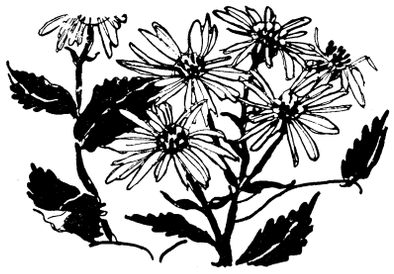
BOTANY

NATURE RAMBLINGS

by Frank Thone



Many in One

➤ LATE SUMMER is the time of the Compositae—that great botanical family that comprises such diverse plants as sunflowers and asters, thistles and ironweed, goldenrod and coneflower, and even cocklebur and ragweed. True, there are plants belonging to this group that begin blossoming early—few spring flowers show their faces before the dandelion, for example—but in general the composites really get going after the sun starts on a southward trek, and keep it up until frost ends the show.

It may surprise persons who are not specifically trained in botany to hear of plants that look so little alike as wild aster and cocklebur as being in the same family. The kinship, however, is pretty well established, and is based primarily on one thing: the tight grouping of a number of small units which are the single flowers into one collective or composite flower head. Whence, incidentally, the name *Compositae*.

The makeup of a composite flower head can be probably most easily studied by taking apart a specimen of the largest of them—a sunflower. Cut or break the big disk of a sunflower in two, and pry out a few of the separate units you will find set in it. You will find that each of these units, which is eventually going to be a sunflower "seed", carries at its top a set of stamens and a two-parted stigma, or pollen-catching organ, and that there is a pair of short chaffy scales outside of these. This is all that remains of the showy parts of the flower, except in the row of units around the rim where the so-called ray flowers are. Here the petals survive; but what appears to be one big petal is really five, joined edge to edge and spread out flat.

That is a condensed (possibly over-condensed) description of the flower-arrangement in just one kind of composite. There are many variations. The bushy purple head of a thistle, for example, has flowers all alike all over the disk. They all have petals, but these are united into a narrow tube instead of being split along one side and spread out flat, as in the sunflower's ray-flowers. And obnoxious weeds like cocklebur and ragweed have no recognizable petals at all. The number of individual units, or flowers, in a head varies greatly, from several hundreds in a big sunflower down to a few dozens in a wild aster, or even to fewer than that, in the small flower-heads of some of the goldenrods.

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The U. S. *Mint* turned out during 1944 approximately 8,000,000 coins for more than a score of friendly nations.

Specially treated *cotton,* made flame-resistant and water-repellent, will probably have wide use in the future for insulation purposes because it is light and highly resistant to the passage of heat.