first to second judgment situations, included "It looked larger," "It appeared smaller," "It appeared larger the second time," and "It was held slightly closer to me." None of these conditions was, of course, objectively true.

An adequate theoretical explanation would have to take into account not only the above phenomenon, but also the means by which the group situation, before individual estimates and their average had been presented to members, had operated to yield a substantially smaller initial dispersion of estimates in those groups with little experience of interaction among their members.

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Manuscript received August 21, 1952.

# Comments and Communications

So the

## Phosphorylated Hesperidin

IN AN article published in SCIENCE (115, 402 [1952]) we reported preliminary results indicating the production of an antifertility effect in rats by the oral administration of phosphorylated hesperidin. Experiments designed to check these findings, in which mice, as well as larger numbers of rats have been used, have given inconsistent results. Negative results have been obtained with samples of material synthesized at different times and under slightly different conditions from that originally reported on.

Phosphorylated hesperidin as first prepared (1)was known to be a mixture. Subsequent chromatographic work (2) has shown the presence of several different components; the number of these and their identity (as determined by the position of the spots) will vary with slight changes in the method of synthesis of the sample being examined. Finally, it has been found (3, 4) that changes in the method of synthesis that will not affect the degree of phosphorylation will affect the antihyaluronidase effect of the substance in vivo and in vitro.

It would appear, then, that the antifertility effect of phosphorylated hesperidin is a function of one component of a mixture of different phosphates. Work on the isolation and identification of this substance is now in progress.

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### A Type of Large-Volume Vacuum Ampul

LARGE-VOLUME ampuls, as containers of dextrose solution or normal saline injections, are still commonly used in the Far East. They are better than bottles from the standpoint of air leakage, as has been ob-



FIG. 1.

served among some carelessly stored goods in Taiwan. They are simple and cheap in comparison with bottles of other types. Because of the weakness of glass, ordinary ampuls cannot withstand pressure, and break easily during sterilization. Actually, in the empty space of an ampul during sterilization at 100° C the partial pressure of air is  $1 \times \frac{333}{293}$  atmospheric pressure