

**THE MOUNTING OF BUTTERFLIES FOR NATURE STUDY.**

The collecting of insects and butterflies has had its devotees since ancient times, but few people have any conception of the magnitude of the industry called forth by it. In recent years, moreover, the addition of nature study to the courses of the public educational system in the United States has largely augmented the trade in collecting, preparing, and distributing insect specimens. These are gathered all over the world by collectors—sometimes exclusively and sometimes incidentally insect gatherers—and shipped for preparation and export to distributing centers, which are found in nearly every large city here and abroad. For the information herein in regard to this trade we are indebted to Mr. O. Fulda, of New York.

The prepared butterflies are sold for educational and decorative purposes, and to private and professional collectors. The last two deal almost entirely in the single specimens shown in the photograph, and for their convenience a list is kept of the constantly changing stock. For educational purposes the specimens are prepared and mounted in such a manner that they will present not only the butterfly itself, but also its entire life, egg, caterpillar, cocoon, butterfly, its food and method of procuring it, the plants on which it exists, and frequently its parasites. For decorative purposes the butterflies and plants or flowers are chosen for the artistic effect and color scheme, and are handsomely framed. The results as shown in two of the photographs are frequently of great beauty.

The introduction of plants into the mounting of these specimens has brought into being an industry of some size in itself in collecting and preparing them. That the plants may retain their natural colors, they must be pressed almost immediately after they are gathered; and to accomplish this, Mr. Fulda uses a special press of light weight and easily carried, in which the plants are placed between sheets of cotton, these between pieces of cardboard, and these again between sheets of corrugated cardboard, and the pressure then applied. If it is necessary to dry the flowers or foliage quickly, the hot air from a lamp placed under the press is allowed



Mounted Specimens for Educational and Decorative Purposes.



to pass between the corrugations, and in a few hours the plant is ready to be mounted.

The butterflies themselves are merely dried with great care, pinned upon a special drying board. In this board there is a channel in which the body of the butterfly is placed, so that the wings may be pinned absolutely flat. This method leaves the specimen rather brittle, but with care it may be preserved indefinitely. The cocoons and small insects like the parasite shown in the photograph are prepared in a similar manner, but the method of preserving the caterpillars is different. The interior portion of the caterpillar is removed by carefully pressing it out, and the empty skin then inflated with hot air and allowed to dry. This preserves the true form and color and prevents decay. The specimens are mounted in an excellent manner by being placed in shallow cardboard boxes, filled with cotton and covered with glass lids.

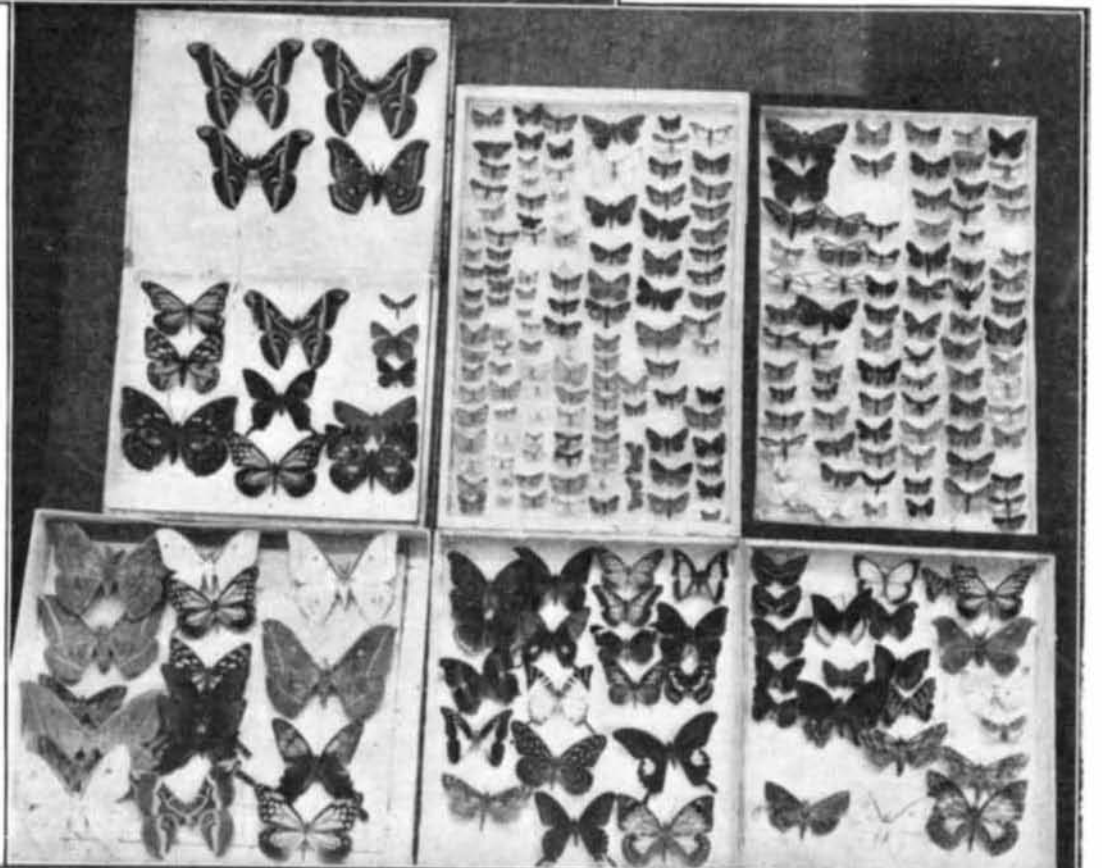
The butterflies are sent by the gatherers to the distributing centers in squares of paper folded to form a triangle, as shown in the illustration. The specimen dries out fairly well in this way, and may be kept for years before being mounted. It is only necessary to place it in wet sawdust for a few hours to soften it, and it may be pinned in the regular manner upon the mounting or drying board.

While the rarer butterflies or those existing in wild countries are taken in their natural state, the commoner varieties are to-day raised by the thousand upon farms especially devoted to their culture.

Father Joseph Murgas, of the Sacred Heart Church of Wilkesbarre, Pa., is the inventor of a wireless system of communication on which he has been working for seven years. He was recently granted the seventh patent covering the different features of the system. He says he has conducted communication with a station located two miles from his workshop. The latter is in the rear of the rectory, and he says that any money he derives from his work will be turned over to the church. Father Murgas took degrees in electrical science in Vienna eighteen years ago, and has kept abreast of all developments in electricity ever since.



Educational Group, Showing Complete Life of Butterfly, Its Mode of Living, and Its Parasite.



Mounting the Butterfly Upon the Drying Board.

Single specimens Sold Cheaply to Collectors.