

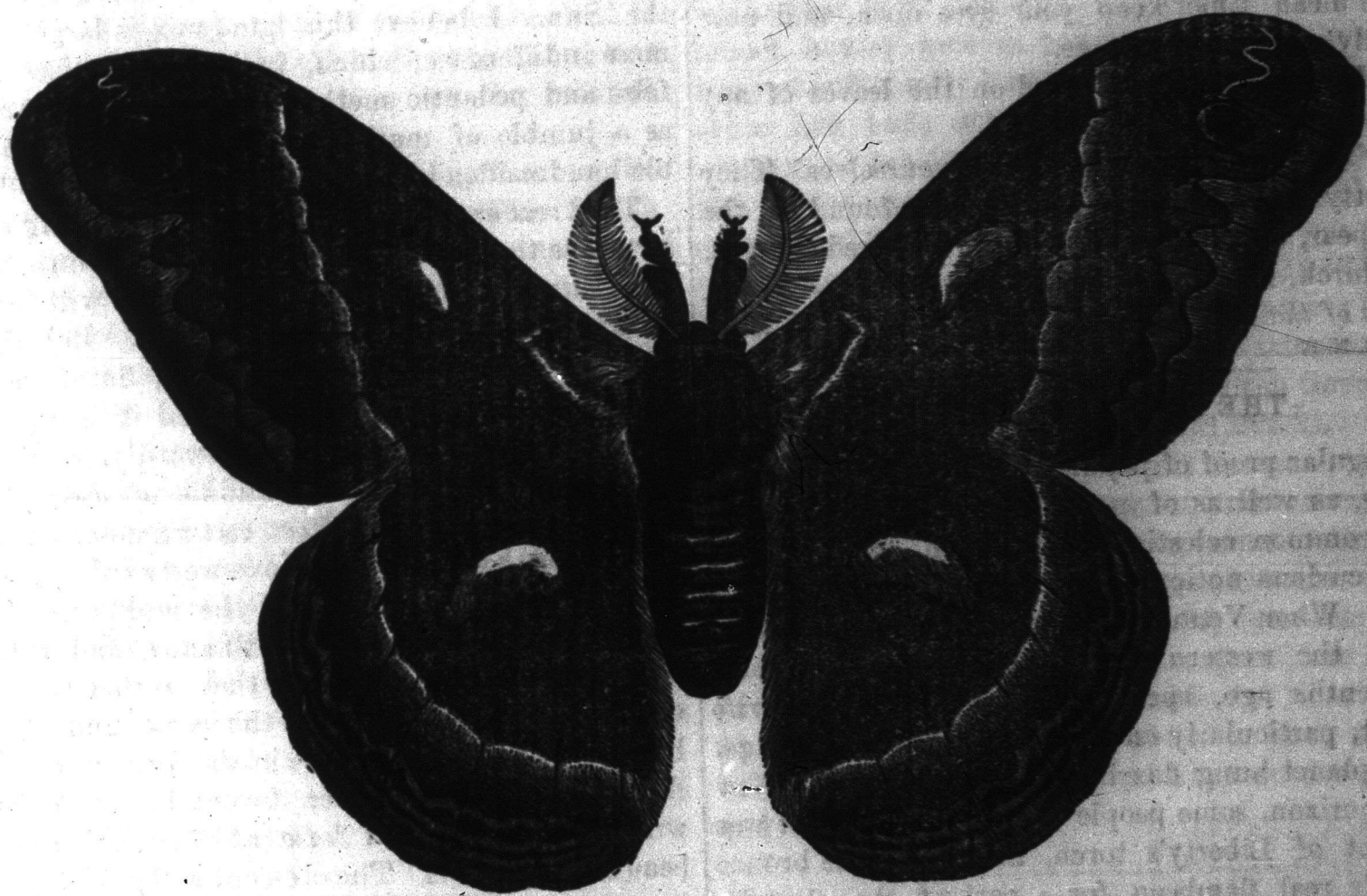
with a coat of very fine, silky fur, brownish red with bands of white. Two large, feathery horns are pressed back over its head. Now the horns are out and standing up.

T. These two feathery horns are called *antennæ*. When the antennæ are simply like two bristles with a knob on the end of each, the insect is known as a butterfly; but when they are feathery or thickened in the middle they are called moths. So this is a true moth.

CHORUS. It is all out. What an ugly thing! Such a big, soft, wet looking thing, and such absurdly small, wet-looking wings! See how it clings to the under side of its cocoon, and appears to be trying to spread its wings.

These scale feathers appear only as colored dust to the naked eye.

When the female is at liberty, in a short time she begins to deposit her eggs, of which she has between two and three hundred, on the underside of the leaves of plants. The eggs are about the size of a head of a pin, of a dirty white color, with a reddish mark near the middle. The eggs are generally glued on to the leaves in pairs. In a week, or week and a half, the eggs are hatched and out comes a small, black, knobby caterpillar, which naturalists call the *larva* of the moth. Larva is the Latin word for a mask. And no one will dispute that the Cecropia Emperor-moth is completely masked when it appears as a caterpillar. This black larva eats voraciously,



THE CECROPIA EMPEROR-MOTH. (*Platysamia Cecropia*.—Linn.)

T. Watch its wings.

S. Oh! they are growing larger. You can see them growing.

T. Yes, and in half an hour you may see them measure half a foot from tip to tip. They will be nearly full grown before our lesson is done. While watching our moth completing its pupa stage and becoming the perfect insect—or *imago*, as the naturalists call it in Latin—we shall note the balance of its life's history. Here is a sketch of the form it will have in a very few minutes. General color, greyish brown, variegated with shades of white, red and black. The colors are in the minute scales which cover the membranous skin of its wings instead of feathers.

and casts its skin several times, each time becoming nearer in size and color to the large pale green caterpillar, three or four inches long, with its curious knobs in red, yellow and blue.

S. Do they eat much?

T. One or two placed on a young apple tree will in a short time strip it of all its leaves.

S. And one moth may produce 200 or 300 of them?

T. Yes.

S. Suppose 100 of these to become perfect female moths by next summer, then one moth this summer might produce over 20,000 caterpillars by the end of next summer, any two or three of which could strip an apple tree.