The "Dynalysor" Spraying Unit for use in hospitals (wards and operating theatre), offices, factories, etc.



THE 'MILTON' SYSTEM OF AIR PURIFICATION

"XVI. 'There is sufficient evidence for considering that the risk of air-borne infection may be reduced by spraying the atmosphere of shelters. On account of its easy procurability, cheapness in bulk, and intrinsic merits the antiseptic recommended is sodium hypochlorite in aqueous solution. The type of spray will vary from mechanically-operated to hand-operated apparatus according to the type and size of shelter."—Recommendations of Lord Horder's Committee regarding the Conditions in Air Raid Shelters. H.M.S.O., Cmd. 6234, 1940.

This recommendation confirmed the result of the pioneer work of the Milton laboratories, reported fully in "A System of Air Purification by Hypochlorous Acid Gas," by the late A. T. Masterman, M.A., D.Sc., F.R.S. (1938).

It was shown that:

- (1) The hypochlorous acid gas was rapidly disseminated throughout the confined space.
- (2) Its presence was quite unobjectionable to the occupants.
- (3) The air was rapidly cleaned and deodorised, and
- (4) As regards air-borne germs, it was possible to produce and maintain a degree of sterility of over 90%. These results were produced by a volumetric concentration of the gas in the region of $\frac{1}{1,000,000}$ to $\frac{1}{10,000,000}$. Further work has shown that a concentration of one part of gas by volume in 1,000,000 gives a slight but completely non-irritant odour, whilst a concentration of 1 in 15,000,000 upwards is germicidally effective up to 99.5%.

In the light of these results it has been found practical to devise a complete system of air purification by the use of a special vaporiser and a special form of Milton Antiseptic known as "Milton 2" for production and dissemination of hypochlorous acid gas.

* * *

Surgeons, physicians, medical officers of health and hospitals' officials interested in air purification, are invited to write to the Professional Dept., Milton Antiseptic Ltd., John Milton House, London, N.7, requesting a demonstration, which will be arranged when a technical representative is next in the enquirer's district.

CONTENTS

(All rights reserved)

	PAGE
EDWARD, D. G. ff., ELFORD, W. J. and LAIDLAW, P. P. (the late). Studies on air-borne virus infections. I. Experimental technique and preliminary observations on influenza and infectious ectromelia. (With 1 Figure in the Text)	1
EDWARD, D. G. ff., Lush, Dora and Bourdillon, R. B. Studies on airborne virus infections. II. The killing of virus aerosols by ultra-violet radiation. (With 1 Figure in the Text)	11
CHALLINOR, S. W. Bacteriological observations on the air of occupied premises. I. Air disinfection with hypochlorites. A simple practical method of disinfecting the air of occupied premises. (With 4 Figures in the Text)	16
Benjamin, B. Height and weight measurements of school children. (With 1 Figure in the Text)	55
Spira, Leo. Mottled nails. An early sign of fluorosis. (With Plate 1, containing Figs. 1–12)	69
Colin-Russ, A. Further studies on foot perspiration and its action on footwear. (With 1 Figure in the Text)	72

The Journal of Hygiene is now issued irregularly. A volume is issued in paper covers at the following net prices:

Volumes I-III (1901-3). 17s. 6d. net per volume.

Volumes IV-XVI (1904-18), excepting Vol. VI, no. 4, Plague number. 25s. net per volume.

Volume XVII (1918). 31s. net.

Volumes XVIII-XXXI (1919-31). 42s. net per volume.

Volumes XXXII-XXXVII (1932-37). 47s. 6d. net per volume.

Volumes XXXVIII-XLII (1938-42). 75s. net per volume.

Quotations can be given for buckram binding cases, also for bound copies of back volumes.

Papers for publication should be sent to Dr G. S. Graham-Smith, Dept. of Pathology, Tennis Court Road, Cambridge. Other communications should be addressed to the University Press, Cambridge.

Papers forwarded to the Editor for publication are understood to be offered to *The Journal of Hygiene* alone, unless the contrary is stated.

Contributors receive twenty copies of their papers free. Twenty-five additional copies may be had at cost price; these should be ordered when the final proof is returned.

The subscription price is £3. 15s. 0d. per volume (post-free), payable in advance; single numbers 16s. 0d. net. Subscriptions may be sent to any Bookseller, or to The Cambridge University Press, Bentley House, 200 Euston Road, London, N.W. 1.

The Cambridge University Press has appointed the University of Chicago Press agents for the sale of *The Journal of Hygiene* in the United States of America.