

V

MARCH, 1856

(ÆT. 38)

March 1. 9 A. M. — To Flint's Pond *via* Walden, by railroad and the crust.

I hear the hens cackle as not before for many months. Are they not now beginning to lay?

The catkins of the willow by the causeway and of the aspens appear to have pushed out a little further than a month ago. I see the down of half a dozen on that willow by the causeway; on the aspens pretty generally. As I go through the cut it is still, warm, and more or less sunny, springlike (about 40° +), and the sand and reddish subsoil is bare for about a rod in width on the railroad. I hear several times the fine-drawn *phe-be* note of the chickadee, which I heard only once during the winter. Singular that I should hear this on the first spring day.

I see a pitch pine seed with its wing, far out on Walden.

Going down the hill to Goose Pond, I slump now and then. Those dense, dry beds of leaves are gathered especially about the leafy tops of young oaks, which are bent over and held down by the snow. They lie up particularly light and crisp. The birch stubs stand around Goose Pond, killed by the water a year or two

ago, five or six feet high and thickly, as if they were an irregular stake fence a rod out.

Going up the hill again, I slump in up to my middle.

At Flint's I find half a dozen fishing. The pond cracks a very little while I am there, say at half past ten. I think I never saw the ice so thick. It measures just two feet thick in shallow water, twenty rods from shore.

Goodwin says that somewhere where he lived they called cherry-birds "port-royals."

Haynes of Sudbury brought some axe-helves which he had been making to Smith's shop to sell to-day. Those made by hand are considered stronger than those which are turned, because their outline conforms to the grain. They told him they had not sold any of the last yet. "Well," said he, "you may depend on it you will. They've got to come after them yet, for they have n't been able to get into the woods this winter on account of the snow, and they'll have to do all their chopping this month."

I like to see the farmer whittling his own axe-helve, as I did E. Hosmer a white oak one on the 27th *ult.*

It is remarkable, that though I have not been able to find any open place in the river almost all winter, except under the further stone bridge and at Loring's Brook, — this winter so remarkable for ice and snow, — Coombs should (as he says) have killed two shel-drakes at the falls by the factory, a place which I had forgotten, some four or six weeks ago. Singular that this hardy bird should have found this small opening, which I had forgotten, while the ice everywhere else

was from one to two feet thick, and the snow sixteen inches on a level. If there is a crack amid the rocks of some waterfall, this bright diver is sure to know it. Ask the sheldrake whether the rivers are completely sealed up.

March 2. Has snowed three or four inches — very damp snow — in the night; stops about 9 A. M. This will probably help carry off the old snow, so solid and deep.

P. M. — Walking up the river by Prichard's, was surprised to see, on the snow over the river, a great many seeds and scales of birches, though the snow had so recently fallen, there had been but little wind, and it was already spring. There was one seed or scale to a square foot, yet the nearest birches were, about fifteen of them, along the wall thirty rods east. As I advanced toward them, the seeds became thicker and thicker, till they quite discolored the snow half a dozen rods distant, while east of the birches there was not one. The birches appear not to have lost a quarter of their seeds yet. As I went home up the river, I saw some of the seeds forty rods off, and *perhaps*, in a more favorable direction, I might have found them much further. It suggested how unwearied Nature is, spreading her seeds. Even the spring does not find her unprovided with birch, aye, and alder and pine seed. A great proportion of the seed that was carried to a distance lodged in the hollow over the river, and when the river breaks up will be carried far away, to distant shores and meadows.

The opening in the river at Merrick's is now increased to ten feet in width in some places.

I can hardly believe that hen-hawks may be beginning to build their nests now, yet their young were a fortnight old the last of April last year.

March 3. To Cambridge.

March 4. To Carlisle, surveying.

I had two friends. The one offered me friendship on such terms that I could not accept it, without a sense of degradation. He would not meet me on equal terms, but only be to some extent my patron. He would not come to see me, but was hurt if I did not visit him. He would not readily accept a favor, but would gladly confer one. He treated me with ceremony occasionally, though he could be simple and downright sometimes; and from time to time acted a part, treating me as if I were a distinguished stranger; was on stilts, using made words. Our relation was one long tragedy, yet I did not directly speak of it. I do not believe in complaint, nor in explanation. The whole is but too plain, alas, already. We grieve that we do not love each other, that we cannot confide in each other. I could not bring myself to speak, and so recognize an obstacle to our affection.

I had another friend, who, through a slight obtuseness, perchance, did not recognize a fact which the dignity of friendship would by no means allow me to descend so far as to speak of, and yet the inevitable effect of that ignorance was to hold us apart forever.

March 5. Snowed an inch or two in the night.

Went to Carlisle, surveying.

It is very hard turning out, there is so much snow in the road. Your horse springs and flounders in it. The snow in the wood-lot which I measured was about two feet on a level.

March 6. P. M. — Up Assabet.

The snow is softening. Methinks the lichens are a little greener for it. A thaw comes, and then the birches, which were gray on their white ground before, appear prettily clothed in green. I see various kinds of insects out on the snow now. On the rock this side the Leaning Hemlocks, is the track of an otter. He has left some scentless jelly-like substance an inch and a half in diameter there, yellowish beneath, maybe part of a fish, or clam (?), or himself. The leaves still hanging on some perhaps young swamp white oaks are remarkably fresh, almost ochre-colored brown.

See the snow discolored yellowish under a (probably) gray squirrel's nest high in a pitch pine, and acorn-shells about on it. Also a squirrel's track on the snow over Lee's Hill. The outside toe on the fore feet is nearly at right angles with the others. This also distinguishes it from a rabbit's track. It visits each apple tree, digs up frozen apples and sometimes filberts, and when it starts again, aims for an apple tree, though fifteen rods distant.

March 7. P. M. — Measured snow on account of snow which fell 2d and 4th. West of railroad, 16 + ;

east of railroad, 16; average, say 16 + ; Trillium Wood, 21. Probably quite as deep as any time before, this year. There are still two or more inches of ice next the ground in open land.

I may say that there has not been less than sixteen inches of snow on a level in open land since January 13th. My stick entered the earth in some cases in the wood, as it has not done before. There has been some thawing under the snow.

March 9. Thermometer at 2 P. M. 15°, sixteen inches of snow on a level in open fields, hard and dry, ice in Flint's Pond two feet thick, and the aspect of the earth is that of the middle of January in a severe winter. Yet this is about the date that bluebirds arrive commonly. A pail of water froze nearly half an inch thick in my chamber, with fire raked up. The train which should have got down last night did not arrive till this afternoon (Sunday), having stuck in a drift.

March 10. Thermometer at 7 A. M. 6° below zero. Dr. Bartlett's, between 6.30 and 7 A. M., was at -13°; Smith's at -13° or -14°, at 6 A. M.

P. M. — Up river to Hubbard Bridge.

Thermometer +9° at 3.30 P. M. (the same when I return at five). The snow hard and dry, squeaking under the feet; excellent sleighing. A biting northwest wind *compels* to cover the ears. It is one of the hardest days of the year to bear. Truly a memorable 10th of March. There is no opening yet in the main stream at Prichard's, Hubbard Bath, or the Clamshell, or probably any-

where but at Merrick's, and that a dozen rods long by ten feet; and it is tight and strong under the bridges. A bluebird would look as much out of place now as the 10th of January.

I suspect that in speaking of the springing of plants in previous years I have been inclined to make them start too early generally.

The ice on ponds is as solid as ever. There has been no softening of it. Now is a good time to begin to cut; only its great thickness would hinder you. The blue shadows on snow are as fine as ever. It is hard to believe the records of previous years.

I have not seen a tree sparrow, methinks, since January. Probably the woods have been so generally buried by the snow this winter that they have migrated further south. There has not been one in the yard the past winter, nor a redpoll. I saw perhaps one redpoll in the town; that is all. The pinched crows are feeding in the road to-day in front of the house and alighting on the elms, and blue jays also, as in the middle of the hardest winter, for such is this weather. The blue jays hop about in yards.

The past has been a winter of such unmitigated severity that I have not chanced to notice a snow-flea, which are so common in thawing days.

I go over the fields now in any direction, sinking but an inch or two to the old solid snow of the winter. In the road you are on a level with the fences, and often considerably higher, and sometimes, where it is a level causeway in summer, you climb up and coast down great swells of hard-frozen snow, much higher than

the fences. I may say that I have not had to climb a fence this winter, but have stepped over them on the snow.

Think of the art of printing, what miracles it has accomplished! Covered the very waste paper which flutters under our feet like leaves and is almost as cheap, a stuff now commonly put to the most trivial uses, with thought and poetry! The woodchopper reads the wisdom of ages recorded on the paper that holds his dinner, then lights his pipe with it. When we ask for a scrap of paper for the most trivial use, it may have the confessions of Augustine or the sonnets of Shakespeare, and we not observe it. The student kindles his fire, the editor packs his trunk, the sportsman loads his gun, the traveller wraps his dinner, the Irishman papers his shanty, the schoolboy peppers the plastering, the belle pins up her hair, with the printed thoughts of men. Surely he who can see so large a portion of earth's surface thus darkened with the record of human thought and experience, and feel no desire to learn to read it, is without curiosity. He who cannot read is worse than deaf and blind, is yet but half alive, is still-born.

Still there is little or no chopping, for it will not pay to shovel the snow away from the trees; unless they are quite large, and then you must work standing in it two feet deep. There is an eddy about the large trees beside, which produces a hollow in the snow about them, but it lies close up to the small ones on every side.

10 P. M.—Thermometer at zero.

I read, when last at Cambridge, in the Philadelphia

Philosophical Transactions, that, in the cold winter of 1780, many shellfish, frogs, insects, etc., as well as birds and plants, perished.

March 11. Thermometer at 7 A. M. 6° , yet, the fire going out, Sophia's plants are frozen again. Dr. Bartlett's was -4° .

When it was proposed to me to go abroad, rub off some rust, and *better my condition* in a worldly sense, I fear lest my life will lose some of its homeliness. If these fields and streams and woods, the phenomena of nature here, and the simple occupations of the inhabitants should cease to interest and inspire me, no culture or wealth would atone for the loss. I fear the dissipation that travelling, going into society, even the best, the enjoyment of intellectual luxuries, imply. If Paris is much in your mind, if it is more and more to you, Concord is less and less, and yet it would be a wretched bargain to accept the proudest Paris in exchange for my native village. At best, Paris could only be a school in which to learn to live here, a stepping-stone to Concord, a school in which to fit for this university. I wish so to live ever as to derive my satisfactions and inspirations from the commonest events, every-day phenomena, so that what my senses hourly perceive, my daily walk, the conversation of my neighbors, may inspire me, and I may dream of no heaven but that which lies about me. A man may acquire a taste for wine or brandy, and so lose his love for water, but should we not pity him?

The sight of a marsh hawk in Concord meadows is

worth more to me than the entry of the allies into Paris. In this sense I am not ambitious. I do not wish my native soil to become exhausted and run out through neglect. Only that travelling is good which reveals to me the value of home and enables me to enjoy it better. That man is the richest whose pleasures are the cheapest.

It is strange that men are in such haste to get fame as teachers rather than knowledge as learners.

I hear that Goodwin found one of his traps frozen in this morning, where it has not frozen before this year.

P. M. — 3.30, thermometer 24° .

Cut a hole in the ice in the middle of Walden. It is just $24\frac{1}{4}$ inches thick, $11\frac{1}{2}$ + being snow ice, $12\frac{3}{4}$ water ice; and there is between 3 and 4 inches of crusted snow above this. The water rises to within $2\frac{1}{2}$ inches of the top of the ice, *i. e.* between a ninth and tenth of the whole thickness. The clear ice has therefore gained $2\frac{3}{4}$ inches beneath since the 16th of February. It has gone on freezing under $21\frac{1}{2}$ inches of ice. Yet people very commonly say that it will not continue to freeze under half that thickness of snow and ice. It is a job to cut a hole now. Snow and ice together make a curtain twenty-eight inches thick now drawn over the pond. Such is the prospect of the fishes!

March 12. The last four cold days have closed the river again against Merrick's, and probably the few other small places which *may* have opened in the town, at the mouth of one or two brooks. I hear, from two sources, of portions of brooks, etc., being frozen over within two days, which had not frozen before this winter.

We had a colder day in the winter of '54 and '55 than in the last, yet the ice did not get to be so thick. It is *long-continued, steady* cold which produces thick ice. If the present cold should continue uninterrupted a thousand years would not the pond become solid?

Rufus Hosmer says he has known the ground here to be frozen four feet deep.

I never saw such solid mountains of snow in the roads. You travel along for many rods over excellent dry solid sleighing, where the road is perfectly level, not thinking but you are within a foot of the ground, then suddenly descend four or five feet and find, to your surprise, that you had been traversing the broad back of a drift.

The crow has been a common bird in our street and about our house the past winter.

One large limb of the great elm  at Davis's, sawed off, presented this outline: a perfect harp.

March 13. P. M. — To Flint's Pond.

Much warmer at last. On Flint's Pond I cut a hole and measured the ice twenty-two rods from the shore nearest to Walden, where the water was nine feet deep (measuring from its surface in the hole). The ice was twenty-six inches thick, thirteen and one half of it being snow ice, and the ice rose above the water two inches. This ice is as solid as at any time in the winter. Three inches of snow above. It was so much work to cut this hole with a dull axe that I did not try any other place

where it may have been thicker. Perhaps it was thicker in the middle, as in '47.¹

March 14. Friday. Quite warm. Thermometer 46°.

3 P. M. — Up Assabet.

The ice formed the fore part of this week, as that at Merrick's noticed on the 12th, and heard of elsewhere in the Mill Brook, appears to have been chiefly snow ice, though no snow fell. It was apparently blown into the water during those extremely cold nights and assisted its freezing. So that it is a question whether the river would have closed again at Merrick's on the night of the 10th and 11th, notwithstanding the intense cold, if the snow had not been blown into it,—a question, I say, because the snow *was* blown into it.

I think it remarkable that, cold as it was, I should not have supposed from my sensations that it was nearly so cold as the thermometer indicated.

Tapped several white maples with my knife, but find no sap flowing; but, just above Pinxter Swamp, one red maple limb was moistened by sap trickling along the bark. Tapping this, I was surprised to find it flow freely. Where the sap had dried on the bark, shining and sticky, it tasted quite sweet. Yet Anthony Wright tells me that he attempted to trim some apple trees on the 11th, but was obliged to give up, it was so cold. They were frozen solid. This is the only one of eight or ten white and red maples that flows. I do not see why it should be.

As I return by the old Merrick Bath Place, on the

¹ Probably not, judging from Walden. *Vide* 19th.

river, — for I still travel everywhere on the middle of the river, — the setting sun falls on the osier row toward the road and attracts my attention. They certainly look brighter now and from this point than I have noticed them before this year, — greenish and yellowish below and reddish above, — and I fancy the sap fast flowing in their pores. Yet I think that on a close inspection I should find no change. Nevertheless, it is, on the whole, perhaps the most springlike sight I have seen.

March 15. Put a spout in the red maple of yesterday, and hung a pail beneath to catch the sap. Mr. Chase (of the Town School), who has lived a hundred miles distant in New Hampshire, speaks of the snow-fleas as a spring phenomenon, — probably because the winter is more uniformly cold there, — and says that they think it time to stop making maple-sugar when they observe them. They get into the sap by myriads and trouble them much.

March 16. 7 A. M. — The sap of that red maple has not begun to flow yet. The few spoonfuls in the pail and in the hole are frozen.

These few rather warmer days have made a little impression on the river. It shows a rough, snowy ice in many places, suggesting that there is a river beneath, the water having probably oozed up or the snow blown and melted off there. A rough, softening snowy ice, with some darker spots where you suspect weakness, though it is still thick enough.

2 P. M. — The red maple [sap] is now about an inch

deep in a quart pail, — nearly all caught since morning. It now flows at the rate of about six drops in a minute. Has probably flowed faster this forenoon. It is perfectly clear, like water. Going home, slipped on the ice, throwing the pail over my head to save myself, and spilt all but a pint. So it was lost on the ice of the river. When the river breaks up, it will go down the Concord into the Merrimack, and down the Merrimack into the sea, and there get salted as well as diluted, part being boiled into sugar. It suggests, at any rate, what various liquors, beside those containing salt, find their way to the sea, — the sap of how many kinds of trees!

There is, at any rate, such a phenomenon as the willows shining in the spring sun, however it is to be accounted for.

March 17. Monday. Snow going off very gradually under the sun alone. Going begins to be bad; horses slump; hard turning out. See where the cattle, which have stepped a few inches one side the sled-track, have slumped two feet or more, leaving great holes.

March 18. P. M. — Up river.

It is still quite tight at Hubbard's Bath Bend and at Clamshell, though I hesitate a little to cross at these places. There are dark spots in the soft, white ice, which will be soon worn through.

What a solid winter we have had! No thaw of any consequence; no bare ground since December 25th; but an unmelting mass of snow and ice, hostile to all greenness. Have not seen a green radical leaf even, as usual, all being covered up.

Nut Meadow Brook is open for a dozen rods from its mouth, and for a rod into the river. Higher up, it is still concealed by a snowy bridge two feet thick. I see the ripples made by some fishes, which were in the small opening at its mouth, making haste to hide themselves in the ice-covered river. This square rod and one or two others like it in the town are the only places where I could see this phenomenon now. Thus early they appear, ready to be the prey of the fish hawk. Within the brook I see quite a school of little minnows, an inch long, amid or over the bare dead stems of polygonums, and one or [two] little water-bugs (apple-seeds). The last also in the broad ditch on the Corner road, in Wheeler's meadow. Notwithstanding the backwardness of the season, all the town still under deep snow and ice, here they are, in the first open and smooth water, governed by the altitude of the sun.

I see many small furrows, freshly made, in the sand at the bottom of the brook, from half an inch to three quarters wide, which I suspect are made by some small shellfish already moving, perhaps *Paludina*!¹

March 19. P. M. — To Walden.

Measured the snow again. West of railroad, 15; east of railroad, $11\frac{1}{5}$; average, $13\frac{2}{5}$; Trillium Woods, $16\frac{3}{4}$. The last measurement was on the 7th, when it averaged about sixteen inches in the open land. This depth it must have preserved, owing to the remarkably cold weather, till the 13th at least. So it chances that the snow was constantly sixteen inches deep, at least,

¹ Vide 20th.

on a level in open land, from January 13th to March 13th. It is remarkable how rapidly it has settled on the east of the railroad as compared with the west since the 7th (or I may say rather the 13th). The whole average settling, in open land, since say the 13th, is a little less than three inches.

The thickness of the ice on Walden in the long cove on the south side, about five rods from shore, where the water is nineteen and a half feet deep, is just twenty-six inches, about one foot being snow ice. In the middle it was twenty-four and a quarter on the 11th. It is the same there now, and undoubtedly it was then twenty-six in the long cove. Probably got to be the thickest on this side. Since the warmer weather which began on the 13th, the snow, which was three or four inches deep, is about half melted on the ice, under the influence of the sun alone, and the ice is considerably softened within the last five days, thus *suddenly*, quite through, it being easier to cut and more moist, quite fine and white like snow in the hole, sticking together as damp snow when I shovel it out on my axe, the dust not at all hard, dry, and crystalline. Apparently, then, Walden is as thickly frozen about shore as Flint's.

While I am measuring, though it is quite warm, the air is filled with large, moist snowflakes, of the star form, which are rapidly concealing the very few bare spots on the railroad embankment. It is, indeed, a new snow-storm.

Another old red maple bleeds now, on the warm south edge of Trillium Wood. The first maple was old and in a warm position.

WHAT BEFELL AT MRS. BROOKS'S.

On the morning of the 17th, Mrs. Brooks's Irish girl Joan fell down the cellar stairs, and was found by her mistress lying at the bottom, apparently lifeless. Mrs. Brooks ran to the street-door for aid to get her up, and asked a Miss Farmer, who was passing, to call the blacksmith near by. The latter lady turned instantly, and, making haste across the road on this errand, fell flat in a puddle of melted snow, and came back to Mrs. Brooks's, bruised and dripping and asking for opodeldoc. Mrs. Brooks again ran to the door and called to George Bigelow to complete the unfinished errand. He ran nimbly about it and fell flat in another puddle near the former, but, his joints being limber, got along without opodeldoc and raised the blacksmith. He also notified James Burke, who was passing, and he, rushing in to render aid, fell off one side of the cellar stairs in the dark. They no sooner got the girl up-stairs than she came to and went raving, then had a fit.

Haste makes waste. It never rains but it pours. I have this from those who have heard Mrs. Brooks's story, seen the girl, the stairs, and the puddles.

No sooner is some opening made in the river, a square rod in area, where some brook or rill empties in, than the fishes apparently begin to seek it for light and warmth, and thus early, perchance, may become the prey of the fish hawk. They are seen to ripple the water, darting out as you approach.

I noticed on the 18th that springy spot on the shore just above the railroad bridge, by the ash, which for a month has been bare for two or three feet, now enlarged to eight or ten feet in diameter. And in a few other places on the meadowy shore, *e. g.* just above mouth of Nut Meadow, I see great dimples in the deep snow, eight or ten feet over, betraying springs. There the pads (*Nuphar*) and cress already spring, and shells are left by the rat. At the broad ditch on the Corner road, opposite Bear Garden, the snowy crust had slumped or fallen in here and there, and, where the bridge was perfect, I saw it quite two feet thick. In the smooth open water there, small water-bugs were gyrating singly, not enough to play the game.

I am surprised at the sudden change in the Walden ice within five days. In cutting a hole now, instead of hard, dry, transparent chips of ice, you make a fine white snow, very damp and adhering together, with but few chips in it. The ice has been affected throughout its twenty-six inches, though most, I should say, above. Hard to say exactly where the ice begins, under the two inches of snow.

March 20. It snowed three or four inches of damp snow last afternoon and night, now thickly adhering to the twigs and branches. Probably it will soon melt and help carry off the snow.

P. M. — To Trillium Wood and to Nut Meadow Brook to tap a maple, see paludina, and get elder and sumach spouts, slumping in the deep snow. It is now so softened that I slump at every third step. The

sap of red maples in *low and warm* positions now generally flows, but not in high and exposed ones.

Where I saw those furrows in the sand in Nut Meadow Brook the other day, I now explore, and find within a square foot or two half a dozen of *Paludina decisa* with their feet out, within an inch of the surface, so I have scarcely a doubt that they made them. I suppose that they do not furrow the bottom thus under the ice, but as soon as the spring sun has thawed it, they come to the surface, — *perhaps* at night only, — where there is some little sand, and furrow it thus by their motions. Maybe it is the love season. *Perhaps* these make part of the food of the crows which visit this brook and whose tracks I now see on the edge, and have all winter. Probably they also pick up some dead frogs.

Father read in a paper to-day of seven hundred and forty-odd apple tree buds recently taken out of the crop of a partridge.

Last night's snow, which is melting very fast, is evidently helping to rot the ice very fast, in the absence of rain, by settling into it, as did the older snow, indeed. Maybe it will thaw the ground in the same way. Considering how solid and thick the river was a week ago, I am surprised to find how cautious I have grown about crossing it in many places now.

For two or three days I have heard the gobbling of turkeys, the first spring sound, after the chickadees and hens, that I think of. The river has just begun to open at Hubbard's Bend. It has been closed there since January 7th, *i. e.* ten weeks and a half.

Set a pail before coming here to catch red maple sap, at Trillium Wood. I am now looking after elder and sumach for spouts. I find the latter best, for though the former has as large a pith (larger in proportion to its size), its wood commonly being less, it does not fill so large a hole, nor is it so strong. Yet there is some by A. Barrett's ditch more than two inches in diameter, very strong, but its pith small. The pith, etc., of the smooth smells to me like weak tobacco. What other shrubs have a large pith? ¹ Got my smooth sumach on the south side of Nawshavtuct. I know of no shrubs hereabout except elders and the sumachs which have a suitable pith and wood for such a purpose. The pith of the smooth sumach is a light brown, like *yellow* snuff. The ring of old wood next to it is a decayed-looking greenish yellow; the sap-wood is white. When cut or broken, it has a singularly parti-colored and decayed look, there being often but a small proportion of sap-wood. A white sticky juice oozes out of the edge of the bark where cut, and soon turns yellow and hard in drops like pitch or hickory sap. This pith does not come out quite so entire and smooth as elder, being drier now at least. You can shove it past the axils of twigs. The old wood of the ivy is also yellow like this, but there is more and harder sap-wood and the pith is quite small. The pith of the poison sumach or dogwood is considerably smaller, but I think it has the same scent with the smooth. An-

¹ Only those plants which have a great growth the first year can have much pith, since apparently this does not increase afterward. *Vide* April 22d for mountain sumach.

other poison-dogwood has a very large pith, and I am not sure about the scent. The juice of the bark is not white.

March 21. George Brooks, of the North Quarter, tells me that he went a-fishing at Nagog Pond on the 18th and found the ice from thirty to thirty-seven inches thick (the greater part, or all but about a foot, snow ice), the snow having blown on to the ice there. He measured it with a rule and a hooked stick. (But at Walden, where I measured, there was no drifting of the snow.) It may have been no thicker at Nagog on an average. He says that both the gray squirrel and the red eat pine seed, but not in company. The former have been quite common about his house the past winter, and his neighbor caught two in his yard.

10 A. M. — To my red maple sugar camp. Found that, after a pint and a half had run from a single tube after 3 P. M. yesterday, it had frozen about half an inch thick, and this morning a quarter of a pint more had run. Between 10.30 and 11.30 A. M. this forenoon, I caught two and three quarters pints more, from six tubes, at the same tree, though it is completely overcast and threatening rain. Four and one half pints in all. This sap is an agreeable drink, like iced water (by chance), with a pleasant but slight sweetish taste. I boiled it down in the afternoon, and it made an ounce and a half of sugar, without any molasses, which appears to be the average amount yielded by the sugar maple in similar situations, *viz.* south edge of a wood, a tree partly decayed, two feet [in] diameter.

It is worth the while to know that there is all this sugar in our woods, much of which might be obtained by using the refuse wood lying about, without damage to the proprietors, who use neither the sugar nor the wood.

I left home at ten and got back before twelve with two and three quarters pints of sap, in addition to the one and three quarters I found collected.

I put in saleratus and a little milk while boiling, the former to neutralize the acid, and the latter to collect the impurities in a skum. After boiling it till I burned it a little, and my small quantity would not flow when cool, but was as hard as half-done candy, I put it on again, and in a minute it was softened and turned to sugar.

While collecting sap, the little of yesterday's lodging snow that was left, dropping from the high pines in Trillium Wood and striking the brittle twigs in its descent, makes me think that the squirrels are running there.

I noticed that my fingers were purpled, evidently from the sap on my auger.

I had a dispute with Father about the *use* of my making this sugar when I knew it could be done and might have bought sugar cheaper at Holden's. He said it took me from my studies. I said I made it my study; I felt as if I had been to a university.

It dropped from each tube about as fast as my pulse beat, and, as there were three tubes directed to each vessel, it flowed at the rate of about one hundred and eighty drops in a minute into it. One maple, standing

other poison-dogwood has a very large pith, and I am not sure about the scent. The juice of the bark is not white.

March 21. George Brooks, of the North Quarter, tells me that he went a-fishing at Nagog Pond on the 18th and found the ice from thirty to thirty-seven inches thick (the greater part, or all but about a foot, snow ice), the snow having blown on to the ice there. He measured it with a rule and a hooked stick. (But at Walden, where I measured, there was no drifting of the snow.) It may have been no thicker at Nagog on an average. He says that both the gray squirrel and the red eat pine seed, but not in company. The former have been quite common about his house the past winter, and his neighbor caught two in his yard.

10 A. M. — To my red maple sugar camp. Found that, after a pint and a half had run from a single tube after 3 P. M. yesterday, it had frozen about half an inch thick, and this morning a quarter of a pint more had run. Between 10.30 and 11.30 A. M. this forenoon, I caught two and three quarters pints more, from six tubes, at the same tree, though it is completely overcast and threatening rain. Four and one half pints in all. This sap is an agreeable drink, like iced water (by chance), with a pleasant but slight sweetish taste. I boiled it down in the afternoon, and it made an ounce and a half of sugar, without any molasses, which appears to be the average amount yielded by the sugar maple in similar situations, *viz.* south edge of a wood, a tree partly decayed, two feet [in] diameter.

It is worth the while to know that there is all this sugar in our woods, much of which might be obtained by using the refuse wood lying about, without damage to the proprietors, who use neither the sugar nor the wood.

I left home at ten and got back before twelve with two and three quarters pints of sap, in addition to the one and three quarters I found collected.

I put in saleratus and a little milk while boiling, the former to neutralize the acid, and the latter to collect the impurities in a skum. After boiling it till I burned it a little, and my small quantity would not flow when cool, but was as hard as half-done candy, I put it on again, and in a minute it was softened and turned to sugar.

While collecting sap, the little of yesterday's lodging snow that was left, dropping from the high pines in Trillium Wood and striking the brittle twigs in its descent, makes me think that the squirrels are running there.

I noticed that my fingers were purpled, evidently from the sap on my auger.

I had a dispute with Father about the *use* of my making this sugar when I knew it could be done and might have bought sugar cheaper at Holden's. He said it took me from my studies. I said I made it my study; I felt as if I had been to a university.

It dropped from each tube about as fast as my pulse beat, and, as there were three tubes directed to each vessel, it flowed at the rate of about one hundred and eighty drops in a minute into it. One maple, standing

immediately north of a thick white pine, scarcely flowed at all, while a smaller, farther in the wood, ran pretty well. The south side of a tree bleeds first in spring. I hung my pails on the tubes or a nail. Had two tin pails and a pitcher. Had a three-quarters-inch auger. Made a dozen spouts, five or six inches long, hole as large as a pencil, smoothed with a pencil.

March 22. Saturday. P. M. — To white maples and up Assabet.

The ice of the river is very rapidly softening, still concealed by snow, the upper part becoming homogeneous with the melting snow above it. I *sometimes* slump into snow and *ice* six or eight inches, to the harder ice beneath.

I walk up the middle of the Assabet, and most of the way on middle of South Branch.

Many tracks of crows in snow along the edge of the open water against Merrick's at Island. They thus visit the edge of water — this and brooks — before any ground is exposed. Is it for small shellfish? The snow now no longer bears you. It has become very coarse-grained under the sun, and I hear it sink around me as I walk.

Part of the white maples now begin to flow, some perhaps two or three days. Probably in equally warm positions they would have begun to flow as early as those red ones which I have tapped. Their buds, and apparently some of the red ones, are visibly swollen. This probably follows directly on the flowing of the sap. In three instances I cut off a twig, and sap flowed

and dropped from the part attached to the tree, but in no case would any sap flow from the part cut off (I mean where I first had cut it), which appears to show that the sap is now *running up*.¹ I also cut a notch in a branch two inches in diameter, and the upper side of the cut remained dry, while sap flowed from the lower side, but in another instance both sides were wet at once and equally. The sap, then, is now generally flowing upward in red and white maples in *warm positions*. See it flowing from maple twigs which were gnawed off by rabbits in the winter.

The down of willow catkins in very warm places has in almost every case peeped out an eighth of an inch, generally over the whole willow.

On water standing above the ice under a white maple, are many of those *Perla* (?) insects, with four wings, drowned, though it is all ice and snow around the country over. Do not see any flying, nor before this.

The woodchoppers, who are cutting the wood at Assabet Spring, now at last go to their work up the middle of the river, but one got in yesterday, one leg the whole length. It is rotted through in many places behind Prichard's.

At the red maple which I first tapped, I see the sap still running and wetting the whole side of the tree. It has also oozed out from the twigs, especially those that are a little drooping, and run down a foot or two bathing them sometimes all around, both twigs and

¹ Yet the next day at Walden it flowed from *both parts*, though *considerably more* from the end attached to the tree. It will also drip from the upper earf of a woodchopper.

buds sometimes, or collected in drops on the under sides of the twigs and all evaporated to molasses, which is, for the most part, as black as blacking or ink, having probably caught the dust, etc., even over all this snow. Yet it is as sweet and thick as molasses, and the twigs and buds look as if blacked and polished. Black drops of this thick, sweet syrup spot the under sides of the twigs. No doubt the bees and other insects frequent the maples now. I thought I heard the hum of a bee, but perhaps it was a railroad whistle on the Lowell Railroad. It is as thick as molasses. See a fuzzy gnat on it. It is especially apt to collect about the bases of the twigs, where the stream is delayed. Where the sap is flowing, the red maple being cut, the inner bark turns crimson. I see many snow-fleas on the moist maple chips.

Saw a pigeon woodpecker under the swamp white oak in Merriek's pasture, where there is a small patch of bare ground. Probably Minott saw one in his doorway in midwinter.

March 23. I spend a considerable portion of my time observing the habits of the wild animals, my brute neighbors. By their various movements and migrations they fetch the year about to me. Very significant are the flight of geese and the migration of suckers, etc., etc. But when I consider that the nobler animals have been exterminated here, — the cougar, panther, lynx, wolverene, wolf, bear, moose, deer, the beaver, the turkey, etc., etc., — I cannot but feel as if I lived in a tamed, and, as it were, emasculated country. Would

not the motions of those larger and wilder animals have been more significant still? Is it not a maimed and imperfect nature that I am conversant with? As if I were to study a tribe of Indians that had lost all its warriors. Do not the forest and the meadow now lack expression, now that I never see nor think of the moose with a lesser forest on his head in the one, nor of the beaver in the other? When I think what were the various sounds and notes, the migrations and works, and changes of fur and plumage which ushered in the spring and marked the other seasons of the year, I am reminded that this my life in nature, this particular round of natural phenomena which I call a year, is lamentably incomplete. I listen to [a] concert in which so many parts are wanting. The whole civilized country is to some extent turned into a city, and I am that citizen whom I pity. Many of those animal migrations and other phenomena by which the Indians marked the season are no longer to be observed. I seek acquaintance with Nature, — to know her moods and manners. Primitive Nature is the most interesting to me. I take infinite pains to know all the phenomena of the spring, for instance, thinking that I have here the entire poem, and then, to my chagrin, I hear that it is but an imperfect copy that I possess and have read, that my ancestors have torn out many of the first leaves and grandest passages, and mutilated it in many places. I should not like to think that some demigod had come before me and picked out some of the best of the stars. I wish to know an entire heaven and an entire earth. All the great

trees and beasts, fishes and fowl are gone. The streams, perchance, are somewhat shrunk.

I see that a shopkeeper advertises among his perfumes for handkerchiefs "meadow flowers" and "new-mown hay."

P. M. — To Walden.

The sugar maple sap flows, and for aught I know is as early as the red.

I think I may say that the snow has been *not less than a foot deep on a level* in open land until to-day, since January 6th, about eleven weeks. It probably begins to be less about this date. The bare ground begins to appear where the snow is worn in the street. It has been steadily melting since March 13th, the thermometer rising daily to 40 and 45 at noon, but no rain.

The east side of the Deep Cut is nearly bare, as is the railroad itself, and, on the driest parts of the sandy slope, I go looking for *Cicindela*, — to see it run or fly amid the sere blackberry vines, — some life which the warmth of the dry sand under the spring sun has called forth; but I see none. I am reassured and reminded that I am the heir of eternal inheritances which are inalienable, when I feel the warmth reflected from this sunny bank, and see the yellow sand and the reddish subsoil, and hear some dried leaves rustle and the trickling of melting snow in some sluiceway. The eternity which I detect in Nature I predicate of myself also. How many springs I have had this same experience! I am encouraged, for I recognize this

steady persistency and recovery of Nature as a quality of myself.

The first places which I observe to be bare now, though the snow is generally so deep still, are the steep hillsides facing the south, as the side of the Cut (though it looks not south exactly) and the slope of Heywood's Peak toward the pond, also under some trees in a meadow (there is less snow there on account of eddy, and apparently the tree absorbs heat), or a ridge in the same place. Almost the whole of the steep hillside on the north of Walden is now bare and dry and warm, though fenced in with ice and snow. It has attracted partridges, four of which whirl away on my approach. There the early sedge is exposed, and, looking closer, I observe that it has been sheared off close down, when green, far and wide, and the fallen withered tops are little handfuls of hay by their sides, which have been covered by the snow and sometimes look as if they had served as nests for the mice, — for their green droppings are left in them abundantly, — yet not such plain nests as in the grain-field last spring, — probably the *Mus leucopus*, — and the wintergreen and the sere pennyroyal still retain some fragrance.

As I was returning on the railroad, at the crossing beyond the shanty, hearing a rustling, I saw a striped squirrel amid the sedge on the bare east bank, twenty feet distant. After observing me a few moments, as I stood perfectly still between the rails, he ran straight up to within three feet of me, out of curiosity; then, after a moment's pause, and looking up to my face, turned back and finally crossed the railroad. All the

red was on his rump and hind quarters. When running he carried his tail erect, as he scratched up the snowy bank.

Now then the steep south hillsides begin to be bare, and the early sedge and sere, but still fragrant, pennyroyal and rustling leaves are exposed, and you see where the mice have sheared off the sedge and also made nests of its top during the winter. There, too, the partridges resort, and perhaps you hear the bark of a striped squirrel, and see him scratch toward his hole, rustling the leaves. For all the inhabitants of nature are attracted by this bare and dry spot, as well as you.

The muskrat-houses were certainly very few and small last summer, and the river has been remarkably low up to this time, while, the previous fall, they [were] very numerous and large, and in the succeeding winter the river rose remarkably high. So much for the muskrat sign. The bare ground just begins to appear in a few spots in the road in middle of the town.

March 24. Monday. Very pleasant day. Thermometer 48° at noon.

9 A. M. — Start to get two quarts of white maple sap and home at 11.30. One *F. hyemalis* in yard. Spend the forenoon on the river at the white maples. I hear a bluebird's warble and a song sparrow's chirp. So much partly for being out the whole forenoon. Bluebirds seen in all parts of the town to-day for first time, as I hear. The *F. hyemalis* has been seen two or three days. Cross the river behind Monroe's. Go everywhere on the North Branch — it is all solid — and

almost everywhere on the South Branch. The crust bears in the morning. The snow is so coarse-grained and hard that you can hardly get up a handful to wash your hands with, except the dirty surface. The early aspen buds down very conspicuous, half an inch long; yet I detect no flow of sap.

The white maple sap does not flow fast generally at first, — or 9 A. M., — not till about ten. Yet last year I paddled my boat to Fair Haven Pond on the 19th of March! Before noon I slump two feet in the snow.

You bore a little hole with your knife, and presently the wounded sap-wood begins to glisten with moisture, and anon a clear crystalline tear-like drop flows out and runs down the bark, or drops at once to the snow. This is the sap of which the far-famed maple-sugar is made. That's the sweet liquor which the Indians boiled a thousand years ago.

Cut a piece of *Rhus Toxicodendron* resting on rock at Egg Rock, five eighths of an inch in diameter, which had nineteen rings of annual growth. It is quite hard and stiff.

My sugar-making was spoiled by putting in much soda instead of saleratus by accident. I suspect it would have made more sugar than the red did. It proved only brittle black candy. This sap flowed just about as fast as that of the red maple.

It is said that a great deal of sap will run from the yellow birch.

The river begins to open generally at the bends for ten or twenty rods, and I see the dark ice alternating

with dark water there, while the rest of the river is still covered with snow.

March 25. P. M. — To Walden.

The willow and aspen catkins have pushed out considerably since the 1st of February in warm places.

I have frequently seen the sap of maples flow in warm days in the winter, in warm localities. This was in twigs. Would it in the trunks of large trees? And if not, is not this an evidence that *this* sap did not come up from the roots?

The meadow east of the railroad causeway is bare in many spots, while that on the west is completely and deeply covered; yet a few weeks ago it was deepest on the east. I think of no reason for this, except that the causeway may keep off the cold northwest winds from the former meadow. For thirty rods distant there are no bare spots. Why is the eastern slope, now, as every spring, (almost completely) bare, long before the western? The road runs north and south, and the sun lies on the one side as long as on the other. Is it more favorable that the frozen snow be acted on by the warmed air before the sun reaches it than after it has left it? Another and second reason is probably that there is less snow on that side or on the west slope of a hill than on the eastern. Snow drifting from the north-west lodges under the west bank. So I observe to-day that the hills rising from the north and *west* (and this seems to give weight to the second reason urged above) sides of Walden are partially bare, while those on the south and east are deeply and completely covered with

snow. Mr. Bull tells me that his grapes grow faster and ripen sooner on the west than the east side of his house.

There have been few if any small migratory birds the past winter. I have not seen a tree sparrow, nut-hatch, creeper, nor more than one redpoll since Christmas. They probably went further south.

I now slump from two to four inches into Walden, though there has been no rain since I can remember. I cannot cut through, on account of the water in the softened ice flowing into the hole. At last, in a drier place, I was not troubled with water, till I had cut about a foot, or through the snow ice, when two or three streams of water half an inch or more in diameter spurted up through holes in the disorganized, partly honeycombed clear ice; so I failed to get through. Probably the clear ice is thus riddled all over the pond, for this was a drier place than usual. Is it the effect of the melted snow and surface working down? or partly of water pressing up? The whole mass in the middle is about twenty-four inches thick, but I scrape away about two inches of the surface with my foot, leaving twenty-two inches. For about a rod from the shore, on the north and west sides (I did not examine the others), it is comparatively firm and dry, then for two rods you slump four inches or more, then, and generally, only about two. Is that belt the effect of reflection from the hills?

Hear the hurried and seemingly frightened notes of a robin and see it flying over the railroad lengthwise, and afterwards its *tut tut* at a distance. This and the

birds of yesterday have come, though the ground generally is covered deep with snow. They will not only stay with us through a storm, but come when there are but resting-places for them. It must be hard for them to get their living now.

The tallest water andromedas now rise six or eight inches above the snow in the swamp.

March 26. To Cambridge.

I hear that Humphrey Buttrick found a whole covey of quails dead.¹ At Philadelphia, a month or two since, they offered a reward for live ones, more than market price, to preserve them. We have heard of an unusual quantity of ice in the course of the Liverpool packets this winter. Perhaps the Pacific has been sunk by one, as we hear that some other vessels have been. Yet the papers say it has been warmer about Lake Superior than in Kansas and that the lake will break up earlier than usual.

They are just beginning to use wheels in Concord, but only in the middle of the town, where the snow is at length worn and melted down to bare ground in the middle of the road, from two to ten feet wide. Sleighs are far the most common, even here. In Cambridge there is no sleighing. For the most part, the *middle* of the road from Porter's to the College is bare and even *dusty* for twenty to thirty feet in width. The College Yard is one half bare. So, if they have had more snow than we, as some say, it has melted much faster.

¹ *He* tells me that his dog found *four* in the winter, and as other coveys are missing, thinks they have starved.

There is also less in the towns between us and Cambridge than in Concord. The snow lies longer on the low, level plain surrounded by hills in which Concord is situated. I am struck by the more wintry aspect — almost entirely uninterrupted snow-fields — on coming into Concord in the cars.

The Romans introduced husbandry into England, where but little was practiced before, and the English have introduced it into America. So we may well read the Roman authors for a history of this art as practiced by us.

I am sometimes affected by the consideration that a man may spend the whole of his life after boyhood in accomplishing a particular design; as if he were put to a special and petty use, without taking time to look around him and appreciate the phenomenon of his existence. If so many purposes are thus necessarily left unaccomplished, perhaps unthought of, we are reminded of the transient interest we have in *this life*. Our interest in our country, in the spread of liberty, etc., strong and, as it were, innate as it is, cannot be as transient as our present existence here. It cannot be that all those patriots who die in the midst of their career have no further connection with the career of their country.

March 27. Uncle Charles died this morning, about midnight, aged seventy-six.

The frost is now entirely out in some parts of the New Burying-Ground, the sexton tells me, — half-way up the hill which slopes to the south, unless it is bare of snow, he says. In our garden, where it chances to be

bare, two or more rods from the house, I was able to dig through the slight frost. In another place near by I could not.

The river is now open in reaches of twenty or thirty rods, where the ice has disappeared by melting.

Elijah Wood, Senior, about seventy, tells me he does not remember that the river was ever frozen so long, nor that so much snow lay on the ground so long. People do not remember when there was so much old snow on the ground at this date.

March 28. Uncle Charles buried. He was born in February, 1780, the winter of the Great Snow, and he dies in the winter of another great snow, — a life bounded by great snows.

Cold, and the earth stiff again, after fifteen days of steady warm and, for the most part, sunny days (without rain), in which the snow and ice have rapidly melted.

Sam Barrett tells me that a boy caught a crow in his neighborhood the other day in a trap set for mink. Its leg was broken. He brought it home under his arm, and laid it down in a shop, thinking to keep it there alive. It looked up sidewise, as it lay seemingly helpless on the floor, but, the door being open, all at once, to their surprise, it lifted itself on its wings and flitted out and away without the least trouble. Many crows have been caught in mink-traps the past winter, they have been compelled to visit the few openings in brooks, etc., so much for food.

Barrett has suffered all winter for want of water.

I think to say to my friend, There is but one interval

between us. You are on one side of it, I on the other. You know as much about it as I, — how wide, how impassable it is. I will endeavor not to blame you. Do not blame me. There is nothing to be said about it. Recognize the truth, and pass over the intervals that are bridged.

Farewell, my friends, my path inclines to this side the mountain, yours to that. For a long time you have appeared further and further off to me. I see that you will at length disappear altogether. For a season my path seems lonely without you. The meadows are like barren ground. The memory of me is steadily passing away from you. My path grows narrower and steeper, and the night is approaching. Yet I have faith that, in the definite future, new suns will rise, and new plains expand before me, and I trust that I shall therein encounter pilgrims who bear that same virtue that I recognized in you, who will be that very virtue that was you. I accept the everlasting and salutary law, which was promulgated as much that spring that I first knew you, as this that I seem to lose you.

My former friends, I visit you as one walks amid the columns of a ruined temple. You belong to an era, a civilization and glory, long past. I recognize still your fair proportions, notwithstanding the convulsions which we have felt, and the weeds and jackals that have sprung up around. I come here to be reminded of the past, to read your inscriptions, the hieroglyphics, the sacred writings. We are no longer the representatives of our former selves.

Love is a thirst that is never slaked. Under the

coarsest rind, the sweetest meat. If you would read a friend aright, you must be able to read through something thicker and opaquer than horn. If you can read a friend, all languages will be easy to you. Enemies publish themselves. They declare war. The friend never declares his love.

March 29. Another cold day. Scarcely melts at all. Water skimmed over in chamber, with fire.

March 30. P. M. — To Walden and Fair Haven.

Still cold and blustering. I come out to see the sand and subsoil in the Deep Cut, as I would to see a spring flower, some redness in the cheek of Earth. These cold days have made the ice of Walden dry and pretty hard again at top. It is just twenty-four inches thick in the middle, about eleven inches of snow ice. It has lost but a trifle on the surface. The inside is quite moist, the clear ice very crystalline and leaky, letting the water up from below, so as to hinder my cutting. It seems to be more porous and brittle than the snow ice.

I go to Fair Haven *via* the Andromeda Swamps. The snow is a foot and more in depth there still. There is a little bare ground in and next to the swampy woods at the head of Well Meadow, where the springs and little black rills are flowing. I see already one blade, three or four inches long, of that purple or lake grass, lying flat on some water, between snow-clad banks, — the first leaf with a rich bloom on it. How silent are the footsteps of Spring! There, too, where there is a fraction of the meadow, two rods over, quite bare, under the

bank, in this warm recess at the head of the meadow, though the rest of the meadow is covered with snow a foot or more in depth, I am surprised to see the skunk-cabbage, with its great spear-heads open and ready to blossom (*i. e.* shed pollen in a day or two); and the *Caltha palustris* bud, which shows yellowish; and the golden saxifrage, green and abundant; also there are many fresh tender leaves of (apparently) the gold-thread¹ in open meadow there, all surrounded and hemmed in by snow, which [has] covered the ground since Christmas and stretches as far as you can see on every side; and there are as intense blue shadows on the snow as I ever saw. The spring advances in spite of snow and ice, and cold even. The ground under the snow has long since felt the influence of the spring sun, whose rays fall at a more favorable angle. The tufts or tussocks next the edge of the snow were crowned with dense phalanxes of stiff spears of the stiff triangularish sedge-grass, five inches high but quite yellow with a very slight greenness at the tip, showing that they pushed up through the snow, which melting, they had not yet acquired color. This is the greatest growth of any plant I have seen. I had not suspected *any*. I can just see a little greening on our bare and dry south bank. In warm recesses and clefts in meadows and rocks in the midst of ice and snow, nay, even under the snow, vegetation commences and steadily advances.

I find Fair Haven Pond and the river lifted up a foot or more, the result [of] the long, steady thaw in the sun. The water of the pond and river has run over the

¹ ? Probably not.

meadows, mixing with and partly covering the snow, making it somewhat difficult to get into the river on the east side. On the east side of the pond, the ice next the shore is still frozen to the bottom under water by one edge, while the other slants upward to meet the main body of the ice of the pond. This sort of canal on one or both sides of the river is from a rod to three or four rods wide. This is the most decided step toward breaking up as yet. But the pond and river are very solid yet. I walk over the pond and down on the middle of the river to the bridge, without seeing an opening.

Saw probably a hen-hawk (?) (saw the black tips to wings), sailing low over the low cliff next the river, looking probably for birds.¹ The south hillsides no sooner begin to be bare, and the striped squirrels and birds resort there, than the hawks come from southward to prey on them. I think that even the hen-hawk is here in winter, only as the robin is.

For twenty-five rods the Corner road is impassable to horses, because of their slumping in the old snow; and a new path has been dug, which a fence shuts off the old. Thus they have served the roads on all sides the town.

March 31. P. M. — To Peter's via Winter Street [?].

I see the scarlet tops of white maples nearly a mile off, down the river, the lusty shoots of last year. Those of the red maple do not show thus.

I see many little holes in this old and solid snow where leaves have sunk down gradually and per-

¹ May have been a marsh hawk or harrier.

pendicularly, eleven or twelve inches, — the hole no larger at the top than at the bottom, nay, often partly closed at top by the drifting, and exactly the form and size of the leaf. It is as if the sun had driven this thin shield like a bullet thus deep into the solid snow. It is remarkable how deep the leaves settle into an old snow like this.

See a small ant running about over a piece of meadow turf. The celandine begins to be conspicuous, springing under Brown's fence.