## Studies

# of the Essex Flora. 

Cyrus Mason Tracy



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## ST U DI ES

OF THE

## EssEX FLORA:

An Enumeration of all Plants found Growing Naturally within the Limits of Lynn, Mass., and Towns adjoining; with Notes as to Localities and Habits.

By


CYRUS MASON TRACY.
$\qquad$
$17906 x^{\prime}$
LYNN, MASS.
THE NICHOLS PRESS - THIS. P. NICHOLS.
1892.

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In sweet memory of<br>LONG WALKS THROUGH FERN-LINED PATHS, OF FLOWER-LORE TAUGHT IN COOL SHADOWS,<br>AND IN<br>RICH ANTICIPATION OF FUTURE STUDY IN FAIRER FIELDS, THIS SECOND EDITION OF THE AUTHOR'S STUDIES<br>IS SENT FORTH BY<br>HIS CHILDREN.

## PREFACE.

During all the intervening years between the first publication of these studies and the present edition, it was the strict habit of the author to note every new discovery, every change in locality, preparatory to a second issue. These notes were written in a close hand, crowded into the uncut margin of an old copy. About two weeks previous to Mr. Tracy's death he decided on immediate publication. Feeling incompetent to undertake the classification of the Grasses and Sedges, he opened correspondence with several, hoping to find among them one to whom he could trust this part of the work; finding no one giving satisfaction he began the preparation of the manuscript, and had written all the headings, carrying them through the Endogens; how much further he had decided to carry the work alone we are ignorant; we have chosen, however, to leave it where he left it rather than that another should add work, perhaps of a far different character.

This explanation will make plain our reason in bringing out first a book requiring re-writing rather than one of the many already prepared. It was first in his thought and plan, therefore first in our execution.
S. E. T.

Lynn, March 19, 1892.

## ERRATA.

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Page 25}\mathrm{ for Cardimine, read "Cardamine."
    " 32 for Celastrus scandeus, read "scandens."
    " 38 for Amelanchiar, read "Amelanchier."
    " 39 for Ludwigea, read "Ludwigia."
    " 41 for Saxafrids, Saxafrage, read "Saxifrids, Saxifrage."
    " 43 for Canium, read "Comium."
    " 44 for Turritus, read "Turritis."
    "48 for Rosens, read "Roseus."
    " }57\mathrm{ for Galutheria, read " Gaultheria;" Azalea, "Azalia."
    " 66 for Echinospernum, read "Echinospermum."
    " 67 for Solonum, read "Solanum."
    " 70 for Ameranthus, read "Amaranthus."
    " }74\mathrm{ for Q. bicolar, read "bicolor."
    " 80 for Alisma, read "Alisima."
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Page 73 after E. polygonifolia, insert
Spotted Spurge, E. maculata. L.
Common. A flourishing weed in most gardens. Perhaps the only native species in this vicinity.

Page 79 after P. natans, insert
Short-spiked P. hybridus. Michx.
Occasional. Still, clear waters.

## INTRODUCTION.

No one who has followed rare old Gilbert White through his Natural History of Selborne, who has read the History of the Bass Rock, or the later volumes of Thoreau,
"Tasting of Flora and the country green,"
will ask for any labored reason why this little work has been undertaken. Those authors have abundantly shown the pleasant and entertaining nature of local research and description; and we only need look to the enduring reputation of the Florula Bostoniensis, as a practical work, to complete the argument, and assure us of the sufficiency of a limited territory to furnish material for profitable thought for a long period of time.
To Essex County, Mass., may be applied the full force of the remark of Bigelow, that "the Flora of any considerable section of our territory may furnish full occupation for years." It has been the scene of the pioneer labors of Cutler and the thorough operations of Oakes; it has given employment by turns to the scrutinizing eyes of Osgood, Nichols and Russell, as well as many others; yet not a few of the localities of this small district seem to remain comparatively unexplored.

The southwestern corner of the County, occupied by the townships of Lynn, Saugus, Lynnfield, Swampscott and Nahant, the present separated fragments of ancient Lynn, would appear to be one of the more neglected of these portions. Those who love pleasant and finely-toned scenery have often found much satisfaction in this vicinity, and the culler of choice old histories and romantic legends has long esteemed it a productive field; but the practical botanist seems, for the most part, to have pre-

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ferred to explore the vegetation of Cape Ann, to turn his pilgrimage to the White Mountains, or drive his hunt through the woods of Middlesex or the meadows of Plymouth, rather than believe that a district so near the metropolis might contain some things worth looking for. There would, perhaps, be no propriety in saying that these other sections are not, any of them, very much superior in natural riches to this; but I strongly suspect that the study of the flora, which is the subject of this work, may reveal phenomena and peculiarities of vegetation, calculated to interest even an adept.

A rather striking diversity, both in geological and botanical productions, appears in the territory under notice.

From the western part of Swampscott an extensive formation of porphyry begins, and sweeping its northern limit along a gently-curving line, follows the valley occupied by the wellknown "Lakes of Lynn" as far as the Sluice Pond, thence traverses the township of Lynn through its center, very nearly, and by a direction not far from east and west; then, passing the valley of Saugus River, in the neighborhood of Pranker's Factories, trends gradually to the southwest and is lost in the hills of Malden and Medford. South of this line there is hardly anything but porphyry to be found in place; to the north there is next to none of it, but the region has all the usual characteristics of one which rests almost wholly on granite.

As any one versed in the subject of natural scenery might expect, the aspects of these two divisions of country are widely different. In the southerly or seaboard portion, the bold eminences of High Rock, Sadler's Rock, Lover's Leap, Forest Rock, and others, well exemplify the prominent traits of the porphyry; hard, stern and precipitous on the southern side in almost every case, looking with inflexible front toward the sea, as if they were the stout old knights that in ancient time had driven back the onset of its marauding waters; and on the north as uniformly smoothed and rounded, shelving back with a gentle slope, and - sinking in the yellow soil of the hills.

The northern section, so far as it is embraced within the boundaries of Lynn, forms one spacious common forest, known as the Ox Pasture; a district where Nature seems to have dallied long and wondrously with the giants of the age of granite.

Long, deep and solid ledges furnish block after block to reward the patience of the quarrymen; and here and there their gaping pits in the hillsides afford a partial sight into one of the many caskets in which New England stores her jewels. But older and sturdier quarriers have wrought here,-the stupendous crush, and jar, and rend of the drift period have seemingly tossed the fragments, of hundreds of tons weight, like footballs, leaving them in some instances perched on the brink of precipices, in what would appear the most unstable attitudes, or again, scattering them over the hill-slopes, small and great together,

[^0]The chemist avers that to cultivate any crop successfully in the field, a studied adaption of the soil to the particular plant in view must ever be made. The converse of this rule would indicate that special characters existing naturally in a soil should give corresponding differences in the kind and style of vegetation which it produces. If I wished for an illustration of this idea, I could hardly find a better case than appears in the two formations under notice.

In passing through Lynn Woods it is not difficult to detect, even with small experience, the exact line of junction of the granite and porphyry, within a few rods, by the style of vegetation alone. A few examples will make this more definite.

On the rocky pasture hills that immediately overlook the city of Lynn, the Barberry starts in unrestrained abundance, the Privet adorns whole acres in early summer with its little clusters of snowy flowers, and the Pitch Pine and Red Cedar assert their right to the land with the vigor of feudal barons. When we pass northward over this natural mark, the Privet disappears almost entirely, the Barberry becomes the exception instead of the rule, the Cedars are scarce and the multitudes of Pitch Pine are only represented by a few stragglers. To replace them, however, the Beech, of which only two specimens grow on the porphyry to my knowledge, and these I suppose to be artificially located, starts up at once almost on the very boundary, and stretches away from thence in vigorous condition towards the woods of Lynn-
field. The Chestnut, that joy of country lads and squirrels, ventures down into the north of Saugus in commendable strength, but cannot cross the enchanted line without the help of man, and in cultivation grows slowly and timidly, as if it were ill at ease. More remarkable than either, the Black Larch or Hacmatac, which, I venture to say, is unknown as a native south of the granitic section, is found growing and thriving within fifty rods of its margin. The Blue Vervain, the Water Avens, and the Mountain Mint, look doubtfully in from the east over the channel of Stacy's Brook, but effect no further progress, and on the west the Knapweed, which revels by the wayside on the Chelsea hills, makes no attempt to establish itself on ground from which it is so singularly debarred.

If my enumeration of the plants of Lynn and vicinity serves no other purpose than to develop a phenomenon so interesting as the above, it will still be far from a vain undertaking. But this is by no means all the motive for the enterprise.
" There is a pleasure in the pathless woods; There is a rapture on the lonely shore."

To him who loves Nature for her own sake she ever dispenses rewards more precious than gold. Botanical pursuits, though harmonizing well with activity and energy of temperament, are yet potent to soothe and tranquilize the fretted spirit; they have all the quieting power which Mudie ascribes to moonlight. I do not wonder that the lamented Oakes, disturbed by the discordance of the jarring interests and conflicting elements of the law, should have taken sanctuary where
"The groves'were God's first temples."
Moore, when he wrote of the bowers
"Where Pleasure lies, carelessly smiling at Fame,"
drew but a very dim outline of that luxurious satisfaction which one feels, when, lounging down with his favorite specimens at noon, on the grassy banks of some merry little brook, with the
thousand vertical shadows gamboling among the ferns around him, he gives himself up to the full inspiration of the place, and, hardly capable of a craving, is but too well satisfied to watch the water-spider that dangles in his flimsy web from rush to rush, or the greedy emmets that hunt among the grass-blades for the crumbs of his slowly-vanishing biscuit. Or, changing the stream for the brink of some pond between the hills, his contemplation alternates from the swift ripples, that break and mutate like the figures in a kaleidoscope, to the upland banks of pleasing contour, spread with dense verdure and counterwrought in the water beneath, or to the soft light and shade that blend through the rounded masses of clumps of oak and hickory, or give additional life to long lines of " willows by the watercourses."

But botany in practice is very far from being all indolence. There are long jaunts to be taken, where the horse and carriage would fare badly and work but ill. There are hills to be climbed and tall rocks to be scaled for the prize that hangs its attractions from crevices high above reach. There are swamps to be penetrated, where the feet must risk a wetting and mock at mire; and thickets to be searched with as much carefulness as though upon a legal warrant, though the proper results of the effort may appear when the garments, like the galligaskins in the Splendid Shilling,

> "A horrid chasm disclose."

Yet how little of all this does the mind regard, at such moments as I myself have seen, when the end had crowned the work, and the object of my search was before me, humble and unpretending sometimes, yet often glowing in all the excellence of its floral dignity. I well remember a hot and weary day when, late in the afternoon, I was coursing with others over the rugged hills and crags of Malden. Tired and thirsty, I was inwardly complaining of the toilsome and profitless route, when, leaping down from a rough pole-fence, I stood face to face with the most magnificent Oak-leaved Gerardia I ever saw. Had the wealth of its yellow bells been coined to very gold in my hand, I could have felt no higher satisfaction than I had in seeing its four-foot stem, crowded with brilliant flowers, swaying to and fro in the
warm westerly wind, the magic wand to charm away, for the time, every thought of fatigue. In a certain summer I had a kind of botanical vow, which I kept long inviolate, to let no day pass without the determination of at least one new species. I was fresh in the study then, and such an idea was nowise absurd. But one day had waned until the sun had actually gone down on my errantry, which threatened to become night-errantry, sure enough. A boggy meadow, often visited before, seemed the only available spot, and to it I turned with the resolution of a forlorn hope. Fifteen minutes later, had my feet responded to my feelings, I should have been dancing among the hassocks for the discovery of the charming Cymbidium, which I had not seen before since I gathered its blushing beauties when a boy, in the meadows of Connecticut.

When I first angled the Purple Bladderwort from its oozy couch, and told my comrades that the sight of it was worth a dollar, I was only laughed at for my enthusiasm. When I found a Corydalis magnificently growing and blooming on the slope of Dungeon Rock, and detaching the whole bunch, earth and all, carried it home in my arms, that the beautiful specimen might not be injured, no one could see any good reason for my lugging so much dirt for a few flowers. I was hardly sensitive enough on the point to commence an argument: I had gained a treasure that flowered all summer for me where I set it; and long before its seeding-time, I had forgotten the wet feet I got in Pine Hill Swamp when bringing it home.

In introducing the list of plants which follows, I would be glad to incorporate into it some quality to give it the zest for others which the originals have had for me. Vitality of expression and the hue of health do not appear in the most perfect statuary; and one may read a simple enumeration of vegetable forms, and feel nothing of the fresh winds that bend the tree-tops - see nothing of the scenic effect of spreading verdure, piled-up masses of foliage, or hill beyond hill, stretching away through the softening gradations of distance.

This little district has no Merrimac or Hudson sweeping round its borders,-no Kearsarge or Wachusett standing for its protector; yet much of the higher and purer delights of open-air research, may always be enjoyed in its exploration. There are
peculiarities in every spot, and this is one where a strong feature is seen in the close connection of seaside and wood scenery; closer, perhaps, than in most other places. Suppose then, reader, we walk down to the shore. You are reading this, probably, because you like plants-Nature in vegetative attire-and like them well enough, I trust, to go where they grow by means of your own powers, not waiting to call for a horse and chaise. To Long Beach, then, that rope of sand, but wonderfully durable, by which, as the clue of Theseus, the young town of Nahant feels its way back now and then to the lap of old Lynn, its mother for two centuries. Here, where the grand, long swell comes rolling heavily in from the middle deeps of the Atlantic and breaks at our feet, like the utterance of great thoughts in human language as near as may be, and yet too often misinter-preted-here we can stand among rocks thickly fringed with dripping seaweeds, or crusted with barnacles and studded with creeping shell-fish, and look away to the iron headlands of East Point and the Spouting Horn, where the Beach Pea straggles among the pebbles and the Pimpernel hangs in the chinks of the rock

> "Half way down""
> Like " one that gathers samphire."

Threading our way eastward along the craggy shore, we may thorn our fingers at pleasure with the prickly Saltwort, or treat our palates to an equal pungency in the radish-like flavor of the Sea-Rocket; and thus we round the jagged projections, and pass the many springs of pure fresh water that bubble up so generously within the tide-range, till a bright stream comes dancing down to meet us, and we give a hand in greeting to Stacy's Brook and the thrifty village of Swampscott at one and the same time.

Such as have not seen Stacy's Brook must not imagine that it differs, materially, from other New England rivulets. Like them it has its depths and its shallows, its sudden angles and smooth reaches, its meadow banks overhung with alders and willows, where the mole and muskrat love to mine, and its impulsive gushings under little road-bridges, where the water goes sparkling over red and white pebbles, and the cows come sedate-
ly down to drink at noon, The stream runs, as you see, reader, through open meadows mostly, till we are near a mile from the shore, when we find it pressing through a culvert in the heavy embankment of the Eastern Railroad, and passing this we are at once welcome to the hospitalities of Linnean Grove.*

The pleasant little copse, whose name hints so strongly at its character, has been so christened by the lovers of botany in its neighborhood, on account of the variety and peculiarity of its productions. We perceive that it consists entirely of hardwooded trees, partly on upland and partly on low ground, with the brook traversing the western margin. Many plants are here that we shall find nowhere else in the district, while for many others it is the best and most accessible locality. I do not know the owner of Linnean Grove. Whoever he is, let him have the praise of preserving to us and others one delightful relic of Nature among the devastations of improvement. May his shadow never be less, nor that of his grove.

Let us go on tracing up the course of the brook. We cross Essex Street and find it turning a mill, the only time it is pressed into such ignoble service. Above this, it comes lazily down through the mossy hollows of Fresh Marsh, where the Fringed Gentian and Grass-of-Parnassus love its copious moisture, and the Arethusas and Cymbidium go, as it were, strolling about among the sedgy grass even to the base of Rocks Pasture, "ye Woodende Rocks" of the old records, that rise so sturdily on the west. Before us is Gravesend, the Hamlet of the Lakes, where the spirit of rural beauty and quietness lingers yet, though expelled from almost all the rest of the township. Let us contemplate it while we may, for Young America rides an iron steed, and when we come again we may find the mantle of Retirement torn and trampled under his impetuous hoofs. The brook betrays its origin here in the Floating-Bridge Pond, long reputed bottomless and no doubt of extreme depth in the center, but certainly quite shallow toward the southern end. Here we may pass out on the low bridge that, bare of romantic arch or ivied buttress, lies stretched out on the water as though it were

[^1]the torpid whale of Sinbad, and look down among the leaves of the water lilies, or see the Button-bush and Sweet-gale wading out into deep water side by side with the pearl hunters, though not like those, pulling up the unoffending shell-fish to gratify a feverish desire.

By a short walk northwesterly, we shall reach the Flax Pond, or, as it will be found marked on the map, Wenuchus Lake. This is by far the finest sheet of water in Lynn, and if we except Spring Pond in the edge of Salem, there is nothing superior nearer than Lynnfield. Receiving the stream from the other ponds on the north, it sends out the perennial current of Strawberry Brook towards the southwest, first through the Bowler Swamp, and thence along a charming valley, quite to the western line of the city.

On the eastern side of the Flax Pond rises a picturesque little eminence known as Silsbee's Hill. From the top of this we can enjoy as pleasant a view towards the west as we can well desire; or, turning northeastward, we may at our leisure study the indications of the granite and porphyry, as visible, on the right and left, in the style of surface and vegetation.

We will pass by Flax Pond on the eastern side and follow the valley northerly to the Sluice Pond. Here is another mill-site; and the little village round it has an air of manufactures. We still continue northerly, for the pond is long and narrow, making its quiet bed all the year in this little hollow, between Indian Hill on one side and the east flank of the Blood's Swamp Hills on the other. When we come to the northern point we shall find the water oozing in on all sides from the gravelly banks, and in spring a gay rivulet rattling along from Spruce or Cedar Pond, still farther north, and falling in to augment the waters of "ye olde Sluice."

At this point a new prospect opens. We have reached the limit of the streams that flow southerly, and after this shall find them traveling, like the star of empire, westward. The ridge which the Lynnfield road here occupies is identical with that of the Blood's Swamp Hills, this being its lowest point. Do you observe, reader, the gorge-like valley that opens towards the west? Do you remark the heavy shadows of the pine woods on the southern declivity, contrasting so agreeably with the lighter
spray and more undulating foliage on the northern side? Notice, also, how the diverse outlines of the strong ledges and thicklywooded hills are seen merging into one another, and as they retire more and more, gray succeeds to green, bluish to gray, and this again deepens to a full azure. This is the most remarkable depression in Lynn: the valley of Blood's Swamp.

Entering by a secluded but pleasant wood-road, we will follow its somewhat devious course up the hill to the left. If you are not in haste, we can regale ourselves with checkerberry leaves, or stay to gather the box-berries that are strewn about as if the drops of dew had been congealed into coral. When we come here in the spring the Blue Hepatica will now and then look up from the damp leaves and give us a quiet welcome; and if we repeat the visit somewhat later, the Linnea will scatter a pure incense from the twin bells of its woodland censer, and be ready to receive us in its cool arbors, whence it never ventures into the open sunshine. Or we may here and there chance upon a Desmodium ; or a bushy Gerardia, as free in its beauty as when it first glowed on the botanical genius of Oakes, that wakened to life before it, as its own buds before the vernal sun. This open spot through which we are passing, will by and by be spangled over with the Yellow Star-of-Bethlehem, and a little later the lithe Golden-Rods will nod and beckon to each other among the larger trees and between the scrub oaks and sassafras bushes. Perhaps they will whisper: I cannot tell.

We are now on the highest of the Blood's Swamp Hills; almost, if not quite, the highest land in the township. There is an unbroken horizon, taking in the long ocean sweep from Boston Harbor to Cape Ann, and then the highlands of Central Essex, including those of Topsfield, Boxford and Andover, with Reading almost at our feet, and the wood-covered eminences rolling beyond, like billows in an ever-heaving ocean, till the prospect fades away among the alpine highlands of southern New Hampshire, with Monadnock and its co-ordinate peaks for the termini. When the weather is thick or the northern sky hazy, nothing of these is to be seen: but in a clear air, such as we have to-day, you observe how lightly and cloudlike their immense forms seem to float, or rather hover, on the horizon. I once stood on this rock, with a friend as enthusiastic as myself, just when the sun
was setting, and the long level beams of yellow light were shooting over the tree-tops in the swamp below us like slender arrows. The sky, for the most part, was free from vapors; but low down in the far north, beyond all else, there hung a dense bank of clouds, dun-colored and sluggish, against which the deep blue of those granite hills lay clear and sharply drawn, more clear, indeed, than the outline of hills five miles away.

There is something amazingly grand in the fair view of a mountain, even when it is far off and comparatively small. My friend was more familiar with alpine scenery than I; he had travelled and dwelt in its midst; yet so forcible and purely elemental was the scene before us, that he, no less than I, stood like

> "A pensive pilgrim at the foot Of the crowned Alleghany, when he wrapt His purple mantle gorgeously around, And took the homage of the princely hills That stood before him, as they bowed them down Each in his order of nobility."

Below us, on the north, the gorge of the swamp sinks down like the entrance to some mighty cavern; and tracing it westerly, you can detect its egress, where the hills are exchanged for the Saugus meadows. Beyond are the high ridges of woods of eastern Middlesex, and Wachusett rising above the whole. Southward from these, the eye ranges over the gravelly hills of Chelsea and Somerville, with the swarming hive of the capital, veiled and panting in the smoke of furnaces and railroad stations.

Our stay in this free and uncontaminated air has probably refreshed you, reader, so that you are no wearier than I. A short walk southwesterly brings us to Dungeon Rock; the place of much that is beautiful, much that is fanciful, much that is perfectly absurd, and much that is lamentably true. The view southerly from this point is perhaps better than from most others. We are now looking over a porphyry tract exclusively, where few hard-wooded trees are seen, but pines and cedars, in extensive groves, occupy the whole. From the great ridge, on a southern spur of which we stand, to the level land of the city, a constant diversity appears; bushy and peaty swamps succeed to
abrupt elerations, sheltered valleys alternate with projecting rocks and crags. and occasionally we see tokens of a hidden brook that goes down from nook to nook by rapid descent, though there is not to my knowledge, a waterfall within the territory.

Let me point out to you a few of the more important spots. Ther will often be referred to in the list that follows, and should your patience survive the ordeal of this introduction, some knowledge of them might not be useless.

Next before us on the southeast, and down. down, many times the "full fathom five" of Ariel, lies Dog Hill Swamp. It is a place where the White Azalea dwells, crowned with especial loveliness: where the Poison Sumach grows to the diameter of a coffee-cup. and woe be to the susceptible woodsman that cuts it; a place where the yellow wasp likes to congregate among the yard-high brakes, and the surveyor works his way in at long intervals, and drives down his stake for a boundary, foot after foot, through the elastic moss. before be strikes hard bottom.

Beyond it is Dog Hill, its namesake and counterpart; where the Bush Clover plumes itself and frolics over the shady sward. On the other side, as in duty bound. another swamp occurs. It is known as Bennet's, and its long trough stretches eastward a full mile. From this and the last. two copious brooks are poured during most of the year, falling into that picturesque sheet of water seen a little to the west of them and called Breed's Pond.

This pond is purely artificial, every foot of it being raised by the dam below. It occupies what was formerly known as Pine Hill Swamp; a labyrinth of bogs and tangled water-bushes, where the otter burrowed in olden time, and round which the wolves went prowling malignantly. On that little rounded island that blends with the southern shore, we could find two deep pits and the remains of another. dug and stoned up by the early farmers as traps for those pests of the flocks. This swamp was stored with the Marsh Marigold or Mayblob before its inundation. and many a basketful have I carried home from thence, crisp and delicate, for a grateful meal in early spring. Pine Hill breaks the prospect beyond the pond, sloping gently down toward the east, as it approaches Bennet's Swamp: and just to the left of those smart-looking buildings that we see yet further
off, upon Linwood, we might visit the dilapidated sheep-fold where, long ago, the town shepherd made sure of the nightly safety of his charge. It stands in an angle of the pasture to which Pine Hill has given a name, a crumbling relic of the agricultural age of Lynn, that period now finished, and half forgotten in the age of manufactures.

You see a range of land of somewhat uniform elevation to the west of Breed's Pond, but to the northwest it suddenly sinks to a deep and horse-shoe-formed depression, many acres in extent, and filled by the almost impassable thickets of Tomlin's Swamp. Twenty minutes' walk will bring us to its western border.

Tomlin's Swamp is probably the most extensive morass in this vicinity, with the possible exception of Blood's Swamp. Like the transformed Pine Hill Swamp, it has its tributaries and its outlet, this last being the romantic, though not enduring, Penny-Bridge Brook. The valley by which this stream finds its way to Saugus River is one of the most enchanting seclusions to be found in this district, a place precisely fitted for reverie and contemplation,

> "Where bright green moss heaves in fantastic forms, Speckled with sunshine; and but seldom heard, The sweet bird's song becomes a hollow sound; And the breeze, murmuring indivisibly, Preserves its quiet murmur most distinct From many a note of many a waterfall, And the brook's chatter."

We will turn backwards now, over Penny Bridge again. It is a small, unpretending, rustic affair, rather the worse for neglect and of no manner of importance, save only that one of the boundary stones between Lynn and Saugus stands near it. From here we will stroll away southerly on the western declivity of high hills covered with pines, and presently we find ourselves on the margin of Edwards' Swamp, endowed by Flora more liberally, perhaps, than any of the others. It is the home of the Purple Orchis, and the chosen seat of the Cardinal-flower; the Mayblob is here too, with the Cress, the Golden Senecio and the charming Calla ; the Dwarf Cornel and the Pyrola are scattered
round the edges, and Fleabanes, Coral-roots, Willow-herbs and Wild Sunflowers are variously distributed on the near hillsides.

From this we will follow the channel of Birch Brook, that flows from its southern extremity. In so doing we pass the remnants of a large cedar-swamp from which many of the trees have been lately cut, and notice the Indian Poke springing greenly by the stream, and the Hempweed climbing in wild freedom over the bushes, both far away from others of their kind. Below this opens the verdant expanse of Pan Swamp Meadow, a rather profitless tract long since reclaimed, that is, tortured out of its natural fitness and character. Birch Brook here unites with that from Breed's Pond, which I have chosen to call Moore's Brook, preferring the name by which it is known in the old deeds of land on its banks, to that of Beaver Brook, sometimes applied to it. As the current passes on through the meadows, it furnishes many a pleasant spot to the botanist, till it falls into Saugus River at the Stone Factory.

I have taken you a long jaunt, kind reader, too bare of interest, perhaps, to be very pleasant. If you desire more minute knowledge of the plants of Lynn, the following list will afford it, I think, very fully. Most of them have passed my own examination. For others, of which I could obtain no specimens, I am glad to inform you of my obligations to Drs. Holder, Clark ànd Nye, and my friend, Mr. Moulton, of this city; gentlemen keenly alive to the attractions of botany, and possessed of a fund of that pleasant information, scraps of which you will find credited to their several names. For the purpose of connecting our flora with that of the rest of the county, I have interspersed notices of plants unknown here, but detected in other towns. An essential service in this particular has been rendered by the Proceedings of the Essex Institute, issued in 1856, to which society an acknowledgement is also due.

And now I must leave you, reader. There are "tongues in the trees, books in the running brooks, and good in everything." If you love plants, then study them, give yourself to them, and fill your desire with their innocent loveliness. Theirs is display, but not meretricious; beauty, but not heartless and trifling; exciting attractiveness, but no bitter depression follows. To him who reads them aright, they tell a higher tale beside, a tale
that none can utter, a tale of life, death, a golden hope and a sanctified immortality. Adieu.
" The Spring is here! the delicate-footed May, With her slight fingers full of leaves and flowers;
And with it comes a thirst to be away,
Wasting in woodpaths the voluptuous hours.
A feeling that is like a sense of wings,
Restless to rise above these perishing things."

Lynn, May i, 1858.

## STUDIES OF THE ESSEX FLORA.

## POLYPETALOUS EXOGENS.

## RANUNCULIDS.

(Crowfoot Family.)

Clematis Virginiana. L.
Common. Low grounds and fence-rows. Cultivated to some extent.

Anemone Virginiana. L.
Frequent. Bushy low places. Wood margins.

## Anemone nemorosa. L.

Abundant. Moist, rich ground. Edges of copses.
Hepatica triloba. Chaix.
Occasional. Near Pirate's Glen and Howard's Spring, Saugus. Near Dungeon Rock. Woodside, Swampscott.

Thalictrum anemonoides. Michx.
Occasional. Fairmount, near Breed's Pond.

## T. dioicum. L.

Occasional. Border of Stacy's Brook, near Essex Street.-Dr. Holder.

Traveller's Joy, Virgin's Bower.

Tall Anemone.

Common Anemone.

Blue Hepatica, NobleLiverwort

Rue Anemone.

Early Meadow Rue.

Large Meadow T. cornuti. L.
Abundant. Meadows and damp places.
Water Crow- Ranunculus aquatilis. L.
foot.
Var. divaricatus. I have found abundant in Saugus River, near Howlet's Mills. Saugus.
lellow Water
Crowfoot.
R. multifidus. Ph .

I find near Howard Place, Saugus.
Creeping
spearwort. R. Flammula. Var. reptans.
Grows on the beach at lower end of Middleton Pond.

Seaside R. Cymbalaria. Pursh. Rare, Nahant.

Small flowered
Crowfoot.

Cursed Crow-
foot, Celery-
leaved Crowfoot
Early Crowfoot.
R. fascicularis. Muhl.

Front of Common Hill, Swampscott.
Meadow Crow-
foot, Creeping
Crowfoot.

Buttercups.
Bulbous Crowfoot.

Tall Crowfoot.
R. repens. L.

Abundant. In all low grounds.
R. bulbosus. L.

Common. Uplands and fields.
R. acris. L.

Frequent. Moist grass-lands.
Caltha palustris. L.
Occasional. Formerly found largely in Edwards' Swamp, now Birch Pond. About Oaklandvale, Saugus.

Coptis trifolia. Salisb.
Frequent. On the north declivity of Blood's Swamp Hills, it often covers the earth for large spaces.
Aquilegia Canadensis. L.*
Frequent. Rocks and ledges.
Actæa spicata. L. Var. alba.
Occasional. Pirate's Glen and sparingly in Dungeon Pasture; more frequently in woods, near Upper Swampscott.

## MAGNOLIDS.

(Magnolia Family.)
Magnolia glauca. L.
Sweet Bay.
To be found at Gloucester at the well-known locality.

## BERBERIDS.

## (Barberry Family.)

## Berberis vulgaris. L.

Abundant. Woods, fields, and almost everywhere.

## NYMPHIDS.

(Water-Lily Family.)

Brasenia peltata, Pursh.
Frequent. Flax Pond and other waters in the eastern part of the city.
Nymphæa odorata. Ait. $\dagger$
Frequent. Lily Pond and others of its kind.

[^2]Yellow WaterLily, Cow Lily.
side-Saddle Flower, Forefather's Cup, Huntsman's Cup.

Nuphar advena. Ait.
Frequent. Ponds and sluggish waters.

## SARRACENIDS.

(Pitcher-Plant Family.)

## Sarracenia purpurea. L. *

Frequent. Bogs and open swamps.

## PAPAVERIDS.

(Poppy Family.)
Celandine. Chelidonium majus. L. Common. Old gardens and cultivated grounds.

Bloodroot. Sanguinaria Canadensis. L.
Rare. Moist woods S.E. of Swampscott Cemetery, and also in ravines N.W. of the same point.

## FUMARIDS.

## (Fumatory Family.)

Pale Corydalis

Common
Fumitory.

Corydalis glauca. Pursh. $\dagger$
Frequent. Retired places on ledges, in thin soil. Fumaria officinalis. L.

Is sparingly naturalized in N . Andover.

## SINAPIDS.

(Mustard Family.)
True Water- Nasturtium officinale. R. Br.
Cress.

Occasional. Brooks and small streams : as for instance, in Neptune Street, near Elm, and near head of Birch Pond.

[^3][MUSTARD F.

## N. palustre. D.C.

Is in the meadows by Shute's Brook, in front of R.R. Station, Saugus Centre.
N. Armoracia. Fries.

Often escaped from cultivation.
Cardimine hirsuta. L.
Occasional. Ditches and small streams. Formerly very plentiful in Edwards' Swamp.

Var. Virginica. Michx.
Rare. Retired ledges about Tomlin's Swamp.
Barbarea vulgaris. R. Br.
Frequent. Meadows and rich lands.
Sisymbrium officinale. Scop.
Abundant. Cultivated grounds and yards.
Sinapis arvensis. L.
Detected near Salem.

## S. nigra. L.

Common. Cultivated grounds and waysides.
Draba Varna, L., the Common Whitlow Grass, has a single locality in Danvers, first noticed, it is said, by Dr. A. Nichols. - Proc. Ess. Inst., 1856. Said to be now extinct.

Lepideum Virginicum. L.
Common. Roadsides and waste lands.

## L. arvense.

Has been found at Peters' Point, Salem.
Capsella Bursa-pastoris. Mœnch.
Abundant. Neglected gardens and compost heaps.
Cakile Americana. Nutt.
Common. Beaches at Nahant, Swampscott, etc.
Raphanus Raphanistrum. L.*

Wild PepperGrass.

Lepidium.

Shepherd's Purse.

Sea Rocket.

Wild Radish. Abundant. A garden weed.

[^4]
## VIOLIDS.

(Violet Family.)

| Lance-Leaved <br> Violet. | Viola lanceolata. L. <br> Abundant. Meadows and damp fields. Prob- <br> ably our most fragrant species. |
| :--- | :--- |
| Sweet White <br> Violet. | V. blanda. Willd. <br> Abundant. Bogs and water-courses. |
| Arrow-Leaved <br> Violet. | V. sagittata. Ait. <br> Abundant. In every soil and situation, flourish- <br> ing freely with little regard to circumstances. |
| Hooded Violet. | V. cucullata. Ait. |
| Abundant. Meadows and brooksides. A few pe- |  |

## CISTIDS.

(Rock-Rose Family.)

Frostweed, Helianthemum Canadense. Michx.
Abundant. Pastures and dry hills and woods.
Hudsonia. Hudsonia tomentosa. Nutt.
Rare. Short Beach, Nahant.
Large Pinweed Lechea major. Michx.
Common. Grassy woodlands.
${ }^{\circ}$ mall Pinweed
L. minor. Lam.

Common. Pastures and clearines.

## DROSERIDS.

## (Sundew Family.)

Drosera rotundifolia. L.
Occasional. Fresh marshes of Chestnut Street, and other such places.
D. longifolia. L.

Occasional. Along the course of Stony Brook, and many similar places.

Parnassia Caroliniana. Michx.
Very rare. I have found it in Lynnfield, and along the banks of Stacy's Brook.

## HYPERIDS.

(St. John's-wort Family.)
Hypericum perforatum. L.
Abundant. Roadsides and neglected soils.

## H. mutilum. L.

Common. A weed in fields and gardens.
H. Canadense. L.

Common. Gravelly edges of ponds and watercourses.
H. Sarothra. Michx.

Abundant. Dry uplands, in cartways and excavations.

Elodea Virginica. Nutt.
Abundant. Cool and shady bogs and along sluggish waters.

## ELATINIDS.

(Water-wort Family.)
Elatine Americana. Arnott. Water-wort.

Rare. Flax Pond.-Robinson.

## DIANTHIDS.

## (Pink Family.)

Wild Pink. Dianthus Armeria. L.

Deptford Pink.
Bouncing Be:Soapwort.

Bladder Campion, Crackers.

Frequent. Turfy banks, mostly near roads.
Saponaria Officinalis. L.
Common. Old grounds about houses.
Silene inflata. Smith.
Abundant. Gravelly places and roadsides. Remarkable for its main root, which is sometimes enormously long. *
Sweet William, S. Armeria. L.
Frequent. A garden weed often migrating to the street.
Wooly Pink,
Corn Cockle.
Lychnis Githago. Lam.
Occasional. Gardens and fields.
Thyme-leaved
Sandwort.
Arenaria serpellifolia. L.
Occasional. Damp rocks at Pine Hill and old cultivated spots about Atlantic St. A little in doubt.
Side-Flowering A. lateriflora. L.
Sandwort.

Sea Sandwort. Honkenva peploides. Ehr.
Frequent. King's Beach, and others in that region.-Dr. Holder.
Chickweed. Stellaria media. Smith.
Abundant. Gardens and fields.
Northern
Stitchwort.
S. borealis. Big.

Has been detected in Broad Meadow, Lynnfield. $-A$. P. Chute.
Cerastium Viscosum. L.
Abundant. Cultivated grounds and waysides.

[^5][PURSLANE F.
Field
Chickweed.

Pearlwort.
Rare. Spring ledges near Pirate's Glen, Saugus. Occasional on gravelly bluffs on the east side of Nahant. Also at Rockport, 1862.

Spergula arvensis. L.
Common. Waste places in cultivated grounds, stubble fields.

Spergularia rubra. Pers.
Common. Waysides and yards.
Var. Marina.
Frequent on Commercial wharf and elsewhere.

## Scleranthus annuus. L.

Common. Dry gravelly fields and roadsides.
Mollugo verticillata. L.
Common. Gardens and fields in rich, cultivated soil.

## PORTULIDS.

## (Purslane Family.)

## Portulaca oleracea. L.

Abundant. No garden can be long tilled without producing it. Thought to be naturalized from Europe, but a French writer in 1636 says: "Purslane naturally comes to the Indians in their cultivated fields, among their corn and pumpkins and is common with them."-Phippen.

## MALVIDS.

## (Mallow Family.)

Abutilon avicennæ. Gært.
Frequent. It occurs spontaneously in gardens Wild Cotton. and manured lands.

Low Mallows, Cheesevine.

## Malva rotundifolia. L.

Abundant. Everywhere near houses and buildings; well known.

## TILIDS.

(Linden Family.)
American Linden, basswood.

Tilia Americana. L.

Occasional. I have found it in Dungeon Pasture; also on Second Pine Hill. It is more plentiful at Oak Island, Chelsea.

## LINIDS.

(Flax Family.)
Wild Flax. Linum Virginianum. L.
Very rare. I have only once met with it, near the top of Second Pine Hill where it still flourishes in small quantity.

## GERANIDS.

## (Geranium Family.)

Cranesbill, Geranium maculatum. L.
Frequent. Thickets, borders of swamps and retired fence rows. Very readily cultivated, yielding a profusion of beautiful flowers. The curious projection of its ripe seeds is worthy of study.
Carolina G. Carolinianum. L.
Occasional. Cultivated lands, not elegant.
Herb Robert.
G. Robertianum. L.

Abundant. Rocky places, at the base of ledges, flourishing among the debris. Miserably fetid.
Touch-me-not. Impatiens pallida. Nutt.
At Backside, Hamilton, side by side with $I$. fulva.-Phippen.
Jewel-weed.
I. fulva. Nutt.

Abundant. Brooksides and wet, rich quagmires.

## Oxalis stricta. L.

Common. In all soils not too dry, particularly
Yellow Wood Sorrel, Ladies' sorrel. manure-beds and other rich places.

## ANACARIDS.

## (Cashew Family.)

## Rhus typhina. L. *

Abundant. Most common on hills in light soil, but thrives almost anywhere. Difficult to eradicate.

## R. glabra. L.

Abundant. Intermixed with the former.

## R. copallina. L.

Frequent. Hillsides in good soil, often forming crowded patches.
R. venenata. DC.

Frequent. Swamps and wet thickets. Its poisonous property affects different persons in various degrees, many not being susceptible at all.

## R. Toxicodendron. L. $\dagger$

Common. Not a respecter of soils by any means.

## VITIDS.

## (Vine Family.)

## Vitis Labrusca. L.

Frequent. Damp thickets. The fertile plants Vild Grape. comparatively few.

[^6]Staghorn
Sumach.

Smooth
Sumach.

Dwarf Sumach.

Poison Elder, Dogwood, Poison Sumach.

Poison Oak, Mercury, Poison Ivy.

Common

Occasional. It seems to occupy higher situations than $V$. Labrusca, and to be more generally fruitful. $V$. Cordifolia, Michx., the Frost Grape, I think is with us but cannot be at all positive.
Creeper. Ampelopsis quinquefolia. Michx.
Abundant. Thrives in all kinds of soil where there is not too much shade.

## RHAMNTDS.

(Buckthorn Family.)
Jersey Tea. Ceanothus Americanus. L.
Occasional. The best localities are on the southern slope of Linwood, and a hillside west of Sadler's Rock.

## CELASTRIDS.

(Spindle-Tree Family.)
Staff-tree, Celastrus scandeus. L.*
IIaxwork.
Bitter Sweet.
Abundant. Borders of fields. and fencerows. A luxuriant and elegant vine, and easy of cultivation.

## SAPINIDS.

(SoApberry Tree.)
Striped Maple. Acer Pennsylvanicum. L.
Rare. Said to grow in Dungeon Pasture.
Sugar Maple. Acer saccharinum. L.
Occasional. I have not found it in Lynn, although it is probably here. It grows at Woodside, Swampscott.
Swamp Maple. A. rubrum. L.
Abundant. The most common tree in swamps and wet localities, next the Alder.

[^7]
## POLYGALIDS.

## (Milkwort Family.)

## Polygala sanguinea. L. * <br> Common. A showy little plant in meadows and damp lands, flowering after the grass is mown. The root has a fine odor like that of Checkerberry. <br> P. cruciata. L. <br> Very rare. I have met with it in wet, oozy lands below the mill-dam of E. Holmes, Lynn. The best locality I know of is Marblehead Great Neck, where it is abundant in the damp lands. <br> Red Milkwort. <br> Cross-leaved Milkwort.

## P. verticillata. L.

Occasional. I know no localities except a meadow near the head of Raddin's Ct., West Lynn, and a spot on the highlands of Rocks Pasture.
P. polygama. Walt.

Frequent. Most so upon and near Second Pine Hill. A fine plant in flower.

## PISIDS.

## (Pulse Family.)

Lupinus perennis. L.
Said to grow in Lynnfield.
Lathyrus maritimus. Bigel.
Abundant. Stony beaches of Nahant and elsewhere.

## L. palustris. L.

Rare. Confined entirely to the Eastern section. Borders of Stacy's Brook, near Humphrey Street.
Apios tuberosa. Mœnch.
Abundant. Overrunning bushes in damp thickets, and spreading extensively.
Amphicarprea monoica. Nutt. Hog Pea-nut.

Whorled Milkwort.

Double-fruited Milkwort.

Lupine.

Beach Pea.

Marsh
Vetchling. Meadow Pea.

Ground-nut.

[^8]Desmodium.

Hairy Bush L. hirta. Ell.
Clover.

Wooly-
stemmed
Clover.

Common
Locust.

Rabbit-foo
Clover,
Pussy Clover.
Red Clover.

Zigzag Clover. T. medium. L.

White Clover, Honeysuckle.
D. acuminatum. DC .

A ledge on Blood's Swamp Hills, nearly north of
e head of Dog Hill Swamp furnishes this plant.
o other locality is known to me. (July, I862.)
A ledge on Blood's Swamp Hills, nearly north of
the head of Dog Hill Swamp furnishes this plant.
No other locality is known to me. (July, i862.)
A ledge on Blood's Swamp Hills, nearly nort
the head of Dog Hill Swamp furnishes this pl
No other locality is known to me. (July, i862.)
Tick-Trefoil. D. Canadense. DC.
Is occasional on the railroad at that part of the
city formerly known as Woodend, and along the
Is occasional on the railroad at that part of the
city formerly known as Woodend, and along the hillsides west of Sadler's Rock.

Bush Clover. Lespedeza violacea. Pers.
Frequent. Dry oak and hickory woods. A handsome plant, and well worth cultivating.
T. pratense. L.

Abundant. Cultivated largely and thoroughly naturalized here. A variety with pure white flowers is occasional in Saugus, Lynn, Salem, etc.

Found in Danvers, near Topsfield line.
Rare. It grows scantily on the southern side of Blood's Swamp Hills; elsewhere I have not seen it.

Common. Open, gravelly hillsides and fields.
L. capitata. Michx.

May be determined among the numerous forms found on Linwood, and other like places.

Robinia pseudacacia. L.
Occasional. Sparingly naturalized. Rather freely established at Cider Mill Pasture, west of Pan Swamp Meadow. Abundant in Peabody, near Lynn line.

## Trifolium arvense. L.

Abundant. Dry, sterile fields and roadsides.

Found in Danvers, near Topsfeld

## T. repens. L.

Abundant. Establishing itself almost everywhere, resisting drought and flourishing in the most unpropitious seasons.

## T. agrarium. L.

Common in poor grass land about Salem.-Phippen.

## T. procumbens. L.

Rare. I have only found it in Linnean Grove. A curious little species.

Melilotus officinalis. Willd.
Is on the beaches at Cohasset Rocks. In cultivated clover, Salem Neck.-Phippen.
M. leucantha. Koch.

Is naturalized in Rowley.-Proc. Ess. Inst., 1856.
Medicago lupulina. L.
Common. Gardens and fields. Also frequently found by waysides and about houses.

## Genista tinctoria. L.

Abundant. Between Lynn and Salem is no doubt the chief seat of this pernicious intruder. It completely covers the elevated pasture soil, exterminating the grass and almost every plant beside.

Baptisia tinctoria. R. Br.
Abundant. Pastures and hills; troublesome in tilling new lands.

## ROSIDS.

(Rose Family.)

Prunus maritima. Wang.
Occasional. Singularly enough, not on the shore at all, but along Boston Street, near Wyoma, and like places. Frequent about Nahant, on the bluffs.
P. Pennsylvanica. Loisel.

Frequent. Hillsides and pastures. An elegant species.

## P. Virginiana. DC.

Common. Upland thickets and old fence-rows.

Hop Clover.

Low Hop
Clover.

Sweet Clover.

White Melilot.

Nonesuch.

Wood Waxen, Dyer's Weed.

Wild Indigo.

Beach Plum.

Wild Red Cherry. Choke Cherry.

Black Cherry. P. seratina. DC.
Common. Woods. The best specimens in Lynn are probably in the old Western Burial Ground, Market Square.

Meadow-sweet. Spiræa salicifolia. L.
Abundant. Swamps and boggy water-courses.
Hardhack. S. tomentosa. L.
Abundant. Rich pastures and uplands. Too common to be duly appreciated.

Agrimony. Agrimonia Eupatoria. L.
Common. Thickets and borders of swamps.
White Avens. Geum Virginianum. L.
Occasional. Shady, rich soil among rocks in elevated spots.

Tall Yellow G. strictum. Ait.
Rare. Formerly at roadside at North Bend.
Purple Avens. G. rivale. L.
Rare. Hardly to be found except in Linnean Grove.-Dr. Holder.

Topsfield. Formerly at N. Salem.-Phippen.
Norway
Cinque-foil. Potentilla Norvegica. L.
Frequent. Cultivated grounds and around dwellings.

Five-finger. P. Canadensis. L.
Abundant. Var. pumilla is a pioneer plant in almost every soil; Var. simplex occurs frequently along walks and in dry thickets.

> Silvery
> Cinque-foil.

## P. argentea. L.

Common. Borders of streets and travelled ways. Remarkable for its downy whiteness.

Silver-weed. P. anserina. L.
Abundant. Dykes and banks about the salt marshes. Resembles tansy.

Crowded
Cinque-foil.

Rare. Formerly at Burrill's Hill.
Sunny cliffs about Castle Hill, S.Salem.-Buttrick.

## P. fruticosa. L.

Very rare in Lynn, if here at all.
I have it from peat bogs in Lynnfield, near Serpentine Quarry, where it abounds. "Backside," Hamilton.-Phippen.

## P. tridentata. Ait.

Near Bass Rock, Gloucester.-J.L. Russell, 186r.
Fragaria Virginiana. Ehrh.
Common. Meadows and fields. Plentiful in recent clearings.

## F. vesca. L.

Frequent. Low grounds. Both species bear very scantily in this section.

## Rubus odoratus. L.

Is said to be naturalized in Salem Pastures.
R. strigosus. Michx.

Abundant. Rocky places in rich woodlands ; the fruit generally small in quantity.

## R. occidentalis. L.

Common. Along pasture walls and in the edges of thickets. Generally very fruitful.

## R. villosus. Ait.

Abundant. Damp soils generally; the varieties appear very much intermixed. The fruit for the most part is poor and valueless.

## R. Canadensis. L.

Abundant. Open pastures and hillsides, trailing extensively and bearing great quantities of fruit.

## R. hispidus. L.

Abundant. Filling every swamp, and thriving almost as well on shady uplands. Fruit of little consequence.

Rosa lucida. Ehrh.*

Shrubby
Cinque-foil.

Mountain Cinque-foil.

Strawberry.

Long-fruited
Strawberry.

Flowering Raspberry. Red Raspberry. Thimbleberry.

High
Blackberry.

Low
Blackberry.

Swamp
Blackberry.

Low Wild Rose

Common. Mostly on the edges of swamps and in damp thickets.

[^9]Sweetbrier. R. rubiginosa. L.
Frequent. Chiefly in open hillsides and uplands.
Red Thorn. Cratagus coccinea. L.
Rare. I found it formerly at Burrill's Hill and in one or two other spots. Fine specimens may be seen in Salem, near the crossing of the Marblehead Railroad and the Forest River road.

Chokeberry, Dogberry.

Pyrus arbutifolia. L.
Common. Among huckleberry bushes. Fruit profuse and attractive to the eye, but not by any means to the taste.

Mountain Ash. P. Americana. DC.
Occasional. Small specimens are only to be found, as the trees are early seized upon for cultivation.

Amelanchiar Canadensis. Torr. \& Gray.
Common in almost every low ground.
Var. Botryapium occurs at Lantern Hill, and occasionally in other places. A peculiar form occurs along the shore at Norman's Woe, Gloucester, fruiting plentifully when the bushes are not three feet high.

## MELASTOMIDS.

(Melastoma Family.)

| Meadow |  |
| :--- | :--- |
| Beauty. | Rhexia Virginica. L. <br> Frequent. Brooksides and meadows. Generally <br> plentiful where it appears at all. |

## LYTHRIDS.

(Loose-Strife Family.)
Ammannia humilis, Michx., a small weed with no other name, is said to grow in Danvers.-Proc. Ess. Inst., 1856.

## Low Lythrum hyssopifolia. L.

I found it at Flax Pond, and also in Oak street, in 1849. I have seen it quite plentifully in a meadow at Nahant, and in lesser quantity in low grounds along Moore’s Brook above Boston Street.

Nesæa verticillata. Ell.
Frequent. Ponds and wet swamps. The stems are sometimes curiously thickened under water.

## ONAGRIDS。

(Fuchsia Family.)
Epilobium angustifolium. L.
Abundant. It seems partial to burnt lands, as the hillside N.E. of Breed's Pond, where in 1856 its flowers made one sheet of purple. Beautiful and easy to cultivate.

## E. palustre. L.

Not rare. Hamilton, Middleton and Danvers.Phippen.
E. coloratum. Muhl.

Frequent. Springy spots and borders of ponds.
CEnothera biennis. L.
Common. Gardens and fields. I have found it in Rock's Pasture, with flowers more than double the common size and very showy.

Var. Cruciata is very abundant on Eastern Railroad between Hamilton and Ipswich.-Phippen.

## C. pumila. L.

Frequent in dry gravelly spots, and sometimes in moist grounds.

## Ludwigea alternifolia. L.

Rare. Formerly on Washington Street, between Essex and Laighton. I found it nowhere else and then it was not plentiful.

## L. palustris. Ell.

Abundant. Creeping in the mud on the banks of ponds and stagnant waters.
Circea Lutetiana. L.
Occasional. Dungeon Pasture and elsewhere. Plants seldom solitary.

## C. alpina. L.

Occasional. Pirate's Glen. Partial to shady spots and grows in patches.

## Mermaid Weed. Proserpinaca palustris. L.

In most ponds and permanent ditches; generally in shallows that dry in summer.

Variable
Water-Milfoil.

Myriophyllum ambiguum. Nutt.
Var. Matans. Occasional. Breed's Pond. Probably in many still waters.

Var. Capillaceum. Occasional. In a rocky pond-hole in Marshall's Pasture.

## CACTIDS.

(Cactus Family.)
Prickly Pear. Opuntia vulgaris. Mill.
On the Ipswich River bank, at North Reading, where a few plants were placed many years ago there is now a very flourishing locality.-Robinson.

## CRASSULIDS.

(Houseleek Family.)

Mossy
Stone-crop,
Stone-crop,
Golden Moss.

Aaron's Rod, Live-forever.

Ditch
Stone-crop.

Houseleek.

Sedum acre. L.
Occasional. Naturalized between the old hotel and Spouting Horn, Nahant, on the gravel banks.

## S. Telephium. L.

Occasional. Near old houses and about ledges.

## Penthorum sedoides. L.

Common. Muddy ditches and edges of stagnant pools. I have never seen the petaloid state.

Sempervivum tectorum. L. (?)
Rare. Naturalized on a ledge at E. Stone's house on Boston Street. Also on a rock at Oaklandvale, Saugus, and on rocks at south end of Floating Bridge Pond.

On rocks, near Witch Hill, Salem -Phippen.

## SAXAFRIDS.

(Saxafrage Family.)
Saxifraga Virginiensis. Michx.
Common. Wherever there is a damp rock to sustain it, it may be found full of buds as soon as the snow is gone.

Var. Chlorantha, with green flowers, occurs in Topsfield.-Proc. Ess. Inst., 1856.

## S. Pennsylvanica. L.

Rare. Perhaps not in Lynn at all, but plentiful in the wet edges of Shute's Brook, near railroad station, Saugus Centre.

In a swamp in Great Pasture, Salem, and along Ipswich River, Hamilton. Roadsides in Wenham, and Rocks near Beverly Bridge, Salem. Abundant and very large along roads in Topsfield, near Ipswich River.-Phippen.
Tiarella cordifolia. L.
Rare. It has been found within the township.Dr. Holder.

Chrysosplenium Americanum. Schw. Occasional. Saugus and Swampscott. ${ }^{\circ}$

## Ribes hirtellum. Michx.

Abundant. On almost every rocky hill, and by no means rare in low grounds. Generally quite fruitful.

## HAMAMELIDS.

(Witch-Hazel Family.)
Hamamelis Virginica. $L$.
Abundant. Damp hillsides, near swamps; easily known by its being in full flower when there are no leaves to conceal it from sight.

## APIDS.

(Parsley Family.)

## Hydrocotyle Americana. L.

False
Mitrewort.

Golden
Saxifrage.

Short-stalked
Gooseberry.

Witch Hazel.

Abundant. Every swamp is filled with it.
H. umbellata, L., (?) the Round-leaved Pennywort, I have found at Essex Pond, Hamilton, but not in flower, so that I rather doubt the species.

Crantzia. Crantzia lineata. Nutt.
A little plant not otherwise named grows on the brackish marshes at Salisbury.-A. P. Chute.

Sanicle. Sanicula Marilandica. L.
Frequent. Edges of thickets and among low bushes.

Carrot. Daucus Carota. L.
Occasional. Naturalized in old fields.
Heracleum Lanatum, Miche.
The Cow Parsnip is probably not in Lynn, but grows on the Forest River Road.

Parsnip. Pastinaca sativa. L.
Occasional. Plentifully established in some older parts of the city.

Archangelica perigrina. Nutt.
The lesser Angelica is to be found in Salem, Danvers and Beverly.-Proc. Ess. Inst.

Fool's Parsley. AEthusa Cynapium. L.
Occasional. In old gardens and cultivated fields.
Scotch Lovage. Ligusticum Scoticum. L.
Frequent. Perhaps not in the proper territory of Lynn, but scattered liberally along the shores about Nahant.

Meadow Thaspium aureum. Nutt.
Parsnip.
Parsnip.
I have found in Topsfield, near Boxford.
Musquash-Root Cicuta maculata. L.
Frequent. In swamps and like places.
$\underset{\substack{\text { Wulb-bearing } \\ \text { Water Hemlock }}}{\substack{\text { C. bulbifera. } \\ \text { L. } \\ \hline}}$
Occasional. Edges of Strawberry Brook, in the Bowler Swamp, and elsewhere.

Water Parsnip. Sium latifolium. L. (?)
Frequent. Brooks and swamps. The distinction between this and S. lineare, Michx., is too obscure.

Osmorrhiza brevistylis, DC., the Hairy Sweet Cicely, grows, it is said, at Oak Island, Chelsea, but I doubt its being an inhabitant of Lynn.

Canium maculatum, L., was formerly in the streets of Salem, but it has disappeared.-Phippen.

Carum Carui, L., the common Caraway, is naturalized in Rowley and Ipswich.

## ARALIDS.

(Spikenard Family.)

Aralia racemosa. L.
Rare. I have found but one specimen in the place, which was in the valley S.E. from Dungeon Rock. It has, however, been brought from the woods for cultivation by others.

## A. nudicaulis. L.

Abundant. Rocky hills and woods.

## A. hispida. Michx.

Frequent. Hilly pastures. Particularly abundant near Gravel and Round Ponds, Hamilton.

## Panax trifolium. L.

Is to be found at the Aqueduct Fountains, Danvers.

## CORNIDS.

## Cornel Family.)

## Cornus circinata. L'Her.

Frequent. Grows largely among the rocks on the N.E. slope of Second Pine Hill, near the road.
C. stolenifera. Michx. (?)

Frequent. Upper Swampscott.
C. paniculata. L'Her.

Frequent. Uplands and hillsides in cool soil. I have some doubt of this species being correctly determined.

## C. florida. L.

Rare. Three or four localities are known.

Spikenard,
Pettimorril.

Wild
Sarsaparilla.

Bristly
Sarsaparilla.

Dwarf Ginsing.

Round-leaved Cornel.

Red-osier
Cornel.

Panicled
Cornel.

Dwarf Cornel. C. Canadensis. L.
Frequent. Around the margin of Breed's Pond, and elsewhere in Dungeon Pasture.

Alternateleaved Cornel.
C. alternifolia. L.

Is frequent on rocky hills and occasional in cultivation.

Tupelo, Nyssa multiflora. Wang. Pepperidge.

Abundant. Rich woods and thickets, Very fine in and about Pine Grove Cemetery.

ADDENDA.
Turritus glabra, L., the Smooth Tower-Mustard, is at Paradise and Orne's Point, Salem.-Proc.Ess. Inst., 1856.
Draba Caroliniana, Walt., the Whitlow Grass, has been found in Salem.-Ibid.

Sanguisorba Canadensis, L., the Canada Burnet, may be often found in Hamilton and vicinity, though never, I think, west of Salem.

## MONOPETALOUS EXOGENS.

## CAPRIFOLIDS.

(Honeysuckle Family)

Linnea,
Twin-flower.

Linnea borealis. Gronov.
Occasional. Very luxuriant on a hill near the Lynnfield road, Wyoma.

Lonicera sempervirens, Ait., the Trumpet Honeysuckle has been detected near Marblehead. -J. L. Russell.-Proc. Ess. Inst., 856.

RUBIDS.]
Diervilla trifida. Mœnch.
Frequent. Along walls near the Saugus line, north of Boston Street.

Abundant in Beverly, Manchester and Essex.Phippen.

## Triosteum perfoliatum. L.

Frequent. Cool and moist lands.

## Sambucus Canadensis. L.

Common. Damp thickets and swamps.
S. pubens. Mx .

Abundant at Hamilton Ponds.
Has been found at Danvers.-Russell.
Viburnum undum. L.
Grows at the head of Middleton Pond, and at Penny Bridge, Saugus.
V. Lentago. L.

Occasional. In a pasture west of Pan Swamp Meadow.

## V. dentatum. L.

Common. Thickets and woods.
V. acerifolium. L. *

Occasional. Generally on elevated and fertile soils. Seldom abundant in any place.

## RUBIDS.

(Madder Family.)
Galium asprellum. Michx.
Abundant. Swamp thickets covering the bushes.
G. trifidum. L.

Abundant. Moist grounds and borders of streams.
G. triflorum. Michx.

Frequent. Boggy open places, among ferns and the like. A rather showy species.

[^10]Bush Honey-
suckle.

Feverwort.

Elder.

Red-berried
Elder.

Withe-rod.

Sweet
Viburnum.

Arrow-wood.

Maple-leaved Arrow-wood.

Rough Cleavers.

Small Bedstraw

Sweet Bedstraw

Wild Licorice. G. circæzans. Michx.
Common. May be found on the south side of almost every precipice where there is sufficient soil.
Button-bush. Cephalanthus occidentalis. L.
Abundant. Water-courses and ponds, forming dense jungle-like masses. Its habit reminds one of the tropical Mangrove.
Partridge- Mitchella repens. L.
berry,
Box-berry.

Bluets,
Innocence.

Common. Certain to be in all woods, and often where there are none, yet better worth cultivating than many exotics.
Houstonia coerulea. L.
Common. In all kinds of grass-lands, except the dryest.

Find both living and dead stems on same root, indicating a perennial habit. Doubt its being a biennial.-Phippen.

## ASTERIDS.

(Aster Family.)
Blazing Star. Liatris scariosa. Willd.
Very rare. Said to grow on the northeast side of Humphrey's Pond, Lynnfield. Reading and Hamilton.-Phippen.

Trumpet Weed, Eupatorium purpureum. L.

Queen o' the
Meadow, Indian Hemp.

Verbena-leaved
Boneset.

Abundant. In every swamp and low meadow. Rarely solitary.

## E. teucrifolium. Willd.

Occasional. In Bowler Swamp, and also in the Ox Pasture, near Lynnfield line.

Backside, Hamilton.-Phippen.
Broad-leaved
Boneset.
E. pubescens. Muhl.

Rare. Somewhat plentiful in Swampscott.
Smooth
Boneset.
E. sessilifolium. L.

Rare. Formerly at Burrill's Hill.
Thoroughwort.
E. perfoliatum. L.

Frequent. Damp situations; not apt to be plentiful, but sometimes abundant.

Mikania scandens. L.
Very rare. Formerly on the shore of Breed's Pond, at the outlet of Bennet's Brook.

Plenty in swamp at W. Danvers. Very luxuriant along Ipswich River, Hamilton.-Phippen.

Sericocarpus conyzoides. Nees.
Common. Pastures and hills.
Aster corymbosus. Ait.*
Frequent. Shady, moist places. Easy to recognize. A form is now and then found which may be A. macrophyllus, L.

## A. patens. Ait.

Frequent. Scattered among the berry bushes on warm upland slopes. One of our finest species.

## A. lævis. L.

Occasional. Eastern part of the town; also in Swampscott.

## A. undulatus. L.

Frequent. The most common species in rocky spots, as the east side of Hathorne's Hill. Very conspicuous.
A. cordifolius. L.

Frequent. Borders of brooks and like moist localities.

## A. dumosus. L.

Common. More generally distributed than other species, but rather less frequent near dwellings.

## A. Tradescanti. L.

Abundant. Principally by roadsides and in gravelly soils. Noticeable for its close, cylindricallooking racemes of white flowers.

[^11]Climbing
Hemp-weed.

White-topped Aster.

Corymbed Aster.

Spreading Aster.

## Smooth Blue

 Aster.Variable Aster.

Heart-leaved Aster. Bushy Aster.

Narrow-leaved Aster.

Mean Aster. A. miser. L.
Common. Most readily distinguished by the leaves. The last three species, though wholly distinct, are a difficult study for beginners.

Willow-leaved Aster.

Rough stemmed Aster.

New England Aster.
A. longifolius. Lam.

Abundant. The prevailing species in swampy places and along water-courses. Variable, particularly in tint. A well-marked variety of this, as I believe, occurs along the beaches in Swampscott. It has a stiff, bushy aspect and quite obtuse leaves.
A. puniceus. L.

Frequent. The roughest species I have found. Resembles $A$. longifolius in the flowers.

## A. Novæ-Angliæ. L.

Frequent Along the railroad in Ward Seven, and on the West Lynn marshes.
A fine variety with rose-purple flowers. A. Rosens, Desf., has been shown as gathered in the township.

Pointed-leaved Aster.
A. acuminatus. Michx.

Occasional. Borders of swamps and like situations.

## A. linifolius. L.

Frequent. Marshes at West Lynn Station and elsewhere.

Rare or unknown about Salem.-Phippen.
Horseweed, Fleabane.

Erigeron Canadense. L.
Common. The inseparable companion of agriculture, showing itself in every garden and field.

Robin's E. bellidifolium. Muhl.
Occasional. Roadsides.
Purrle Flea- E. Philadelphicum. L. bane.

Occasional. Near Orne's Point, Salem. Also in Danvers.-Phippen.

Taisy Fleabane. E. annuum. Pers
Frequent. Along Strawberry Brook.

## E. strigosum. Muhl.

Common. Scattered over every pasture and hillside during most of the summer.
Diplopappus linariifolius. Hook. (?)
Abundant. Pine Hill and other bushy pastures. I cannot suppose the plant to be anything but this, but the short pappus is altogether obscure. Otherwise the description perfectly applies.
D. umbellatus. Torr and Gr. (?)

Frequent. Fence rows and elsewhere. Very plentiful near Beck's Pond, Hamilton. The same uncertainty attends this as the preceding.
D. cornifolius. Darl. (?)

Occasional. Margins of Dog Hill Swamp. Also, in profusion, on the hills S. of Peabody Almshouse.

## Solidago bicolor. L.

Frequent. A pasture plant, here and there among the huckleberries.
S. cæsia. L.

Abundant. Most frequent in the woods or recent clearings, and in rocky locations.
S. puberula. Nutt.

Rare. I have found it in a deserted stone-quarry near the N.W. corner of Pine Grove Cemetery. Also in the reclaimed fields of Stocker's Swamp, Saugus.
S. stricta. Ait.

Occasional. Bowler Swamp and similar places.

## S. sempervirens. L.

Abundant. On the dykes and other places around the borders of the marshes.

Makes a fine garden plant, much frequented by the butterflies.-Phippen.
S. neglecta. T. \& G. (?)

Occasional. Swamps in the neighborhood of Stony Brook.
S. linoides. Solander.

Occasional. So far only in the swamp east of Horse Pasture Spring.
[ASTER F.
Narrow-leaved Daisy Fleabean.

Violet
Diplopappus.

Large
Diplopappus.

Cornel-leaved Diplopappus.

White-rayed Goldenrod.

Blue-stemmed Goldenrod.

Many-flowered Goldenrod.

Willow-leaved Goldenrod.

Seaside Goldenrod.

Smooth Goldenrod.

Rough or Tall Goldenrod.

Sweet Goldenrod.

Gray Goldenrod.

Common
Three-ribbed Goldenrod.

Late
Three-ribbed Goldenrod.

Bushy
Goldenrod.

Elecampane.

High-water Shrub.

Salt Marsh
Fleabane.

Roman
Wormwood.

Sea Burdock, Cockle-burr.

Cut-leaved Rudbeckia.
S. altissima. L.

Common. Fence-rows in old grounds where it is almost constant. Our most conspicuous, though not most elegant species.
S. odora. Ait.

Is about Cutler's Pond, Hamilton; and said to be in Lynn.
S. nemoralis. Ait.

Common. Dry fields and hillsides; the most prominent flower in the autumnal scenery.
S. Canadensis. L.

Frequent. Dry and gravelly soils.
S. serotina. Ait. (?)

Occasional. Dry and moist lands, and margins of swamps.
S. lanceolata. L.

Frequent. Alluvial soils. The only species with us which has an agreeable odor.

Inula Helenium. L.
Rare. Escaped from cultivation. Along Western Ave. In quiet spots in Saugus Center.

Iva frutescens. L.
Rare. Only appears on the old dyke at Willis' Neck.

Pluchea camphorata. DC.
Grows on the marsh above Bear Pond, Nahant.
Ambrosia artemisiæfolia. L.
Common. Too well-known for any further notice.

Xanthium echinatum. Murray.
Frequent. On shores and beaches, at about highwater mark. Also inland, growing freely on the beds of sea-manure heaps.

Rudbeckia laciniata. L.
Said to be wild in Lynnfield.
R. hirta. L.

Occasional. It appears now and then in the meadows and mowings, but seems inconstant as to locality.

## Helianthus divaricatus. L.

Frequent. Readily found at Stone Factory, Boston Street; also at Linwood.

## H. strumosus. L.

Frequent. Only in the eastern section, near Swampscott. The prevailing form does not fully agree with this species, and some might incline to call it $H$. decapetalus.

## H. tuberosus. L.

Frequent. Getting established in by-places in good soil.

Coreopsis trichosperma. Michx.
Occasional. Confined entirely to the eastern part of the city, beginning about Cedar Pond. Low, damp, and marshy spots.

## Bidens frondosa. L.

Common. Cultivated grounds; sure to invite attention at seeding-time.

## B. connata. Muhl.*

Frequent. Borders of ponds and streams.

## B. cernua. L.

Occasional. Border of Moore's Brook, above Boston Street, afforded good specimens.

## B. Beckii. Torr.

Is in Ipswich River.
Has been collected by G. D. Phippen.
Maruta Cotula. DC.
Common. Yards and roadsides.

[^12]Cone-flower.

Cross-leaved Sunflower.

Pale-leaved Sunflower.

Jerusalem Artichoke.

Tickseed Sunflower.

Cuckoldweed, Beggar-ticks.

Swamp Beggar-ticks.

Nodding
Burr-Marigold.

Water Marigold.

Mayweed.

Yarrow. Achillea millefolium. L.
Common. Always well known.

Sneezewort Goose-tongue.
A. ptarmica. L.

Occasional. Generally tenants the vicinity of streams, but sometimes dry spots, as on the ridge of Pine Hill, by the Dungeon Road. Neither Gray or Bigelow allude to its slender habit, with us it has little more strength than a Galium.

Oxeye Daiss, Lencanthemum vulgare. Lam.
Common. Universally known and detested by cultivators.

Tansy. Tanacetum vulgare. L.
Common. Escaped from gardens and getting troublesome.

Shore Mugwort Artemisia candata. Mx. (?)
I have found sparingly on the beaches at Nahant.
Mugwort. A. vulgaris. L.
Very rare. A few plants grew to great perfection in the garden of Jesse Rhodes, Esq., in 1855. I have never found it elsewhere.

Gnaphalium decurrens. Ives.
Rare. I have met a few specimens in cartways in the woods; not more than three or four in all.
G. polycephalum. Michx.

Abundant. Hills and pastures in light soils.
G. uliginosum. L.

Abundant. Cartways and neglected walks, in the ruts and broken sward.

Antennaria margaritacea. R. Br.
Frequent. Uplands and bushy fields.
A. plantaginifolia. Hook.

Common. Almost everywhere, unless among strong grass. Flowers earlier than anything else, not excepting Saxafraga Virginiensis.

Erechthites hieracifolia. Raf.
Abundant. Certain to appear whenever the soil is stirred or burned in the woods.

## Senecio vulgaris. L.

Common. A vexatious weed in gardens, and by no means scarce in other places.

## S. aureus. L.

Frequent. Wet places by streams. Grows profusely at the head of the Bowler Swamp, opposite Flax Pond.

Centaurea nigra. (?) L.
Rare. I found one specimen on the railroad in Swampscott, in 1848 ; but no more. It grows abundantly on the turnpike at North Chelsea.

Cirsium lanceolatum. Scop.
Common. Roadsides and fields.
C. discolor. Spreng.

Rare. Only to be found to my knowledge at the west end of Summer Street.
C. pumilum. Spreng.

Common. Woods and fields, widely distributed.

## C. arvense. Scop.

Frequent. Generally by roadsides, not specially odious here.
Onopordon acanthium. L.
Frequent. It seems partial to beds of decayed sea manure; it flourishes at Little Nahant, and generally where such manure has lain.

## Lappa major.

Common. Too familiar to need further notice.
Lapsana communis. L.
A weed in gardens in S. Salem.-Russell.
Cichorium intybus. L.
Abundant. Roadsides and railroad banks.
Krigia Virginica. Willd. *
Frequent. Only in the hills, where it starts in every open spot, if the ground be broken.

[^13]Common
Groundsel.

Golden
Ragwort,
Golden Senecio.

Knapweed.

Common
Thistle.

Two-colored
Thistle.

Pasture Thistle.

Canada Thistle.

Cotton Thistle.

Burdock.

Nipplewort.

Wild Succory,
Chicory.

Dwarf
Dandelion.

False Dandelion, Horse Dandelion.

Canada Hawkweed.

Rough Hawkweed.

Rattlesnake weed.

Rattlesnake root.

Tall white Lettuce.

Dandelion.

Wild Lettuce. Lactuca elongata. Muhl.
Common. Pastures and woods; the Var. Sanguinia being most frequent.

Mulgedium. Mulgedium leucophæum. DC.
I found on the beaches at Gloucester harbor, Sept. r4, 1866.

Common Sow Thistle.

Prickly Sow Thistle.

## Leontodon autumnale. L.

Common. Almost universally present in this section. I know no other plant, but the grasses, which is so fully distributed.

Hieracium Canadense. Michx.
Occasional. Found at Linwood.
H. scabrum. Michx.

Abundant. One of the familiar things of the woods and fields.

## H. venosum.

Frequent. Sometimes in woods, but more frequently in open pastures. The veined leaves very attractive.

Nabalus albus. Hook.
Frequent. It appears in many shady copses in stony slopes.
N. altissimus. Hook.

Abundant. Shady woods, especially if damp and free from pines.

Taraxicum Dens-leonis. Desf.
Common. I think this plant flowers longer than any we have. Sonchus oleraceus. L.

Rare. Now and then appears in old cultivated grounds, as along Boston Street.
S. asper. Vill.

Rare. A few specimens have been secured about Berry's Mill, at Waterhill.

## LOBELIDS.

(Lobelia Family.)
Lobelia cardinalis. L.
Frequent. Swampy localities and banks of streams.

## L. inflata. L. *

Frequent. Wood roads and neglected fields.

## L. spicata. Lam.

Frequent. Meadow grounds and sometimes in upland fields.

## L. Dortmanna. L.

Rare. I have found it in Spring Pond and in Essex Pond, Hamilton; also in Middleton Pond. It usually grows in about two feet of water.

## CAMPANULIDS.

(Harebell Family.)
Campanula aparinoides. Pursh.
Occasional I once found it in a meadow near Breed's Mills, but nowhere else in Lynn that I remember. It grows in the meadows in Lynnfield.
C. rotundifolia, L., the Harebell, appears to have been collected near Sutton's Mills, N. Andover, in 1850 -Proc. Ess. Inst., 1856.
C. glomerata, L., apparently overlooked by both Gray and Bigelow, is said to have been long established in Dark Lane, Danvers.-Ibid.

It is also abundant along the Newburyport Turnpike in the south part of Topsfield.

Specularia perfoliata. DC.
Frequent. At Three Needle Rock, near Saugus River; also through the woods in thin soil upon ledges.

[^14]
## Cardinal

Flower.

Lobelia, Indian
Tobacco.

Pale spiked
Lobelia.

Water Lobelia.

Slender
Bell-flower.

## KALMIDS.

(Heath Family.)
Dangleberry. Gaylussacia frondosa. Torr \& Gr.
Occasional. In Pratt's Pasture, near the pond and below a precipitous ledge. Also scattered through the woods, near the various swamps.

Huckleberty. G. resinosa. Torr \& Gr.
Abundant. Covering acres of ground, and very fruitful when young.
Cranberry. Vaccinium macrocarpon. Ait.
Abundant. Meadows and ponds. In one place at Breed's Mills it formerly grew on a dry upland.
V. VITIS-IDeA, L., the Cowberry has one or two localities in Danvers.-Proc. Ess. Inst., 1856.
Low Blueberry. V. Pennsylvanicum. Lam.
Abundant. Our first berry and one of the most fruitful, though not the finest.

Blue Huckle-
berry.

Highbush
Blueberry.

Black Blue-
berry.

Mountain
Cranberty.

Trailing
Arbutus,
Mayfower
V. fuscatum. Ait.
V. vacillans. Sol. (?)

Occasional. Very common on the ridge of Blood's Swamp Hills, and other like situations.
V. corymbosum. L.

Abundant. Borders of swamps, forming thickets, and bearing superb fruit. Flourisning perfectly in Salem Pastures.

Abundant. Intermixed with $V$. corymbosum, and only distinguishable by its flowers or fruit.

Arctostaphylos Uva-ursi. Spreng.
Occasional. A fine patch grows in Pratt's Pasture, and I have it from Rail Hill, near the cemetery. The finest growth I know of is on the ledges at Swain's Pond. Melrose.

Epigæa repens. L.
Very rare. It has been found in the woods between Lynn and Lynnfield.

KALMIDS.]
57

## Galutheria procumbens. L. *

Abundant. A large spot west of Pan Swamp Meadow is covered with it; but fruit is nowhere plenty.

## Andromeda ligustrina. Muhl.

Abundant. One of our commonest water-shrubs, almost exactly like a blueberry, except in flowers and fruit.
A. polifolia, L., the Rosemary Andromeda, has a famous locality at Cedar Pond, Wenham. $\dagger$

## A. calyculata. L.

Occasional. The best locality perhaps, is at the head of Bowler Swamp, between Boston and Chestnut Streets.

## Clethra alnifolia. L.

Abundant. Another of the most common tenants of the swamp, and one of the most beautiful.

## Rhodora Canadensis. L.

Rare. Not in Lynn to my knowledge, except in one spot on the border of Breed's Pond. A choice plant for cultivation.

## Azalea viscosa. L.

Abundant. Borders of ponds and damp situations.

[^15][HEATH F.
Partridge-berry
Checkerberry.

Privet Andromeda.

Rusty-leaved
Andromeda.

Sweet Pepper-
bush,
White Alder. Rhodora.

Swamp Pink, White Honeysuckle.

| Mountain | Kalmia latifolia. <br> Laurel. |
| :--- | :--- |
|  | Very rare. I have seen fresh specimens gathered <br> ascertain. Very fine at Beverly, and magnificent at |
| Gloucester. |  |

Sheep Laurel, K. angustifolia. L.
Common. Watercourses and damp lands everywhere.
K. glauca, the Pale Laurel, is at Cedar Pond, Wenham.-S. P. Fowler. Proc. Ess. Inst., 1856.

## Pyrola rotundifolia. L.

Common. Shady places and woods, everywhere unless the soil be extremely poor.

Broad-leaved Pyrola.

Thin-leaved Pyrola.

Small Pyrola.

One-sided Pyrola.

One-flowered Pyrola.
P. asarifolia. Michx.

Occasional. Cold, shady woods. I have found it most in Pirates' Glen.
(I am not confident as to this species, as it runs, so near $P$. chlorantha, in some of its forms.)
P. elliptica. Nutt.

Frequent. Bears more exposure than $P$.asarifolia, but generally thrives only under thick pines.
P. chlorantha. Swartz.

Rare. Pirates' Glen and a few other shady spots.

## P. secunda. L.

Rare. This, like the last, I have found in Pirates' Glen, but seldom elsewhere in this vicinity.

Moneses uniffora. Salisb.
Very rare. My only specimens were from Saugus, but it is now extinct there, and has since been found near Dungeon Rock. Quite frequent in the James Newhall pasture, between E. Saugus and the Centre.

Prince's Pine. Chimaphila umbellata. Nutt.
Abundant. Shady, cool woods in good soil.
Spotted
Wintergreen.
C. maculata. Pursh.

Is sparingly found on the south side of Middleton Pond. Also in Saugus.-Dr. Clark.

Hypopitys lanuginosa. Nutt.
Occasional. To be found in pine woods, bursting up through decaying leaves.
Monotropa uniflora. L.
Frequent. Generally in pine woods, in the deep loose mould.

Var. morisoniana, Mx., with erect flowers, is frequent, appearing at the close of the season.

## AQUIFOLIDS.

(Holly Family.)
Prinos verticillatus. L.
Abundant. Swamps and pond borders.
Ilex glabra. Gray.
I have found abundant in the Magnolia Swamp, Gloucester.
Nemopanthes Canadensis.
Occasional. Cool places in rich, alluvial soil.

## PLANTIDS.

(Plantain Family.)
Plantago major. L.
Common. Familiar to all.

## P. lanceolata. L.

Common. Gardens and fields.

## P. maritima. L.

Frequent. Marshes. Rocks washed by the sea along the whole coast. In seeking for this, the student is liable to be misled, as I was, formerly, by the spikes of the Marsh Arrow-Grass, which see further on.

## PLUMBIDS.

(Leadwort Family.)

## Statice Limonium. L.

Frequent. On the salt marshes within the range of high tides.

Pine-sap, False Beechdrops.

Indian Pipe.

Black Alder. Inkberry.

Mountain Holly.

Plantain.

Narrow
Plantain.
Seaside
Plantain.

## PRIDCLIDS.

(Primrose Famlit.)
Star-Flower. Trientalis Americana. Pursh.
Abundant. I know no better locality than the summit of Second Pine Hill.
UYpright
Loosestrife.
Lysimachia stricta. Ait.
Common. Damp grounds and brooksides. The bulbiferous state is not unusual.

Four-Ieaved
Loosestrife.

Lance-leared
Loosestrife.

Tufzed
Lousestrice

Pimpernel

Inflated
Featherfoil.

## L. quadrifolia. L.

Common. Inhabits meadows and hilltops indiscriminately.

## L. lanceolata. Walt.

Rare. Formerly abundant in a low place between Carnes and Federal Streets. The only locality I have known.

Naumbargia thyrsiflora. Reich.
I have found in the swampy woods by the Turnpike, east of Spring Pond.
Anagallis arrensis. L. *
Frequent. Cultivated grounds and dry fields. Also on the rocks at Nahant, fine specimens.
Hottonia inflata. Ell.
Frequent. Swampy edges of Breed's Pond and the tributary brooks.

## CTRICCLIDS.

(Bladderwort Family.)
Inflated
Bladie:wort.

Purple
Bladderwort.
C. purpurea. Walt.

Rare. Hardly in Lynn. A stagnant pond east of Lynnfield Hotel furnishes it in abundance.

Ipswich River.-Phippen.

[^16]U. vulgaris. L. (?)

Common. In all ponds and sluggish waters.

## U. intermedia. Hayne.

Occasional. Muddy sloughs near turnpike at Glenmere; also plentiful in a meadow reclaimed from Bowler Swamp, near the Cemetery.
U. carnuta, Michx., the Horned Bladderwort, a singular, leafless species grows scantily in springy places at Norman's Woe, Gloucester.

Also at Rocks Pasture, Lynn, and in Lynnfield. -Chute.

## OROBANCHIDS.

## (Broomrape Family.)

Epiphegus Virginiana, Bart., Beech Drops or Cancer Root, is very abundant in the beech woods of Hamilton, southwest of Essex Pond.

Aphyllon uniflorum. Torr. \& Gr.
Very rare. I once found a single specimen near Breed's Mills, and a few more on Burrill's Hill.

## LINARIDS.

(Snapdragon Family.)
Verbascum Thapsus. L.
Common. Perfectly known.
Linaria Canadensis. Spreng.
Common. Roadsides and dry fields.
L. vulgaris. Mill.

Common. Roadsides and like places.
L. elatine, Miller. The Halbert-leaved Toadflax is naturalized at Ipswich.-Proc.Ess.Inst.,1856.
Scrophularia nodosa. L.
Very rare. I doubt if in Lynn at all. It was formerly in one spot on Washington Street. I have found it at North Andover.

## Chelone glabra.

Low ground and open swamps.

Common
Bladderwort.

Creeping
Bladderwort.

One-flowered Cancer-root. Mullein.

Canada
Snapdragon.

Toad Flax, Butter and Eggs.

Figwort.

Monkey-flower. Mimulus ringens. L.
Frequent. Along streams; especially Strawberry Brook, below Bowler Meadow.

Hedge-Hyssop. Gratiola Virginiana. L.
Frequent. Wet places, pond borders, associated with the next.

Golden HedgeHyssop.

False
Pimpernel.

Water
Speecwell.

Marsh
Speedwell.

Common
Speedwell.

Thyme-leaved Speedivell.

Neckweed. V. perigrina. L.

Corn Speedwell V. arvensis. L. (?)

Purple Gerardia.

Abundant. A troublesome weed in gardens.

Rare. A few depauperate plants grew formerly by Holmes' Mill, Walnut Street. On gravelly banks at Nahant.
G. aurea. Muhl.

Frequent. Generally in the same places as the previous, and hard to distinguish except by the color of the flower.

Ilysanthes gratioloides. Benth.
Occasional. Muddy borders of ponds and streams.

Veronica Anagallis. L.
Abundant. So thick in many ditches as to almost choke them up. Margins of Breed's Pond and like places.
V. scutellata. L.

Frequent. Wet places. Less plentiful than $V$. Anagallis., and apparently much later.
V. officinalis. L.

I found, in 1876, a fine patch by the roadside at "Burrill's Landing," S.W. of Dungeon Rock.
V. serpyllifolia. L.

Common. Creeps among the grass in cool ground.

## Gerardia purpurea. L

Abundant. Meadows and damp lands.
G. maritima, Raf. The Seaside Gerardia, I found in the autumn of 186 r , a fine patch on the marsh between Sagamore Hill and Beach Street, near Long Beach. In good flower and well determined.
G. tenuifolia. Vahl.

Abundant. Uplands and warm pasture slopes.

## G. flava. L.

Occasional. In the E. section, near Swampscott.
G. pedicularis. L.

Frequent. Formerly near Echo Grove.
Castilleia coccinnea. Spreng.
The yellow variety of this abounds in a meadow near the Meeting House, Topsfield.
Pedicularis Canadensis. L.
Frequent. Sunny banks among bushes, generally in rich, moist soil.

## P. lanceolata. Mx.

I think I found this near Shute's Brook, above the railroad station, Saugus Centre.
Melampyrum pratense. L.
Var. Americanum. Benth.
Abundant. Shady woods and pastures. A difficult thing to transplant, withering even when taken up with a large ball of earth.

## VERBENIDS.

(Vervain Family)

## Verbena hastata. L.

Very rare. I have not seen it in Lynn. Reported by Dr. Holder in the neighborhood of Chatham Street, above Essex. Also at Saugus.
V. urticifolia. L.

Common. Roadsides and fields.
Phryma leptostachya. L.
Is found on the Newburyport Turnpike, near Middle Road, Danvers.

MENTHIDS.
(Mint Family.)
Mentha viridis. L.
May be found at Stocker's Brickyard, E. Saugus.
[VERVAIN F.
Slender
Gerardia.

Downy
Gerardia.
Bushy Gerardia

Painted Cup.

Lousewort, Wood Betony.

Yellow
Lousewort.

Cow Wheat.

Blue Vervain.

Nettle-leaved Vervain.

Lopseed.

Peppermint. M. piperita. L.
Abounds at the Foundry on Weare River, Hingham.

Meadow-mint. M. Canadensis. L.
Abundant. Meadows and brooksides.
Water
Hoarhound. Lycopus sinuatus. Ell.
Abundant. Wet grounds and streams.
Pennyrojal. Hedeoma pulegioides. Pers.
Frequent. Neglected fields to some extent, but more in pastures and open woods. Smaller than specimens from further inland.

Wild
Monarda fistulosa. L
Grows at N. Andover on the southwest side of Great Pond.

Catnip. Nepeta cataria. L
Rare. Sparingly at Nahant, and occasionally in Lynn, but always near some old garden.

Ground Ivy, N. Glechoma. Benth.

Wild Basil. Pycnanthemum incanum. Michx.
Rare. Only found thus far on the southern slope of Linwood.

Mountain Mint. P. muticum. Pers.
Very rare. Grows sparingly in damp spots in Swampscott.

Thymus serpyluum, L, the Garden Thyme, grows in Boxford.-Proc. Ess. Inst., 1856.

Self-heal.

Scull-cap. Scutellaria galericulata. L.
Rare. In the eastern part of the city. - True.
Grows finely at Lily Pond, Manchester. Also at Peters' Meadow, Danvers.

## S. lateriflora. L.

Frequent. Gravelly banks of ponds.
Lamium purpureum. (?) L.
Occasional. An intrusive weed in old gardens as those on Boston Street, near Federal.

Leonurus cordiaca. L.
Common. Familiar to all.

## Galeopsis tetrahit. L.

Rare. Grew formerly between Federal and Mall Streets.

Stachys palustris, L., the Marsh Hedge Nettle, appears in Ipswich and elsewhere--Proc. Ess. Inst., 1856.

## Trichostema dichotomum. L.

Common. Pastures and fields, especially in the hills.

A variety with red flowers occurs on the railroad between S. Reading and Lynnfield Hotel.-A. P. Chute.

## Teucrium Canadense. L.

Occasional. I find it only on upland hillocks and margins, about the marshes east of the Long Railroad Bridge, Saugus River. I found, in 1859, a form with pink flowers growing very rankly round old yards in N. Andover.

## SYMPHYTIDS.

## (Borage Family.)

## Echium vulgare. L.

Very rare. A few specimens found on Walnut Street on a manure bed.

Seed no doubt brought from abroad.-Dr. Nye.
Myosotis laxa. Lehm.
Occasional. Pirates' Glen; other wet situations.
M. stricta. Link.

Blue Curls, False Pennyroyal.

Germander, Wood Sage.

Blue-weed.

Forget-me-not. Scorpion-grass.

Abundant. A little weed on the hillsides, of small consequence.

Beggar's Lice. Cynoglossum Morisoni. DC.
Found on the south side of Flax Pond, in one instance.

Stickseed. Echinospernum Lappula. Lehm.
Is at N. Andover, I859.-Russell.

## CONVOLVULIDS.

(Morning-Glory Family.)

Hedge Bindweed.

Bindweed.

Common Dodder.

Calystegia sepium. R. Br.
Frequent. Climbing on walls in many places.
Convolvulus arvensis. L.
Frequent. Formerly abundant near Ingalls' Pond, Fayette Street. Also in cultivated land about N. Federal Street.

Cuscuta epilinum, Weihe., the Flax Dodder, has been found in Rowley.-Proc. Ess. Inst., 1856.

Cuscuta Gronovii. Willd.
Frequent. Damp and weedy situations, climbing on Bidens, Polygonums, etc.

## SOLANIDS.

(Nightshade Family.)
Thorn-apple, Datura Stramonium. L.
Jamestownweed.

Common. Old grounds and rich places. It seems partial to beds of decayed sea-manure, and is commonest near the beaches.

Black Henbane. Hyoscyamus niger. L.
Very rare. At the north end of Short Beach, Nahant, is the principal locality. A plant now and then in old, rich yards.

Apple of Peru.

Nicandra physaloides. Gært.
Rare. I have seen it in yards in Summer and S. Common Streets, but sparingly. Becoming more plentiful as an intruder in gardens in West Lynn.

Solonum dulcamara. L. *
Abundant. Brooksides and thickets.

## S. nigrum. L.

A few plants have been found on Short Beach, Nahant, and also on Lynn Common.

## GENTIANIDS.

(Gentian Family.)
Gentiana crinita. Frœl.
Occasional. Fresh marsh and like situations.
G. Andrewsii. Grise.

Very rare. Fay estate. Have considerable doubt as to this; it seems not to be the common species of N. England, known as G. saponaria.

Menyanthes trifoliata. L. $\dagger$
Rare. Plentiful along Shute's Brook at the railroad station, Saugus Centre. Also in a muddy slough in the eastern part of Rocks Pasture.

Limnanthemum lacunosum. Grise.
Frequent. Ponds, with the different water lilies.

## APOCYNIDS.

(Dogsbane Family.)
Apocynum androsæmifolium. L.
Common. Woods and uplands.

[^17]Woody
Nightshade.

Common
Nightshade.

Fringed Gentian.

Closed
Gentian.

Buck Bean.

Floa ing Heart.

Dogsbane, Flytrap.

## ASCLEPIDS.

## (Milkweed Family.)

Common Asclepias Cornuti. Decaisne.
Common. Fencerows and edges of cultivated lands.

Poke Milkweed A. phytolaccoides. Pursh.
Occasional. Sheltered pastures and clearings in the woods.

Four-leared Milkweed.

Swamp Milkweed, Indian Hemp.

Whorled Milkweed.
A. quadrifolia. Jacq. *

Rare. I have met with it once or twice in Dungeon Pasture, and the neighboring lands.

## A. incarnata.

Common. Watercourses and low grounds: sometimes in uplands, but more rarely.
A. verticillata. L.

Was found in 186 r at the entrance of Pine Grove Cemeters. by Mr. Edward Johnson. Only known to me before at Waitt's Mount. Malden. I found it in I862. on the rocky hill at Edward Stone"s house. Boston Street. near the Cemetery in considerable quantity, with Sempervivum.

## OLIDS.

## (Olive Family.)

Privet,
Prim.

White Ash. Fraxinus Americana. L. (§)
Occasional. Hardly as frequent as the next. though I confess to some indecision about both species.
Black Ash. F. sambucifolia. Lam. (.)
Woods and borders of fields, as at Linwood.

[^18]
## APETALOUS EXOGENS.

## CHENOPIDS.

(Goosefoot Family.)

## Salsola kali. L.

Common. On the various beaches near highwater mark.
Suæda maritima. Moquin. Salt Goosefoot.
Abundant. Borders of all the salt marshes.

## Salicornia herbacea. L.

Common. On the marshes wherever the sea has access.

Salicornia ambigua, Michx., the Creeping Glasswort, may be found at Gloucester.-Proc. Ess. Inst.

Chenopodium glaucum. L.
I found in 1861, in the barnyard of Isaiah Hill, Summer Street. Also previously at Marblehead Neck, near the beach.

## C. hybridum. L.

I found at North Andover in 1859.
C. album. L.

Common. A weed in every garden.

## C. urbicum. L.

Occasional. About dwellings and yards.
Ambrina anthelmintica. Spach.
Rare. Found on a manure bed on Holyoke Street. Also in Glenmere.
Atriplex patula. L.
Abundant. Along the Eastern Railroad, and the margin of all marshes.

A plant of this family, which seems undescribed by Gray, grows on Short Beach, Nahant. It may possibly be an Obione.

Saltwort.

Samphire.

Oak-leaved
Goosefoot.

Maple-leaved
Goosefoot.
Pigweed.

Triangular *
leaved
Goosefoot.
Wormseed.

Spreading Orache.

## AMARANTHIDS．

（ANARRANTH FAMULTE）

| Ioo ogity to hate a iame | Ameranthus albus．$L$ ． <br> Common．A pertioacemas intruder into erert collixated spot． |
| :---: | :---: |
|  | A．họbridus．IL <br> Common．As homels as its fellom．and mock more troublesome． |

## PHITOLIDS．

（POKEWEED $\mathbb{F}$ ANTILIN）
Poke Sobice，Phytolacea decandra．I．
Greqti． bate been．

## POLYGONIDS．


Fail Polygonum Pennsintranicum．I．
Oocasionai．Pine Grore Cemetert bas fumisbed fine plants nearl？four feet high
İETE Ihumも P．persicaria．I．

Common．IVanute beds and ficin maste grounds． Easit distinguisbed by the daris spot on the leaf．
Sma：rwee．P．hydropiper．I
Common．Cool and moist situations．Well known．

MCie Mater－
きごった。
P．hydropiperoides．Michr
Firequent Smamps and brooks．


むubgruss

## P．amphibium． $\mathbb{L}$

Occasionall．Not as commom as eitber of the last three．Have foumd the beat specimems at Grear Fond N．Audorer．Hardin think is in ITHT．
P．ariculare．L．
Common．Insefarable from cjullization If ans plant is dereloped from inorgawic maner it musi kit让放。
P. tenue. Michx.

Rare. Now and then appearing in gravel pits, and along some by-roads.

Polygonum articulatum, L., Var. Multiplex, the Jointweed has been met with at Ipswich and very abundantly at Groveland.-Proc. Ess. Inst. Also on the railroad between Lynnfield and S. Reading, abundantly.

## P. arifolium. L.

Frequent. Dense and secluded thickets and swamps.

## P. sagittatum. L.

Common. Swamps and meadows.

## P. convolvulus. L.

Common. Gardens and fields.
P. dumetorum. L. (?)

Frequent. Running on walls and bushes.
Fagopyrum esculentum. Mœnch.
Occasional. Naturalized to some extent. I have found it on Lynn Common.

Rumex salicifolius. Hook. (?)
Frequent. Nahant; on the beach and elsewhere.

## R. obtusifolius. L.

Common. Damp cultivated grounds.
R. crispus. L.

Common. Needs no description.
R. acetosella. L.

Common. Pastures and fields. The abundance of the plant appears to be inversely as the richness of the soil.

## LAURIDS.

(Sassafras Family.)

Sassafras officinale. Nees.
Frequent. Seldom grows large with us. I have seen it ten or fifteen feet high at Baker's Hills, Saugus, and about the same size on a knoll in Pan Swamp Meadow.

Slender
Knotgrass.

Larger
Scratchgrass.

Common
Scratchgrass, Tear-thumb.

Black Bindweed Wild Bean.

Climbing False Buckwheat.

Buckwheat.

White Dock, Willow-leaved Dock.

Bitter Dock.

Curled Dock, Yellow Dock.

Common
Sorrel.

| Spice Wood, | Benzoin odoriferum. Nees. |
| :--- | :--- |
| Fever-bush. | Occasional. Pirates' Glen, and in the swamp |
| along Stony Brook, near Linwood Street. The |  |

## THYMELIDS.

(Mezereon Family.)
Mezereum. Daphne Mezereum. L.
Occasional. Paradise Woods, Swampscott.

## SANTALIDS.

(Sandalwood Family.)
False Comandra umbellata. Nutt.*
Toad-flax.
Abuodant. Rocky hills and pastures.

## CALLITRIDS.

(Water-Starwort Family.)
Water Callitriche verna. L.
Starwort.
Frequent. Running waters with muddy bottoms.
Narrow-leaved
Starwort.
C. linearis. Pursh.

Stagnant ponds and slow streams.

## ECPHORBIDS.

(Spurge Family.)
Sun Spurge. Euphorbia helioscopia. L.
A few plants found at E . Saugus in a lot on Boston Street. beside the railroad, south side of the street. Otherwise not found.

[^19]ULMIDS.]
73

## E. Esula. L.

Common. About old dwellings. An emigrant from the garden. Near Devil's Den, Newburyport, it flourishes in the gravel of the railroad in a very peculiar form.
E. polygonifolia. L.

Frequent. Beaches at Nahant, especially Long Beach.

Acalypha Virginica. L.
Common. Yards and rubbish heaps.

## ULMIDS.

(Elm Family)

## Ulmus Americana. L.

Frequent. Generally in wet places, but not always.

Celtis occidentalis. L.
Is said to grow in Great Pastures, between Lynn and Salem.-Robinson.

## Urtica dioica. L.

Occasional. Old gardens and weedy yards.

## U. urens. L.

Occasional. Now and then to be found about old yards in the eastern part of the city.

## Pilea pumila.

Common. Gardens and manure beds.
Bochmeria cylindrica. Willd.
Occasional. Along the brook in Marion Street, and on the edge of several different streams.

Cannabis sativa. L.
Occasional. Old gardens and weedy yards.

Three-seeded
Mercury.

Clearweed, Stingless Nettle.

False Nettle.

Hemp.

## PLATANIDS.

(Buttonwood Family.)
Buttcnwood. Platanus occidentalis. L.
Frequent. Here and there in the woods, seemingly escaped from cultivation.

## JUGLANIDS.

## (Walnut Family.)

Pignut,
Hickory.

Carya glabra. Torr.
Abundant. Forms large tracts of young woods in Dungeon Pasture and vicinity.

## QUERNIDS.

(Oak Family.)
White Oak. Quercus alba. L.
Common. Woods and copses.
Swamp
Chestnut Oak.

## Q. Primus. L.

Formerly abundant in and about the "Johnson Swamp," between Laighton Street and Beacon Hill Avenue. Mostly destroyed.
Q. Prinoides, Willd., the Chinquapin Oak, was found on the Town Farm, Peabody, at a meeting of the Essex Institute, in June, 1857. A single bush was identified by me in 1886 on the summit of " Mount Tabor," near "Penny Brook," Lynn.
Scrub Oak. Q. illicifolia. Wang.
Frequent. Dry hills, forming rough thickets, alike destructive to the clothes and comfort of the wood ranger.

Swamp
White Oak.
Q. bicolar. Willd.

Common. Low grounds.
Quercitron Oak, Black Oak.
Q. tinctoria. Bart.

Occasional. Woods in dry soil.
Scarlet Oak. Q. coccinea. Wang.
Frequent. A heavy tree, scattered about in open lands.

Castanea vesca. L.
Rare. Grows finely in Lynnfield, but not at all, as is believed, in Lynn.

Fagus ferruginea. Ait.
Occasional. Scattered through the Ox Pasture, toward Lynnfield. A tree or two grow in Pratt's Pasture, and a few remain in Linwood.

Corylus Americana. Walt.
Frequent. Old pastures and fence rows. Fruit seldom plentiful.
C. rostrata. Ait.

Grows in Saugus and has been produced at Field Meetings of the Essex Institute.
Carpinus Americana. Mx.
Rare. Formerly common in Linnean Grove, but hardly anywhere else.
Ostrya Virginica. Willd.

## MYRIDS.

(Bayberry Family.)

## Myrica Gale. L.

Abundant. Apparently confined to the western end of the township.
M. cerifera. L.

Common. Pastures and woodlands.
Comptonia asplenifolia. Ait.
Common. Perfectly familiar.

## BETULIDS.

(Birch Family.)
Betula populifolia. Ait.
White Birch.
Common. Formerly covering many acres near the house of N. C. Hutchinson.
B. papyracea. Ait.

Is abundant, as I think along the Spicket River, in Methuen.

Chestnut.

Beech.

Hazel Nut.

Beaked Hazel Nut.

American Hornbeam.

Lever Wood, Hop Hornbean

Sweet Gale, Meadow Fern, Dutch Myrtle. Bayberry. Sweet Fern.

Paper Birch, Canoe Birch.

Red Birch, River Birch.

Cherry Birch,
Black Birch.
B. nigra. L. (?)

Occasional. Three trees stand on the side of Forest Rock, in Pine Grove Cemetery, which do not appear to be $B$. excelsa, and certainly are not $B$. lenta. If they are not this species, they can hardly be included in Gray's enumeration.
Yellow Birch. B. excelsa. Ait.
Frequent. Scattered through the woods and swamps.

## B. lenta. L.

Rare. I have never found a specimen in Lynn, but it has been gathered in former times by others, and may still be found sparingly.

A low birch grows on the shores of Great Pond, N. Andover, which is either B. pumila, L., or else the dwarf $B$. papyracea, which, quere.
Speckled Alder. Alnus incana. Willd.
Is plentiful along Shute's Brook, near the railroad station, Saugus Centre. And likewise in the swamps below the residence of E. B. Phillips, Swampscott.
Common Alder. A. serrulata. Ait.
Common. Sure to appear wherever there is water.

## POPULIDS.

## (Willow Family.)

Low Bush
Willow.
Salix humilis. Marshall.
Frequent. I suppose this, and possibly S. tristis, Ait., and S. discolor, Muhl, are so blended in our flora as to make good distinction difficult.

Swamp Willow, S. eriocephala. Michx. (?)
Frequent. Meadows and streams, sometimes migrating to the uplands. The "Pussy Willow" may comprise more than one species, and I am not well satisfied as to this one in particular.

Hoary Willow. S. candida. Willd.
A small bush near Holmes' Pond, and another on the hillside east of Breed's Pond, are of this species possibly. They are quite distinct, and I cannot otherwise determine them.

## S. alba. L.

Yellow Willow.
Var. Vitellina.
Common. Thoroughly naturalized in wet situations. Probably several varieties are found with us.

Populus tremuloides. Michx.
Frequent. Scattered through the woods, but seldom attaining any great size.
P. grandidentata. Michx.

Tooth-leaved
Frequent. Woods near Breed's Pond. The
American Aspen. most elegant poplar we have.

## GYMNOSPERMOUS EXOGENS.

## PINIDS.

(Pine Family.)
Pinus rigida. Miller.
Pitch Pine.
Common. Extensively distributed all over the dry and rocky pastures in the southern part of the territory.
P. strobus. L.

Common. Not partial to light soils, but growing vigorously in low lands. Greatest height with us about one hundred feet.

Abies Canadensis. Michx.
Hemlock.
Frequent. Scattered, or forming groves, but rarely attaining much magnitude.

Larix Americana. Michx.
Occasional. Grows in Tomlin's Swamp and simWhite Pine. ilar places toward Lynnfield. Seldom large.

Black Larch, Hacmatac.

White Cedar. Cupressus thyoides. L.
Frequent. Fills a swamp at Swampscott, and another, of fine trees, near Birch Brook Pond, near Mr. H. B. Newhall's farm-house.
$\underset{\text { Horse Savin. Juniperus communis. L. * }}{\text { Juniper, }}$
Common. Pastures and hills.
Red Cedar. J. Virginiana. L. $\dagger$
Common. The undisputed tenant of all rocky and sterile hills.

## ENDOGENS.

## ARIDS. <br> (Wake-Robin Family.)

Indian Turnip. Arum triphillum. L.
Adundant. In every wet, rich thicket. The striped or variegated form is frequent here, as in other places.

Arrow Arum. Peltandra Virginica. Raf.
Occasional. Along the banks of brooks.
Water Arum. Calla palustris. L. $\ddagger$
Frequent. At Penny Bridge Brook, in large
quantity.

[^20]TYPHIDS.]
79
Symplocarpus foetidus. Salisb.
Abundant. In all wet grounds. Familiar.

## Acorus calamus. L.

Occasional. Most easily found on the brackish banks of Strawberry Brook, just above Cottage Street.

## TYPHIDS.

## (Cat-Tail Family.)

## Typha latifolia. L.

Frequent. Fresh marshes and stagnant ponds.
Sparganium ramosum. Hudson.
Frequent. Ditches and muddy streams. A ditch in Bridge Street gives good specimens.

## S. Americanum. Nutt.

Abundant. In almost all muddy places.
S. natans. L.

Frequent. Margins of Breed's Pond, and other like places.

ZOSTERIDS.<br>(Sea-Wrack Family.)

## Zostera marina. L.

Abundant. In the harbor, and every salt-water ditch beyond low-water mark.

## Potamogeton natans. L.

Frequent. Most of the ponds.
P. heterophyllus. Schreber.

Frequent. Ponds in shallow water; Bartholomew's Pond, in Peabody, for instance.

## P. lucens. L.

Occasional. Only known to be at Breed's Pond, but probably in other waters also. My specimens were all imperfect, so that the name is partly conjectural.
[CAT-TAIL F. Skunk Cabbage

Sweet Flag.

. $=$

<br>$\qquad$

Smaller Burr Reed.

Sparganium.

Eel-grass.

Floating Pondweed.

Slender Pondweed.

Thin-leaved Pondweed.

Clasping Pondweed.

Narrow-leaved Pondweed.

Marsh
Arrowgrass.

Water
Plaintain.
Arrowhead. Sagittaria variabilis. Engelm.
Common. Everywhere in wet places. The innumerable forms are all included in this species.

## ORCHIDS.

## (Orchis Family.)

Twayblade. Liparis Lœeselii. Rich.
Very rare. Formerly along Stacey's Brook.
Large Corallorhiza multiflora. Nutt.
Rare. Scattered on Blood Swamp Hills, west of Dungeon Rock and so southward.

Late Coral-root.
C. odontorhiza. Nutt.

Rare. Rather plentiful on the east side of Edwards' Swamp.

## Pale Green

 Orchis.Triglochin maritimum. L.
Abundant. Scattered thickly over the salt marshes, forming annular patches. The spike might easily be taken for that of a plaintain.

## Alisma plantago.

Frequent. Water-courses and borders of ponds.

Coral-root.

Gymnadenia tridentata. Lindl.
P. perfoliatus. L.

Abundant. Strawberry Brook.
P. pauciflorus. Pursh. (?)

Abundant. Strawberry Brook at the tan yard, with the last, forming dense mats on the water.

Potamogeton sp. (?) This is from Wenham Pond, and not a perfect specimen. For some time I regarded it as $P$. perfoliatus, but this idea was set aside by finding that species afterward. As it seems not to agree with any species noticed by Gray, I would give a description, but the specimens are unfortunately destroyed.

## ALISMIDS.

(Water-Plantain Family.)

Rare. I have found a single specimen in Salem Pasture.

Platanthera flava. Gray.
Occasional. In the neighborhood of Birch Pond.
P. blephariglottis. Lindl.

Very rare. Not in Lynn.
Possibly in the meadow lands at Swampscott, but this admits of doubt.-Dr.Holder.

It belongs to the flora of Cape Ann, rather than ours, being frequent in the Magnolia Swamp.
P. lacera. Gray.

Common. Our most common species, distributed largely in all damp lands.
P. psycodes. Gray.

Occasional. Swamps and other wet situations.

## P. fimbriata. Lindl.

Very rare. Only one specimen reported.

## P. orbiculata. Lindl.

Very rare. One specimen on the south side of Mt. Nebo, at "Pilgrim's Rest," Aug. 23, 1885.

## Arethusa bulbosa. L.

Rare. Confined to the eastern part of the city. I have it from Rock's Pasture.

## Pogonia ophioglossoides. Nutt.

Frequent. Meadows and bogs, widely distributed.
Calopogon pulchellus. R. Br.
Frequent. In company with the last, usually, but not quite as plentiful.

## Spiranthes gracilis. Bigel.

Frequent. Uplands among bushes. A plant of solitary habit.
S. cernua. Richard.

Abundant. Cool meadows among the grass, which it much resembles in its leaves.

Goodyera repens. R . Br.
Frequent. Pine woods. Distinguished from the next by the white veins being duller, and the leaves more pointed.
[ORCHIS F.
Yellowish Orchis.

White Fringed
Orchis.

Ragged Orchis.

Small Purple
Fringed Orchis.
Large Purple Fringed Orchis.

Round-leaved Orchis.

Arethusa.

Adder's
Tongue Arethusa.

Cymbidium.

Naked
Spiranthes.

Ladies'
Tresses.

Pale Rattlesnake Plantain.

Rattlesnake G. pubescens. R. Br.
Plantain.

Frequent. Pine woods. Generally in patches,
Low Ladies' Cypripedium acaule. Ait.
Slipper,
American
Valerian.
Abundant. Pine woods for the most part, but to be found on many of the hills.

## AMARYLLIDS.

(Amaryllis Family.)
Yellow Star-of- Hypoxis erecta. L.
Bethlehem.
Abundant. Rich uplands and shady borders of woods.

## IRIDS.

> (Blue-Flag Family.)

Large Blue Iris versicolor. L.
Flag.
Abundant. In all wet lands. Well known.

Slender Blue
Flag.
Blue-eyed
Grass.

## I. Virginica. L.

Frequent. Wet meadows and borders of streams. Sisyrinchium Bermudiana. L.

Common. Rather partial to wet spots, but thrives anywhere in good soil.

## SARSIDS.

## (Greenbrier Family.)

Green Brier, Smilax rotundifolia. L.
Common. Forms the most intricate of all thickets, and gets the hearty execration of all who have to pass through its meshes.
Carrion Flower. S. herbacea. L.
Frequent. Shady banks and meadow borders. The common name cannot be matched for expressiveness.

Nodding
Trillium

Trillium cernuum. L.
Rare. Good plants along Shute's Brook, at railroad station, Saugus Centre.

## T. erectum. L.

Also Var. al.bum, have been found by Jno. Sears in a swamp between Danvers and Wenham. The former common there.-Russell.

## Medeola Virginica. L.

Frequent. Moist, shady thickets.

## LILIDS.

## (Lily Family.)

Polygonatum pubescens. Pursh.
Frequent. Warm, rocky slopes in light, rich soil.
Smilacina racemosa. Desf.
Frequent. Stony woods in warm exposures.
S. stellata. Desf.

Rare. Banks of Stacey's Brook, Swampscott.Dr. Holder.
It proves to be plentiful on a hillock at Willis' Neck.
S. bifolia. Ker.

Common. Woods and bushy fields everywhere. Clintonia borealis, the Northern Clintonia, is at Pleasant Pond, Wenham.-Proc. Ess. Inst., 1856. And I found it at the Magnolia Swamp, Gloucester, in 1861.

Ornithogalum umbellatum. L.
Rare. Occasionally found in Glenmere, in wet situations.

Allium Canadense. Kahn.
Occasional. Both the eastern and western parts of the city afford specimens.

## Lilium Philadelphicum. L.

Frequent. Berry pastures among the bushes. Hard to find till it flowers.

## L. Canadense. L.*

Occasional. Not as common as the last.

[^21]Small
Solomon's Seal.

False Spikenard

Star-flowered Solomon's Seal.

Two-leaved Solomon's Seal.

White Star-ofBethlehem.

Wild Meadow Garlic.

Red Lily. Yellow Lily.

## Doo-tooth Erythronium Americanum. Smith. Violet. <br> Occasional. Confined almost exclusively to the eastern section.

## MELANTHIDS.

## (Indian Poke Family.)

## Clasping Bell- Uvularia perfoliata. wort.

Very rare. Formerly at Hathorne's Hill, but extirpated there. I find it even more thrifty in the Blueberry Pasture.

Common
Bellwort.
U. sessilifolia. L.

Abundant. Shady, open woods, often covering large areas.

White Helle-
bore,
Indian Poke.
Veratrum viride. Ait.
Occasional. Upper Swampscott. Neighborhood of Birch Pond.

## JUNCALIDS.

(Rush Family.)
Bulrush. Juncus effusus. L.
Common. Bogs and meadows everywhere.
White-seeded J. paradoxus. E. Meyer. (?)
Rush.
Abundant. Bogs and swampy meadows.
Black-grass. J. Gerardi. Loisel.
Abundant. Forms patches on the lightest part of the marshes.

## PON'TEDERIDS.

(Pickerel-Weed Family.)
Pickerel-weed. Pontederia cordata. L.
Abundant. Brooks and ponds, sometimes forming large clumps.

## XYRIDS.

## (Yellow-Eyed Grass Family.)

Xyris Caroliniana. Walt.
Yellow-eyed
Occasional. Rills in Rock's Pasture, and bogs Grass. along Stony Brook.

## ERIOCAULIDS.

(Pipewort Family.)
Eriocaulon septangulare. Wither. Small Pipewort.
Frequent. Borders of ponds, growing in the edge of the water, or where it has recently dried away.

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[^0]:    "Thick as autumnal leaves that strew the brooks, In Vallambrosa."

[^1]:    * Linnean Grove, together with several other localities mentioned in the first edition of these studies, has been sacrificed to the cheap house-builder, and can no longer be recognized by the botanist. -Ed.

[^2]:    * Easy to cultivate, if good roots be obtained. A fixed variety of a pale, yellowish red or salmon color has been found near Salem. It propagates itself without change.-Phippen.
    $\dagger$ A curious observation on this plant was made by the late Asa T. Newhall, Esq., of Lynnfield, some years since. Having planted some roots in a small pond fed by a cold spring, the flowers, though luxuriant, were perfectly devoid of odor ; a fact due, as he judged, to the coldness of the water where they grew.

[^3]:    * This fine plant is becoming somewhat classical in American design : and enters into the composition of the fountains in front of the State House, Boston.
    $\dagger$ A lovely biennial. By collecting the seeds in mid-summer or the young plants in late autumn, it may be cultivated with ease.

[^4]:    * A crucifer of unknown species, or at least not included in Gray, has appeared in a single instance at Burrill's Hill.

[^5]:    * I traced one five feet into the earth perpendicularly, which retained a diameter of nearly an inch. This plant is almost unknown in Salem, and the north part of the county.-Phippen.

[^6]:    * In this vicinity, this and the two following show to rather poor advantage in autumn, being divested of all the young shoots and leaves by the morocco tanners. $R$. copallina is said to be better for this than the others, though less abundant. $\dagger$ It is a terror to many who are not poisoned by $R$. venenata, of which class I happen to be one.
    A marked specimen of the shrub-form is at Juniper Point,

[^7]:    * Not only graceful, but curiously illustrative of the tendency of leaves to furn the upper surface to the light; the petioles beins all twisted when the twig is inverted.

[^8]:    * This genus is a difficult study for beginners, but is perfectly easy to recognize after a little acquaintance.

[^9]:    * Either this and R. Carolina, L.. the Swamp Rose, are not well distinguished, or else the latter is not in this region.

[^10]:    * An elegant undershrub, well suited for ornamental uses. When not in flower, it is not readily distinguished from a young maple.

[^11]:    * Not a few of this genus might be made to adorn the garden as much as the Cinerarias. A. lavis, patens and Nova Anglia, are all charming flowers, with scarce a fault ; but, alas! they are "so common."

[^12]:    * The energy with which this plant establishes itself has often appeared remarkable, when I have found the vigorous plants growing in the crevices of the bark of trees, three or four feet above the ground, where the seeds have been deposited by the water, when the pond by which they stood was unusually full. A persevering root had in every case followed the retiring water, till it had finally reached the earth.

[^13]:    * Noticeable for the tint of the flowers, which are a full orange. No other plant exhibits it here, I believe, unless it is the Celandine, Chelidonium majus.

[^14]:    * No more a virulent poison than a mustard plant. I have eaten it, drank it, slept upon it, rubbed and bathed with it, and never saw the slightest evil from its use; had it been poisonous, I must have died long since, unless I possess the stomach of a Mithridates.

[^15]:    * I desire in all cases to give the common or English name which is the best and most widely known ; bnt I cannot engage that Partridge-berry, Checkerberry, or Wintergreen, mean anything definite, or apply to one plant more than another. These, like many others, are differently used by different persons. The student should know this and regulate his confidence in them accordingly. As to the present case, the Gaultheria is the plant used for flavoring confectionery and essences.
    $\dagger$ This is one of the shrubs so pleasant to buy of the metropolitan florists. As much as three dollars has been paid for a single bush, when for half that sum a decent wagon-load could be brought from Wenham. It makes one think of Pindar's cheeses:-
    " Where they were made, they sold for the immense Price of three sous apiece;
    But as salt water made their charms increase, In England the fixed rate was eighteen pence."

[^16]:    * Perhaps there is no native flower whose color comes more nearly to a pure red than this. The remarkable range of hues attributed to it by Gray seems to have no example so far as this region is concerned.

[^17]:    * This plant is often spoken of as the Deadly Nightshade, a name which properly belongs to the Atropa Belladonna, L. The two are readily distinguished by the fruit, which in the Atropa is black, but a brilliant red in the other. The true Deadly Nightshade is a rare plant in all parts, and the Solanum Nigrum, L., the Common Nightshade, which somewhat resembles it, is not, I think, to be found in this vicinity.
    $\dagger$ Any one who has access to a brookside or other wet place may cultivate this elegant plant without trouble; and be rewarded with flowers as fine as hyacinths.

[^18]:    * I do not understand how this plant has so long escaped cultivation. Its beauty cannot be questioned, and it would no doubt endure a garden soil perfectly.

[^19]:    *The sbarp-eyed student will notice the strange manner in which the anthers of this species are tied down with threads. and if he feels very wise, may try his ingenuity for the reason Why it is so. There are mysteries in plants, and this is one of them.

[^20]:    * The largest specimen I have seen formerly grew on Second Pine Hill, being some two hundred feet in circumference. It was burnt in 1852.
    $\dagger$ A tree stood formerly on what is known as Pigsty Rock or Big Cedar Hill, worthy to be styled the Patriarch. It measured over seven feet in girth in 1814, with a proportionate height.
    $\ddagger$ I am led to suspect that many are unware that the secluded waters afford this younger sister of the fine Calla Ethiopica of the greenhouse. It is somewhat more modest but hardly less charming than the other, and would prove an ornament to the aquarium or artificial pond.

[^21]:    * A resplendent thing in cultivation. Several of my friends have had it attain a height of six feet, with a dozen or so of flowers open at once.

[^22]:    Et

