness. The happiness of this pair I believe to be of more consequence to themselves and to society than the possible or even probable inconvenience of their offspring. I say inconvenience, for deafness is neither a crime nor a disgrace; nor does it inflict any suffering on its subject. There was a time when the deaf were considered but brutes, and classed as idiots, and treated accordingly. That time, all are thankful, is past; and in our time deaf persons often stand in society the peers of any others, in all that makes true nobility of character and manhood. In education, in mechanical skill, in æsthetic culture, in artistic talent, in true refinement and taste, they are oftentimes above the average of hearing people; and sometimes the deaf member of the family is the one of all his kindred most entitled to respect, because his deafness, having withdrawn him from his surroundings, has placed within his reach an education and culture that enables him to live on a much higher plane than any of his relations enjoy, and than he would have enjoyed if he had not been deaf. There is in society a vast amount of practical ignorance concerning the deaf, which it seems almost impossible to eradicate. This is one of the heritages handed down from former times, when deafness was indeed a great calamity, consigning its subject to perpetual infancy in law, and to dense ignorance for life. But, as already stated, times have changed; and what was once a calamity is now only a serious inconvenience. There are other inconveniences that descend by heredity that we might quite as well combat through matrimony as deafness. Baldness is a physical defect that is often (in fly-time and in cold weather, or when sitting in a draught, for instance) a great inconvenience; but who ever thought of classing the bald-headed among the defective classes, or of regarding baldness as a crime or disgrace? Near-sightedness is a physical defect that is often very inconvenient; but who ever thought to trace the pedigree of bald or near-sighted people, to see if they might enter into wedlock? PHILIP G. GILLETT.

Jacksonville, Ill., Oct. 22.

Chalk from the Niobrara Cretaceous of Kansas.

THE chalk from the Niobrara cretaceous of Kansas has long been known, but, so far as I am aware, little has been hitherto discovered regarding its structure or formation. Professor Patrick, some years ago, stated that it contained no microscopic organisms, but afterwards, with the aid of a very high power objective, found what he thought were organic remains. This is all the more remarkable, as the chalk appears to be wholly composed of organic forms, very readily visible under a comparatively low power (a one-fifth or a one-sixth objective and a C eye-piece). A ready way to detect them is by allowing a thin film held in suspension in water to dry on a slide, afterward mounting in balsam. I have examined a number of specimens, and find the material composed of small elliptical disks, either with four depressions or foramina, leaving ridges in the shape of a Greek cross, or with one or two central depressions or nuclei. Scattered among them are small slender rods, and occasionally a number of these were seen attached to a central mass. I believe the disks to be coccoliths (discoliths), which occur abundantly in the white chalk of England, and, at the present day, in deep-sea deposits. The Kansas chalk, however, has always been thought to be a shallow-sea deposit,—a belief strengthened by the abundance of thick-shelled molluscan remains, such as certain *Inocerami*, *Rudistes*, etc. The Kansas chalk, unlike the English, shows no flinty nodules. I shall make further examinations of material from different regions of the outcrop, which varies not a little in its physical and fossiliferous characters, and publish further results of my investigations, with figures. S. W. WILLISTON.

University of Kansas, Oct. 24.

AMONG THE PUBLISHERS.

THE Forest and Stream Publishing Company of New York will issue at once the first number of a quarterly publication entitled "The Book of the Game-Laws," compiled by the editor of *Forest and Stream*, and containing all the laws of the United States and Canada relating to game and fish.

—Messrs. John Wiley & Sons announce for immediate publication Egleston's "Metallurgy," Vol. II.

—D. C. Heath & Co. have in active preparation for early publication "The American Citizen," by Rev. Charles F. Dole. It is intended to provide a book suitable for the higher grades of the grammar-school, as well as for high-schools and academies.

—The Goldthwaite Geographical Exchange, New York, has brought out a new edition, based on the 1890 census, of "Cram's Standard American Atlas." Special attention is given in this atlas to the railway systems, which are printed in separate colors. The index is claimed to be very complete, giving not only the location of the places, but also the means of reaching them by rail, express, etc., and the banking facilities available.

—Messrs. D. C. Heath & Co., Boston, have in preparation the following additions to their valuable list of works on education: (1) the authorized translation of Compayré's "Psychologie Appliquée à l'Education," in two volumes,—Vol. I., "Notions Théoretiques," a treatise on elementary psychology; Vol. II., "Application," a practical application of the principles of psychology to physical, intellectual, and moral education; and (2) the authorized translation of Compayré's "Cours de Morale Théoretique et Pratique." These lectures are all fully indexed, and each is followed by a *résumé* of its contents.

—Three new Old South Leaflets have been added to the general series published by D. C. Heath & Co., all of them devoted to Indian subjects. The first is Coronado's "Letter to Mendoza in 1540," written probably from the Zuñi peublo, describing his search through New Mexico for the famous "Seven Cities of Cibola." This English translation of Coronado's report has never been published before except in the large and costly collection of Hakluyt; and it is of special interest at this time, when the researches of Frank Cushing and others have directed attention anew to the Zuñi country. The other two leaflets are John Eliot's "Brief Narrative of the Progress of the Gospel Amongst the Indians of New England," first printed in London in 1671, and Rev. Eleazer Wheelock's "Narrative of the Original Design, Rise, Progress, and Present State of the Indian Charity-School in Lebanon, Conn." (1762). The establishment of this school was the most important and interesting effort for the education of the Indians in New England, in the last century; Dartmouth College, of which Wheelock was the first president, being an outgrowth of the school. These papers are a valuable addition to the series of Old South Leaflets, which now furnishes so many original historical documents to our students at the cost of a few cents, Wheelock's "Narrative" being No. 22 of the series. Mr. Mead's historical and bibliographical notes to the three new leaflets are full.

—The result of the experiments at the Ohio State Agricultural Station in the cultivation of different varieties of strawberries shows that if we separate varieties of strawberries into two classes,—viz., those that continue a long time in bearing, and those that have a short season,—we find that the most prolific fall into the first class, while those that give small crops continue but a short time in bearing: in other words, those that give the greatest number of pickings during the season produce the largest crops. It might seem that the aggregate crop would depend as much, or more, upon the quantity of fruit ripe at each picking, as upon the number of pickings; it would also seem that the varieties that ripen slowly, and continue a long time in bearing, would be more in danger of dry weather than those that yield their crop in a short time: but such does not appear to be the fact. Nearly all of the very early varieties continue but a short time in bearing, yield but few pickings, and give short crops. The same is true, in a more marked degree, of the extreme late sorts. They commence to ripen late, but hold out little, if any, longer than the medium varieties. The second early or medium varieties usually give more