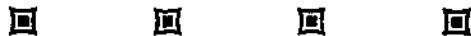




Mounted on the apparatus is a small tube or reservoir, containing liquid carbonic acid and connected up to the cylinder. The operation of starting-up is as follows:—The apparatus—which can be adjusted in height by means of the telescopic leg shown—is held so that, with the legs resting on the ground, the driving dog is brought into contact with the fitting on the air screw. On pressing a small lever, pressure from the CO₂ reservoir forces the piston outwards, thereby tightening the cable around the drum and causing the latter to make two sharp revolutions. The air screw is thus also rotated and the engine started, and through the angle given the recesses in the air screw fitting, the starter is pushed forward and disengaged. Should the engine backfire, neither the apparatus nor the operator are in any way injured, for as soon as the drum rotates in the opposite direction it brings the piston back, against the already expanded gas, when the cable becomes slack, leaving the drum free to rotate indefinitely.

The carbonic acid flasks are similar to those used for fire-extinguishers, flame-projectors, "Sparklets," etc., each flask being capable of giving five starts with a 300 h.p. Hispano-Suiza engine. Larger flasks are also supplied. Hundreds of these starters have been used on all types of engines, such as the 130 h.p. Clerget, 200 and 300 h.p. Hispano-Suiza, 400 h.p. Liberty, 350 h.p. Napier, Rolls-Royce, etc.

That this starter is easy and speedy in operation is proved by the fact that at a certain aerodrome an apprentice, 15 years old, started six machines in seven minutes. On another occasion a 400 h.p. twin-engined Borel-Odier postal seaplane had to make seven forced descents upon the water owing to a leak in the radiator. As it was very rough, starting by hand would have been out of the question, but fitted with the stationary type Odier starter—which is bolted on the crank-end, with operating controls situated inside the cockpit—fourteen successful starts were easily accomplished.



The Royal Aero Club of the United Kingdom

OFFICIAL NOTICES TO MEMBERS

Vice-Patron of the Club

H.R.H. THE PRINCE OF WALES has honoured the Club by becoming a Vice-Patron.

Society of British Aircraft Constructors and Royal Aero Club

A Meeting of the Joint Standing Committee of the Society of British Aircraft Constructors and the Royal Aero Club was held on Thursday, July 24, 1919, when there were present:—Royal Aero Club: Lieut.-Col. J. T. C. Moore-Brabazon, M.P., in the Chair, Lieut.-Col. F. K. McClean, Lieut.-Col. Alec Ogilvie and Mr. Harold E. Perrin, Secretary. Society of British Aircraft Constructors: Mr. R. O. Cary, Mr. Hamilton Fulton, Mr. N. G. Gwynne and Mr. Charles V. Allen, Secretary.

Chairman.—On the motion of Mr. N. G. Gwynne, seconded by Lieut.-Col. F. K. McClean, Lieut.-Col. J. T. C. Moore-Brabazon, M.P., was unanimously elected to the Chair.

The appointment of the Joint Standing Committee was reported as follows:—

Society of British Aircraft Constructors

Capt. P. D. Acland. Mr. Hamilton Fulton.
Mr. R. O. Cary. Mr. N. G. Gwynne.

Royal Aero Club

Lieut.-Col. F. K. McClean. Mr. J. H. Nicholson.
Lieut.-Col. J. T. C. Moore-Brabazon, M.P. Lieut.-Col. Alec Ogilvie.

Records.—It was decided that the word "Record" should not be used in any advertisement except in the case of a definite record having been granted by the Royal Aero Club.

SPECIAL COMMITTEE MEETING

A Special Meeting of The Committee was held on Wednesday, July 30, 1919, when there were present:—Brig.-Gen. Sir Capel Holden, K.C.B., F.R.S., in the Chair, Mr. Ernest C. Bucknall, Lieut.-Col. John D. Dunville, R.A.F., Lieut. Col. Spenser D. A. Grey, D.S.O., R.A.F., Lieut.-Col. T. O'B. Hubbard, M.C., R.A.F., Lieut.-Col. F. K. McClean, Lieut. Col. Alec Ogilvie, Col. C. R. Samson, D.S.O., R.A.F., and Mr. Harold E. Perrin, Secretary.

A Deal in Aeroplanes

THE Aircraft Disposal Board have just sold 260 new Avro aeroplanes to Mr. S. W. Copley, of 1, Queen Victoria Street, E.C. 4. It is understood that this comprises the whole surplus stock of machines of this type which the Department possessed. The highest number of aeroplanes sold to a single purchaser previously by the Board was about 100.

And Another in Engines.

ANOTHER big deal reported is that by which the United Aircraft Engineering Corporation of New York, through its London agents, the Canadian and General Trust, Ltd., have

Golf

Royal Air Force Club v. Royal Aero Club

A Golf Match between the Royal Air Force Club and the Royal Aero Club took place at Worplesdon on Tuesday, July 29, 1919. The morning's play resulted in the Royal Air Force Club being defeated by 6 points to 1. The afternoon was given up to four-ball matches, in which the teams finished "2 all." The Royal Aero Club won, therefore, on the day's play by 8 points to 3.

THE FLYING SERVICES FUND

(Registered under the War Charities Act, 1916)

Administered by the Royal Aero Club

For the benefit of *Officers, Non-Commissioned Officers and Men of the ROYAL AIR FORCE* who are incapacitated while on duty, and for the widows and dependants of those who are killed or die from injuries or illness contracted while on duty.

Honorary Treasurer:

The Right Hon. LORD KINNAIRD.

Committee:

H.R.H. PRINCE ALBERT, K.G. (*Chairman*).
Mr. CHESTER FOX.
Lieut.-Col. T. O'B. HUBBARD, M.C., R.A.F.
Lieut.-Col. C. E. MAUDE, R.A.F.

Secretary:

H. E. PERRIN.

Bankers:

MESSRS. BARCLAYS BANK, LTD., 4, Pall Mall East, London, S.W. 1.

Subscriptions:

	£	s.	d.
Total subscriptions received to July 29, 1919 ..	15,077	19	1
Amount paid for a passenger flight with Mr. H. G. Hawker on May 31, 1919. Per the Sopwith Aviation and Engineering Co., Ltd.		42	0 0
Total, August 1, 1919	15,119	19	1

Offices: THE ROYAL AERO CLUB,
3, CLIFFORD STREET, LONDON, W. 1.
H. E. PERRIN, Secretary.

bought from the Aircraft Disposal Department 700 aircraft engines and a large number of aeroplanes.

These are for export to Canada and the United States, to develop the commercial use of aircraft in both countries.

A New Record Claim

A BRIEF message from New York claims that an American aviator has beaten the altitude record by climbing to 30,700 ft. It is stated that "the thermometer then recorded 25 deg. below zero, and the motor became chilled, forcing the aviator to descend."

The name of the aviator, the make of machine, and the place where it occurred are, however, unimportant details which were not worth reporting apparently.