

eight, nine, twelve or fourteen-cylinder engines, and are provided with spark gap distributors and rotary safety gaps. It may be mentioned that the advantage of this type of magneto is that the current generated reaches a maximum value four times during each complete revolution of the polar inductor, thus producing four sparks per revolution of the armature shaft. In conclusion, it may be mentioned that B.T.H. magnetos, besides figuring in most of the big aviation events during the past few years, were used on the aeroplanes securing first and second places in the each of Aerial Derbys (five in all) flown round London during the last five years, and were also fitted to the first two machines in last year's Circuit of Britain race for the King's Cup.

**Brown Bros., Ltd.,**  
Great Eastern Street, London,  
E.C. 2.

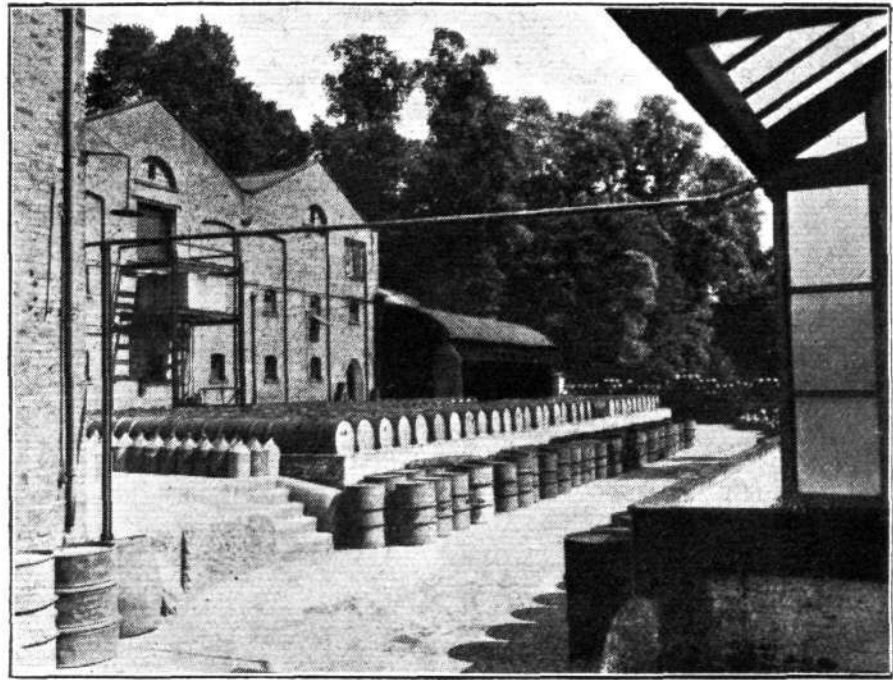
BROWN BROS., LTD., are one of the oldest "accessory" firms in Great Britain, firstly in connection with cycle, motor-car, and then in aircraft work. They are also one of the largest suppliers of aircraft parts to practically all British manufacturers, and also have a large export connection. It is only when one looks through their special aircraft catalogue that an idea of the extensive range of aircraft material handled by this firm makes itself apparent. For instance, this catalogue of some 96 pages, in addition to covering various standard aircraft fittings and materials, instruments, tools and aerodrome equipment, bomb-gear, etc., contains numerous useful British Standard and Air Board specifications. Besides specialising in all A.G.S. parts, Brown Bros. are also in a position to supply presswork and metal fittings and machine parts in special steel to specification.

**Bullivants, Ltd.,**  
72, Mark Lane, London, E.C.3.

WELL-KNOWN as specialists in stranded steel wires and cables, Messrs. Bullivants are also pioneers in the application of the above in connection with aircraft, in which respect they have carried out a considerable amount of research work with a view to producing stranded cables to meet the various requirements for aircraft.

**Cellon (Richmond), Ltd.,**  
Richmond, Surrey.

WHEN the first "Cellon" dope was manufactured in a small factory at Clapham, London, in 1911, the demand, although, of course, not very large in those days, very soon exceeded the supply. This resulted in arrangements being made for the production of "Cellon" in larger quantities by Messrs. Thomas Tyrer and Co., chemical manufacturers, at Stratford. From this time "Cellon" made great strides forward, and "Doped with Cellon" began to be phrase known near and far. By 1913 Cellon, Ltd., was formed, and still supply and demand increased, necessitating enlargements of plant. The Great War, of course, made great demands for "Cellon," not only on the part of Great Britain, but the Allies as well. Thus, in 1916, the present large works, comprising mixing rooms, storage houses, laboratories, etc., were erected at Richmond, and "Cellon" was produced in larger and still larger quantities. In 1918 the present company was formed, and "Cellon" had gained a reputation



Part of the Stores Section of the Cellon Works at Richmond.

as satisfactory as it was wide-spread. Naturally, after the Great War the demand for dope was not so large, but fortunately for "Cellon" its fame had spread to foreign countries, and with the resumption of export trade the demand for "Cellon" grew—and still grows.

In the meanwhile the Research Department of the works were carrying out experiments on other uses and properties of cellulose solutions, with the result that a number of materials, under the name of "Cerric" have been produced. Chief amongst these are "Cerric" black lacquers, which are made in all grades to give from a dead matt to a highly glossy finish. These, like all other "Cerric" materials, possess the advantage of being rapidly applied by means of spray, and they also dry very rapidly. They are being used very largely in place of the usual stoving enamel. Other "Cerric" materials consist of transparent lacquers, wood solutions, coloured solutions for decorating tins, boxes, furniture, etc. Another speciality from the same source is "Porcelac," white solution which is very largely used for the covering of hospital (or bathroom, etc.) fittings. In conclusion we would point out that "Cellon" and its descendants is represented at the Prague Aero Show, not only on some of the machines there, but at the "Cellon" stand.

**The Falcon Airscrew Company,**  
113, Cottenham Road, Holloway,  
London, N.19.

THE FALCON AIRSCREW Co., of Holloway, London, are, perhaps, known all the world over as the largest manufacturers of aeroplane and seaplane airscrews. They have always on hand a large number of airscrews suitable for practically all known engines and machines in existence, and are in a position to forward them by aeroplane or steamer ready for immediate flight. This firm has recently been granted the compliment by the British Aeronautical Inspection Department of their own approved inspection. Their resources in timber, which is specially selected for the manufacture of airscrews, are enor-

mous, and their output of finished airscrews is approximately 100-150 of various types per week. They are the largest manufacturers of this component employed by the British Air Ministry, and manufacture the majority of the airscrews used on the British Air Service machines. They also ship to almost every country in Europe batches of airscrews designed and manufactured for the latest designs of machines therein used. One of their specialities is the construction of three-bladed airscrews—a difficult proposition with which they have gained considerable reputation. Another is a system of metal-tipping the blades by means of a series of independent metal "clips," placed one next the other along the edge of the blade, which system is claimed to be a great improvement on the orthodox single metal strip method. A visit to their works, an invitation which is always cordially extended, would impress the representative of any foreign Government with the enormous business this firm does in this particular speciality. They have an excellent system of registration and examination of the various materials used in the construction of airscrews, and there is no firm in Europe with such a capacity for output and first-class workmanship, and we cordially recommend everybody interested in the design and construction of aeroplane airscrews to communicate with them direct.

**H. M. Hobson, Ltd.,**  
27-29, Vauxhall Bridge Road,  
London, S.W.1.

THE name of Hobson is almost universally known in connection with "Caudel-Hobson" carburettors. We are unable to give a description of the Caudel-Hobson carburettor as such here, for the simple reason that this carburettor is specially designed to embody the particular features desired by any individual engine manufacturer—in other words, it is designed to suit the engine to which it is fitted, and therefore varies in detail accordingly. The Caudel-Hobson carburettor is a standard fitting to many well-known makes of