

The two conglomerates named above are identical with the Upper and Lower Conglomerates of Professor Safford of Tennessee. They are usually some twenty-five to thirty feet apart, though sometimes separated by a hundred and fifty feet of other strata, and sometimes in direct contact with each other. The lower conglomerate is usually the harder of the two, and is often called the "Mill-stone Grit." In the north-eastern part of the region the most important coal-bearing beds are below this lower conglomerate, and have an average thickness of fifty feet, but there are places where the sub-conglomerate measures have a thickness of seven hundred feet or more, as in parts of Blount County.

The principal seam of coal in the sub conglomerate measures is the Cliff Seam, immediately under the lower conglomerate or cliff rock. Its thickness, like that of all these lower coal seams, is extremely variable, ranging from a few inches to five or six feet. Fifteen or twenty feet below the Cliff Seam is the Dade or Eureka Seam, likewise very variable in thickness, passing, within limited areas, from a few inches to twelve or fourteen feet. This great variability in the thickness seems generally to be due to undulations in the strata forming the floor of the beds, though in some cases to variations in the roof or cover. While there are two or three other seams below these, the two just named have furnished most of the coal mined in the plateau region, and of this the Cliff Seam has yielded the greater part. Between the two conglomerates there is another good workable seam, the Sewanee Seam, from two to three feet in thickness.

While the upper conglomerate forms generally the surface rock over the Plateau Region, there are in many places, and especially as we go south westward, overlying strata with their coal seams, none of which, however, have been worked in this section, but which become more and more important in the direction of the Basin above mentioned, and yielding all the coal there mined. In that direction also the sub-conglomerate coals lose their importance, being mined nowhere in Alabama except in the north-eastern portion of the Plateau Region in Madison, Jackson, and DeKalb Counties.

In these lower Coal Measures there are, very generally, beds of clay iron-stone (carbonate), and of black band, which may some day come into use.

Homilies of Science. By DR. PAUL CARUS. Chicago, Open Court Pub. Co. 12°. \$1.50.

THIS book consists of articles on various topics in science, religion, and morals, contributed at intervals to the *Open Court* newspaper, of which Dr. Carus is editor. He tells us in his preface that in early life he intended to be a preacher in the Christian church; his inclination toward the religious life being partly due to his native disposition, and partly, no doubt, to the example of his father, who was a doctor of theology and an officer in the church of eastern and western Prussia. But his studies led him, as they have led many others in our time, to doubt the truth of many of the Christian doctrines, and ultimately to complete religious and philosophical scepticism. He therefore abandoned his intention of entering the church, and after a time became a preacher of the new doctrines that he had adopted, the most conspicuous of which is a blank materialism — a materialism which is not in the least disguised by calling it "monism." But while abandoning all distinctly religious views, Dr. Carus has held fast to the supremacy of the moral law and the need of moral improvement in personal and social life, and the earnestness with which he preaches these truths constitutes the main interest of this book. His remarks on God and immortality will be far indeed from pleasing religious minds; but what he says on ethical subjects, though containing nothing particularly new, will find an echo in the hearts of good men of every creed. He is wholly uninfected with the socialistic heresies now so widely prevalent, and he sternly rebukes those free-thinkers who regard morality with indifference, and scoff at its requirements.

In all that he says about the need of moral improvement and the dignity of man's moral nature, it is needless to say that we cordially agree with him; but we are by no means prepared to follow him in his rejection of all religious belief. We do not believe that the world will abandon theism, though it will undoubtedly

abandon many of the traditional dogmas of Christianity, if it has not already abandoned them. Nor can we agree with Dr. Carus in thinking that the views set forth in his book are the last word of science and philosophy on religious themes. On the contrary, we regard the present as emphatically an age of transition in religion and philosophy; and we believe that the religion of the future will be quite different from the doctrine of Dr. Carus, widely prevalent as his views undoubtedly are at the present time. But as an example of existing tendencies, as well as by its moral earnestness, this book will interest the reader.

AMONG THE PUBLISHERS.

IN *St. Nicholas* for January Eliza Ruhamah Scidmore, favorably known as a writer on Japanese subjects, tells of "Two Queer Cousins of the Crab" — the giant crab and the little mask-crab that carries the impress of a human face upon its shell.

— John Wiley & Sons have in preparation a work by Simpson Bolland, entitled "The Iron Founder."

—"It would be a wise and timely move," says *Outing* for January, "to prohibit the sale of grouse of all kinds and quail for, say, a period of at least three years. This would give a fair idea of just how much the market-shooters are responsible for the decrease of our game, and should so lessen the annual slaughter as to give the birds every chance to increase."

— Charles Scribner's Sons have now ready "The Real Japan," studies of contemporary Japanese manners, morals, administration, and politics, by Henry Norman, with seventy illustrations from photographs taken by the author; also "The Development of Navies During the Last Half Century," by Captain Eardley-Wilmot, which forms a volume in the Events of Our Own Time Series.

— Macmillan & Co. will publish in the course of January Mr. Henry Jephson's account of the "Rise and Progress of the Political Platform." The work is in two volumes, of which the first deals with the long struggle for the rights of public meeting and of free speech during the reigns of George III. and George IV. The second volume follows the progress of the platform from the agitation for the first reform bill to that which preceded the reform act of 1884. Mr. Jephson finally treats of the position and power of the platform in the present day.

— A unique experiment will be tried in the February issue of *The Ladies' Home Journal*. The entire number has been contributed in prose, fiction, and verse by the daughters of famous parentage, as a proof that genius is often hereditary. The work of thirty of these "daughters" will be represented. These will comprise the daughters of Thackeray, Hawthorne, Dickens, James Fenimore Cooper, Horace Greeley, Mr. Gladstone, President Harrison, William Dean Howells, Senator Ingalls, Dean Bradley of Westminster, Julia Ward Howe, General Sherman, Jefferson Davis, and nearly a score of others. Each article, poem, or story printed in this number has been especially written for it, and the whole promises to be a successful result of an idea never before attempted in a magazine.

— The *Quarterly Journal of Economics* for January contains an important article by Hon. Carroll D. Wright on the "Evolution of Wages Statistics," showing the gradual process by which the statistics of labor have been perfected in the last twenty years, the United States leading the way. S. M. Macvane writes on "Capital and Interest," and H. Bilgram of Philadelphia on "Böhm-Bawerk's Positive Theory of Capital." J. A. Hill makes a careful study of the recent "Prussian Income Tax," and W. B. Shaw presents his annual review of "Social and Economic Legislation by the States in 1891." Various notes and memoranda and the usual careful bibliography for the preceding quarter make up a number having great variety of contents and of interest.

— *The Chautauquan* for February presents the following table of contents: The Battle of Monmouth, by John G. Nicolay; Domestic and Social Life of the Colonists, V., by Edward Everett Hale; Trading Companies, II., by John H. Finley; States made from Territories, II., by Professor James Albert Woodburn; Sunday Readings, selected by Bishop Vincent; Physical Culture, I.,