

Thursfield's idea of the plan of attack at Trafalgar differs somewhat from those commonly accepted; but after reading what he has to say, the impression is deepened that at Trafalgar, as in many other fights of that day, the plan of battle as outlined before the fight was greatly modified to suit the exigencies of the hour. This work will possess a particular interest for American readers, because so large a portion is devoted to an appreciative survey of the achievements of John Paul Jones. Mr. Thursfield is the first English writer of prominence to remove the stigma which was attached to Jones's name by the calumnious writers of his day, and reveal him as the admirable character that he was. One of the most valuable chapters is that in which full justice is done to Admiral Duncan, the hero of Camperdown, whose exploits and general professional ability seem never to have received adequate recognition until late in his career.

SECOND APPENDIX TO THE SIXTH EDITION OF DANA'S SYSTEM OF MINERALOGY. By Edward S. Dana and William E. Ford. New York: John Wiley & Sons, 1909. 8vo.; 114 pp. Price, \$1.50.

During the ten years of mineralogical investigation which this appendix covers, a large amount of material has been published. An evidence of this is to be found in the two hundred new names which are given in the classified list in the introduction. About sixty of these new names on account of the completeness of their descriptions seem to have a warrant for their acceptance as new species. The other names are either of imperfectly described minerals or variety names of well-recognized species. The descriptions of the new species included in this book are given concisely but completely. It was found, however, impracticable to follow the plan adopted in the System and the First Appendix of recalculating all the angles and crystal constants of the new species. This has been done in a few cases, but in the majority of the descriptions the figures of the authors have been accepted without verification. In the cases of some of the new species with complex crystals it has been impossible to give the complete lists of the forms identified upon them. The method followed has been to give the more common and prominent forms and to indicate the number of those not listed.

THE MAKING OF SPECIES. By Douglas Dewar, B.A., and Frank Finn, B.A. New York: John Lane Company, 1909. 8vo.; 400 pp. Price, \$2.50, postage extra.

The authors' aim in writing this book has been twofold. In the first place, they have attempted to place before the general public in simple language a true statement of the present position of biological science, and in the second place they have endeavored to furnish the scientific men of the day with food for reflection. As the British nation seems to be slowly but surely losing, through its conservatism, the commercial supremacy it had the good fortune to gain during the last century, so is it losing, through the unwillingness of any of her scientific men to keep abreast of the times, that scientific supremacy which she gained in the middle of the last century by the labors of Charles Darwin and Alfred Russel Wallace. It is not among Englishmen but among Americans and Continentals that the world has to look for advanced scientific ideas. The authors fear that this book will come as a rude shock to many scientific men. What they attack is not Darwinism, but that which is erroneously called Neo-Darwinism. Neo-Darwinism is a pathological growth on Darwinism which, we fear, can be removed only by a surgical operation. The book is a beautifully printed one and will doubtless interest all naturalists.

THE ELEMENTARY PRINCIPLES OF INDUSTRIAL DRAWING. By George Jepson. Oblong 12mo.; 28 pp.; 11 plates.

The aim of this little book is to present the subject of industrial drawing, so that a student after he has become familiar with its contents, will have mastered all the essential principles as applied to mechanical and architectural drawing. While the book presents all the principles of industrial drawing, it is not a graded course of lessons, although if desired an elementary or more advanced course can be compiled from its contents. The author is an instructor in descriptive geometry, machine drawing, and shop work in the Massachusetts Normal Art School, and was for many years master of the Evening Science School of the city of Boston. The book appears to be an excellent one.

HENDRICKS'S COMMERCIAL REGISTER OF THE UNITED STATES FOR BUYERS AND SELLERS. New York: Samuel E. Hendricks Company, 1909. Quarto; 1220 pp. Price, \$10.

This is the eighteenth annual edition of Hendricks's Commercial Register of the United States. It is a complete and reliable annual index of industries, containing over 350,000 names and addresses of buyers and 33,000 business classifications. Full lists are given of manufacturers and dealers in everything employed in the manufacture of material, machinery, and apparatus used in these vast industries, from the raw material to the manufactured article and from the producer to the consumer. It is indispensable as a work of

reference for the architect, engineer, contractor, manufacturer, jobber, retailer, exporter, purchasing agent, and for the railroad machine shop, foundry, mill, factory, mine, and plantation. We have occasion to use several copies of this book, and it answers a vast number of our inquiries for manufacturers. It is a book which we can thoroughly commend.

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INDEX OF INVENTIONS

For which Letters Patent of the United States were Issued for the Week Ending

October 12, 1909,

AND EACH BEARING THAT DATE

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Table listing inventions with patent numbers, including: Bulb support, E. Gorman; Bullet mold, F. L. Putney; Bust developer, J. G. Eganhouse; Cabinet, ironing board, B. A. Stocking; Cabinet, weight, M. C. Brown; Cables or conductors, machine for making, G. E. Kress; Cableway, portable, J. H. Dickinson; Calendar pad, H. T. Avery; Camera focusing hood, E. P. Comrie; Can cover, oil waste, P. Anderson; Can heading machine, G. H. Stewart; Cane cutter, L. H. Breaud; Caoutchouc and similar substances, apparatus for washing, F. Kempter; Cape, W. W. Pelton; Car and engine retractor, J. I. Ford; Car coupling, H. J. Dean; Car door, grain, A. J. Denton; Car fender, G. H. Carter; Car fender, C. T. Koenigsberg; Car fender, H. Simpson; Car squeeze, O. H. Dempsey; Car ventilator, railway, J. E. Ward; Cars, supplemental wheel for motor, A. E. Whitney; Carburetor, K. Maybach; Card holder, O. A. Bremer; Carpet fastener, stair, W. A. Price; Carpet securing means, M. A. V. Odell; Carrier. 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Table listing inventions with patent numbers, including: Engine starting device, explosive, H. Wayte; Engines, beating roll for refining, E. A. Jones; Engines, speed controlling mechanism for explosive, Miller & Metcalf; Envelop, N. J. Macdonald; Explosions, apparatus for utilizing energy derived from, W. H. Smyth; Explosive engine, W. J. Wright; Extension table, E. Tyden; Fan, spring, D. Robert; Feed bag, W. P. Abel; Feed device, J. H. Adams; Fence post, O. M. Reed; Fertilizers, making solid, B. F. Halvorsen; Fifth wheel, J. A. Burrell; Films or flakes, making metallic, T. A. Edison; Fire alarm, automatic, C. D. Miller; Fire escape, J. H. Thornburg; Fire extinguisher, W. A. Starr; Fire extinguisher, D. H. Conkling; Fire extinguishing apparatus, automatic alarm device for, Henley & Crowder; Fire extinguishing syringe, A. Hruby; Firearms, combined firing pin and ejector for, J. D. Pedersen; Fish stringer device, W. G. Callender; Flanging machine, J. Brensinger; Flower pot stand, P. 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