

NEW BOOKS, ETC.

DIE FLUGMASCHINEN. Theorie und Praxis. Berechnung der Drachenflieger und Schraubenflieger. Von Georg Wellner, Maschineningenieur, Hofrat, Professor i. R. Mit 100 Abbildungen und 2 Tafeln. Vienna: A. Hartleben, 1909.

The author of this book has had about thirty years' experience in the solving of aerodynamic problems. As a general rule, aeronautical works are either entirely practical or purely theoretical; in other words, they either simply describe machines that have been actually constructed, or else set forth with the aid of complex mathematical formulae the theoretical problems involved in aerial flight. The book before us is unique in so far as it is a compromise. It is both a practical and a theoretical treatise. As to mathematics, the author has purposely avoided the usual analytical method of discussion, which provides for all contingencies and which considers not only uniform horizontal flight but accelerated flight and flight on an inclined plane, and has concerned himself chiefly with the synthesis of convenient and easily understood equations for those simpler cases of aerodynamics which agree fairly well with practice. Therefore, not a few mathematical formulae will be found in the book. Nevertheless, the work may be regarded as a semi-popular treatise. Approximations and abbreviations have been adopted perhaps too liberally, but inasmuch as the aim of the author seems to have been clearness of expression and a simple explanation of the principles of dynamic flying, his course seems to be justified. An excellent discussion of the relative merits of aeroplanes and helicopters or screw fliers will be found in the work. On the whole, the tone of the book is healthy. It is free from that exaggerated optimism which has led the public to expect more from the future of artificial flight than past failures would seem to justify.

A HISTORY OF NEW YORK SHIPYARDS. By John H. Morrison, author of "A History of American Steam Navigation." New York: William F. Sametz & Co. 8vo.; 165 pp.; 20 ill. Price, \$2.50 net.

The name of John H. Morrison as the author of anything connected with the history of shipping, particularly in New York city and vicinity, is a synonym of great accuracy and thoroughness of research; and these qualities are evident in the compact work before us. In his "History of American Steam Navigation" Mr. Morrison has given the public a very exhaustive summary of the ships built and their subsequent performances. Of equal value and interest is the story of the New York shipyards in which these vessels were built. It was only during the later history of colonial times that vessels began to be built in this city for the coastwise and the West Indian trade, and the material for the history of the shipbuilding of those days is very scanty. After the signing of the treaty of peace with Great Britain, the shipbuilding industry began to show indications of its subsequent great activity, which became pronounced after the monopoly of steam navigation on our rivers was removed in 1824. Then came the building of the ocean and coastwise steamships, and, later still, of the justly celebrated clipper ships. It was not until the close of the civil war that a marked decline began to occur in the shipbuilding of New York city. The work opens with a survey of the colonial period, followed by a chapter which carries the story to the year 1820 and contains an interesting account of the early American New York ships and shipbuilders, including the "Clermont" and its constructor, Charles Browne, who, by the way, was born in London, and served for some time in the British dockyards. Subsequent chapters deal with periods of large development in shipbuilding; the strikes of shipyard employees and the formation of trade unions; the famous "Mechanics' Bell," whose purpose it was to give regular notice when to commence and when to quit work; the new era of ocean steamships, which culminated in the magnificent clipper ships of worldwide fame, the launching of vessels and launching disasters; high water in wooden shipbuilding; a most interesting chapter containing new information about the yacht "America" and the records of prominent American clipper ships; and finally, a chapter on the decline of wooden shipbuilding. This is a most excellent work upon a too-much-neglected subject.

INVENTIONS, PATENTS, AND DESIGNS, By G. Croydon Marks. New York: D. Van Nostrand Company. 1909. 16mo.; 116 pp. Price, \$1.

In this book Mr. Marks has printed in full the British Patents and Designs Acts of 1907, and has in connection therewith devoted many pages to a popular discussion of the questions which patent solicitors are continually required to answer. In this way much information is compiled in convenient form for reference.

A GUIDE TO THE COUNTRY HOME. By Edward Kneeland Parkinson. New York: The Outing Publishing Company, 1909. 12mo.; 156 pp. Price, \$1.

This well-printed little book deals with Choosing the Home; Winter Planning; Tools, Their Cost and Use; What Shall We Raise; Live Stock—the Horse; Cows, Their Cost and Care; Swine, the Curing of Ham and Bacon;

Fowls, Their Care, Cost, and Price; Crops and How to Plant Them; the Orchard; the Market Garden; the Kitchen Garden; Bees; Trees, Lawns, and Shrubbery, and the Harvest. The illustrations are printed on wood-cut paper and are inserted.

Carburator, G. T. Glover	936,118	Gas cut-off, automatic, R. F. Ainsworth...	935,725
Card attaching device, F. E. Morris	936,145	Gas main, Moore & Glazier...	936,013
Card exhibitor, Kilmer & Henning	936,277	Gas mantles, manufacture of incandescent,	
Card fillet tightener, A. A. Cole	936,214	A. Simonini...	936,177
Carpet cleaner, sanitary, A. J. Meier	935,919	Gaseous fluid compressor, D. E. Haite...	935,655
Cash register, E. S. Church	935,640	Gate, G. B. Garwood...	935,650
Cash register, W. H. Muzzy	935,677	Gate, C. C. Miller...	935,673
Cash register and money changer, combined, C. A. Grimm	936,122	Gate, V. R. Stairs...	936,180
Casket, A. Malinowsky	936,003	Gear wheels, manufacture of, F. A. Brun...	935,630
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Center tube stem machine, W. N. Packer	936,153	Glass fastener, window, C. W. Phinney...	936,158
Chair and couch, combined, C. L. Pudrith	935,661	Glass forming machinery, W. W. W. Keyes	935,663
Chair attachment, M. A. McClelland	936,047	Glass heating and drawing furnace, U. Houze...	935,789
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Cigarette tubes, making, G. Nast	936,019	Gun sight, auxiliary, J. Potter...	936,934
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Clasp, P. M. MacKaskie	935,670	Hammer, pneumatic, W. B. Baxter, Jr...	935,634
Claw bar, M. Waters	935,714	Harrow scraper, disk, F. B. Niesz...	935,680
Cleat joint, S. Whitehall	935,871	Harvester, R. Y. Gregg...	936,121
Clock, geographical, J. B. Olinger	935,806	Hat attachment, A. D. Glascock...	936,117
Clock, nickel alarm, E. E. Stockton	936,063	Hats, ventilator and medicament or perfume container for, H. D. Barnes...	935,832
Clothes line attachment, J. H. Thomas	936,054	Hay loader, L. H. Frazer...	935,649
Clothes pounder, L. E. Van Landingham	935,949	Hay loader, L. Howe...	935,986
Clothes rack, folding, E. M. Blank	936,080	Headlight, dirigible, J. B. Baum...	936,211
Clutch, H. E. Conlin	935,644	Headlight, locomotive, Wade & Smith...	936,200
Clutch, friction, W. A. E. Henrici	935,909	Heater, E. J. Droz, et al...	936,097
Clutch mechanism, V. J. Emery	936,102	Heating apparatus, G. B. Collier...	935,743
Coal separator, N. Mowery	936,015	Heating system, steam, D. Broadbelt...	935,960
Comb rack, A. Vance	936,196	Heel, detachable, E. Rennie...	936,037
Compound gasoline engine, L. C. Burton	935,740	High speed brake, W. V. Turner...	936,059
Compressor, W. H. Miller	936,143	Hinge, spring, W. P. Collins...	936,090
Concrete mixer, M. J. Demorest	935,782	Hoe, H. W. Richards...	936,038
Concrete mixer, L. W. Cargill	935,891	Hopper and feeding device, J. E. Perrault...	936,029
Concrete molding machine, J. A. McNamara	935,678	Horse releaser, J. A. Hockett...	936,128
Concrete tile molding machine, D. Fuhrer	935,904	Hose coupling, J. F. Hinck...	935,984
Condenser, F. J. Newton	935,923	Hydrant, W. K. Palmer...	935,857
Conveyor, gravity, L. D. Logan	935,669	Hydraulic pressure, apparatus for generating and applying, J. W. Nelson...	936,020
Cooking apparatus, H. A. Winterknight	935,631	Hydrogen sulfid generator, E. L. Ross...	936,183
Cooking utensil cover, W. H. Ostrander	936,262	Ice cream freezer, H. Viedt...	936,060
Coop and nest, chicken, H. G. Panton	936,025	Ice creeper, S. Kossler...	935,998
Cord clamp, F. Walter	935,990	Ice edger, O. W. Robins...	935,690
Cove oven, J. J. Johnson	935,990	Ice in cans, apparatus for making clear, F. A. Ride...	935,928
Corset, L. Dziedzic	936,099	Ice machine cut-off device, R. Whitaker...	936,065
Cottage construction, collapsible, T. Cosgrove	935,744	Ice sawing machine, A. L. Stauffer...	935,886
Cotton chopper, E. J. King	936,126	Incubator, A. M. Shaw...	935,697
Coupling, See Car coupling	936,012	Invalids, mechanism for elevating, R. L. Floyd...	936,107
Crankless engine or motor, D. H. Reimers	936,036	Ironing board, J. Horsepian...	936,132
Crate, D. F. Payne	936,028	Jacquards without pattern cards, mechanism for electrically operating, A. Regal...	935,818
Crate, shipping, G. W. Sharp	936,258	Joints, making interlocking, M. Guett...	935,970
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Culvert, metal, O. A. Haas	935,971	Knitting machine, automatic circular, J. D. Hemphill...	935,981
Cushion edge support, F. H. Hampton	935,844	Knockdown table, F. J. Mauborgne...	936,007
Cut-off and filter for rain spouts, automatic, W. S. Bare	936,210	Ladder, J. Coplin...	936,219
Cutting blanks, E. Z. Taylor	935,626	Lamp, arc, J. T. H. Dempster...	935,896
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Dental or surgical chair, G. Holtz	936,131	Lamp, inverted gas, C. L. Duenkel...	936,098
Directory for commercial buildings and apartment houses, E. V. Stoddard	935,704	Lamp sockets, etc., strain relieving means for, terminals of, F. A. Swan...	935,705
Dish washing machine, M. Curran	936,237	Last, hinged, E. O. Krentler...	936,158
Dispensing receptacle, H. A. Tellerson	936,187	Last, locking, F. W. Kittlinger...	935,985
Display and packing case, garment, F. C. Boden	936,187	Latch, automatic door, J. T. Tatum...	935,946
Display rack, F. E. Bewyer	935,958	Latches, interchangeable spring tool holder for, H. A. Hillenbrand...	935,656
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Dividers, J. M. King	936,136	Life buoy, T. E. Williams...	935,717
Door fastener, N. W. Reid	936,164	Linotype machine matrix, Billington & Hollis...	935,635
Door fastener, sliding, E. H. Turcott	936,191	Lithium compounds, manufacture of pure, E. Zell...	935,880
Door operating means, sliding, A. Krause	935,795	Lock, See Mortise lock.	
Draft controlling means and other devices, mechanism for operating, F. J. Wolf...	935,719	Lock, H. F. Keil...	935,913
Draft regulating apparatus, Mailoux & Westover	935,763	Lock indicator, door, Arens & Teich...	936,231
Draft regulator, H. D. Frymire, Jr.	936,111	Locomotive, S. M. Vauchan...	936,198
Draaining device, A. Thompson	936,188	Locomotive recording instruments, gearing for, Park & Phillips...	935,682
Drill cup cleaner, L. D. Whitney	935,873	Logs, apparatus for injecting chemicals into, W. G. Born...	935,888
Dry cell tester, E. S. Lincoln	936,001	Loom, F. A. Mills...	935,802
Dust collector, U. J. Jodicek	935,658	Loom, automatic weft replenishing, R. Crompton...	935,645
Dye and making, galcoyanin, W. L. Lommei	936,247	Loom dobby, A. Gordon, Jr...	935,652
Dye and making same, galcoyanin, W. L. Lommei	936,248	Loom dobby, H. Le Doux...	935,667
Dye, azo, P. Volkmann	935,830	Loom harness motion, H. Le Doux...	935,666
Dye, making red azo, E. Ulrichs	936,260	Loom, weft replenishing, P. Macpherson...	935,671
Dye, vat, J. Delnet	935,781	Loom, weft replenishing, E. H. Ryon...	935,693
Dye, vat, P. Thomaschewski	935,827	Loom, weft replenishing, H. Wyman...	935,720
Dye, vat, L. Wolman	935,878	Lubricator, W. O. Turner...	935,948
Dye, yellow azo, P. Volkmann	935,829	Magnesium, production of, Von Kugelgen & Seward...	935,796
Eaves protector, E. P. Rucke	936,040	Mail bag deliverer, B. F. Troup...	936,189
Eccentrics, shifting, U. Tremblay	935,708	Mail bag hanger, W. M. Corthell...	935,894
Electric furnace, W. A. Smith	935,937	Mail box, Sieh & Lowe...	935,934
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Electrical oscillations, receiving system for, Quach & Woude	936,163	Match making machine attachment, J. E. State...	935,825
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Elevator safety appliance, electric, C. S. Gilbert	936,039	Measuring instrument, W. P. Phenix...	936,157
Elevator shafts, false rail for, M. Brown	936,116	Meat curing and smoking apparatus, L. Bloomberg...	935,886
Embroidery hoop, H. E. Fife	935,841	Meat tenderizer and vegetable chopper, M. H. Tyler...	935,710
End gate, O. B. Reynolds	935,819	Metal chips and apparatus therefor, process for melting, W. F. Prince...	935,686
Engines, combined charging and feeding device for gasoline, L. W. Wittry	935,718	Metallic plate edging machine, Fraser & Gray...	936,109
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