

# THE BRITISH INDUSTRIES FAIR

*Nearly a Hundred Stands With Products to Interest the Aircraft Industry*

*THE following notes, made by members of the staff of "Flight" during a visit to the engineering sections of the British Industries Fair, which opened at Castle Bromwich, Birmingham, last Monday, will, we hope, be of interest to the intending visitor. Since it is impossible to draw a dividing line, especially where works equipment is concerned, it is not claimed that this review of aircraft equipment and materials is a complete one; nevertheless, it covers nearly 100 stands. The comparatively small number of appropriate exhibits at the London sections will be dealt with next week.*



Three names well known in the aircraft industry are discernible in this view at Castle Bromwich—Celson; Guest, Keen and Nettlefolds; and B.E.N. Patents.

**ACCLES AND POLLOCK, LTD. (D.510).**—Piscatorially inclined members of the trade are, no doubt, finding the tubular-steel fishing rods on this stand a refreshing diversion from the more familiar displays of cold-rolled steel tubes, some thousands of which form the walls of a roomy office.

**ACCLES AND SHEVOLVE, LTD. (A.321 and 216).**—Apart from their repetition machining activities for the aircraft industry, Accles and Shelvoke have other associations with aviation through such items as their flare-signal pistols.

**AERASPRAY MFG. CO., LTD. (D.722).**—“Spraying specialists” is perhaps the most concise description of this concern. Not only do they supply the means of spraying, but they have evolved incidental apparatus for exhausting fumes and purifying the air. They are specialists in the design of single- and two-stage air compressors, cooled by air or water. In fact, they can meet almost every requirement of “the compleat sprayer.”

**THE AEROGRAPH CO., LTD. (D.227).**—A London firm catering for almost every industry, Aerograph show spraying equipment for applying paints, lacquers, enamels and protective finishes. A wide range of sizes in this equipment is exhibited, and neat portable apparatus may be examined.

**AEROFILMS, LTD. (B.720).**—The progress of A.R.P. work is one of the more recent subjects for the company's aerial cameramen. Their exhibit is entitled “Industries from the Air,” and includes some magnificent coloured enlargements.

**GEO. H. ALEXANDER MACHINERY, LTD. (D.622).**—The up-to-date engineer will find plenty of interest on this stand, which displays representative examples of such items as sheet-metal testers; honing equipment; gauges; drill-chucks; suds pumps; cutters; files; boring heads; lift trucks; elevators; jigs; fixtures; and tappers and form-tools.

**ANGLO-AMERICAN OIL CO., LTD. (D.306).**—Esso and Essolube fuels and oils are known the world over, and it is these products which form the bulk of the company's supplies to the aircraft industry. Very attractive they look when illuminated in bottles as a stand decoration. Particular interest attaches to examples of boring tools used in the search for oil in Great Britain.

**ASSOCIATION OF DROP FORGERS AND**

**STAMPERS (D.418).**—Fifteen drop forging and stamping firms, members of the Association, have combined to show various interesting examples of their work. The chief aeronautical interest centres around two forged airscrew blades.

**AUTOMOTIVE ENGINEERING CO., LTD. (D.205).**—An unusual range of products are made by this Twickenham firm. In the automobile industry in particular the B.H.B. piston is well known, while of the small parts manufactured are Hardinge collets, Seeger circlips, tappet-adjusting screws, and feed fingers.

**AUTOSET (PRODUCTION), LTD. (D.526).**—Castors, castors, pulleys and pulleys—hundreds of them—decorate the impressive display on this stand, which also shows various types of ball-bearing runners for doors, trolleys and portable benches, etc.

**W. AND T. AVERY, LTD. (D.515 and 412).**—The visitor to this stand will not be far wrong if he assumes that there are Avery machines to record everything from the weight of the baby to the degree of hardness of aircraft materials; in addition to rapid direct-reading, hardness-testing machines there are other essential precision-made instruments for which this firm is renowned the world over.

**BALDWIN'S, LTD. (Cb.222).**—Special sheet and raw materials generally are produced for the heavier industries by Baldwins, Ltd. Productions include plain and bright-finished tin- and lead-coated steel sheets. Steels for the electrical trades and large pressed sections for car bodies are outstanding among the exhibits, while a sheet and girder A.R.P. shelter is made quite luxurious by the addition of chairs and settees.

**B.E.N. PATENTS, LTD. (B.627).**—Devices which filter, meter, compress and exhaust air and which utilise it for spraying purposes figure prominently in this comprehensive display. Automatic switchgear, mechanical polishers, power greasers, valves, hose, and hydraulic jacks are also represented.

**BAKELITE, LTD. (Cb.408).**—The high spot of the display on this stand is a mechanical demonstration of the anti-corrosive properties of Bakelite varnishes—various metals coated with this varnish are continually immersed and withdrawn from corrosive solutions such as sulphuric acid and caustic soda. Examples of Bakelite synthetic resin

mouldings form a suitable background to this convincing demonstration.

**JOHN BEDFORD AND SONS (A.431 and 332).**—From high-efficiency, crucible alloyed drill steels for aircraft and mining purposes to manicure files and tweezers, range the samples of work exhibited on the John Bedford stand. Joiners' wood-working tools are also listed, together with a selection of files and rasps, general tools, shovels, spades, and gardening implements.

**BIRMINGHAM BATTERY AND METAL CO., LTD. (D.607 and 506).**—The Short-Mayo (in)separables in model form hang suspended from the roof over a mass of copper, brass and phosphor-bronze tubing to call attention to the fact that they and other types of Short flying boats are equipped with copper tubing made by this Birmingham firm at their Selly Oak works.

**BIRMINGHAM ELECTRIC FURNACES, LTD. (Cb.313 and 214).**—Several continuous furnaces for bright annealing and scale-free hardening are shown. Plant developed for gas-drying and air-conditioning in factories is another product of this well-known firm. Expert advice is offered on heat-treatment problems and on the subject of dehydration.

**BLACK AND DECKER, LTD. (Cb.511).**—Interest on this stand centres round the new Black and Decker “Holgun”—a neat pistol-grip electric drill with a remarkably small offset. The display includes Van Dorn tools, Vibro Centric valve-seat grinders, and a host of other machines.

**BLACKBURN AIRCRAFT, LTD. (CIRRUS ENGINE SECTION) (D.110).**—As in previous years, the Cirrus engine is the sole representative of the British aero engine industry. This year the 50 h.p. Cirrus Midget is shown with the 90 h.p. Minor and 150 h.p. Major. Cirrus engines have done well in the export market, and are to be found flying in many countries. All the models are of the inverted four-cylinder air-cooled type.

**BRITANNIA BATTERIES, LTD. (Cb.608).**—Centring round large lead-acid accumulators for stationary purposes and emergency supply in buildings, the Britannia exhibit also features the smaller types for commercial use and specially developed models for propulsive purposes. Switchgear is also represented.

**BRITISH ALUMINIUM CO., LTD. (D.615 and 514).**—Aluminium and its alloys are shown