Feb. 1. Measured Gowing's Swamp two and a half rods northeast of the middle of the hole, i.e. in the andromeda and sphagnum near its edge, where I stand in the summer; also five rods northeast of the middle of the open hole, or in the midst of the andromeda. In both these places the pole went hard at first, but broke through a crust of roots and sphagnum at about three feet beneath the surface, and I then easily pushed the pole down just twenty feet. This being a small pole, I could not push it any further holding it by the small end; it bent then. With a longer and stiffer pole I could probably have fathomed thirty feet. It seems, then, that there is, over this andromeda swamp, a crust about three feet thick, of sphagnum, andromeda (calyculata and Polifolia), and Kalmia glauca, etc., beneath which there is almost clear water, and, under that, an exceedingly thin mud. There can be no soil above that mud, and yet there were three or four larch trees three feet high or more between these holes, or over exactly the same water, and there were small spruces near by. For aught that appears, the swamp is as deep under the andromeda as in the middle. The two andromedas and the Kalmia glauca may be more
true said to grow in water than in soil there. When
the surface of a swamp shakes for a rod around you,
you may conclude that it is a network of roots two or
three feet thick resting on water or a very thin mud.
The surface of that swamp, composed in great part
of sphagnum, is really floating. It evidently begins with
sphagnum, which floats on the surface of clear water,
and, accumulating, at length affords a basis for that
large-seeded sedge ( ?), andromedas, etc. The filling
up of a swamp, then, in this case at least, is not the
result of a deposition of vegetable matter washed
into it, settling to the bottom and leaving the surface
clear, so filling it up from the bottom to the top; but
the vegetation first extends itself over it as a film,
which gradually thickens till it supports shrubs and
completely conceals the water, and the under part
of this crust drops to the bottom, so that it is filled up
first at the top and the bottom, and the middle part
is the last to be reclaimed from the water.
Perhaps this swamp is in the process of becoming
peat. This swamp has been partially drained by a
ditch.
I fathomed also two rods within the edge of the blue-
berry bushes, in the path, but I could not force a pole
down more than eight feet five inches; so it is much
more solid there, and the blueberry bushes require a
firmer soil than the water andromeda.
This is a regular quag, or shaking surface, and in
this way, evidently, floating islands are formed. I am
not sure but that meadow, with all its bushes in it,
would float a man-of-war.
Feb. 2. Still rains, after a rainy night with a little
snow, forming slosh. As I return from the post-office,
I hear the hoarse, robin-like chirp of a song sparrow
on Cheney’s ground, and see him perched on the top-
most twig of a heap of brush, looking forlorn and drab-
bled and solitary in the rain.
Feb. 3. P. M. — To Conantum.
I notice that the corner posts of the old Conantum
house, which is now being pulled down, were all set
b utt up, and are considerably larger at that end.
I do not see this year, and I do not know that I ever
have seen, any unseasonable swelling of the buds of
indigenous plants in mild winters. I think that herba-
ceous plants show less greenness than usual this win-
ter, having been more exposed for want of a snowy
covering.
Feb. 4. P. M. — To C. Miles Swamp.
Discover the Ledum latifolium, quite abundant over
a space about six rods in diameter just east of the
small pond-hole, growing with the Andromeda caly-
culata, [A.] Polifolia, Kalmia glauca, etc. The A.
Polifolia is very abundant about the pond-hole, some
of it very narrow-leaved and dark, even black, above,
as if burnt.
The ledum bears a general resemblance to the water
andromeda, with its dark reddish-purplish, or rather
mulberry, leaves, reflexed; but nearer it is distinguished
by its coarseness, the perfect tent form of its upper
leaves, and the large, conspicuous terminal roundish
(strictly oval) red buds, nearly as big as the swamp-pink's, but rounded. The woolly stem for a couple of inches beneath the bud is frequently bare and conspicuously club-shaped. The rust on the under sides of the leaves seems of a lighter color than that of Maine. The seed-vessels (which open at the base first) still hold on. This plant might easily be confounded with the water andromeda by a careless observer. When I showed it to a teamster, he was sure that he had seen it often in the woods, but the sight of the woolly under side staggered him.

There are many small spruce thereabouts, with small twigs and leaves, an abnormal growth, reminding one of strange species of evergreen from California, China, etc. I brought some home and had a cup of tea made, which, in spite of a slight piny or turpentine flavor, I thought unexpectedly good.

An abundance of neseca on the east edge of the pond-hole (call it Ledum Pond-hole); and is that a lysimachia mingled with it? 1

The ledum does not grow amid the maples, — nor, indeed, does the A. Polifolia, Kalmia glauca, nor even the water andromeda abundantly. It bears no more shade than that of the spruce trees, which do not prevail over the above-named shrubbery. As usual with the finding of new plants, I had a presentiment that I should find the ledum in Concord. It is a remarkable fact that, in the case of the most interesting plants which I have discovered in this vicinity, I have anticipated finding them perhaps a year before the discovery.

1 Elodea.

Feb. 5. P. M. — To Boaz's Meadow.
There is a plenty of that handsome-seeded grass which I think Tarbell called goose grass 1 in the meadow south of the roadway, at Boaz's Meadow, also in the meadows far north in the woods, and some in Minot Pratt's meadow.

Feb. 7. Aunt Louisa has talked with Mrs. Monroe, and I can correct or add to my account of January 23d. She says that she was only three or four years old, and that she went to school, with Aunt Elizabeth and one other child, to a woman named Turner, somewhere in Boston, who kept a spinning-wheel a-going while she taught these three little children. She remembers that one sat on a lignum-vitea mortar turned bottom up, another on a box, and the third on a stool; and then repeated the account of Jennie Burns bringing her little daughter to the school, as before.

I observed yesterday in that oak stump on the ditch-bank by Trillium Wood (which I counted the rings of once) that between the twentieth and twenty-seventh rings there was only about three sevenths of an inch, though before and after this it grew very fast and seven spaces would make nearly two inches. The tree was growing lustily till twenty years old, and then for seven years it grew only one fourth or one fifth part as fast as before and after. I am curious to know what happened to it.

P. M. — To Cliffs through Wheeler's pasture on the hill.

1 Probably glyceria.
This new pasture, with gray stumps standing thickly in the now seres sward, reminds me of a graveyard. And on these monuments you can read each tree's name, when it was born (if you know when it died), how it thrrove, and how long it lived, whether it was cut down in full vigor or after the infirmities of age had attacked it.

I am surprised to find the epigaea on this hill, at the northwest corner of C. Hubbard's (?) lot, i.e. the large wood. It extends a rod or so and is probably earlier there than where I have found it before. Some of the buds show a very little color. The leaves have lately been much eaten, I suspect by partridges. Little mounds or tufts of yellowish or golden moss in the young woods look like sunlight on the ground.

If possible, come upon the top of a hill unexpectedly, perhaps through woods, and then see off from it to the distant earth which lies behind a bluer veil, before you can see directly down it, i.e. bringing its own near top against the distant landscape.

In the Fair Haven orchard I see the small botrychium still fresh, but quite dark reddish. The bark of the *Pappus grandidentata* there is a green clay-color.

Feb. 8. P. M. — To Walden and Goose Pond.

The ground is so completely bare this winter, and therefore the leaves in the woods so dry, that on the 5th there was a fire in the woods by Walden (Wheeler's), and two or three acres were burned over, set probably by the engine. Such a burning as commonly occurs in the spring.

The ice which J. Brown is now getting for his ice-house from S. Barrett's is from eight to nine plus inches thick, but I am surprised to find that Walden ice is only six inches thick, or even a little less, and it has not been thicker. You can almost drive an axe through it at one blow. In many places about the shore it is open a dozen feet wide, as when it begins to break up in the spring.

I observe, as usual, the shore heaved up near where my house was. It is evidently the result of its thawing. It is lifted up with an abrupt, nearly perpendicular edge nearly a foot high (but looks as if it had been crowded up by the ice), while the part under water probably has not been frozen, or has not been thawed. But in the water close to the shore I observe singular dimples in the sand, sometimes perfectly circular tunnels, etc., as if a stone had been turned round and round and then lifted out. Perhaps this ridge thus lifted up remains somewhat loose through the summer, not falling entirely back, and the next winter, therefore, freezes yet deeper and is heaved up yet higher, and so gains a little from year to year. Thus a pond may create a barrier for itself along an adjacent meadow. When it thus lifts up the shore, it lifts the trees with it, and they are upset.

At Little Goose Pond, where I am surprised to find the ice no thicker than at Walden, I raked in the middle and brought up the branches of white pines two inches thick, but perfectly sound, four rods or more from the shore. The wood has been cut about seventeen years on one side, and at least twelve or fourteen on the other,
and the present growth is oak. These were the tops of pines that formerly fell into the pond. They would long since [have] decayed on land.

I walked about Goose Pond, looking for the large blueberry bushes. I see many which have thirty rings of annual growth. These grow quite on the edge, where they have escaped being cut with the wood, and have all the appearance of age, gray and covered with lichens, commonly crooked, zigzag, and intertwined with their neighbors,—so that when you have cut one off it is hard to extract it,—and bending over nearly to the ice, with lusty young shoots running up straight by their sides. I cut one, which measured eight and a half inches in circumference at the butt, and I counted pretty accurately forty-two rings. From another I cut a straight and sound club, four feet long and six and a half inches in circumference at the small end. It is a heavy and close-grained wood.

This is the largest of the *Vaccinium* which grows here, or is described in Gray's Botany. Some may have borne fruit before I was born, or forty and odd years ago. Older than my cultivated fruit trees. Nobody could tell me what kind of wood it was. The biggest panicked andromeda that I saw thereabouts was only a little more than an inch in diameter and apparently not half as old. It has a much more yellow wood, with a twist to its grain.

Mrs. Monroe says that her mother respected my grandfather very much, because he was a religious man. She remembers his calling one day and inquiring where blue vervain grew, which he wanted, to make a syrup for his cough, and she, a girl, happening to know, ran and gathered some.

Feb. 9. A. M. — To old Hunt house with Thatcher. The stairs of the old back part are white pine or spruce, each the half of a square log; those of the cellar in front, oak, of the same form. There is no ridge-pole whatever,—not even a board,—but a steep roof; and some of the rafters are oak saplings, hewn and showing a good deal of bark, and scarcely three inches diameter at the small end; yet they have sufficed.

Saw at Simon Brown's a sketch, apparently made with a pen, on which was written, "Concord Jail, near Boston America," and on a fresher piece of paper on which the above was pasted, was written, "The jail in which General Sir Arch'd Campbell & Wilson were confined when taken off Boston in America by a French Privateer." A letter on the back side, from Mr. Lewis of Framingham to Mr. Brown, stated that he, Lewis, had received the sketch from the grandson of Wilson, who drew it.

You are supposed to be in the jail-yard, or close to it westward, and see the old jail, gambrel-roofed, the old Hurd house (partly) west of the graveyard, the graveyard, and Dr. Hurd house, and, over the last and to the north of it, a wooded hill, apparently Windmill Hill, and just north of the Hurd house, beyond it, apparently the court-house and schoolhouse, each with belfries, and the road to the Battle-Ground, and a distant farmhouse on a hill, French's or Buttrick's, perhaps.
Begins to snow at noon, and about one inch falls, whitening the ground.

_**Feb. 10.**_ Grows cold toward night, and windy.

_**Feb. 11.**_ At 3 p. m. it is 11° and windy.

I think it is the coldest day of this winter. The river channel is now suddenly and generally frozen over for the first time.

P. M. — To Hill.

The water in the pitcher-plant leaves is frozen, but I see none burst. They are very tightly filled and smooth, apparently stretched.

The leaves of the round-leaved pyrola, so exposed this winter, look not only dark but as if frozen. I am not sure that they are stiffened however. I see that the hemlock leaves also have this frozen or frozen-thawed, cadaverous look, dark and slightly imbrowned, especially the most exposed twigs, while some sheltered ones are still a bright green. The same is the case even with the white pines and, as far as I observe, other evergreens. There is a change in their leaves with cold weather, corresponding to the reddening and darkening of checkerberry and pyrola leaves. They change, though they do not fall, and are to some extent affected, even as those trees which, like the oaks, retain a part of their leaves during the winter in a withered state; _i. e._, they have begun to wither or be killed. I have often before noticed that the pines, when cold weather came, were of a darker and duller green, somewhat like a frozen apple. In the hemlock, at least, there is a positive tendency to redness. The evergreens, then, though they do not fall the first year, lose their original summer greenness; they are changed and partially killed by the cold, like pyrola and checkerberry and lambkill, and even, in a degree, like oak leaves. Perhaps the pitch pine is the least affected.

Cut a club of celtis wood. It is hard but, I think, brittle.

The celastrus (waxwork) is a soft, spongy, and flexible wood, though of very slow growth. You can easily sink your knife into it. I count twenty-five rings in the heart-wood of one which is not quite an inch in diameter. In the sap there is no evidence of rings at all.

_**Feb. 12.**_ Colder than yesterday morning; perhaps the coldest of the winter.

P. M. — To Ledum Pond.

Those small holes in the ground,—musquash, mice, etc.,—thickly beset with crystals of frost, remind me of the invisible vapor issuing thence which may be called Earth’s breath, though you might think it were the breath of a mouse. In cold weather you see not only men’s beards and the hair about the muzzles of oxen whitened with their frozen breath, but countless holes in the banks, which are the nostrils of the earth, white with the frozen earth’s breath.

About the ledum pond-hole there is an abundance of that abnormal growth of the spruce. Instead of a regular, free, and open growth, you have a multitude of slender branches crowded together, putting out from
the summit or side of the stem and shooting up nearly perpendicularly, with dense, fine, wiry branchlets and fine needles, which have an impoverished look, altogether forming a broom-like mass, very much like a heath.

There is, apparently, more of the *Andromeda Polifolia* in that swamp than anywhere else in Concord.

**Feb. 13.** Last night said to have been a little colder than the night before, and the coldest hitherto.

P. M. — Ride to Cafferty’s Swamp.

The greatest breadth of the swamp appears to be northeasterly from Adams’s.

There is much panicled andromeda in it, some twelve feet high, and, as I count, seventeen years old, with yellowish wood. I saw three tupelos in the swamp, each about one foot in diameter and all within two rods. In those parts of the swamp where the bushes were not so high but that I could look over them, I observed that the swamp was variously shaded, or painted even, like a rug, with the sober colors running gradually into each other, by the colored recent shoots of various shrubs which grow densely, as the red blueberry, and the yellowish-brown panicled andromeda, and the dark-brown or blackish *Prinos verticillatus*, and the choke-berry, etc. Standing on a level with those shrubs, you could see that these colors were only a foot or so deep, according to the length of the shoots. So, too, oftener would the forests appear if we oftener stood above them.

How often vegetation is either yellow or red! as the buds of the swamp-pink, the leaves of the pitcher-plant, etc., etc., and to-day I notice yellow-green recent shoots of high blueberry.

Observed a coarse, dense-headed grass in the meadow at Stow’s old swamp lot.

What did the birds do for horsehair here formerly?

**Feb. 14.** About one inch of snow falls.

**Feb. 15.** To Cambridge and Boston.

Saw, at a menagerie, a Canada lynx, said to have been taken at the White Mountains. It looked much like a monstrous gray cat standing on stilts, with its tail cut down to five inches, a tuft of hair on each ear and a ruff under the throat.

**Feb. 18.** I find Walden ice to be nine and a half plus inches thick, having gained three and a half inches since the 8th.

The *Rubus hispidus* (sempervirens of Bigelow) is truly evergreen. There has been so little snow this winter that I have noticed it the more,—red, glossy, and, as it were, plaited.

I see the ice, three inches thick, heaved up tentwise eighteen inches or more in height, near the shore, yet where the water is too deep for the bottom to have been heaved, as if some steam had heaved it.

At Brister’s further spring, the water which trickles off in various directions between and around little mounds of green grass half frozen, when it reaches the more mossy ground runs often between two per-
perpendicular walls of ice, as at the bottom of a cañon, the top of these perfectly square-edged banks being covered with the moss that originally covered the ground (otherwise undisturbed) and extending several feet on each side at the same level. These icy cliffs are of a loose crystalline composition, with many parallel horizontal seams, as if built up. I suppose that the water flows just under the moss, and, freezing, heaves it one stage; then the next night, perchance, new water, flowing underneath, heaves the whole another stage; and so on, steadily lifting it up.

Far from here, I see the surface of weeds and mud lifted up in like manner where there is no cañon or rill, but a puddle.

George Minott tells me that he, when young, used often to go to a store by the side of where Bigelow’s tavern was and kept by Ephraim Jones,—the Goodnow store. That was probably the one kept by my old trader. Told me how Casey, who was a slave to a man,—Whitney—who lived where Hawthorne owns,—the same house,—before the Revolution, ran off one Sunday, was pursued by the neighbors, and hid himself in the river up to his neck till nightfall, just across the Great Meadow. He ran through Gowing’s Swamp and came back that night to a Mrs. Cogswell, who lived where Charles Davis does, and got something to eat; then cleared far away, enlisted, and was freed as a soldier after the war. Whitney’s boy threw snow-balls at him the day before, and finally C., who was chopping in the yard, threw his axe at him, and W. said he was an ugly nigger and he must put him in jail. He may have been twenty years old when stolen from Africa; left a wife and one child there. Used to say that he went home to Africa in the night and came back again in the morning; i.e., he dreamed of home. Lived to be old. Called Thanksgiving “Tom River.”

Feb. 19. Coldest morning this winter by our thermometer, — 3° at 7.30.

The traveller is defended and calloused. He deals with surfaces, has a great coat on. But he who stays at home and writes about homely things gives us naked and tender thoughts and sentiments.

Feb. 20. Snows all day. The most wintry day of the winter; yet not more than three inches on a level is fallen.

We hear the names of the worthies of Concord,—Squire Cuming and the rest,—but the poor slave Casey seems to have lived a more adventurous life than any of them. Squire Cuming probably never had to run for his life on the plains of Concord.

Feb. 24. I see, at Minot Pratt’s, rhodora in bloom in a pitcher with water andromeda.

Went through that long swamp northeast of Boaz’s Meadow. Interesting and peculiar are the clumps, or masses, of panicled andromeda, with light-brown stems, topped uniformly with very distinct yellow-brown recent shoots, ten or twelve inches long, with minute red buds sleeping close along them. This uniformity in such masses gives a pleasing tinge to the
swamp's surface. Wholesome colors, which wear well. I see quite a number of emperor moth cocoons attached to this shrub, some hung round with a loose mass of leaves as big as my two fists. What art in the red-eye to make these two adjacent maple twigs serve for the rim of its pensile basket, inweaving them! Surely it finds a place for itself in nature between the two twigs of a maple.

On the side of the meadow moraine just north of the boulder field, I see barberry bushes three inches in diameter and ten feet high. What a surprising color this wood has! It splits and splinters very much when I bend it. I cut a cane and, shaving off the outer bark, it is of imperial yellow, as if painted, fit for a Chinese mandarin.

Feb. 25. Ice at Walden eleven inches thick and very soggy, sinking to a level with the water, though there is but a trifling quantity of snow on it. Does it not commonly begin to be soggy even thus early, and thick, sinking deeper? I hear of sudden openings in ponds — as at Cochituate — this year.

Feb. 27. A. M. — To Hill.

The hedges on the Hill are all cut off. The journals think they cannot say too much on improvements in husbandry. It is a safe theme, like piety. But for me, as for one of these farms brushed up, — a model farm, — I had as lief see a patent churn and a man turning it. It is simply a place where somebody is making money.¹

¹ [Maine Woods, p. 171; Riv. 210.]