

**AIRPORTS EXHIBITION
(CONTINUED)**

defrosting), jacks of all types, lubricating equipment, oil trays, paint- and dope-spraying equipment, pedestal lights and inspection lamps, pinking shears, respirators, small tools, storage bins and racks, tool chests, valve maintenance equipment, vices, welding outfits.

Adjustable and adaptable, the Rothswan patent "Aerojacks" supersede clumsy wood trestles and other makeshift devices. The rigid tripod base stands firm on uneven ground and gives a surface contact of 40 sq. in.—a valuable feature when in use on soft ground. Two models, each with a set of interchangeable saddles, are available, with ranges of 23-35in. and 36-54in. respectively.

Brown Brothers also have a lighting service department which will gladly provide for and advise on the subject of lighting equipment for aerodromes, hangars, workshops, airport buildings, waiting rooms, offices, etc.

Butlers, Ltd. (Stand 32), Atlantic Works, Grange Road, Small Heath, Birmingham.—This firm, which specialises in aircraft and automobile lighting equipment, as well as in presswork, is featuring its aerodrome lighting equipment, which includes large and small searchlights and signalling apparatus.

Callender's Cable and Construction Co., Ltd. (Stand 25), Hamilton House, Victoria Embankment, London, E.C.4, show a model of the Callender-Hamilton unit-construction hangar (described in *Flight* a year ago), which has a steel framework consisting of a series of box-girder ribs comprising vertical stanchions supporting flat-pitch roof girders. It has sliding doors at each end. All parts are standardised, and the hangar can be erected at a low capital expenditure, with negligible maintenance costs afterwards. This type has been supplied to the Air Ministry for erection at various aerodromes.

Also exhibited are (1) various types of electric cables, rubber-insulated, flexible tough-rubber sheathed, low-tension and super-tension paper insulated, single-conductor welding, with plain or hard-cord braided finish; (2) Kalbitum paint, a bituminised product which is weather- and corrosion-resisting; (3) Kalanoid compound, which remains plastic, yet is waterproof and is used for other purposes as well as its original one of filling junction boxes in wiring system work; (4) specially made adhesive tape (for making and protecting joints in rubber-insulated cables).

There is also an enlarged aerial view of Swell Aerodrome. Callender's have a complete organisation for carrying out electrical installations of all types, with branches throughout the country.

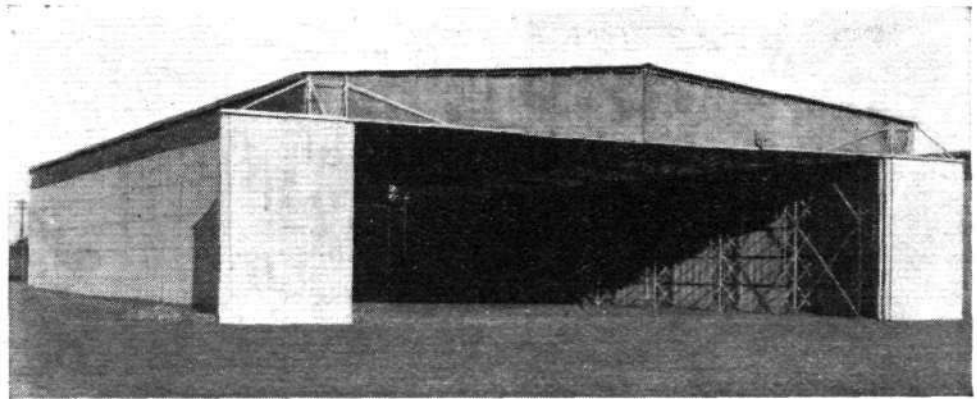
Cardiff Foundry and Engineering Co., Ltd. (Stand 36), Hurman Street, Cardiff.—No detailed information regarding this exhibit is available, but the firm has been known for some years in connection with the "Pillar of Fire" boundary beacon, as installed at Doncaster and Cardiff airports.

An illuminated, orange-lighted pillar is held upright by three stays. In the event of an aircraft accidentally striking the pillar, the stay breaks and the pillar collapses away from the aircraft, at the same time breaking the circuit and thus preventing all danger of fire.

Cellon, Ltd. (Stand 27), Cellon Works, Kingston-on-Thames, Surrey.—This exhibit will be representative of the Cellon specialities, which include:—

Cellon aircraft finishes.—All grades of aircraft finishes to the requisite Air Ministry specifications, including Cellon dopes, "Cerrux" synthetic finishes, "Cerric" cellulose finishes and "Cerrax" chromated primers, Cellon dope-proof tape and all sundries for the finishing shop.

Cellon patented strip-sealing process.—This process covers an improved method of sealing lines of rivets, edges of lapped or butted panels, petrol tanks, etc., of all-metal construction, which have caused difficulty in treatment in the past. The thermoplastic and chromated adhesive employed has been further improved, and is completely un-



The Callender-Hamilton unit-construction hangar, showing wide, unobstructed door opening. (Stand 25.)

affected after continued immersion in seawater, oil, petrol, etc. Research has now perfected a small electric iron which may be employed in conjunction with this process.

"Cerrux" modern decorative finishes.—A complete range of synthetic painting materials for all protective and decorative work, as used on many large aircraft factories and airports.

The "Cerrux" film, it is claimed, possesses a unique combination of properties, including tenacious adhesion, flexibility, hardness and stability, with freedom from decomposition, and is therefore particularly valuable for external protection and interior decoration. The display at the Exhibition includes representative specimens of the various "Cerrux" finishes.

Decorative spraying.—"Cerrux" flat, satin and gloss finishes provide a ground surface particularly suitable for decorative spraying, several interesting specimens of stencil spraying being shown on the stand.

"Cerrux" de-oxidising primer.—Of particular interest for steelwork structures and corroded metal surfaces, this material is a de-oxidising agent for converting to an inert compound by chemical reaction all "live" rust particles remaining buried after wire brushing.

Also shown are "Cerreen" semi-synthetic gloss finish, a new Cellon production shortly to be placed on the market, and "Cerrusco" water paint and plastic paint.

Chance Bros. and Co., Ltd. (Stand 5), Lighthouse Works, Smethwick, Birmingham.—The exhibits on the stand of this well-known firm of lighting specialists include:—

Fixed-type floodlight for surface illumination.—This comprises six 1 kW. para-trough reflector units in non-metallic housing and gives a beam candle power of 1,000,000. Advantages include safeguard against total failure due to single-lamp breakdown, and there is a simply operated focusing device.

Runway marker or contact lights.—These have been designed to give maximum light at low angles (8 deg. to 3 deg. above horizontal through 360 deg. in azimuth). The dome glasses are tested to carry a static load of 15 tons/sq ft., and have carried 45 tons. Lamps of this type are used in the Ringway Airport system described in last week's *Flight*.

Boundary lights—illuminated skirt type.—These are easily collapsed by an 80-lb. load applied horizontally at the top of the fitting; the electrical contacts are then automatically

broken and sealed. Low-voltage (6.6 v.) lamps are used.

Airway beacons.—One and a half-kilowatt revolving type, with 24in. mirror and automatic lamp changer; 1,800,000 beam candlepower.

Landing direction indicators, direct wind operated and auxiliary wind vane operated. The latter type is sensitive to winds of 1½ m.p.h. and does not oscillate in gusts.

Automatic electric standby plant, to take over lighting services in the event of mains failure; embodies many "Austinlite" features.

Also represented are obstruction lights, mobile floodlights, ceiling lights, signalling lamps, etc.

Desoutter Brothers, Ltd. (Stand 7), The Hyde, Hendon, London, N.W.9, are demonstrating their range of portable pneumatic and electric tools. These include the famous "Mighty Atom" range of ½in. drills, including the close corner drills specially designed for the aircraft industry, together with shears, screwdrivers and nut runners, which are used in large quantities throughout the industry.

They are also demonstrating the Desoutter portable pneumatic nibbler, which was originally designed for Service work on metal-skinned aircraft, and is now coming into great demand in many factories for such jobs as cutting out portholes in finished and assembled fuselages, cutting out inspection panels in wings and similar jobs, which, by any other method, would take much tedious drilling and filing.

The family of larger rotor-type drills running up to ½in. capacity are also on view, together with the Desoutter electric drill guns, ranging from the type A1 ½in. capacity, 5,000 r.p.m. model, specially designed for rapid production in duralumin, to the type B3-¾in., 450 r.p.m. drill gun, designed for working in high-tensile or stainless steels and other such tough materials.

Fully qualified sales engineers are in attendance to demonstrate the tools and to answer any technical queries. The tools shown, it is stated, will be willingly supplied on loan to any interested parties without any obligation on their part.

Epco, Ltd. (Stand 12), Star Works, Leeds, 7, are showing their "Epco" hydraulic trolley jacks, portable floor cranes, degreasing plant and trestles and stands.

Esavian Doors (Stand 18), Esavian House,

The Desoutter "Mighty Atom" countersinking tool. An adjustable stop on the nose of the tool limits the depth of countersink, and by removing the risk of the operator going too deep greatly speeds up the operation. (Stand 7.)

