WHERE METAL AIRSCREWS ARE MADE : The new works of Metal Propellers, Ltd., at Purley Way, Croydon, where the Leitner-Watts all-metal airscrews are produced.

METAL PROPELLERS, LTD.

WHILST in the neighbourhood of Croydon the other day we took the opportunity of paying an informal visit to the new works of Metal Airscrews, Ltd., located at Purley Way, Croydon—just on the "other side" of Croydon Aerodrome. Metal Propellers, Ltd., it should be mentioned, was formed just recently and has taken over the original company, known as the Metal Airscrew Syndicate and associated with the names of H. Leitner and Dr. H. C. Watts, which was responsible for the successful development—entailing years of experiment and research—of the well-known Leitner-Watts all-metal airscrews.

It is not our intention here to give a detailed description of the metal airscrew produced by this firm, for this has been done in a previous issue of FLIGHT, as far as the earlier model is concerned, and the main principle of construction is much the same in the latest models. Very shortly, however, we hope to have something further to say in regard to the latest developments of these airscrews and also about the new works. It is to the latter that we wish this week to make brief reference.

Moving into new works always entails considerable difficulty, effort and time, but Metal Propellers, Ltd., have certainly made wonderful progress during the last few months as regards "settling down." Of course, at the time of our visit, the works were not quite completed, but we were able to get a very good idea as to the general character this plant will take when finished. Except for "raw material" and the production outside of the forgings for the propeller bosses, the Croydon works are—or will be very shortly—absolutely self-contained, enabling the complete airscrew to be made "on the premises" from start to finish. This, of course, is a very important feature from a production and supply point of view.

The works include really fine up-to-date machinery, welding plant, an excellent drawing office, and well-equipped technical research department and laboratory—however, we will give our readers a more detailed account of these works as a whole on a future occasion.

Before concluding, however, it may be of interest to note that Metal Propellers, Ltd., have been experimenting for some time with the variable pitch airscrew, and we understand that they have now developed a design for this very desirable type of airscrew which gives promise of leading to the solution of this problem that has, up to now, met with but medium success. The Air Ministry has examined a working model of this variable pitch airscrew and an order for experimental types has, we believe, already been placed. For obvious reasons we are unable to give details of this new airscrew, but we may say that it is simplicity itself, it is entirely automatic—no hand control being employed—and that its principle is based on the resultant of the thrust and centrifugal force, which acts on the blades and adjusts them to the most efficient angle for any particular variation of engine r.p.m., power, etc. But, more of this anon.

Finally, it is indeed very gratifying to learn that Metal Propellers, Ltd., have just recently received a large order from the British Air Ministry. This order is for 1,000 Leitner-Watts metal blades, of which a few are to be constructed of duralumin.

SIDE WIND

IT is not only at home that "Titanine" dope makes good, for we learn that the Marquis de Pinedo's Savoia S.16 ter flying boat—which has just arrived in Tokyo from Rome—was coated with "Titanine Two" dope and aluminium nitro varnish. The three Gloucester-Schneider Cup 'buses are, by the way, also doped with "Titanine" (Special Racing Scheme).

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PUBLICATIONS RECEIVED

Der Deutsche Rundflug, 1925. Aero-Club von Deutschland, Blumeshof 17, Berlin, W.35.

Performances of the Hispano-Suiza Engine. Société Française Hispano-Suiza, Rue du Capitaine Guynemer, Bois-Colombes (Seine), France.

The Principles of Sound Signalling. By Morris D. Hart and W. Whateley Smith. Constable and Co., Ltd., 10-12, Orange Street, London, W.C.2. Price 12*s.* 6*d.* net.

The Elements of Internal-Combustion Engineering. By Telford Petrie. Longmans, Green and Co., 39, Paternoster Row, London, E.C. 4. Price 10*s.* 6*d.* net.

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AERONAUTICAL PATENT SPECIFICATIONS

Abbreviations: Cyl. = cylinder; i.c. = internal combustion; m. = motor. The numbers in brackets are those under which the Specifications will be printed and abridged, etc.

APPLIED FOR IN 1924.

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13,489. DAIMLER-MOTOREN-GES. Axles for aircraft undercarriages. (217,216.)
13,693. A. ROHRBACH. Connections for wings. (218,263.)
14,182. AIRSHIP GUARANTEE CO., LTD. and B. N. WALLIS. Controlling and steering means for airships. (239,300.)
17,098. J. BOWIE. Aerial propellers. (239,323.)

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