CHAPTER VI

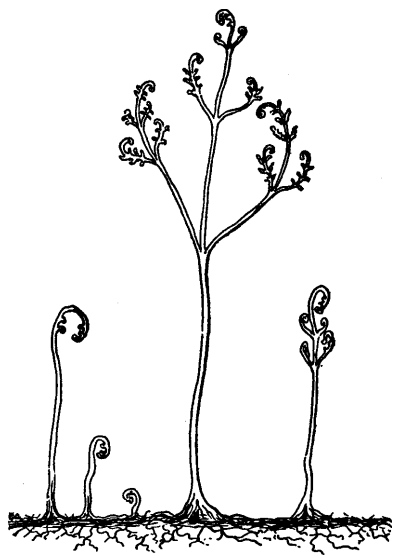
WILD PLANTS WITH EDIBLE STEMS AND LEAVES

I often gathered wholesome herbs, which I boiled, or eat as salads with my bread.

Gulliver's Travels.

WHAT would you say to a dish of ferns on toast? It is quite feasible in the spring, if the Common Bracken *(Pteris aquilina* L.) grows in your neighborhood-that coarse, weedy-looking fern with long, cord-like creeping root-stocks and great, triangular fronds topping stalks one to two feet high or more, frequent in dry, open woods and in old fields throughout the United States—the most abundant of ferns. The part to be used for this purpose is the upper portion of the young shoot, cut at the period when the fern shoot has recently put up and is beginning to uncurl. The lower part of the shoot, which is woody, and the leafy tip, which is unpleasantly hairy, are rejected. It is the intermediate portion that is chosen, and though this is

loosely invested with hairs, these are easily brushed off. Then the cutting, which resembles an attenuated asparagus stalk, is ready for the pot. Divided into short lengths and cooked in salted, boiling water until quite tender-a process that usually requires a half to three quarters of an hour-the fern may be served like asparagus, as a straight vegetable, or on toast with drawn butter, or as a salad with French dressing. The cooked fern has a taste quite its own, with a suggestion of almond. Its food value, according to some experiments made a few years ago by the Washington State University, is reckoned as about that of cabbage, and rather more than either asparagus or tomatoes. Furthermore, the rootstocks of this fern are edible, according to Indian standards, and are doubtless of some nutritive worth as they are starchy, but the



BRACKEN SHOOTS
(Pteris aquilina)

flavor does not readily commend itself to cultivated palates.

Dietitians who insist on the value of salads as part of a rightly balanced ration have a strong backer in Mother Nature, if we may take as a hint the large number of wild plants which everywhere freely offer themselves to us as "greens" -all wholesomely edible and many of decided palatability. Especially in the spring, when the human system is starving, for green things and succulent, the earth teems with these tender wilding shoots that our ancestors set more or less store by, but which in these days of cheap and abundant garden lettuce and spinach we leave to the rabbits. To know such plants in the first stages of their growth, when neither flower nor fruitage is present to assist in identification-the stage at which most of them must be picked to serve as salads or pot herbs-presupposes an all-round acquaintance with them, so that the collector must needs be a bit of an expert in his line, or have a friend who is.

There is one, however, that is familiar to everybody-the ubiquitous Dandelion, whose young plants are utilized as pot-herbs particularly by immigrants from over sea as yet too little Americanized to have lost their thrifty Old World ways. It is a pleasant

sight of spring days to see these new-fledged Americans dotting the fields and waste lots near our big cities, armed with knives, snipping and transferring to sack or basket the tender new leaves of the well-beloved plant, which, like themselves, is a translated European. The leaves are best when boiled in two waters to remove the bitterness resident in them; and then, served like spinach or beet-tops, they are good enough for any table. Old Peter Kalm, who has ever an eye watchful for the uses to which people put the wild plants, tells us the French Canadians in his day did not use the leaves of the Dandelion, but the roots, digging these in the spring, cutting them and preparing them as a bitter salad.

Then there is Chicory, which has run wild in settled parts of the eastern United States and to some extent on the Pacific coast, adorning the roadsides in summer with its charming blue flowers of half a day. Its young leaves, if prepared in the same way as those of the Dandelion, are relished by some. Preferably, though, the leaves are blanched and eaten raw as a salad. The blanching may be done in several ways. The outer leaves may be drawn up and tied so as to protect the inner foliage from the light and thus whiten it, or flower-pots may be capped over the plants. Another method is this:

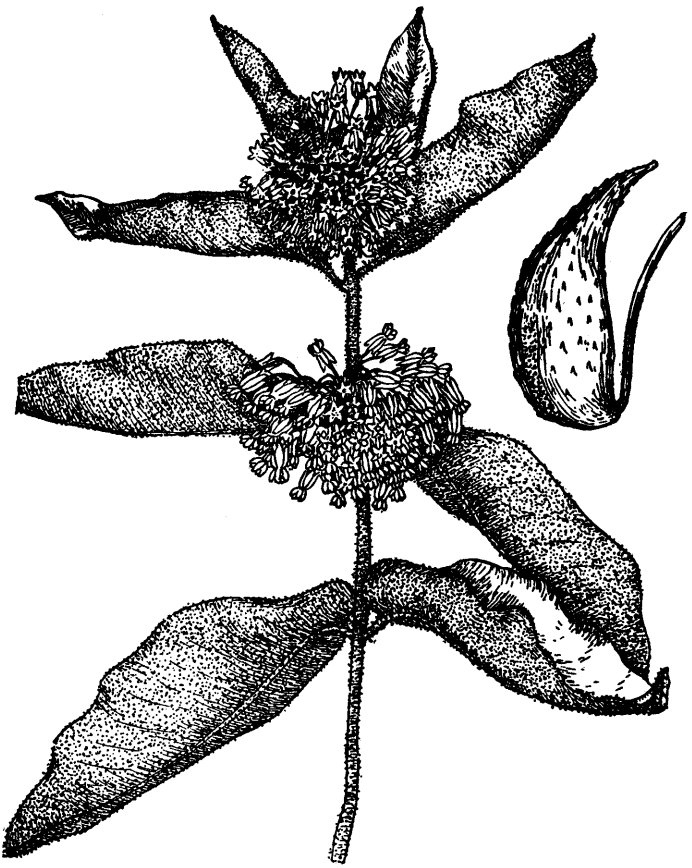
CHICORY
(Cicorium Intybus)

Dig up the roots in the autumn, cut back the tops to within an inch of the root-crown and bury the roots to within an inch of the top in a bed of loose mellow earth in a warm cellar. In a month or two,

new leaves should appear, crisp and white and ready for the salad bowl.

Another old-fashioned pot-herb that may be gathered freely in the spring is the early growth of that familiar weed of gardens and waste places throughout the land, the homely Pigweed *(Chenopodium album,* L.), or Lamb's quarters. This latter queer name, by the way, like the plant itself, is a waif from England, and according to Prior [1] is a corruption of "Lammas quarter," an ancient festival in the English calendar with which a kindred plant *(Atriplex patula),* of identical popular name and usage, had some association. Of equal or perhaps greater vogue are the young spring shoots of the Pokeweed *(Phytolacca decandra,* L.) boiled in two waters (and in the second with a bit of fat pork) and served with a dash of vinegar. So, too, the first, tender sprouts of the common eastern Milkweed *(Asclepias Syriaca,* L.) have garnished country tables in the spring as a cooked vegetable, but the older stems are too acrid and milky for use. Mr. J. M. Bates, writing in "The American Botanist," speaks of this and of the closely related species, *A. speciosa,* Torr., of the region west of the Mississippi, as the best of all wild greens, provided they are

1 "On the Popular Names of British Plants," R. C. A. Prior, M.D.



MILKWEED
(Asclepias Syriaca)

picked while young enough, that is, like asparagus sprouts and while the stems will still snap when bent. Young leaves and all are good in that stage of growth.

The Buckwheat family, which has yielded to civilization not only the grain that bears the family name but also the succulent vegetable Rhubarb, has some wild members with modest pretensions to usefulness. That common weed, naturalized from Europe, the Curled Dock *(Rumex crispus,* L.), for instance, is of this tribe; and its spring suit of radical leaves stands well with bucolic connoisseurs in greens. Another Rumex *(R. hymenosepalus,* Torr.), common on the dry plains and deserts of the Southwest and becoming very showy when its ample panicles of dull crimson flowers and seed-vessels are set, is famous there as a satisfactory substitute for rhubarb, which, indeed, the plant somewhat resembles. The large leaves, nearly a foot long, are narrowed to a thick, fleshy footstalk, which is crisp, juicy and tart. These stalks, stripped off before the toughness of age has come upon them, and cooked like rhubarb, are hardly distinguishable from it. Westerners know it as Wild Rhubarb, Wild Pie Plant, and Cañaigre. Under the last name it has some celebrity as tanning material, the tuberous roots being rich

WILD RHUBARB
(Rumex hymenosepalus)

in tannin and having been long used by the Indians in treating skins. The tannin is extracted by leaching the dried and ground roots.

To the same family belongs the vast western genus *Eriogonum*, which includes that famous honey plant of the Pacific coast known as Wild Buckwheat. Some members of this genus are prized by the Indians and children for the refreshing acidity of the young stems-a quality of distinct value in the arid regions where many of them grow and where one is " a long way from a lemon. " Among such is *Eriogonum inflatum*, T. & F., the so-called "Desert Trumpet" or "Pickles," found abundantly on the southwestern desert as far north as Utah and eastward to New Mexico. It is remarkable for its bluish-green, leafless stalks, hollow and puffed out like a trumpet, sometimes to the diameter of an inch or so, and rising out of a radical cluster of small heart-shaped leaves. The stems before flowering are tender and are eaten raw.

The peppery, anti-scorbutic juices of the Mustard family supply a valuable element in the human dietary everywhere; and besides the important vegetables and condiments that represent it in our gardens-such as cabbage, turnips, radishes, horseradish, etc.-there are several species growing wild

that have been proved of worth. Water-cress, known to everybody *(Nasturtium officinale* R. Br.) and originally introduced, at least in the East, from Europe, is now a common aquatic throughout a large part of the United States and Canada. The waters of springs and brooks are often found thickly blanketed with green coverlets of this plant dotted with the tiny white flowers, and lending spice to the wayfarer's luncheon. Winter Cress, Yellow Rocket, or Barbara's Cress *(Barbarea vulgaris,* R. Br.) used to be very generally eaten by people of humble gastronomic aspirations, so that it has acquired the additional name of Poor Man's Cabbage, being prepared either as a pot-herb or as a salad. It is abundant by roadsides and in low-lying fields quite across the continent, and, in fact, almost around the world, and was no doubt cultivated in our colonial gardens. Even in winter, when the snow melts enough to show bare patches of earth, the tufted, thickish leaves of this sturdy mustard are frequently revealed, green and alive, hugging the ground. The lower leaves are of the shape that botanists call lyrate-that is, long and deeply lobed, with one to four pairs of segments and a terminal one large and roundish. In early spring it sends up a spike of showy, yellow, four-petaled flowers. Quite similar

WINTER CRESS
(Barbarea vulgaris)

to this, and by some botanists considered only a variety of it, is the Scurvy Grass *(Barbarea praecox,* R. Br.), with leaf divisions more numerous than those of the Winter Cress. It, also, is used as a winter salad. It must have been very grateful to systems suffering from the unvaried ration of salt meat that too often distinguished the winter tables of our rural ancestors.

In the same class are two large cruciferous plants of the arid regions of the Far West, that go by the name of Wild Cabbage among the whites who know them. Their tender stems and leaves have a cabbage-like taste and have at times gone into the pioneer's cooking pots. One is *Stanleya pinnatifida,* Nutt., found in dry, even desert soil, from South Dakota to New Mexico and westward to California, a stout, smooth perennial, two to four feet tall, with lower leaves divided into slender segrnents and with long racemes of yellow, four-petaled flowers, succeeded by slender seed-vessels downwardly curved on long foot-stalks. The other is *Caulanthus crassicaulis* (Torr.), Wats., found on dry foothills of the interior basin from the Sierra Nevada to Utah. It, too, is a stout, smooth perennial, two to three feet high, but with hollow, inflated stems, leaves mostly radical and in shape somewhat like a dandelion's,

and dark-purple flowers each with four crisped, wavy petals little larger than the woolly calyx. The young plants, while still tender, are edible but need to be cooked. The process pursued by the Panamint Indians is thus described by Coville: "The leaves and young stems are gathered and thrown into boiling water for a few minutes, then taken out, washed in cold water, and squeezed. The operation of washing is repeated five or six times, and the leaves are finally dried, ready to be used as boiled cabbage. Washing removes the bitter taste and certain substances that would be likely to produce nausea or diarrhoea."

One would suppose that the stinging Nettle (*Urtica dioica.*, L.) would be as unlikely a subject as one could readily find to supply a morsel wherewith to tickle the palate. Nevertheless, this "naturalized nuisance," as good old Doctor Darlington of "Flora Cestrica" fame testily styles it, has long been valued as a vegetable in Europe, whence the plant has come to us. There the tender shoots, cut before the flowering stage, were served in old times on the tables of the well-to-do as well as of the peasantry. On a day in February, 1661, Mr. Samuel Pepys, of immortal memory, ingenuously set down in his diary the fact that calling upon one

Mr. Simons in London, he found the gentleman abroad, "but she, like a good lady, within, and there we did eat some nettle porridge, which was made on purpose to-day for some of their coming, and was very good." Was it not Goldsmith who wrote that a French cook of the olden time could make seven different dishes out of a nettle-top?

Along our Southwestern border from Texas to California and southward into Mexico a species of Amaranth grows *(Amaranthus Palmeri,* Wats.), known to the Mexicans and Indians as *quelite* (a general name among the Mexican population, I believe, for greens) or more specifically as *bledo.* The latter word is good Spanish for "blite," an Old World pot-herb. *Quelite* is highly regarded when young and tender as a vegetable for men, and, when cut and stacked, as a winter feed for cattle. It is a stout, weedy annual, two to four feet high, the ovate leaves one to four inches long on footstalks about twice that length, the greenish flowers of two sexes (on different plants) disposed in long, dense chaffy spikes. Only the young plants should be gathered; they should then be boiled without delay, and the result, in the judgment of white people who know it, is a dish resembling asparagus in flavor, and rather superior to spinach. Mexicans and Indians have

used it extensively.[2] Other species of Amaranths have been similarly turned to account.

This little course in wild pot-herbs may now be closed with mention of three members of the Portulaca family. These plants are marked by smooth, succulent, thickish leaves, and though humble herbs, they are usually found, when found at all, in sufficient abundance to be very noticeable. Most familiar is the little prostrate plant common everywhere in fields and waste places, called Purslane *(Portulaca oleracea,* L.). It is generally regarded by Americans as a weed and provokes the temper by its stubborn persistence in turning up after it has apparently been eradicated. It has, however, held quite a respectable social position abroad, where gardeners have cultivated it and developed it as a wholesome vegetable useful not only as a pot-herb but for salads and pickles. On the Pacific slope a cousin of the Purslane, known as Miner's or Indian Lettuce *(Montia perfoliata,* Howell), is abundant in shady places. It is easily recognized by clustered, long-stalked, fleshy root-leaves, rhomboidal in outline, from among which a flower stalk rises to the height of several inches. This is terminated by a raceme of tiny white flowers beneath which a pair of oppo-

2 Lumholtz, "New Trails in Mexico."

MINER'S LETTUCE
(Montia perfoliata)

site leaves united at their bases forms a cup or saucer around the stem, a diagnostic feature of the plant. The Indians were very fond of the pleasant succulence of the stem and leaves and their consumption of the herb led the white pioneers to try it. It makes, indeed, a palatable enough dish, either raw with a sprinkling of salad dressing or boiled and served like spinach. Stephen Powers tells of a certain tribe of California Indians who were accustomed to lay the leaves near the nests of red ants, which running over the greens would flavor them with a formic acidity that served in lieu of vinegar![3] The value of this little wilding is attested by its introduction into English kitchen gardens, where, under the name of Winter Purslane, it is esteemed as a pot-herb and a salad plant.

Also of California is another of the Portulaca kinship, the pretty wild flower known as Red Maids or Kisses *(Calandrinia caulescens Menziesii.* Gray), whose crimson blossoms expanding in the sunshine make sheets of vivid color over considerable areas in the spring. The plant is an annual with. juicy stem and leaves, and may be used like those others of its family just mentioned as a garnish to a meal.

If, as we have seen, the Nettle may be made to

[3] "Contributions to North American Ethnology," vol. III, 425.

grace the table, it is quite credible that within the spiny armor of the Cactus tribe nutrition may be hiding. As a matter of fact, in the Southwest the Mexican and Indian population resort to the Nopal (that is, the flat-jointed sort of *Opuntia)* not only for the tuna fruit, as described in a previous chapter, but also for the succulent flesh of the stem, which may be made to do duty as a vegetable. The Mexicans call these flattened joints *pencas,* and gather the young ones when about half grown and before the spines have hardened. Cut into narrow strips, boiled until tender and served with a tasty dressing or just salt and pepper, they are about in the class of string beans, particularly grateful to desert dwellers whose craving for green food it is not always easy to satisfy. There is a bluish-green, procumbent cactus without spines *(Opuntia basilaris,* Engelm.) common in the southwestern deserts, that has been in particular favor with the Indians, and the Panamint method of preparing it, as recorded by Mr. Coville,[4] may be stated here: In May or early June the fleshy joints of the season's growth, as well as the buds, blossoms and immature fruit, are distended with sweet sap. The joints are then broken off and collected, carefully rubbed with grass to remove the

4 The American Anthropologist, October, 1892.

tiny bristles, and spread in the sun to dry. After being thoroughly dried, they will keep indefinitely, and are boiled as required and eaten with a seasoning of salt. An alternative process is to steam the joints for about twelve hours in stone-lined pits first made hot by a fire of brush. The cactus, thus cooked, may be eaten at once or dried and laid away for future use. It then has the texture and appearance of unpeeled dried peaches.

From the curious, cylindrical, keg-like bodies of another cactus of the Southwest *(Echinocactus* sp.), termed *bisnaga* by the Mexicans, or Barrel Cactus by polite Americans (others sometimes style it Nigger-head), a sort of conserve used to be made by the Papago Indians of Arizona-the prototype of the so-called "Cactus Candy " of city shops. The process, as described by Dr. Edward Palmer, was to pare away the thorny rind of a large specimen and let it remain several days "to bleed." Then the pulp was cut up into pieces of suitable size and boiled in the syrup of the Sahuaro pitahayas, obtained as described in the preceding chapter. Another and more important use of this cactus will be described later.

Few plants of the Southwestern desert region are more interesting and useful than the Agave, a genus

of the Amaryllis family. Its general aspects are made familiar through the well-known Century Plant of cultivation. There are a dozen species or more indigenous within the limits of the United States, ranging mostly along the Mexican border from Texas to California. For years-ten to twenty, it may be-the plant devotes itself exclusively to developing a rosette of slender, pulpy, dagger-pointed leaves, stiff and fibrous. Then some spring day, within the center of this savage leaf-cradle, a conical bud is born and develops quickly, a foot a day it may be, into a huge, asparagus-like stalk, twelve or fifteen feet tall, that breaks out at the summit into clusters of yellow blossoms. This long delayed consummation costs the plant its life, and with the maturing of its seeds it turns brown and withers away. It is from a Mexican species of Agave that the Mexicans manufacture their desolating drinks *pulque* and *mescal.* The United States species, however, have been little turned to such account, but as a nutritive food source they have from very ancient times been important to the Indians. This food shares with the fiery Mexican drink the name *mescal.* Even at the present day, when the ease of extracting a meal from a tin can has been the cause of relegating many an honest

old-time cookery to oblivion, there are Indians who pack up every spring and repair to the mescal fields, there to open again the ancient baking pits which their fathers and their fathers before them had used, and camp for a week at a time, cutting and cooking, feasting and singing, and telling once more the immemorial legends of their race.

The process of preparing mescal as I happen to have observed it in California is this : The succulent, budding flower-stalks when just emerging from amid the leaves are cut out with an axe, or better yet with a native implement fashioned for the purpose-a long, stout lever of hard wood (oak or mountain mahogany) beveled at one end like a chisel. They are then trimmed of their tips and all adhering leafage, the desirable portion being the butt, which is filled with all the pent-up energy that the plant was holding in reserve for the supreme act of flower and seed production. Meantime, a circular pit, about a foot and a half deep and five or six feet in diameter, has been prepared-usually one that has been used in previous years being dug out. This is lined side and bottom with flat stones, and a huge fire of dry brush started in it, care being taken to use no wood that is bitter. When the fire has burned down, the mescal butts are placed in the hot ashes, covered

over with more hot ashes and heated stones from the sides of the pit, and all is then buried beneath a mound of earth. There the mescal is left to steam until some time the next day, like the four-and-twenty blackbirds of the nursery rhyme in their pie. When the pit is opened the mescal, still hot and now charred on the outside, is drawn out, the burnt exterior pared off, and the brown, sticky inside laid bare, to be eaten on the spot or laid away to cool and be transported home for future use. If the buds have been cut young enough, mescal is tender and sweet, the flavor suggesting a cross between pine-apple and banana and pleasant to most white palates. Indians are extravagantly fond of it, and it is rare indeed that the stock carried home lasts over the following summer. Should the buds be too old when cooked, the result is unpleasantly fibrous, though in such cases one need only chew until the edible part is consumed, when the fibre may be spat out. Mr. Coville, in his account of the Panamints above quoted, speaks of finding at some forsaken Indian camps along the Colorado River, dried and weathered wads of chewed mescal fibre-visible reminders of forgotten feasts.

Denizens of the same region with the Agaves, and

Southwestern Indian cutting mescal (Agave deserti) for baking.

somewhat resembling them, are several species of *Dasylirion*, but the leaves, which form a crown upon a central stem, are much narrower and the small flowers are white and constructed on the plan of the lily. They are called, in popular parlance, Bear-grass, from Bruin's fondness for the tender stalks, or more generally by their Mexican name, *Sotol*. The budding flower-stalks are to some extent used like mescal-roasted and eaten. So, too, the beautiful *Yucca Whipplei*, Torr., abundant throughout Southern California and adjacent regions, has been made to add variety to the aboriginal menu. The splendid flower masses of this plant, several feet in length and rising in pure white spires out of a bristling clump of slender, rigid, spine-tipped leaves, are a famous sight in parts of the Southwest. Americans call this Yucca " Spanish Bayonet," or sometimes more poetically "The Lord's Candle." To Mexicans it is *quiote*, one of the many Aztec terms that survive with little mutilation in the Spanish dialect of the Southwest. The flower-stalk, when full grown but before the buds expand, is filled with sap and is edible, cut into sections and either boiled or roasted in the ashes. The tough rind should first be peeled off. The flower buds, too,

make a palatable vegetable, if boiled, and serve as a succulent side-dish to the camper's usually monotonous dry diet.

On the Southeastern rim of our country from North Carolina to Florida, a common tree is the Cabbage Palmetto *(Sabal Palmetto,* R. & S.), which South Carolina has adopted as so peculiarly her own that she is known as the Palmetto State. It is a palm of much the general look of the California Fan Palm, though it never attains so great a height as the latter often does. All palms grow by the development of a central, terminal leaf-bud, and this in some species-the Palmetto is one-is turned to account as an edible, being popularly known as a "cabbage." When cooked, the Palmetto cabbage is a tender, succulent vegetable, though the harvesting of the buds is a wasteful practice, unless it is desired to clear the land, as cutting them out kills the trees.

We have it on the authority of Holy Writ that Nebuchadnezzar, king of Babylon, foregathered for a season with the beasts of the field and ate grass as oxen, finding it, it is to be assumed, a sustaining ration. The Indians of California, curiously enough, long ago acquired and maintained more persistently than the royal Babylonian a similar habit

of turning themselves out to pasture, to feast upon the patches of wild clover. This they ate raw and with greedy avidity, before the flowering stage, while the plants were still young and tender. In fact, clover was another of the aboriginal food plants esteemed as so important as to be honored with especial dance ceremonies. Chesnut speaks of seeing groups of Indians in Mendocino County, California, wallowing in the wild clover, plucking the herbage and eating it by the handful. Its nutritive content is unquestioned, if only one have the digestive organs to handle it, chemical analysis of the leaves showing the presence of food elements in good degree. Intemperate indulgence, however, is liable to cause bloat and severe indigestion. The Indians, to obviate this, learned that dipping the leaves in salted water, or munching with them the parched kernels of the Pepper-nut (the fruit of the California Laurel, *Umbellularia Californica)* is efficacious? Not all species of clover are considered equally good. The favorite, still to quote Chesnut, is the so-called "sweet clover" *(Trifolium virescens,* Greene), distinguished by stout, succulent stems, ovate leaflets, large, inflated yellow and pink flowers,

5 V. K. Chesnut, "Plants Used by the Indians of Mendocino Co., California,"

and a noticeable sweetness of taste. Of this species even the flowers are eaten. Next to this in favor is the "sour" or "salt clover" (*T. obtusiflorum*, Hook.), with narrow, saw-toothed leaflets, whitish blossoms with purple centers, and a clammy, acidulous exudation that covers the leaves and flowers.