

the food of plants, we can lime and burn and till, introduce the natural agency of air and rain and the artificial agency of lime and heat, and thus stimulate that chemical action within the soil on which the preparation of food for plants depends. Does it hinge on the supply of additional fertilising matter, we can add these matters directly from the dung heap, the manure manufactory, and the guano ship, or we can add them indirectly by feeding sheep and cattle on the land upon imported food. Unquestionably fertility is to a very great extent a work of art. This is not less true on natural and shallow soils, where no such extraordinary change has to be effected in the original character of the land before it will yield good crops, than it is in the fens of Lincolnshire and Cambridge, now laden with rich grain crops and herds and flocks of cattle and of sheep, where the natural fertility yielded formerly but sedge and rush and bog and sea-side plants, with only wild fowl for the live stock.—*Agricultural Gazette.*

Wilson, the Ornithologist.

Among the most recent English volumes is one, by Allan Park Paton, entitled: "Wilson the Ornithologist: a New Chapter in his Life—embodying many letters hitherto unpublished." Wilson, who died in 1813, aged forty-seven, was a weaver in Scotland, who came to America to improve his fortunes, after having failed at home in the unromantic occupation of a peddler. He arrived at the Capes of the Delaware on the 14th July, 1794, came to Philadelphia, where he worked a little at the loom, learned to draw, etch, and color, and also to write good prose (he had previously made indifferent rhymes), became a schoolmaster, visited Niagara at the age of thirty-eight, and from that time devoted himself to the completion of a work on American Ornithology which has made his name famous. To obtain materials, he travelled extensively over the North American Continent. The first volume of his work appeared in 1808, published by William Bradford, of Philadelphia, and ere his death every crowned head in Europe had subscribed for it. In Pennsylvania, soon after his arrival, he became acquainted with Charles Orr, a writing master, who was then a much better educated man than himself, and a correspondence took place between them, seven years of which have been recovered, and the letters are given by Mr. Paton, forming the "new chapter" in Wilson's life. The chief fact which they communicate is, that when Wilson taught school at Milestown (now within the chartered limits of Philadelphia), he formed an attachment to a young lady, which, or its consequences, caused him to change his residence to Bloomfield, New Jersey, where he again taught a school. It has hitherto been believed that Wilson had never exhibited the slightest susceptibility for the tender passion. His book has been edited by a prince of the Napoleon family, and now, half a century after his death, the citizens of Paisley, his native town, proud of his reputation, and not unwilling to share it, are about to erect a public monument in his honour. Mr. Mossman, a sculptor of Glasgow, is engaged on a design for this statue, which is to represent the naturalist dressed for his work; a dead bird, which he has just shot, in his hand, his gun slung round his shoulder,

and a sketch book and parrot at his feet—a well-contrived and very proper model of the great man. The *London Athenaeum*, noticing this "new chapter" in Wilson's life, thus eloquently and justly characterizes his favorite pursuit: "In the very name of an ornithologist there is a charm. He is a lonely man, who loves Nature and has an animal delight in air and color. With a gun slung on his back, with a wallet on his thigh, and an inkhorn in his belt, he sallies forth into the copse, he jumps into his boat, and for weeks and weeks he may be lost to the sight of man. When he comes back into the world, it is with rare spoil of knowledge won from Nature in her most secret haunts. No roof domes in his workroom, which is wide as the land and open as the sky. His feet are among the young ferns—his nostrils filled with the scent of trees and flowers—his eyes are soothed by the green earth and the blue vault—his ears lulled with the sighing of leaves or roused by the whirl of wings. Beauty lies about him at every step. In almost everything that man does there is some near limit of scenery. The judge is confined to his court, The secretary must attend to his office. The journalist is chained to his desk. The physician sees little beyond his patient and his brougham. The preacher has but his pulpit and his Sunday audience. Even in the more stirring occupations of war and trade, there is an order, a discipline, a sequence, which in the course of time palls upon the sense. A sailor tires of the sea. A soldier longs to lay down his sword. A merchant prays for the hour when his ships shall have come home and he may take his rest in peace. But we have heard it said, that a man who has once become a freeholder of the woods—like Macgillivray or Gould—who has watched all day for a grebe by the lonely English tarn, or bagged his bird of Paradise on the coast of New Guinea, will never tire of his sport so long as he can hold a gun. The canoe, the fowling-piece, the forest glade, the hill-top, are to such a man health and life. He pines in cities. In society he is dreaming of the loch and the heather; at his club-room he is musing of the log-hut in the backwoods or the camp-fire by the Yarra-Yarra. He is the lion who has lapped up blood, the Howadjee who has tasted of the Nile, the poet who has eaten of the insane root. His life is not as that of other men; he is set apart; his career is not a profession but an adventure."

Operations of English Shipbuilding Firms, by Mr. Palmer, Newcastle.

I may perhaps be allowed to describe very briefly, the operations of my own firm, which I trust, will prove of some interest, as showing the extent to which one establishment may be developed. In the first place, we obtain the greater portion of our ironstone from our own mines. At a point on the coast ten miles north of Whitby, the ironstone seams crop out in the sides of the cliffs, and here we have formed the small harbour of Port Mulgrave, where vessels can ride in safety, and ship their cargoes with ease and expedition. Between the Tyne and Port Mulgrave, some of our steamers run direct, making on the average four voyages per week, whilst others of a larger class call to load stone on their return voyage from London. At Jarrow the