## AN IMPROVED INSECT COLLECTING CAGE

PAUL C. BEAVER AND ORLIN K. FLETCHER, JR.

The insect collecting cage described below was evolved to fulfill the requirement for a simple, easily constructed apparatus to facilitate the preservation of anopheline mosquitoes in the field. It is, however, readily adaptable for the collection of insects other than mosquitoes. In comparison with the well known lamp-chimney type of collecting cage the improved design has the advantages of greater strength and durability, simplicity of construction, and of being constructed of readily procurable materials.

The main body of the cage is composed of an ordinary screw-cap glass jar which may be varied in size from one-half pint to one gallon to suit the individual needs of the user. The particular type of jar used is equipped with a cap of two piece construction, composed of an outer band or ring which screws onto the neck of the iar and retains a center insert or seal. This center insert or seal is discarded and replaced with the door or baffle through which the insects are introduced into the cage by means of an aspirator or collecting tube. The door or baffle to the cage is formed from a disc of heavy sheet rubber (automobile inner-tube is excellent material for the purpose) and a disc of screen wire (16 or 18 meshes to the inch) as illustrated in figure 1. Since the disc fits over the mouth of the jar to close the opening, it should be of the same diameter as the insert which was removed from the cap. A circular opening, one inch in di-

ameter, is cut from the center of the screen wire disc to permit passage of the aspirator or collecting tube. Two slits one inch long, bisecting each other at right angles, are cut in the center of the rubber disc and a series of small holes, about onefourth inch in diameter, are punched onefourth inch from the edge. The rubber disc is then superimposed upon the screen wire disc, and the two are stapled together with a paper-stapler. Or, if desired, the rubber disc may be vulcanized to the wire one. The slits in the rubber disc should be directly over the center opening which was cut in the screen wire and form flaps which effectively close the opening yet permit the introduction of insects. The small holes which were punched along the outer edge of the rubber disc serve as exhaust openings when the insects are blown into the cage from an aspirator, and also provide for ventilation. To complete the cage, the finished door or baffle is placed inside of the screw band (from which the insert has previously been removed) and the assembly screwed onto the mouth of the jar. The baffle-cap assembly is the fundamental part of the cage, and, since all common type fruitiars, regardless of capacity, have openings of identical size, the baffle may be readily transferred from a small to a large jar, or vice versa, to suit the requirements of the moment. To clean or empty the cage it is necessary only to unscrew and remove the cap.

MOSQUITO CONTROL INSPECTION TOUR
SEE PAGE 181

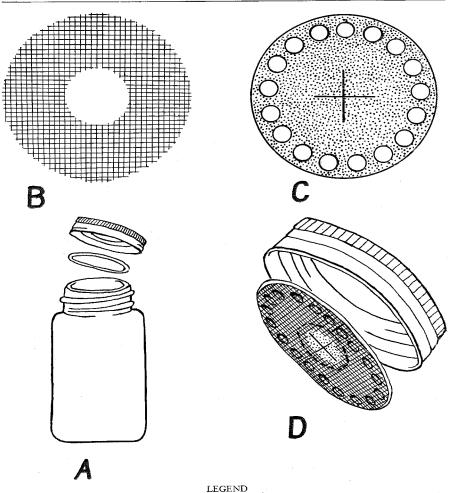


Fig. 1.—Component parts of the insect collecting cage. A. Fruit jar with two-piece screw cap consisting of seal disc and retaining band. B. Screen wire disc having diameter equal to that of seal disc and with one-inch hole cut in center. C. Sheet rubber disc having diameter equal to that of seal disc, and with one-inch slits at center and quarter-inch holes punched around its edge. D. Finished door or baffle consisting of the original retaining band and units "B" and "C" stapled together.