aerosol, the product being in one container and the propellant in a separate container ?

THE LECTURER : I have not handled these personally. There are some perfume dispensers of this type in France. These have very complicated valves which increase the cost of the pack considerably. An alternative is the "Jet Pack", which has been licensed to one of the contract fillers in this country. A plastic handle incorporates a nozzle and a container of propellant 12 is utilized. A refillable product container is fitted, and on operation the propellant passes towards the nozzle, and simultaneously draws up product from the reservoir; in fact similar to the old-fashioned perfume atomizer. This type of pack is used mainly for paints. The U.S. Nebu-Halent pack for asthma sufferers is very similar in action.

MR. W. A. WOODWARD : In pressurized packs of toilet powders, the particle size must be very important. Could you give us details of the range required for successful formulation ?

THE LECTURER : Approximately 325 mesh. It all depends on the valve, and the amount of powder in the container. 8 per cent is the maximum with the majority of valves. I would also refer you to the work of Geary and West [*Aerosol Age* **6** 25 (August 1961)].

LETTER TO THE EDITOR

Sir,—I refer to J. S. Jellinek's paper "Evaporation and the Odor Quality of Perfumes", in page 168 of the April 1961 issue of the *Journal*. I would like to comment that all these experiments show is that the rate of evaporation is influenced by the composition of the bulk. They do not indicate any reason for this, although conjecture is permissible, but fixation is not necessarily a result of molecular association as is advanced in this article. A substance completely inert to one of the smells covering say, $\frac{9}{10}$ of the surface of the perfume would decrease the odour concentration or balance of odour to approximately $\frac{1}{10}$ due to the reduction of the uncovered surface under the conditions of the described experiment and thereby act as a "fixative".

The relative factors in fixation are the extent of the surface available to the bulk molecules for their evaporation, the energy of their evaporation and the molecular reflexion properties of the surface, although this latter will not apply to the experiments described. [*J. Soc. Cosmetic Chemists* **7** 69 (1956)].

Yours faithfully,

A. W. MIDDLETON.

Chesebrough-Pond's Ltd.,
Victoria Road,
London, N.W.10.