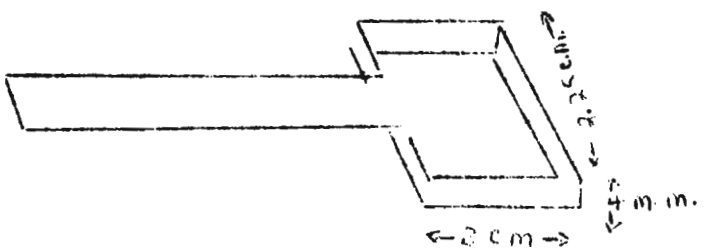
DeMarinis, Frank. An apparatus for facilitating direct facet-counting. A simple and convenient apparatus can be easily constructed which will facilitate direct facet-counting or other somatic examination of Drosophila. A smooth steel ball, 2 cms. in diameter fitted on a metalic socket, 1 cm. high, 2 1/2 cms. external diameter and 1 1/2 cms. internal diameter is all that is required. By placing a very small amount of glue at the top of the ball the specimen can be made to stick conveniently for examination. With a simple rotation of the ball with the fingers the observation may be made at any point in the curvature of the eye or the body, as the case may be.

Dempster, E. R. Shipping flies in cold storage. At the suggestion of Dr. W. L. Waterhouse of Sidney, Australis, we made two shipments of several stocks of Drosophila melanogaster to Australia in the summers of 1937 and 1938 in the chill room of Matson Line steamers, hoping thus to successfully evade the lethal equatorial temperatures. The Matson Co. has given us the following values as temperature limits: 38° F (3-1/3° C) to 40° F (4-4/9° C). The flies remained in the chill room approximately 4 weeks in each case. The shipment of 1937 was completely successful, that of 1938 a complete failure. In both cases flies were introduced into 1" x 6" test tubes containing approximately 1-1/2" of food and stoppered with extra-tight fitting gauze and cotton stoppers, well wrapped to prevent evaporation and with no holes thru the packages for ventilation. Our experience in general, especially for airplane transfers, has indicated that evaporation is a much more serious hazard than lack of ventilation. The flies were kept at 25° C for approximately 8 days before being placed in the chill room with the hope that some individuals in a relatively resistant stage of development would at least survive. In the 1938 (unsuccessful) shipment the standard cornmeal-molasses formula (Bridges, DIS-6:27), to which was added about .07% Moldex A, was used. In the 1937 (successful) shipment the medium was approximately the same except that only 1% of agar was used and about .75% of cooked dried yeast added. Very likely the failure in 1938 was due to the use of too dry a medium; probably a very wet medium would be best for such low temperatures.

Sidky, A. R. New spoon for egg counting, and method for seeding. While studying egg-laying in Drosophila a new spoon for egg counting was constructed and used instead of the ice cream paper spoon commonly used. It proved very satisfactory. The spoon is made of aluminium of about 0.5 mm. thick. Its shape and dimensions are shown in the illustration. The width of the spoon is so planned



that it just fits the vials used. The 150 ordered by the Institute were supplied at one penny each. The food is poured into spoons in a liquid state through a funnel fitted with a rubber tube and aclamp. The food takes about one minute to harden. A large number of spoons can be prepared in a very short time so that a few days' supply can be prepared and kept in a refrigerator. This spoon is superior to the paper one in the following respects: (1) The main advantage is that, the surface being level, one can count all the eggs with one focussing and so save much time. (2) The food is of uniform thickness and the edges do not get dry and make counting or collecting the eggs difficult. (3) The food does not stick to the spoon, and when it is to be removed for incubation, etc., it can be lifted completely out of the spoon by merely inserting the point of a blade or a needle. No eggs are lost or crushed in the process. (4) Being made of aluminum it is very durable, stands any amount of boiling and sterilizing, and is very easily cleaned. It does away with the recoating with paraffin which is necessary with the paper spoons. The counting is done by marking the surface of the food with a needle and so dividing it into two or three rectangular areas according to the field of the binocular, and passing the spoon backwards and forwards while counting. Instead of the usual method of allowing a drop of yeast to fall on the food, which results in the yeast growing into a large lump containing many eggs and so renders the counting difficult, painting the surface of the food with a thin suspension of yeast using an ordinary small camel hair brush thus providing a uniform thin film of yeast, gave very good results.

Slizynska, Helen. The method for obtaining any number of virgin females.

Since the sex in Drosophila can easily be determined at the larvae stage, the way of collecting virgin females is based upon the separation of females larvae from the males. The female flies gathered in this way are beyond any doubt virgin.