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Contributions

TO THE

History of Old Derryfield,

BY WILLIAM ELLERY MOORE.

PART FIRST.

PRICE TWENTY-FIVE CENTS.

1
CONTRIBUTIONS

TO THE

HISTORY OF DERRYFIELD,
NEW HAMPSHIRE.

TOPOGRAPHY AND LANDSCAPE

AS MODIFIED BY TORRENTS FROM MELTING ICE-FIELDS, TOGETHER
WITH SOME ACCOUNT OF EARLY FLOODS AND OTHER
LOCAL EVIDENCES OF A GLACIAL EPOCH.

BY WILLIAM E. MOORE.

A PAPER READ BEFORE THE

MANCHESTER HISTORIC ASSOCIATION.

PART I.

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CONTRIBUTIONS
TO THE
HISTORY OF DERRYFIELD.

BY WILLIAM E. MOORE.

CHAPTER I.

PRELIMINARY — LANDMARKS — ROCK RIMMON — THE PINNACLE — MERRI-
MACK — PISCATAQUOG — BLACK BROOK — COHAS — MASSABESIC
LAKE — SPECIAL FEATURES, ETC.

THE conscientious and self-respecting historian will always aim at relating not only the truth but the whole truth. Histories of Derryfield have been written, but none of them began at the beginning. It does not need to be added that very much was omitted.

The present undertaking will give some account of pre-historic times and will be brought down to date. The whole period covered embraces more than a thousand centuries — how much more cannot with certainty be computed. In the presence of this time-problem the wisest are ignorant, since the facts with which we have first to deal refer to times so remote as to make ancient history a tale of yesterday. The story to be related in these opening chapters relies for evidence upon no witnesses — there were none — neither upon myth, legend or tradition. Our sole authorities are certain eloquent “sermons in stones” and sundry decipherable “books in the running brooks.” These, however, supply ample and conclusive testimony.

All the available sources of information will be examined, and the animal, vegetable and mineral creation interrogated. No stone will be left unturned, no field unploughed, no plant or animal permitted to escape.

LANDMARKS.

For the present we defer giving details of the early occupation and settlement of Derryfield and confine our view to some prominent features of its natural scenery and topography. To present these in intelligent order it will be necessary to broaden our horizon to include the entire landscape, from the highlands on the east to the mountains rising west of the Merrimack.

From the river valley the ground ascends rapidly at first, then broadening into an extensive and nearly level plain, and again mounting abruptly to the height of land in the eastern foreground. Here the chief elevations are known as Wilson, Bald, and Oak or Heath-Hen hills. From these highlands a magnificent panorama salutes the eye, and as the sun illuminates the picture a thousand points of splendor punctuate the wide and varied scene.

To the north may be seen Mt. Belknap and the Gilford mountains, as well as a portion of the Ossipee and Sandwich groups, while with favoring conditions glimpses of the Franconia range may be seen without a glass. To the northwest is a distinct view of Kearsarge and Ragged mountains, while in Vermont the distant crest of Ascutney breaks the line of the horizon. Westward and trending south we are confronted with Crotchet and Temple mountains, dominated by Pack and Grand Monadnock, the blue lift of Wachuset in Massachusetts closing the grand sweep as if of a hemisphere.

But these, with others scarcely less conspicuous, form only the background of the picture, for nearer and in front stand the Uncanoonucks and Joe English, flanked by the Dunbarton, Mount Vernon and Lyndeborough ridges, while nearer still are the rounded slopes of Hackett, Shirley, Scribner's, and Yacum

hills, with a host of lesser eminences completing the details of a picturesque landscape, which for quiet and restful beauty is unrivalled in southern New Hampshire.

Ancient Derryfield included the whole river front, from above the falls at Amoskeag on the north to below Goffe's falls on the south, and the mile-limit to the east crossed the summit of Wilson hill.

ROCK RIMMON.

Directly west of Amoskeag falls, upon a level plateau extending from the ancient river terrace, Rock Rimmon lifts its solid shoulder of gneiss above the plain. This rock is an object of great interest, attracts many visitors, and offers a most superb view of the Piscataquog and Merrimack valleys. The easterly escarpment is a sheer and inaccessible precipice of one hundred and seventeen feet, the crest reaching an altitude of more than three hundred feet above the bed of the river.* The summit is easily reached from the western and northern slopes.

THE PINNACLE.

Eight miles away to the north, on the west bank of the Merrimack, is another bald and rocky peak, mounting also from a terrace-plain, rising even higher than its Derryfield rival. Just west and touching the base of the Pinnacle is a small lake. The water is very deep, is popularly believed to have no bottom, and in area and contour is said to exactly match the outline of the Pinnacle itself. It has been contended that this great mass of rock was lifted bodily from the bed of the lake and the hole afterwards filled with water. When the Pinnacle slides back to its old quarters we may the more readily assent to this theory. A substantial observatory has been erected upon the summit, from which exceptionally fine views may be had.

* The exact figures, taken from the field-notes of the City Engineer, are as follows: Top of rock above city elevation, 296.35 feet; base above the same level, 179.83 feet, and about 95 feet above low-water mark at Amoskeag eddy. Extreme height of rock, 116.53 feet.

THE MERRIMACK.

This river is now a continuous stream from its sources to the sea, but there is little doubt that the present valley was once filled with a great chain of lakes, extending from the Winnepesauke on the north to an indeterminate point to the south, certainly as far as ancient Dunstable. The evidence in support of this view is conclusive and will be considered in detail hereafter. Along the course of the river the ancient terraces form a conspicuous feature.

THE PISCATAQUOG.

This river enters the Merrimack on the west bank, some two miles below Amoskeag falls. The valley extends in a north-westerly direction, passing to the west of Rock Rimmon. The old terraces on either bank are remarkable.

BLACK BROOK.

This considerable water-course has its source in the Dunbarton hills, twelve miles away, flows southeasterly and enters the Merrimack on the west bank a short distance above Amoskeag falls. The significant relation of this now somewhat reduced stream to our history will become more apparent as the record proceeds.

COHAS BROOK.

Aside from a number of inconsiderable brooks and rivulets, this is the only local water-way remaining unnoticed. It is the outlet of Massabesic lake and enters the Merrimack on the east bank, immediately below Goffe's falls. The foregoing, therefore, comprise all the principal water systems properly belonging to the Derryfield map, or which are of importance as relating to our present inquiry.

MASSABESIC.

Four miles to the east, and wholly within the bounds of ancient Chester, this fine body of water lies in a series of bays, so joined by necks and separated by headlands as to include a shoreline of not less than thirty-six miles. From this lake the great manufacturing city of Manchester derives its water-supply. The Massabesic is dotted with numerous islands and surrounded by highlands, conspicuous among them being a splendid rocky promontory on the Auburn shore, Minot's ledge, and the mountain in Chester familiarly known as the "Devil's Den." The old water-marks plainly show a much higher lake-level in a not remote period, the water then wholly covering the present highway and involving the out-lying meadows and lowlands. Several smaller ponds are found within the limits of ancient Derryfield, but none calling for more than passing recognition.

SPECIAL FEATURES.

Over and above the more prominent landmarks of the territory we have attempted to describe there are in addition a number of less conspicuous but even more striking points of interest. Chief among these are the following:

1. The great clay deposits about the Hooksett Pinnacle, and extending north, especially on the east bank of the river.
2. The enormous accumulations of sand upon the site of Derryfield proper.
3. The stupendous bulk of water-worn stones and gravel, high above modern water levels, in ancient terraces and moraines.
4. Certain remarkable instances of rock-wear performed by pre-historic streams.
5. Travelled blocks and rock-fragments transported from distant centres of dispersion.
6. Curious survivals of tropical trees and shrubs.

These, with added evidences of the work done by water in another age, will be considered in the proper place, when it will be shown that these wonderful monuments now bear mute but unimpeachable testimony to the existence of powerful and long-continued currents, flowing in so vast a volume as to make the proudest river of to-day a plaything. These propositions, with the facts referable to them, are as certain as anything in Deuteronomy, but we regret to say there are still otherwise intelligent people who refuse to believe them. The Agnostic claims that he can know nothing, and is aware of it; but even such an one is less difficult to convince than he who likewise knows nothing but has no knowledge of it.

Should it be desired to prove beyond question that New England was once the scene of volcanic activity, a piece of Roxbury pudding stone would be sufficient. So, in reference to our present purpose, any strip of land in New Hampshire, with hills and valleys and water-courses, will serve for illustration. Such a region was Derryfield—a territory one mile wide and eight miles long—ranging upon the Merrimack, and now the river-front of Manchester.

CHAPTER II.

THE AGE OF ICE-WATER — GRADUAL DISAPPEARANCE OF WATER — EARTH MAKES STEAM — A WITNESS OR TWO.

Stated by the best obtainable evidence, this zone of ours has passed through at least one — possibly several — glacial epochs. We have now to consider only the last, the effects of which are still to be seen about us on every hand, when sought for with asking eyes.

The glacial and inter-glacial theories, as now understood and generally accepted, offer a wonderfully inviting field for study. No time will be lost in any discussion of the causes which made necessary an age of ice, and we shall now simply illustrate our history with some pictures showing the action of water, notably of streams proceeding from rapidly melting ice-fields.

We are tempted to record much matter not wholly within the scope of our story; we find it difficult to avoid asking and even attempting some answer to questions which troop about and beset us at every turn, but must be content with a few preliminary generalizations.

We may conceive Earth in its desolation, its first-born nakedness, before desire arose, absolutely without life other than that which may have been potential. We then reach a later period in which there was indeed life, existing in low forms, maintained with difficulty, intermittent and migratory. Still later we recognize a true life-bearing age, in which plants and animals inclusive of man appeared, moved and died.

To the foregoing it seems necessary to add that as there were life-bearing and non-life-bearing periods so there were non-life-producing as well as life yielding zones. Moreover, that climatic changes in the same zone rendered it now fit now unfit for life, and this entirely without reference to elevation and subsidence

or any other so-called cataclysmal operation of the crust of our planet. We intend to mean that the surface of solid Earth has been by turns so blasted with fire, devastated by ice, and deluged with water, that for long periods of time and large continental areas life of most sorts was out of the question.

Our orthodox friends will observe that we have no wish to ignore the flood; on the contrary, we insist upon several and as many rainbows as called for.

THE DISAPPEARANCE OF WATER.

We assert with some confidence that there was once much more water upon the surface of our globe than at present; the oceans were larger, the inland waters and streams of greater volume. Should this position need reinforcement let us admit, as it seems we must, that the earth once nourished no life, either animal or vegetable, and we have at once nameless millions of fluid tons to be somehow accounted for. Nor can it be claimed that the atmosphere then and always held moisture in suspension as now, or that absorption by percolation was a process of the earlier as well as of the later stages of creation. We are thus brought face to face with a curious problem: Without plants or animals, with an atmosphere totally rejecting it and the earth stubbornly declining to take it in at the pores, what was the status of water and where its abiding place?

THE EARTH MAKES STEAM.

Not to be entirely in the dark or beyond our depth, we may hint at the appearance and concede the existence of steam in the earlier cycles and must give it a place as one of the prime factors in the complicated processes of evolution, and to this day and hour a powerful agent in its still uncompleted operations, to which it is not our present purpose to refer. Our readers are expected to comfortably fix upon dates, either as to the appearance or duration of the phenomena described or to be

described in these opening chapters. We say only and stand by it, that there was fire, water and steam, fume of gas and molten flood, ice and snow, by turns and altogether, in such horrible fashion as no new nor old notion of hell can illustrate. If we seek for evidence, present and eloquent witnesses await our interrogations.

Let us first suppose such a state of things as has been hinted at, when there was this preponderating amount of surface water; that following this period, in necessary sequence, the effects of evaporation and condensation succeeded; that in simple obedience to cosmical laws milder methods of dissipation of energy were made possible, and that finally, during a period of intense cold, the whole or nearly the whole maximum mass of water at this parallel was converted into ice, and we are furnished with at least a tentative theory if not a working hypothesis.

One familiar with the testimony of the rocks and the environment of our modern water-systems cannot doubt that something much like this did happen; that the very zone we now inhabit was once and probably more than once delivered over to the rigors of an arctic winter. In the light of the highest and best equipped recent scientific authorities no prime fact is more rightfully believed than that a large portion of this now temperate belt was once deeply covered with ice, and for so vast a cycle that it must have been regarded as perpetual by the people of that age, if people there were.

A WITNESS OR TWO.

Again without pausing to discuss the causes which brought about this condition, and not even considering the possibility of its recurrence, it assuredly follows that such an age of ice could not and did not come and go without leaving its mark.

During a long and busy life Prof. Agassiz accumulated a vast amount of information as to the agency of glacial action in producing geological effects. A student of glaciers for forty years,

and growing up in a glacial region, he was familiar with their phenomena. He says: "As soon as geologists have learned to appreciate the extent to which our globe has been covered and fashioned by ice, they may be less inclined to advocate changes of level between land and sea, whenever they meet with the evidence of the action of water."

Charpentier speaks of "perpetual snow-sheets and glaciers reaching the sea, as far down as the middle of the present temperate zone." Prof. Gunning characterizes the New England ice-sheet as "colossal." Prof. Newbury, of Columbia College, in a review of the evidence, reaches this conclusion: "The glaciers and snow-fields of Greenland stretched continuously down the Atlantic coast, to and below New York. * * * * The highlands of New England were completely covered and probably deeply buried in sheets of ice and snow." Prof. Dana says the ice-sheet was "semi-continental," and adds: "The height to which scratches and drift occur about the White Mountains proves that the upper surface of the ice in that region was 6,000 or 6,500 feet in height, and hence that the ice was not less than 5,000 feet in thickness over the whole of that part of northern New England. Facts also show that the surface height in southwestern Massachusetts was at least 2,800 feet, in southern Connecticut 1,000 feet or more." He again remarks that "the continent underwent great modifications in the features of the surface through the agency of ice," and points out in great detail the effects produced by glacial torrents.

It would be easy to multiply authorities, but since they can be consulted by questioners and doubters we will not forestall their studies. We assume, then, that there is no one prime fact in the past annals of our planet better proved than that of an age of continental glaciers. Evidence of this is increasingly convincing and may be found for the seeking upon nearly every square yard of the hillsides and valleys of New England.

Mankind are prone to treat with indifference that which is common, and the familiar aspect of our lakes and rivers, even of

the sea, provoke in us no commensurate idea of the stupendous force which water is capable of exerting.

Two hundred and odd years ago the earliest printed description of Niagara was given to the world by Father Hennepin. His account of this "vast and prodigious cadence of water" is a mixture of childish exaggeration and sober truth." But the sublimity of this great cataract, which discharges the enormous volume of eighteen million cubic feet of water every second, needs not the aid of description. About 9,800 cubic miles of fresh water—nearly half the quantity on the entire globe—are in the upper lakes, and all the water from these huge reservoirs makes the circuit of the falls, the St. Lawrence, the ocean, vapor, rain, and a return to the lakes in a little more than a century and a half.

But how shrinks this brief cycle of time and how fade the outlines of the scene when in imagination we stand beside the gigantic operations of the past. What some of those operations were let Mr. Clarence King tell in his own words. In alluding to volcanic activities he speaks of "what was once a world-wide and immense exhibition of telluric energy * * * distortions of the crust, deluges of molten stone, emissions of mineral dust, heated waters and noxious gases," and asserts that modern volcanic phenomena are "insignificant when compared with the gulfs of molten matter which were thrown up in the great massive eruptions" of the past.

He adds: "Of climatic catastrophes we have the record of at least one;" and in reference to a glacial period he sets forth the destructive effects of the invasion of our latitude by polar ice, and the devastating power of the floods which were characteristic of its recession. He contends that the modern rivers are mere echoes of their parent streams in the early quarternary age and utterly incapable, even with infinite time, to perform the work of glacial torrents. Citing the wonderful cañons of the Cordilleras, he says "they could never have been carved by the pigmy rivers of this climate to the end of time." In view

of all the ascertainable facts, Mr. King believes they present "perfectly overwhelming evidence that the general deposition of aerial water, as compared either with the phenomena of the immediately preceding period or with our own succeeding condition, constituted an age of water-catastrophe whose destructive power we only now begin distantly to suspect."

We have thus briefly cited the few foregoing authorities, in order to reinforce and fortify our interpretation of certain local phenomena, and to the end that our theories may not wilfully be divorced from fact. To the mathematician, the geologist, the astronomer—to those who walk without stumbling in the wide ways leading to the sun—we leave the task of explanation.

We call to our support at this point but one other authority, and quote from the works of Prof. Hitchcock, whose researches in the very field of our inquiry are precisely in point and entitle him to a hearing. He says: "The evidence is clear of the passage of the ice-sheet over all the higher New England summits." The facts illustrating this statement may be found in the geological reports for Maine, New Hampshire, Vermont and Massachusetts; for example as to Katahdin, the White Mountains, the Green Mountains, and for Greylock in the state last named. These reports are easily accessible. Prof. Hitchcock describes in detail the moraines and the upper and lower till, and of the former he says: "The capping of the hill is loose, the fragments are rough, not far removed from their source, commonly lying naturally." He concludes that these materials were held in the ice at the time of its melting. He also refers to extensive "sloping plains of gravel and sand, deposited by streams from melting ice acting upon the moraine." He concludes by remarking that "the numerous kames, elevated sand plains and river terraces came into existence with the copious floods of water resulting from the dissolution of the ice. The history of the ice-age is incomplete without a discussion of the events occurring in this great continental freshet."

Our own century beholds Earth, as if newly-awakened from a dream ; draped in beautiful garments, she has striven to hide the scars of her terrific struggle for life. Time has obliterated much ; but there still remain records of an age that is past, and the clear eye of science—the vision of him who seeks to know—may still see the ancient ice-cap moving majestically over the spruce and fir-clad hills of our own northland.

In the tremor of forgotten earthquakes and the outburst of crater fires ; in the fall of dew and the music of rain ; in waiting flakes of snow or crystals of frost ; in the quiet creep of glaciers or the rush of enfranchised waters we recognize the play of the old terrestrial forces by which the frame-work of our Earth has been evolved.

CHAPTER III.

CONCERNING EARLY FLOODS.

There is at this day no excuse for descendants of our Derryfield ancestors not knowing that a literal river of ice once flowed down the now peaceful valley of the Merrimack. Its direction, volume and extent are mapped upon their rock-wrinkled homesteads. It crawled southward, grinding along at the rate of a foot a week—a mile in a century. It at some time halted, for how long we may only guess, and then began the terrible retreat. The rate of recession is not so well determined, but was without doubt comparatively rapid, though probably arrested at various stages and for undefined periods. To judge from the wide-spread havoc to which this near section has been subjected there must have been a halt near us. We know—since we stand upon the scene of the event—that from the foot of this retreating, melting glacier, poured frightful down-rushes of turbid water, by whose action the landscape acquired its present characteristic features, and by which the surface materials of this region have been so strangely sifted and assorted.

The tourist of to-day who shall stand beside the source of the Arveiron, “who drinks in the sublime view at the foot of the glacier; he who beholds this marvel, glorious with icy portico, façade and pyramid, who hears at night the scornful roar of the Alpine flood,” may peradventure frame some dim conception of energies which seem to know no yesterday nor morrow. But greater things than these, which promised to flow forever, have passed away.

Let us come nearer home. Passing westward from the river let us climb the isolated ridge of Rock Rimmon—if, indeed, it be not also submerged—and from that point observe. To the west and trending northerly lies the valley of the Piscataquog;

to the east front, ranging north and south, the valley of the Merrimack, and between these the lesser valley of Black Brook. From the point of time we have chosen—a matter of seventy or eighty thousand years ago—these little resemble the peaceful landscapes with which we are now acquainted.

Three powerful, ice-fed streams, terrible in their energy, are forcing their way southward, carving channels as they move; bursting their banks, assailing rocky barriers, raging, roaring, eroding; with counter and cross-currents, eddies, whirlpools, horrible, precipitous narrows, and tremendous rapids, forerunners of still more tremendous cataracts. Borne along and whirled hither and yon in the midst of these frightful torrents we see indistinguishable masses of debris and angular blocks of frozen clay, with an interminable procession of rifted fragments of inland icebergs, accompanied with stones and rocks of differing dimensions, from the pebble to the boulder. Add to this the gloom of a cloudy sky, the ceaseless fall of rain, the riot of winds, the song of the tempest. Try to picture the indescribable, continuous rush and turmoil of the elements, the intermittent thunder of the pounding ice and boulders, then turn to the shrunken rivers of to-day.

The figures of the transporting power of water are startling. We know the force is as the sixth power of the velocity; that is, by doubling the rate we increase the power sixty four times. To give concrete examples: A stream running at the rate of three inches per second will wear away fine, tough clay; with a velocity of thirty-six inches per second the current will remove angular fragments of rock from two to three inches in diameter. The latter rate is quite moderate—a little more than two miles an hour—and presents but a picture in little of the rapidity of our earlier floods. We have taken no account of the influence of gravity operating on descending slopes, and we may also call to mind the fact that rocks lose nearly one-third of their weight in water.

Let us now inquire in a general way what we find to be the environment of our typical New England river. At its sources we usually discover great rock masses, detached from the cliffs of the mountains. Along the course of the precipitous, tumbling torrent—the trout-water of the sportsman—we find immense boulders, more or less carved and water-worn, their angular projections rounded, their bulk diminished and lessened as they course down the rough miles of attrition. At the foot of the descent we shall find aggregations of smaller boulders, with cobble-stones and pebbles. He who wades and follows, rod in hand, the bed of one of these mountain tributaries may step confidently from one stone to another and find firm footing, rarely meeting one that turns under his tread. The reason is as simple as it is significant, for each of these detached rocks has been many times rolled over and wrenched from its lodgment until it has at length found the groove that fits and holds it.

Where two mountain streams unite we shall generally find a tongue of land, or rather a delta of stone, usually symmetrical in form and built of assorted layers of stones and pebbles, seemingly put together with the discrimination of design. These shining, parti-colored beds are the boulders in miniature. Still lower we find the smaller pebbles, gravels of varying fineness, then sand, and last of all mud or silt.

We can never view a bank of earth, laid bare by accident or design, exhibiting its curiously stratified layers, without referring to this sorting and sifting process, this violent picking and choosing of torrents, while we stand in wonder at the delicate threads of deposition laid almost tenderly in place by succeeding quiet waters.

We have space merely to mention other tremendous agencies which have contributed to the landscape some of its most rugged features. We can only now hint at the ruin caused by streams dammed by drifting ice, or by the accumulation of more permanent obstacles, but there should not be left out of account the

more terrible effects of land-slides choking the mountain gorges until the gathering waters burst the mighty barriers, carrying everything before them. That almost inconceivable havoc was not infrequently caused by these agencies our torn and ravaged plains attest. The White Mountains afford evidence of ancient land-slides in many places. The Willey slide, though not large, became widely known from the loss of life which accompanied it. The great slide in Waterville was the most extensive ever known in this region. An immense mass of loosened earth and rock was precipitated to the valley from the steep western slope of Tri-Pyramid mountain, the material covering acres in extent and reaching as far as Mad river. The writer has personally visited and examined the scene of this great land-slip. Within quite recent years a considerable slide occurred on Cherry mountain, to which excursion trains were run to enable the curious to witness the unaccustomed sight.

But by far the most striking and picturesque slide ever occurring in New Hampshire took place in the town of Albany, in the county of Carroll, only a few years since. The north side of Passaconaway mountain was cleft from peak to base, laying bare the solid granite bed for the entire distance. The slide is narrow at the top, gradually widening as it descends and comes down in a straight line until the foot-hills are encountered. Here the mass was sharply deflected to the west and forced into the valley of Downs's brook. The north slope of Passaconaway is uncommonly steep and is densely wooded to the summit. But every tree and rock, inclusive of every inch of the soil, was carried down, leaving the very core of the mountain as clean as if swept with a new broom. The brook-valley was completely choked up with earth and stones piled with trees in inextricable confusion, rising many feet in height, and for nearly three miles the banks of the stream were lined with the blackened trunks of great firs and spruces. The water rose incredibly and finally forced its way through, but a splendid trout stream was ruined.

The event occurred in the night and had no witnesses, but its horrible rumble and grinding roar shook the earth and was distinctly heard and felt by the inmates of houses more than five miles distant. Passaconaway—signifying Child of the Bear—rises to a height of more than four thousand feet and is the highest summit of the Sandwich range. The writer has repeatedly visited the locality and made himself familiar with the scene by climbing for a prudent distance up the slippery bed of this huge but unworked quarry. Viewed from the Swift river valley, commonly known as the “Great Interval,” at a distance of some four miles by an air-line, the picture is magnificent. The great rock-floor appears as steep as the sides of a church roof, but the feat of climbing it has been successfully accomplished, and what is more astonishing and apparently incredible, several persons have ascended the summit by way of the “Birch Intervale Trail” on the south or Tamworth side, and safely walked down the slide to the foot. It is well that they walked; to run would be fatal, for once running there could be no stopping, and an attempt to put on the brake by lying down would be simply a changed mode of motion, as one would get about two miles of roll, with an accompaniment of bumps better imagined than described. In the exercise of an instinct quite common to many of us, we have quite decided to go down in a sitting posture, with a series of short hitches, which may consume time but will contribute to our peace of mind. A number of ladies have climbed Passaconaway, but none have made use of the rock-toboggan. This is reserved for the new woman.

Flowing from the east flank of Tri-Pyramid mountain and entering the Swift river a mile or more west of the base of Passaconaway is Sabbaday brook. Two miles from its mouth may be seen the finest waterfall in the White Mountains. It is a right-angled fall, the first plunge being to the north, the second to the east. At the foot of the upper fall is a large, bowl-shaped basin, some twelve feet in diameter. At the foot of the lower

fall is another basin, and leading from it is a deep flume cut in solid trap rock. In the white, rushing foam of this flume, in the summer of 1873, the writer caught his first genuine "rainbow trout." The surroundings of this waterfall add a gloomy grandeur to the scene. The deep gorge is enclosed by vertical walls of trap rock, the ascent to the top being up a natural stone stairway, the steps as sharply defined as if cut with a chisel. Some miles further up, the stream has been overwhelmed by extensive land-slides and for a mile or more is entirely buried. The two brooks referred to are mountain streams of the first order, with wide valleys and free water-courses, averaging from two to three rods in width, and flowing, the first for a distance of six and the second for more than ten miles of winding water.

The above, with many other features of great interest in this New Hampshire "garden of the gods" are little known, owing to remoteness of situation and difficulty of access, the distance from the nearest railway at Conway Corner being fifteen miles—the entrance between the frowning walls of Moat mountain and the peak of Chocorua. There is but one road by which to enter or return, and if one seeks a shorter way he must climb over the enclosing mountains. But woe to him who loses the trail, for there are thousands of acres of timber blown flat by hurricanes, the passage of which is next to impossible.

The foregoing, although removed from the immediate surroundings of our story, is given in cumulative support of what has gone before, and as furnishing striking instances of the powerful forces still reserved by nature.

We shall not fail to find along the Merrimack valley at every mile of its course just what we might expect to find, in the light of the previous considerations. To localize the inquiry, we may now see both above and below Amoskeag falls, notably on the west bank, vast mounds of water-worn and water-borne deposits, consisting of sand, gravel and cobble-stones, the latter ranging from a few inches to a foot or more in diameter, and as various

in composition as in size. These accumulations lie many feet above any high water mark of which record or memory remains. To be reckoned in millions of tons, they lie where they were left of old in the rocky peninsulas between the floods. We may find them at greater or less elevations, alternating with deposits of sand, earth or clay, now presenting beautiful banks with differing colored strata, or again in a rude aggregation of unassorted drift. Wherever found, and whether near or remote from existing water-courses, from which many of them are far removed, these terrace-like elevations tell us of the waters that brought them there.

A mile south of Rock Rimmon, passing over an elevated sand-plain, one comes suddenly to the brink of high bluffs, which as surely once looked upon a lake below them as Boar's Head looks upon the sea. The height, the waving contour-line following the shores of bays and inlets, the sunken river beds beyond and the shoals stretching between, all testify to the occupation and conquest of water in that sub-glacial era, of which so little is known, but concerning which so much still remains in records awaiting research and interpretation.

We know in a half-thinking way that a great city occupying the site of ancient Derryfield is built upon sand. How came it here? To this there can be but one answer: It was made in the first instance and fetched here by water, however much it may have since been tossed about by the wind or shovelled about by man. In a similar mood we carelessly tread beneath our feet in the concrete foundations of our public walks the stones worn smooth in the beds of the elder floods. Our forests grow, our harvests thrive upon soil leached and filched from the mountains, while the very walls that give us shelter are built of clay ground in the glacial mills and precipitated in the still waters of glacial lakes.

With the approach of summer the thoroughfares to the White Hills will be thronged with pilgrims. In the ceaseless but un-

recognized work carried on in the laboratories of nature, asking only time and patience, how many inconceivable changes have been already wrought. Time and patience—given these what wonders have been achieved in the brief span of human effort ; with these, nature will continue to supplement her tireless work until the hills that remain shall follow those which have gone before. Slowly but surely water is performing its allotted work—the rivers are removing mountains.

Let no false conclusions be drawn from the record, and no theory of unmixed evil be too hastily reached. Nature knows no wrath. Earth, rent and torn in its early struggle with titanic forces, succeeded to a period of rest and preparation. The ordeal through which she passed was not beyond the measure of her endurance, the baptism of water and fire was a consecration to a nobler use. Nothing is sweeter than the memory of hardship and privations passed ; our planet shivered in a wintry night, with rattle of driving sleet, a season of frowning skies, a burden of icy sheets and snow-piled plains ; but in the infinite reaches of time, healed and pacified, there came a spring of grace and glory, a summer of fruitful seed, a harvest of plenty. So, from the womb of appalling danger, has been begotten the last inheritance—LIFE.

In the menacing roar of the thunderous fall, in the rainbow of its mist, and in the sea that swallows all, we seem to behold a glorious trinity of Power, Law and Order ; we bow reverently before the majesty of that Creative Will which walked in darkness upon the face of the primeval deep, which brooded upon the face of the waters.

[A succeeding paper is in preparation, which will deal with added evidences and consider other effects of the epoch under discussion in the foregoing pages. It will form part second of the series and will be paged continuously from the present number. Among the topics reserved for discussion are "The Sand Area," the "Great Clay Beds," "Pot Holes and Rock Wear," the "Devil's Pulpit," etc.]

Contributions

TO THE

History of Old Derryfield,

BY WILLIAM ELLERY MOORE.

PART SECOND.

PRICE TWENTY-FIVE CENTS.

CONTRIBUTIONS
TO THE
HISTORY OF DERRYFIELD,
NEW HAMPSHIRE.

SOME SPECIAL LOCAL FEATURES

AS PRODUCED BY TORRENTS FROM MELTING ICE-FIELDS, TOGETHER
WITH A FURTHER ACCOUNT OF EARLY FLOODS AND OTHER
ALLIED EVIDENCES OF A GLACIAL EPOCH.

BY WILLIAM E. MOORE.

A PAPER READ BEFORE THE
MANCHESTER HISTORIC ASSOCIATION.

PART II.

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CHAPTER IV.

ROCKS IN PLACE—BOWLERS—THE SAND AREA—THE GREAT CLAY BEDS
—VEGETABLE SURVIVALS—RHODODENDRON SWAMP—POT HOLES
AND ROCK WEAR, ETC.

Evidences of a former period of volcanic activity in this immediate section are not wholly wanting, but it may be said roundly that there is no such evidence manifesting itself to the untrained eye. We have no volcanic cones, no active or even extinct craters, and no lava beds. Aside from the presence of altered or metamorphic rock, and occasional trap dikes, we are aware of no plutonic material in the region we have described.

The rocks in place within a radius of ten miles, an area extending from the mountains on the west to beyond the water-shed line upon the east—consist generally of mica-schist, gneiss and granite, with the usual variety of quartzites. The principal beds in Derryfield proper are composed of gneiss, or bastard granite, and fine specimens of this archæan rock may be seen in the pillasters of the city hall. Quarries of pure granite are rare in this vicinity, although new ones are being from time to time opened and developed.

We are not without a large representation of travelled blocks, and numerous enormous boulders, which have been transported

from a distance may be seen in the neighborhood. One block, reckoned at not less sixty tons in weight, lies near Ray brook. Ten miles away, in the old settlement of Charmingfare, is one nearly double the former in size. Hundreds of others in assorted bulk are perched here and there in every direction and at all elevations. On Shirley hill, upon the very apex of the crest, are three heavy boulders lying close together, evidently parts of one parent piece, and known far and wide as the "Tipping Rocks." Two of these, weighing many tons each, may be put in motion by the hand of a child; the third could formerly be rocked back and forth with a slight pressure, but the experiments of thousands of visitors, and the efforts of vandals with lever and fulcrum, moved it at last once too much, and it now waits in place some power greater than the hand of man. Several of the larger rock masses are in the vicinity of the falls and some remarkable fragments lie upon the bank of the river, near the great eddy below Amoskeag.

Mere coincidence cannot reasonably be assigned for the very frequent recurrence of the great boulders in doubles or triplets, split apart, and the text-books do not appear to treat of the way in which this has been done, most writers making no allusion to it whatever. This phenomena, however, is so common and characteristic of transported rock-masses, carried for long distances through the agency of ice, that we are impelled to attempt some explanation. It must be conceded that rocks held fast in a moving ice-sheet, or borne upon its surface, must during their journey be subjected to great vicissitudes. A mass beginning with a position on top might end with a place at the bottom, or even be stranded along a lateral moraine. These incidents of its progress would be sufficient to account for the loss of angular projections as well as for the wearing, since they would be more or less rounded by coming in contact with other stones. But these conditions would hardly explain the separation of heavy boulders into two or more fragments. Our solution is that dur-

ing the dissolution of the ice-cap these masses were released and fell headlong, sometimes for great distances, striking the earth with a force sufficient in many instances to shatter them in pieces. This theory would not only answer the question raised but would also account for the varying intervals between the parts of the parent mass. In our field studies we have frequently met with such a rifted fragment and queried as to the whereabouts of its companions. We need hardly add that the evidences of rock-weathering and the accumulation of moss or lichen, even upon the riven surfaces of the boulders alluded to, show the fractures to be of great age, and that they must necessarily be referred to the time of impact at the point of deposition. It is quite easy to make allowance for the character of the surface upon which the rock chanced to strike; the problem of the distance through which it fell we gladly leave to the physicist.

Garnet-bearing gneiss is quite common hereabout, some of the ledges near Rock Rimmon containing good specimens, but probably of no commercial importance. No valuable minerals have ever been found here, so far as we are aware, although beautiful crystals of quartz, felspar, hornblende and tourmaline are encountered, and small quantities of graphite are found in local ledges. Small but finely-polished porphyritic pebbles are found near by in the bed of the Merrimack, brought down from the neighborhood of Moosilauke mountain by way of Baker river and the Pemigewasset, others reaching us by way of the Winnepesaukee. Larger fragments of porphyritic rock are found at various levels, even upon the water-shed ridges, which points to the wide dispersion of this peculiar rock, as we understand it is not found in place nearer than the region of Winnepesaukee lake. The text-books will sufficiently describe the character and trace to their habitat other transported minerals, some of which came to us from the Laurentian hills or even the remote wilds of Labrador.

THE SAND AREA.

Roundly speaking, Derryfield was built upon the sand. Every chink, crack or crevice, every depression is filled with it; plenum is the word. The depth of this vast deposit varies from twelve to twenty or more feet, and the great sloping sand-plains lie on either flank of the river valley. Before the Massabesic water-supply was introduced the people had mainly to rely upon wells, although there were a considerable number of fine springs, some of which are in use at the present day. A copious spring on Hanover square has been walled in and the water conducted in pipes to various points in the heart of the city, so that our citizens have the luxury of cool spring-water throughout the warmer months. An iron fountain in front of the city hall is fed from this supply, where thousands of our thirsty operatives daily slack their thirst. Most of the old wells are now disused or filled up, but in nearly every instance the digging of each well told the same story: First, an excavation through clear sand, both wind-blown and stratified, then smooth and rounded cobble-stones, beneath them coarse, water-bearing gravel, usually over-lying clay or hard-pan. The water-worn stones rest upon the gravel beneath the overlying deposits, precisely as they rested upon the beds of open and flowing streams, in that far-off epoch before the sand-burdened floods buried them.

THE GREAT CLAY BEDS.

As we have before hinted, there are along the course of the Merrimack, to the northward and mainly upon the east bank, a series of beds of very superior brick-clay, so extensive as to be practically inexhaustible. As elsewhere, these deposits are overlaid with a mantle of recent till, gravel, sand and loam. No one familiar with the structure of clay can conceive of its being deposited in rapid water. These clays were laid down in the still waters of ancient lakes, having been ground between the upper and nether mill-stones of the glaciers and transported to the

basins they afterwards occupied. It is true that they no longer occupy anything that resembles a basin, but lie high above the present water-level. But before the bed of the Merrimack became continuous and finally sank to the level of our time, the rock-barriers at Garvin's, Hooksett, Amoskeag and Goffe's falls must have given way, at least sufficiently to drain the lake. The first business of the released water would be to carve a channel through materials of the least resistance, and prodigious quantities of clay went out, possibly to form new deposits elsewhere, leaving the remainder of the beds where they are found to-day.

It is not easy to conceive of the origin of such vast accumulations. We know that the chief ingredient of the finer clays is decomposed felspar—pure kaolin—and we are at no loss to locate this mineral in the almost universal presence of felspathic rocks in this region, notably granite and gneiss. These rocks, then, supplied the materials, and the very fact that it was yielded in such enormous quantities is an independent witness to the magnitude of those sub-glacial phenomena to which so many of the common facts of to-day are to be referred. The former presence of felspar in excessive quantities in this locality is evidenced by the composition of the rocks in certain abandoned quarries, notably along the Hooksett road, where may now be found remarkably fine crystals of felspar of unusual size.

As to the precise method by which the clays as we know them were in the first instance formed there is scant evidence, and the subject asks for further treatment at the hands of geological experts. Authorities assert, however, that the stones in the ever moving and shifting ice were ground together and that the fine dust thus liberated was transported by water to suitable points of deposit, resulting in beds of clay or earth.

It may further be borne in mind that during and immediately following the final melting of the ice-cap much of the accumulated earth, clay, gravel and stones were left in unstratified deposits, in immense quantities and often of great height, and that

these were attacked, re-transported and the materials re-arranged through the agency of water, still flowing in great volume from the receding ice to the northward. So that when we contemplate the fact that the boulder clay and in fact the great bulk of all unstratified drift was used over and over again, the problem of the origin of the great modern clay beds does not seem obscure.

Prof. Dana says the melting of the great ice-sheet was the cause of mighty floods in the valleys, so vast as not to be compared with those resulting from the breaking up of the ordinary winter. He adds that with the melting of the lower one thousand feet of ice came the principal deposition of the coarser gravel and stones, the material being "heaped pell-mell over the land." This happy phrase accurately describes the condition which we find prevailing to-day in the fields, pastures and plains about us. A map of our farm-lands, drawn upon a scale to give the stone wall division lines, would show an almost inconceivable bulk of this material in single and double walls, while thousands of fields dotted with the familiar rock-heaps, and numberless ravines, by-places and road-side ways serving as unloading places for nameless millions of tons of this "pell-mell" material, yet represent but a very small fraction of the original deposit. These modest monuments of New England thrift and industry give us but a faint conception of the operation of the beneficent forces of nature, which, while they seemed destructive, were making Earth a fit abiding-place for man. We should add that most of the material was at first left unstratified, while that which found its way to lake basins or to shoals and bars in flowing streams would have become stratified, and that is precisely what is found in the region under consideration.

Dana also remarks the coarsely stony character of the upper part of the terrace formation, and concludes that the glacial flood was greatly and suddenly augmented in depth and violence toward the close of the melting period.

In Wright's "Ice Age in North America" the author says: "In the deltas of rivers the sifting power of water may be observed. Where a mountain stream first debouches upon a plain the force of its current is such as to move large pebbles, or boulders even two or three feet in diameter. As the current is checked the particles moved by it become smaller and smaller until only the finest sediment is transported * * * and this is deposited as a thin film over the previous coarse deposit. Upon the repetition of the flood another layer of coarser material is spread over the surface, and so, in successive stages, is built up a series of stratified deposits. Water moving with various degrees of velocity is the most perfect sieve imaginable."

The author reaches many conclusions, specially applicable to the restricted field of our inquiry, which we have only space to epitomize: When a glacier dissolves, the torrents of water arising tear down and distribute as sediment to distant valleys the material accumulated by the slow movement of centuries; that the transportation by water from the front of glaciers is certainly of immense extent; that the glacial débris still remaining is but an insignificant remnant of the total amount transported, and that sub-glacial streams must have sent their turbid currents down through every New England outlet.

Prof. Shaler estimates the total amount of drift in New England and its neighboring terminal moraines at 750 cubic miles, or more than the mass of the White Mountains. If evenly distributed this would make a layer of about sixty-five feet.

Prof. Wright says that New England is gridironed by a system of gravel-ridges deposited by glacial streams, and that in these and in the terminal moraines we may study the skeleton of the continental ice-sheet as intelligently as the anatomist can study the skeleton of a dissected animal.

The same authority says: "The scenes to have been witnessed during the advance of the ice-sheet are as nothing compared with those which must have occurred during its retreat." "During the last stages of the great ice-age, through the months

of July, August and September, warm southerly winds and a glowing sun were combining to dissolve, with utmost rapidity, the vast masses of ice which still lingered in the country. The channels were then compelled to carry off not only the annual precipitation, but the stored-up precipitation which had been accumulating as glacial ice for thousands of years." "These floods along the lines of glacial drainage have left their marks, and their direction and extent can be traced almost as readily as in the case of the present streams."

The careful observer upon our own ground, within thirty minutes walk of the mayor's office, will find sand and gravel terraces one or two hundred feet above the present flood-plain; and these terraces approximate if they do not accurately mark the highest stage of the closing floods of the ice-age.

VEGETABLE SURVIVALS.

Scattered at not rare intervals throughout this section a few sassafras trees may be found, but they are more frequently met with upon the shore and islands of Massabesic lake. Two specimens of the slippery elm are growing in the fine grove known as Arcadia, northwest of Rock Rimmon and upon the east terrace of the Piscataquog. These are the only specimens of this tree, growing wild, with which we are acquainted in this vicinity. Cedars are not uncommon, and are frequently seen, being more plentiful toward the sea-coast.

These with other curious survivals of a former tropical climate in this latitude, probably closely following the age of ice, are of great significance, and we offer them in cumulative support of the existence of such a period; and the recorded and published facts concerning the discovery of the remains of tropical animals and plants as far north as southern Greenland, removes our modest assumptions from the charge of improbability. On the other hand we have purposely refrained from giving here a catalogue of survivals of an arctic flora and fauna, which undoubtedly accompanied the age of arctic ice-fields.

RHODODENDRON SWAMP.

About two miles northwest of Amoskeag falls, lying to the east of and near the valley of Black brook, is a great thicket, covering from sixty to eighty acres, and known as Rhododendron or Cedar swamp. A portion of this territory is covered with a thick growth of cedars, and large areas are overgrown with rhododendron. So dense is the cover that its depths are penetrated with difficulty, but it is visited by scores of people whose time and toil are rewarded in securing specimens of this rare and fragrant flower.

POT-HOLES AND ROCK WEAR.

The vicinity of Amoskeag falls, below the present dam, presents fine examples of the well-known but little understood pot-holes, found there in great number. These are of all sizes and depths, from those of a few inches in diameter or groove to those of several feet in width, and of varying depth. The largest example is located high upon the sloping shoulder of a great boss of granite, lying south of the highway bridge, between the two main streams leading from the dam, and overhanging the current. Here may be seen a large excavation running down entirely through the east shoulder of the rock, the rapid water having worn away the ledge beneath, allowing the stone tool or tools which performed the work to drop through into the stream below. This curious hole is nearly circular in form, more than six feet in diameter, and not less than fourteen feet in depth. Since this remarkable excavation was made a large angular fragment of rock has fallen into it and lodged about half-way down, where it is now securely wedged in place. This pot-hole—if, indeed, it be such—offers a notable exception to the remaining members of the group and is a geological puzzle. The top of the rock in which it occurs is high above ordinary flood-mark and has not been completely covered by the waters of any freshet of modern times, with possibly two or three exceptions, and

then for only a few hours at a time. So that this particular excavation must be singled out with confidence as having been formed by a pre-historic stream, flowing at a level very much above the known water-lines of to-day, and in a time so remote as to be conjectural, if not at once referred to a glacial epoch ante-dating that under discussion.

There are some remarkably significant facts connected with the group of pot-holes we are considering. In the first place the larger part of them occur in the bottom or bed-rock; again, they were found just as they now appear when the first dam was built upon the stream above them. They remain precisely in the form of their first discovery by the early salmon-fishers, not less than two centuries and a half ago. Old residents at the falls unite in the statement that so far as their observation or knowledge extends there has been no change in their number and character. It is altogether probable that under the required conditions pot-holes are somewhere even now being made, but there is not the slightest evidence here of the formation of new ones within the historic period.

Beautiful and symmetrical examples of pot-holes are likewise found at Hooksett and Goffe's falls on the Merrimack, at Kelly's falls on the Piscataquog, and at a point on the latter stream near Arcadia, where there was formerly a dam.

We have examined a pamphlet by Bouvé, entitled "Indian Pot-Holes," in which the writer sets up an ingenious theory as to the manner of their formation. He conceives that some may have been formed by plunging falls, descending from a sufficient height, proceeding from ice-fissures, and continued long enough to produce the effects. He concedes the difficulty of requiring the ice-sheet to remain stationary, but offers nevertheless no other explanation. It is certain that continued plunging falls will excavate remarkable basins in rock-floors upon which they impinge; these are frequently very symmetrical, and the rock-wear has undoubtedly been in part produced by stones carried

round in the cavity, thus reinforcing the labor of the water. But true pot-holes are so unlike any other rock excavations that they can never be confounded. Their cylindrical form and vertical direction, as well as their peculiar situation, preclude any but a modified acceptance of the theory of Bouvé.

One pot-hole or "giants' kettle," described by Bouvé as in the "form of a cylinder," is sixteen feet deep by five broad. Another has a depth of about forty feet and a diameter of eight to twelve. Much more remarkable than either is his account of two others, found near Archbald, Pennsylvania, which we quote: "The Archbald pot-holes are one thousand feet apart and were both discovered in coal-mining, their bottoms being in the coal bed. When the drift filling them was cleared out, one was found to be thirty-eight feet deep, with a diameter of about fifteen feet at the bottom, increasing to a maximum of forty-two feet and a minimum of twenty-four feet across its top; and the second, the diameter of which is not definitely noted, was about fifty feet deep in rock, with a covering of about fifteen feet of drift."

In his remarkable work previously quoted, Prof. Wright gives this: "On the water-parting between the Merrimack and the Connecticut, there is to be found the dry bed of a river which for a time flowed through a pass from the Connecticut valley into the Merrimack, which is now five hundred feet above the valleys. Here, upon this mountain axis in central New Hampshire, nine hundred feet above the sea, are numerous and large water-worn circular cavities in the rock, technically known as pot-holes, such as are formed in shallow rapids, wherever gravel and pebbles become lodged, first, in some natural slight depression, and then, through the whirling motion given them by the running water, these continue to wear a symmetrical depression so long as the supply of water continues, or until a channel has been cut through. Pot-holes may be seen in the rapids of almost any rocky stream, with the gravel and pebbles, which do the immediate work when set in motion, still partially filling them.

Such pot-holes exist in the anomalous position mentioned in New Hampshire, where no present stream could by any possibility be made to flow. One of them, measured many years ago by Jackson, was eleven feet deep, four and a half feet in diameter at the top, and two feet at the bottom, and when discovered was filled with earth and rounded stones."

The instance referred to above is in Grafton county, between Grafton Centre and East Canaan.

The whole account is no less wonderful than admirable, conforming wholly with what we have independently observed, with the single exception of the reference to "shallow rapids." We have become convinced that pot-holes are rarely if ever formed except at the bottom of deep eddies and whirlpools, where there is set up a continuous and nearly equable circular movement of the water. Their formation in rapid and at once shallow currents could not occur, for the reason that the force of the stream would continually wash down and away the stone tools which might elsewhere undertake the work. Besides, were Professor Wright's assumption true, we should see the making of the characteristic pot-hole going on under our very eyes. But this is precisely what we do not see, and we are unable to assign such examples as have come to our knowledge to any but a remote era and to operations taking place at a very considerable if not great depth of water. It is true that they may be still found in shallow rapids, and even partially filled with pebbles, but the perhaps unintentional inference that they were now in process of making does not appear to be warranted by observed facts.

We venture to set down four important factors in the formation of the true pot-hole, to wit: 1. Sufficient depth of water. 2. A whirling and nearly equable movement of the current. 3. Sufficient length of time. 4. Varying hardness of the rock attacked, and hardness of the excavating tool. Under these varying conditions the differing features of pot-holes, wherever found and whether single or in groups, may be accounted for.

With reference to more common examples of rock-wear, these may be found at the various falls in this section to which allusion has been made, and no finer instances of the action of running water are afforded this side of the upper Ammonusuc. At Amoskeag this is exhibited upon a grand scale, and in a spring freshet the rapids below the falls are not matched in grandeur elsewhere in New Hampshire. Here the evidence is overwhelming as to the former existence of a rocky barrier, holding back the water in a great lake basin, extending as far north as Hooksett. Beyond that point there is equally conclusive evidence of the existence of two or more great lakes stretching northward, with rock-dams at Garvin's and Sewall's falls, and another and final barrier at Franklin, where the Pemigewasset and Winnepesaukee unite. Further reference to examples of rock-wear performed by pre-historic streams, and the part played by glacial dams in the stupendous terrestrial drama, may be found in the succeeding chapter.

CHAPTER V.

THE DEVIL'S PULPIT — GLACIAL DAMS, ETC.

After what has been brought before us in preceding pages our readers will not be surprised at the introduction of another witness to the series of events occurring in past ages, of which no written evidence is obtainable and concerning which tradition is and must be forever silent. With the admission of the claim for the presence of quaternary or even tertiary man, we acquire no new source of information, and may look for no addition aid from any assumed living contemporaries. The science of anthropology has kept pace with other kindred lines of investigation, and a consensus of conclusions in this department of inquiry leads us to hope for no enlightenment from a race of savage men, scarcely less brutal in their instincts than the wild beasts with which they contended. As heretofore, our reliance must be wholly upon evidence put upon record by the operations of natural forces—records which have fortunately been so enduring as to survive the ravages of time in the vast lapse which has succeeded.

We turn, then, with undisguised satisfaction, to the testimony given by a most remarkable and almost unique example of rock-wear performed by a pre-historic stream, located in our own immediate neighborhood, in the adjoining town of Bedford, and commonly known as the "Devil's Pulpit." With the exception of a brief and inaccurate allusion in Savage's "History of Bedford," we are not aware that any account has ever been published or any accurate description attempted. How little importance was attached to this phenomena, and how absolutely void of significance it was regarded no longer ago than 1851, is shown by Savage's reference, which we append.

The historian says : "There are some objects of curiosity worthy of note. On the west line of Bedford, near Chestnut

hills, is a vast fissure or opening in a mighty mass of rock, apparently made by some convulsion of nature; over the precipice thus formed is a fall of water some 200 feet into the gulf below. Here are found several excavations in the solid rock, sufficiently large to contain several persons, and one of them, bearing some resemblance to a pulpit, has given name to the place; at the bottom there is always a small pool of water, where, in the hottest day, the warmth of the sun scarcely penetrates. As one stands on the verge of this tremendous precipice, emotions of sublimity will be awakened; and any lover of nature, who should find leisure on a pleasant day, would find himself well paid by a visit to this wild and romantic spot."

About nine miles from Manchester, as the bird flies, or nearly twelve by the highway, the "convulsion of nature" referred to is found upon the farm of Mr. Clinton French. Our first visit to this locality was more than twenty years ago, when it may be said to have been in a state of nature. Since that time an increasing number of visitors suggested to the owner the idea of making it more accessible to the general public, and with this in view he caused to be constructed a good carriage road leading from the highway to the Pulpit. Convenient paths were made, plank walks laid where necessary, and a substantial stairway built, so that the leading points of interest can be easily reached. A turnpike gate guards the entrance and a small toll-fee is exacted, sufficient to reimburse the owner for his care and outlay.

The road descends to the level of a wet run, which it crosses, and the Pulpit is located in an old pasture a short half-mile from the highway. The swampy run is the source of a small brook, entering upon the extreme left, and a still smaller stream, which is frequently dry during the summer months, enters upon the extreme right of the Pulpit. The direction of this curiosity is west by south from the city hall, lying to the south and some distance west of the Uncanoonucks and east and south-east of

Joe English. Between these mountains and their contiguous highlands is a deep, well-defined valley or basin, generally trending north and south, and for much of its course more than two miles broad. Standing upon the height of land near the French homestead this great valley extends in either direction as far as the eye can reach, the stretch to the southward forming such a remarkable depression as to at once suggest the idea of an old lake basin, and the contour of the country is such as to entirely favor that assumption. From the near highlands is an uninterrupted view of the valley for certainly not less than twelve miles, and the scene from the point of view looking towards the sharp southern escarpment of Joe English is one of surpassing loveliness, aside from a consideration of its more striking and suggestive features. Another fine view of the extension of this valley northward may be had at Dunbarton village, looking west.

In following the half-mile carriage way to the bottom of a lateral valley, at nearly a right-angle with the larger basin, one comes suddenly and without any manner of warning upon the brink of an abrupt and forbidding chasm in the ledge. This is the opening to the famous Devil's Pulpit. It is neither more nor less than a water-worn gorge in solid granite, extending in a west by south course for about a half mile in nearly a straight line. In width the gorge varies but little and will average from one hundred and fifty to two hundred feet. At the head of the chasm is a fifty foot wall of rock, the cliffs upon either side maintaining this altitude for from forty to sixty rods, gradually lowering until the level of the valley plain is reached. The whole of this imposing rock fissure has been eroded by the action of water, as the evidence conclusively shows the former existence here of a long-continued and powerful stream. The main fall plunged over the precipice, causing a whirlpool below sufficiently violent to excavate the bed-rock in a great circular cavity, worn apace with the depth eroded, so that instead of there being found the usual bowl-shaped pool or basin the floor was level with the bottom of the cliff. The height of successive stages of water is

distinctly marked by great semi-circular grooves worn into the face of the wall ; of these not less than five are shown, each from fifteen to twenty inches vertical diameter, and from three to five feet apart. The section directly above the base, to a height of more than twelve feet, is eaten in back of the vertical line for a considerable distance, and high upon the front of the cliffs the granite plainly shows the wear of the great churning movement of the whirlpool.

At the immediate left of the main plunge the action of the water is even more remarkable. Here has been sculptured out a huge stone chamber many feet in diameter ; hanging midway is an enormous hulk of rock detached from the cliff ; the cavity beneath this has been likewise eaten away, and an extending flange of rock between the lower chamber and the main fall is smoothly worn and polished, standing up edgewise like a stone knife-blade. The hanging rock above described is the "Devil's Pulpit," and its gloomy and mysterious origin must have seemed a sufficient excuse for the name bestowed by some superstitious godfather. The vertical height of the wall at the centre of the cataract is a little less than fifty feet, but the out-crop of the ledges above on either side is some feet higher ; the width immediately over the fall is thirty-six and at the base from thirty-one to thirty-seven feet, with a forward elongation of fifty-three. The whole mass of rock eroded and removed at this point will be seen to have been enormous. With the exception of the supply from melting snows or occasional heavy rainfalls no water now flows over the cliff and for the greater part of the year there is but an insignificant drizzle.

At the left of the Pulpit there is a high, protruding mass of rock, forming the south wall of the upper gorge, and at the foot of the projection lie heavy masses of rock, thrown down from the cliff above, the water having worn away the supporting ledge beneath. These fallen rocks now have trees of considerable size growing upon them. At various other points along the cañon there are other great heaps of fallen rock ; some of these lie,

curiously enough, midway of the glen, showing conclusively, if other evidence were needed, that the whole area between the enclosing walls was carved out of a solid rock-bed by the action of water. The upper gorge is sixty feet wide by ninety-four in length.

The foregoing, however, is but the beginning of a series of wonders. Seventy-eight feet from the upper fall is "No-Bottom Pool." Unlike some other so-called bottomless pits, this is well named. We made an attempt to probe it in the autumn of 1896, reaching a depth of seventeen feet without difficulty with an iron probing-rod of that length, but the bottom seemed as far off as ever. Mr. French informed us that, in company with others, he some years ago penetrated the pool, with birch poles spliced together, to a depth of forty feet, without finding bottom. This pool is fifteen feet in diameter, is nearly choked up with *débris*, among which are several logs firmly wedged horizontally, and is filled to the brim with water. If this excavation is a pot-hole it is certainly the most remarkable example in New England and fairly parallels the largest known anywhere. It is, however, possible that the bed-rock at this point has been worn through, affording an entrance into what geologists describe as a fault. The question can only be determined by a thorough examination by a properly equipped scientific expedition. So far as observed it appears to have all the characteristics of true pot-holes. It is circular, vertical, and at the top fifteen feet in diameter.

The same authority informed us of his discovery of another excavation near the foot of the stairway, in which no bottom was reached at a depth of twenty feet. Its existence would not now be suspected, as it is entirely filled up and covered with earth and stones; and it is altogether likely there are others which have similarly escaped observation. These instances are sufficiently wonderful to invite scientific exploration.

A few rods below, occupying a lower level, is a second gorge, with a twenty-six foot wall, and a basin below thirty feet in diam-

eter. The supporting side-walls are from fifteen to thirty-two feet vertical height. Still lower along the cañon, and at varying intervals, are other pools and basins, some of them many feet in depth, and in diameter much larger than those described. At all of these points, and high upon the front of the lateral walls upon either side, is exhibited the same evidence of water-erosion, as distinctly mapped upon the granite leaves as if drawn upon sheets of modern card-board.

At the extreme left of the upper fall, separated from it by high, protruding masses of rock, and flowing at a little lower level, is the run-brook before referred to, which courses through the entire length of the gorge, entering the sunken valley below. This brook has at first a winding and steep descent, and goes trickling along the bed of the cañon, broken in its course by a series of beautiful cascades and miniature waterfalls, with many fine pools and basins, some of them quite large and symmetrical, with carved rock channels intervening. The brook itself, however, as we know it to-day, is utterly incompetent to produce even these minor but attractive features, the volume of water being insufficient to account for them. The stream ran down for a considerable distance independently, until it coalesqued with the main current from the upper right-hand fall.

But this brook affords another and striking feature to which we are impelled to direct attention. Just above the point of its entrance, upon a level ledge, ten or twelve feet higher than any conceivable stage of water within modern times, is a well-defined and undoubted pot-hole, whose age must certainly be referred to the same period as that of the gorge itself. As will appear hereafter, it is important to remember that after a course of several miles the water of this brook finds a way to the Souhegan, through the extension of the valley southward.

There is, almost of course, the inevitable Devil's Oven, the interior blackened with smoke, the most reasonable and obvious inference being that His Bedford Majesty united in his person the functions of preacher, sculptor and cook.

The foregoing description of the Devil's Pulpit, although extended, is inadequate when viewed from the stand-point of its importance as a factor in the measurement of geological time or the value of its testimony to the stupendous work performed by water in a distant age; and the preparation of this paper was undertaken partly with the hope that the attention of geological experts might be enlisted in explaining its further relations to the general subject of glacial phenomena.

We now find established, by evidence as ample as it is convincing, four prime facts: 1. A remarkable example of water erosion upon a grand scale. 2. The dry bed of a once powerful and long-continued stream. 3. That the stream was fed mainly by water from melting ice-fields. 4. That there is no evidence of the existence of any stream capable of performing the work within the historic period.

It must further be concluded that a stream of great volume flowed at the same time through the great north and south valley to which allusion has been made, and that extensive sections of this valley were occupied by one or more great lakes. It only remains to corroborate the conclusions reached by citations from admitted authorities. The following extract from Wright's "Ice Age in North America" will well support the views advanced, and at the same time afford an impressive example of the part played by glacial dams. Prof. Wright's account is based upon detailed surveys by Mr. Upham, the results of which are published in the New Hampshire Geological Reports:

"The Contoocook river now empties into the Merrimack a little above Concord and flows in a direction north-northeast. The present outlet was, towards the close of the glacial period, obstructed by ice some time after it had melted off from the southeastern portion of the valley. During that period a lake was held in the portion of the valley freed from ice, at a height sufficient to turn the drainage temporarily to the south and southeast. At first the drainage was over the water-shed in Rindge,

through Ashburnham and Winchendon, Mass., and thence into the Connecticut. The reality of this line of drainage is evidenced by the extensive kames and gravel deposits extending from the Contoocook valley through the towns of Rindge and and Winchendon."

This evidence is as interesting as the facts are remarkable, but that which follows is to us of more absorbing interest, since it reinforces our assumption of a great water-way, fed from the the same sources, and stretching southward immediately west of the Dunbarton ridge and the Uncanoonucks. Our authority continues :

"When the ice had withdrawn a little further north, an outlet was open to the southeast into the Souhegan river, and thence into the Merrimack. The evidence here is also conclusive that, for a period, a stream of water eighty feet deep poured through this pass, and the lake formed in front of the ice was in its greatest extent thirty miles long, and from two hundred to two hundred and fifty feet in depth. The evidence of this remains in delta terraces at that level formed at various points where streams came into the lake."

Here, then, we have high testimony to the existence of other ice-fed streams and lakes nearly at our own door, distinctly corroborative of the claims heretofore advanced. We are unable to determine whether any portion of the current of this great water-course contributed to swell the tremendous torrent which rushed down through the gorge of the Devil's Pulpit. It is certain, however, that the outlet of this lateral valley opened into the great Contoocook lake, finally finding its way into the Merrimack ; and it is altogether probable that the enormous water-supply required was derived wholly from the glacial sheet which still hung upon the summit and flanks of the Uncanoonucks.

We are able to add an additional link to the chain of evidence already presented, in the existence of extensive clay-beds at the site of the lake referred to. Before the day of railroads these deposits were extensively worked, as many as twenty million of

brick being made in a single year. These were hauled to Reed's ferry and transported down the Merrimack to Lowell. In the famous Manchester and Milford Railroad hearing a witness testified that he had clay enough upon his farm to build another city as large as Manchester. Much other testimony to the same effect sufficiently demonstrates an immense deposition of clay in the basin of this ancient lake.

For the present we reluctantly draw the curtain upon the series of scenes presented, some description of which has been attempted in these opening chapters. For the most part there has been little exhibiting nature in her gentler moods, having thus far witnessed her more terrible yet fascinating aspects. It is still reserved to modern science to continue the investigation, to add to the already vast store of accumulated facts, and by its method of patient investigation and research interpret for us other problems which await solution. We confidently abide the future; the spirit of inquiry, the interrogating attitude of the age, made not less but more reverent by its courage, assure to us further and perhaps more astounding revelations.

Time and circumstances permitting, some following chapters will be devoted to the "Flora and Fauna" of Derryfield and its contiguous territory.

Contributions

TO THE

History of Old Derryfield,

BY WILLIAM ELLERY MOORE.

PART THIRD.

PRICE TWENTY-FIVE CENTS.

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NEW HAMPSHIRE.

THE LOCAL FLORA AND FAUNA.

BRIEF BOTANICAL SKETCH—EVIDENCES OF ARCTIC LIFE—PARTIAL
LIST OF TREES, SHRUBS AND FLOWERS—WILD ANIMALS,
BIRDS, FISHES, INSECTS, ETC.

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A PAPER READ BEFORE THE
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CHAPTER VI.

BRIEF BOTANICAL SKETCH—EVIDENCES OF ARCTIC LIFE—PARTIAL LIST
OF TREES, SHRUBS AND FLOWERS.

All plants are animals, minus the power of locomotion. This lack is in large measure supplied by their wonderful power of adaptation, and in the myriad methods of dispersion by which they really move. Having neither wings nor feet, they do not walk but contrive to be transported. They lie in wait for the wind upon which they ride; lakes and rivers bear them from shore to shore, from mountain to plain, and ocean currents waft them to friendly or inhospitable coasts. They hide in the depths of earth and lurk in the crannies of rocks; they cling to claws and talons of bird or beast, and with deceitful simulation procure themselves to be swallowed, that peradventure they shall be cast out upon propitious soil, to await their resurrection morn. We behold everywhere this curious paradox of the plant-world, incapable of motion and yet migratory; and we may well look with amazement upon the exercise of this marvellous instinct which enables plants, under all the countless mutations of climate and soil, to reproduce and perpetuate their kind.

The word extinct, written after the names of vegetable forms which no longer exist, need not here concern us. That this

was once the home of a pre-historic flora is not open to question, but our limits forbid more than this mere allusion, leaving the imagination to supply the details of that first world-garden whose leaves fell and whose flowers faded unseen.

We do not design to add to our description an account of the large number of trees, shrubs, flowers or weeds, not indigenous, but introduced by accident or design, and the writer's limitations preclude any attempt at a scientific botanical essay. From an unpublished "History of Andover," New Hampshire, we venture to make the following extract: "The dwarf willow and white birch were probably our earliest trees, succeeding lichens and mosses, after the climate of the ice-age of this region became sufficiently ameliorated to allow a growth of shrubs. The dwarf willow now grows at the extreme north part of Spitzbergen, within eight degrees of the Arctic pole, and the white birch appears near the north cape of Norway."

To the foregoing we are tempted to add the Norwegian pine, the mountain cranberry, and the hardy highland blueberry. It is probable that the hemlock, the pines, firs, spruces and hackmatacks, with their congeners, came next, followed later by the remaining deciduous trees which are with us to-day. The little willow, now found growing in cold land, is the descendant of its dwarf ancestor referred to. For thousands of years the struggle for life went on, the law of the survival of the fittest prevailing in this as in other organic kingdoms, until the rich covering of our hill slopes and mountain crests, and the deeper soil of plain, valley and meadow gleamed with verdure. Beneath the forest and field growth of to-day the fallen generations lie, in their decay enriching a soil which had scantily served their wants.

We share with others a deep regret at the destruction, almost extermination, of our forest trees; throughout nearly the entire area of central and southern New Hampshire there are roundly no old growth trees remaining, while the great timber tracts of Coös are attacked year after year, its wooded acres despoiled by the axe of the lumberman. Appeals and protests have been

made in vain ; lovers of nature have bewailed the rapid razing of our mountain groves, on the æsthetic ground of disfigurement and consequent loss of attraction to the summer tourist. But these sentimental appeals have no effect upon the lumber kings who have possessed themselves of our fair heritage. We must first create an educated public sentiment, resting upon grounds of public interest, and powerful enough to invoke the strong arm of the state. To accomplish this it must be shown that the denudation of the mountain slopes is a distinct menace to the property and lives of our citizens. A paid employé has written and caused to be printed in one of our city dailies an article in apology and defence of the lumber interest. This was evidently inspired by the unexampled freshet of the spring of 1896, which involved wide-spread disaster, a burdensome interruption to public travel, and a financial loss in the state of more than a million dollars. The writer says the unprecedented and rapid rise of the mountain tributaries was owing to a warm sun acting upon reserves of snow ; that the exposed slopes were coated with ice, and that the melting snow, reinforced by rain, sped unchecked into the valleys. This was all true ; but he did not tell us how the slopes became bare and ice-covered, nor did he suggest that if the protecting timber-fringe had been allowed by the lumber magnates to stand upon the steep flanks of the White Hills, that the disastrous freshet of March would have been averted. We utter this warning, at the risk of its being considered out of place, anxious only to contribute to public enlightenment upon a theme which must soon compel attention. The eyes of our great manufacturing interests already look askance toward the north, and their ears are primed to hear the roar of advancing floods. It has already become a question of self-protection, and efficient action is to-day imperatively needed.

Without further digression, we proceed at once to present a list of the more common trees and shrubs now to be found in or near this locality, a list necessarily incomplete, adding occasional observations concerning them :

White Pine, *Pinus strobus*. This magnificent tree, which in colonial days alone had the honor of being marked with the broad arrow of King George, formerly grew in great abundance in this neighborhood, especially along the river and brook valleys. Forty years ago great pines flourished in what are now compact portions of the city, along the ravines, and upon Ray, Mile, Christian, Cemetery, and Cohas brooks, while the various highways were lined with primitive forests. A group of huge pines occupied a ravine on the south of Granite street, now the site of wholesale warehouses, and more than fifty years ago the children of the "cold-water army," in what was known as the Washingtonian movement, held a picnic in this grove. A little later the children of the Unitarian Sunday-school, not standing in fear of ghosts, enjoyed a picnic in the then beautiful grove of the Valley cemetery; in both these celebrations the writer was an interested and hungry participant.

Pitch Pine, *Pinus rigida*. Fifty years ago the sand-plains of Derryfield were covered with a dense growth of these trees, extending over large areas to the north, south and east, as well as upon the plains west of the river. Nearly the whole section not actually built upon or under tillage, was invaded by pines. The growth reached to Lowell street, immediately back of the first high school building, over nearly all the territory east of Pine, and rabbits were hunted and trapped in what is now Tremont common. Parker was murdered in the pines just east of Beech street, and a man tired of living in the woods hung himself on Monument square.

Norway or Red Pine, *Pinus resinosa*. This beautiful variety was once not uncommon, but is now rarely seen hereabout. It is remarkably free from knots and grows "as straight as a loon's hind-leg."

White Spruce, *Abies alba*. Formerly existing upon Bald hill and the Uncanoonucks, but now exterminated.

Black Spruce, *Abies nigra*. Never plentiful here, and now scarce, growing only as a shrub.

Balsam Fir, *Abies balsamea*. A graceful and symmetrical tree, formerly adorning our hill and mountain crests, but now very rare, being brought here from a distance to supply the demand for Christmas trees.

Hemlock, *Abies Canadensis*. This extremely beautiful tree is still common in moist woods, in plateau ravines, and upon the higher ridges. But the once great hemlock groves bearing fine specimens of the old-growth giants, have long since disappeared. It may not be generally known that the trunk of a full-grown hemlock yields a bitter, resinous gum, which has never become popular for chewing purposes. One of our earliest recollections is the gathering of materials for hemlock-brooms for one of our grandmothers.

Juniper or Ground Hemlock, *Juniperus communis*. This low, creeping shrub prevails in open woods and dry pastures; the more arid the soil the better it seems to flourish, and a field or pasture attacked by it is doomed, as nothing else can grow upon the ground it covers. This pasture-pest seldom reaches a height of more than two feet, while single shrubs are frequently more than twelve feet in diameter. Axe and fire supply the only remedy, and must be used without stint. It is the vegetable octopus of creation.

Rock or Sugar Maple, *Acer saccharinum*. With the exception of scattered groves and single specimens, this valuable tree has disappeared, although never sufficiently plentiful here to encourage the manufacture of maple sugar; but a few thousands are fortunately growing as shade-trees.

White or Soft Maple, *Acer dasycarpum*. This variety grows abundantly in moist lands, and is still common perhaps because it has little value.

Red Maple, *Acer rubrum*. This extremely beautiful tree favors wet lands, but flourishes at considerable elevations. Its scarlet blossoms offer to the eye one of the earliest and most grateful promises of spring.

Striped Maple, *Acer Pennsylvanicum*. This member of the

maple family is commonly known as Moosewood, and is encountered in low woods.

Mountain Maple, *Acer spicatum*. This was formerly common but is now infrequently seen.

Swamp Maple. This variety we thus christen independently, as the authorities do not aid us. It is undeniably a maple, but bears a large single-winged seed vessel, while all the text books assign a double-winged pod to the maple and make mention of no other. We have observed another variety which produces a double seed-pod, the winged halves of which are almost invariably shed single. This curious habit is not referred to by the authorities. We dismiss the maples by observing that among living specimens of these trees those of first or ancestral growth in Derryfield can be counted upon the fingers of one hand.

White Oak, *Quercus alba*. These were very common in this locality, but have now largely gone the way of the rock maples, alike hewn and consumed, their diminished successors occupying the scrub lands. An ancient oak, a relic of the native woods, still stands in the southwestern quarter of Concord square, and a few others similarly survive. A very fine specimen stands on the south side of Milford beyond Carroll street, and here and there are others at wide intervals.

Red Oak, *Quercus rubra*. This was the rail-splitting, stave-making tree of our ancestors, in the days of hand-made barrels and casks. Though formerly plentiful and attaining a great size, from sixty to eighty feet, good specimens have become as rare as cooper-shops.

Scrub Oak, *Quercus illicifolia*. This little tree, scarcely more than a shrub, supplants a once nobler growth and like many another worthless thing flourishes.

Beech, *Fagus ferruginea*. This strikingly handsome forest tree is fast disappearing, noble specimens being extremely rare. None miss it more sadly than the squirrels, the harvest of nuts supplying them with food. Gone are the ancient groves through which the wild turkey stalked ; gone are the initials of colonial

lovers, rudely carved upon the smooth and mottled trunks. Civilization has brought us much, but of how much have we been robbed?

Elm, *Ulmus Americana*. The elm is still flourishing, growing wild about us in all directions, and native and transplanted specimens of great size are numerous. We cannot be too grateful for the wise forethought which resulted in the fine avenues of shade elms which now adorn our older thoroughfares.

White Birch, *Betula populæfolia*. The ancient growth is but a memory, having gone with the canoe of the Indian, but the birches are so persistent and prolific that their diminished representatives are still seen on every hand. We add to the above the Grey, Silver, Red, and Yellow or Golden Birch. Whole generations have gone to peg and toothpick-mills, and countless cords to the wood-yards. One would now stand in amazement before a birch large enough to furnish bark in one piece to make a canoe fifteen feet long. There is said to be a golden birch in Andover with a circle of shade large enough to seat five hundred people.

Black Birch, *Betula lenta*. This is not uncommon and may be recognized by the aromatic flavor of the twigs. The larger trees were formerly made into table-tops, which may still be found in old farmhouse kitchens, and also supplied hand-made yokes and other wares of husbandry.

Brown or Basket Ash, *Fraxinus sambucifolia*. Once common but now met only as scattered trees. The White, Prickly, and Mountain Ash are now scarce. The ash is undesirable as a shade tree, the leaves coming late and going early.

Chestnut, *Castanea vesca*. This tree grew and still grows in all directions, and flourished in such profusion as to cause the whole section hereabout, including all the adjoining towns, to be known as the "Nutfield country," long before permanent settlements were made. Many extensive groves have been swept away and the forests culled for material for fence-posts and railroad ties, the work of extermination still proceeding. The near

extinction of our nut-bearing trees will soon deprive us of the red and grey squirrel.

Hickory, *Carya alba*. In addition to the Shagbark there were several other nut-bearing varieties once numerous. The great value of the wood for fuel, as well as the demand for its use in wood-working arts, have contributed to its practical extinction in this locality. Doubtless, God could make a better nut than the hickory, but doubtless God never did.

Butternut, *Juglans cinerea*. This is still common in open pastures and along roadside ways. The outer bark of the nut was extensively used by our grandmothers in dying wool. The writer well remembers wearing the brown home-spun.

Poplar or American Aspen, *Populus tremuloides*. Formerly quite common, now comparatively infrequent. The bass wood is still here and still valueless.

The Black Cherry is frequently seen in open fields and pastures. This is the "rum-cherry" of our spirit-loving forefathers, bad imitations of which are sold to-day in various rum-holes. There is also a wild red cherry and the choke-cherry. A great many boys have not died by drinking milk after eating freely of the latter fruit.

There are still a number of varieties of the genus Willow, including the Osier or Basket Willow. The common willow is undoubtedly doomed to immortality, as it is impossible to destroy a tree that will grow without roots and flourish after death.

A Wild Plum, *Prunus Americana*, formerly grew in plenty but is now rare.

Other varieties of trees, both native and introduced, will suggest themselves to the reader, such as the alders, elders, leatherwood, mountain sumach, horn beam, leverwood, etc.

The group of shrubs is large, but we must content ourselves with a mere mention of the more common examples: We still have the white-rod or withe-wood, the fence-mender of the old-time farmer; the witch-hazel, curious and interesting in its habit

of late flowering, the tawny yellow blossoms surrounding the ripe seed-pods, which like miniature howitzers discharge their contents to an incredible distance ; the button-bush, swamp and highland huckleberry, blueberry, high and low blackberry, red and black raspberry, thimble-berry, hardhack, iron-weed, highland and swamp laurel, sheep laurel or lamb-kill, cornel, poison sumach or dogwood, bayberry, sweet fern, swamp and sweet brier rose, skunk currant ; creeping, bush and climbing poison ivy, thorn-bush, etc.. The number of shrubs omitted probably largely exceeds the number above enumerated.

The grasses, native and introduced, now number more than thirty varieties.

We append a partial list of additional flowering and non-flowering plants : Wild grape, clematis, woodbine, cranberry, May-flower, club and tree-club moss, columbine, true and false Solomon's seal, checkerberry, partridge berry, sarsaparilla, cardinal flower, arrowhead, pipsissewa, the blue closed, five-fingered and fringed gentian, Jack-in-the-pulpit, Indian tobacco, bunch berry, skunk cabbage, fire-weed, pyrola, gold-thread, garget, pitcher-plant, mullein or the American velvet plant, purple and yellow lady's slipper, several sorts of milk-weed, St. John's wort, white and pink yarrow, pearl everlasting, cinquefoil, yellow, and sour or narrow leaved dock, nettle, sweet flag, cat-tail, white water-lily, cow-lily, pickerel weed, flower de luce, blue flag, blue-eyed and star-grass ; yellow, and red or tiger lilies, many varieties of violets, the rushes, the thistles, purslane, robin-run-round, pig-weed, called in the south lamb's-quarter and used for greens ; burdock, screw-stem, self-heal, wild morning glory, smartweed, purple orchis, spring and fall dandelion, wild sunflower, daisy or white weed, black-eyed-Susan or ox-eye daisy, horsetail, many species of goldenrod, several members of the aster group, spearmint, peppermint and other square-stems, pennyroyal, mother-wort, thoroughwort, elecampane, wild buckwheat, artichoke, garden wormwood, formerly supposed to be necessary to digest

new rum and prevent nausea ; ragweed, accused of causing hay-fever ; primroses, plaintain, snake's head, buttercup, cowslip, wild pink, chickweed, Indian mallow, field and wood sorrel, twin Linnæa, jewel weed, may weed, touch-me-not, deadly nightshade, wild carrot, wild parsnip, wild strawberry, yellow gerardia, etc. Besides these and many others we have lovage, liverwort, sweet Sicily, baneberry, joint-weed, bind-knot weed, vervain, skull-cap, hoarhound, crowfoot, horse-radish, mustard, blue harebell, wild honeysuckle, colt's-foot, tansy, bell wort, queen of the meadow, and others unnamed but not unknown. Of parasitic plants we have the curious form known as the "Dodder." We have also growing here the dog-tooth violet, which is really a lily, as well as several native orchids, among them the so-called Lady's Tresses, the pink *Arethusa*, and the most exquisitely beautiful flower of our wild collection, the *Pogonia ophioglossoides*.

For a full list of ferns and cryptogamic plants we refer the reader to the text-books, since any attempt to array them here would be a servile reproduction. Should our brief and inadequate account serve to arouse in others a love of forest and field lore we shall be contented ; and we venture to indulge the hope that some one better fitted will soon prepare an elaborate and more exhaustive monograph of our local flora.

CHAPTER VII.

THE WILD ANIMALS OF DERRYFIELD.

It requires no severe exercise of the imagination to associate the presence of arctic animals with an arctic climate. During the rigor of the glacial epoch there is little room for doubt that the arctic fox, reindeer and polar bear roamed over the plains and that the seal and walrus were found upon the coast. It is equally certain that other forms, partly owing to the absence of food, became extinct, their embedded bones alone remaining. Among these extinct types were the mastodon and woolly elephant. At the same time a great exodus of animals took place to the south, fleeing before the threatening advance of the great ice-sheet, again returning as the ice retreated.

The Panther or Puma, *Felis concolor*. This ferocious and dangerous animal once lurked in our forests, and was occasionally killed by the early hunters and trappers. Almost alone of all others, this beast had no fear of man, who at any time was liable to be attacked. A panther was killed in Pittsfield some years before the settlement of the town, in 1770. A party of hunters came up from Durham, through what was then an unbroken wilderness, after a pack of wolves which had been killing their sheep. There had been a snow-fall, hardened with a firm crust, over which new snow had fallen, so that travelling was good and the wolves easily tracked. These hardy men followed the trail over the summit of Catamount. Here night came on, and being tired with the long tramp the party, three in number, went to sleep upon a ledge. When preparing breakfast the next morning they discovered an enormous panther watching them as he laid crouched upon the limb of an oak. The three men fired simultaneously and the animal fell dead. This incident, the details of which were given to us by Mr. John C. French,

gave rise to the name of "Catamount," a considerable eminence to the east of the village. Some confusion has long prevailed and still exists concerning the panther, his true habitat being Asia and Africa, while his cousin in our continent is limited to South America, the Mexican Cordilleras and the Rocky Mountains, and is otherwise known as the puma or cougar. Its present range is probably from Texas to Patagonia, but there is no doubt that it was formerly wider and more northerly. In North America it has been in the east generally known as the catamount, and in the west as the painter.

Wild Cat or Bay Lynx, *Felis catus*. This variety is also dangerous and will sometimes attack man. It is known in the vernacular as the "bob-tail," and is a very ugly customer at close quarters. Before Manchester became a city, the highway leading to Goffe's falls ran through thick woods for nearly the whole distance. A man was hauling a load of wood into town, accompanied by a small dog, and after reaching a point near the Valley cemetery, a wild-cat came out of the woods and attacked the dog. The driver took a round four-foot stick of wood from his load and killed the cat, bringing the carcass into town, where it was for some time on exhibition in a window of the old town house, and the writer well remembers seeing it. They were in the early days quite common, but are now seldom seen, though occasionally encountered to this day. Only last September the writer with his nephew heard the wailing, long-drawn and lonesome cry of a lynx, probably calling for its mate. This was in the thick woods of Tamworth, sixty miles away, but in a short half-day journey these wild-cats might make a honeymoon trip to Derryfield Park.

Canada Lynx or Loupcervier, *Felis Canadensis*. This is an extremely shy little animal, not prone to attack man or beast unless driven to a corner. It is also popularly known as a wild-cat, and was once common here.

Wolf, *Canis occidentalis*. None have been seen here outside of a menagerie for a hundred years; before that time they had

to be reckoned with, especially in winter when food was scarce. These destructive beasts were persistently hunted by early settlers, and large numbers were trapped or shot, each capture at once ridding the settlement of an enemy and giving the captors a valuable pelt. The writer has never seen a wolf but has met an old gentleman who saw one in his boyhood. He said they looked at each other for a minute; the boy then threw up his hands, yelled and ran towards home, and the wolf ran the other way. The cowardly nature of wolves and their habit of hunting in packs is well known.

Wolverine, *Gulo luscus*. This diminutive, carnivorous glutton has been supposed to be not nearer to us than Michigan, but on the authority of the late William Little this animal was once in New Hampshire and had been seen in Warren.

Black Bear, *Ursus Americanus*. This terror of sheep, calves, pigs and woman-folk was common in this locality in the time of the first settlers and long afterwards, disappearing about the first of the present century, with the exception of wanderers, which were seen here as late as 1834. Though classed with the carnivora, the black bear is a vegetarian, subsisting mainly upon edible plants and fruit, especially blueberries, of which he is extremely fond, and indulging in a diet of honey whenever he can get at a wild hive. He is fond of green corn and created more havoc in corn-fields than in any other way. He is not especially dangerous, and stories of terrific hand-to-hand encounters with bears are greatly exaggerated. Bears very rarely permit themselves to be seen. The writer has climbed, fished and camped among the mountains in the wooded regions about Albany and Waterville, and from Livermore Falls to Ossipee, where they are still somewhat numerous, but in twenty-five years of such experience has not had the pleasure of seeing or even hearing a black bear. We were finally permitted to see one from the top of a stage-coach, on an excursion from the Crawford House to the "Flume and Boulder." When young the bear is playful, easily tamed, and is an expert in the art of hugging.

Moose, *Alce Americanus*. Hunters now seek Canadian covers or the wilds of Maine to kill these magnificent animals, which are even there becoming scarce. They were once numerous in this section, but withdrew before the advancing settlers. The well-known moose yards on sheltered slopes and thickets of the neighboring mountains, especially in Deerfield and Nottingham, were visited by early colonial hunters, the deep snow making the herded moose an easy prey.

Deer, *Cervus Americanus*. This is the common fallow-deer, known generally as the red or brown deer. One hundred years ago and earlier deer were more common than cattle are to-day, and were especially valuable, serving both for food and clothing. The skins were home-tanned and made into jackets, mittens, leggins and boots, or made useful in a great variety of ways, in making chair seats, snow-shoes, etc. While the deer was at first killed solely for these purposes, there came a time when they were hunted nearly to extermination, at the close of the Revolution, on account of the great scarcity of grain. The crime of the deer consisted in their eating and tramping down the growing crops of wheat, corn and rye. So much mischief was done in this way that many towns offered a bounty for their destruction, and the office of "deer keeper" was created, the duty of that official being to abate the deer nuisance. They are still common in the northern part of the state, and have been seen even within the city bounds during the last twelve-month.

Caribou or American Reindeer, *Tarangus zangifer*. This is a woodland ranger, now confined to Canada and northern Maine, or found in the region of the great lakes.

Beaver, *Castor fiber*. This wonderful animal has furnished the world with an example of intelligent instinct scarcely paralleled in the whole range of the brute creation. Engineer, surveyor, architect and builder, his achievements are comparable to those of men supplied with the tools of civilization. The existence of beaver-meadows and the finding of logs knawed asunder

by their industrious teeth testify to their former residence here. The beaver passed with the last century, but we were informed by the late Joseph M. Rowell, one of the oldest native-born residents of Derryfield, that he had in his boyhood seen their fresh skins brought in by trappers, and he distinctly remembered what was pointed out to him as a "beaver slide," on the bank of an inlet to the Piscataquog river. The fur of this animal has always been valuable, and many an old settler paid for his first cow with a bundle of beaver skins.

The Black or Silver-Grey Fox, an animal of the genus *Vulpes*, is now seldom found within the limits of the state; once here in considerable numbers, stray specimens having been seen within the last quarter-century. The skins are now valuable and are sometimes in use for hearth-mats.

Red Fox, *Vulpes fulvus*. This cunning and mischievous animal still survives in this and neighboring towns, and notwithstanding there are more hunters than game the fox is said to be upon the increase. His favorite dishes are domestic fowls, the larger and fatter the better, and he makes nothing of carrying off a full-grown gobbler. When young they are easily tamed, but not easily kept, as they will escape if possible. The fox is a thief by nature, a criminal by heredity, and takes to the road as inevitably as a highwayman. He is the embodiment of cunning and adroitness, and in folk-lore tales is always assigned the part of combined rogue and villain, which he perfectly plays in real life. It is said that he has never less than two holes to his burrow, and it is certain he has a good many strings to his bow. His survival to this day, amid the civilized surroundings of a great city, is little less than a miracle.

Raccoon, *Procyon lotor*. Most of our older citizens have seen and hunted the "coon" in his hollow. Year after year, since the larger sorts of game became scarce, the sport of coon-hunting has gone on under the eyes of the October moon, but in spite of men and dogs the sly old coon contrives to live, even within

gunshot hearing of the mayor's office, and coon-suppers are still served by the *chef* of the Derryfield Club. In old times the fur of this animal was extensively used for home-made overcoats and winter caps. As long as there are country corn-fields there will be coons. The raccoon belongs to the bear family and like him lives upon both a flesh and vegetable diet.

Otter, *Lutra Canadensis*. This aquatic, fish-feeding animal was formerly not infrequent here, haunting the trout-streams, being partial to fish without scales. They are expert swimmers and divers and marvellously swift in movement. A single pair of otters will depopulate an ordinary trout brook in an incredibly short time. They are now rare this side the upper Coös meadows. Their fur is very valuable.

Mink, *Putorius vison*. This fur-bearing animal belongs to the weasel family and is carnivorous. It is semi-aquatic and makes its burrow usually in the bank of a river or brook. Lines of traps were laid along the Merrimack, Piscataquog, Black Brook and their tributaries, and along other streams to the north, by down-country trappers, many years before any permanent occupation or settlement. The "Mink Hills" in Salisbury received their name more than one hundred and sixty years ago. The animals most sought after were the beaver, otter, fisher-cat and mink, but the traps were sometimes sprung by less desirable creatures. Mink skins were early esteemed and even passed current in lieu of money for many years. The mink is here practically extinct, though stray specimens are occasionally met. They are also fond of trout and will travel long distances to obtain them. The late Bradbury P. Cilley had for years a small trout-pond on his premises at the corner of Amherst and Walnut streets. These fish, which had attained good size, disappeared in a night. The owner supposed some one had caught them with line and hook, until the real culprits were discovered to be a pair of minks. These had made their way along the course of Mile brook, which ran for a distance of many blocks in a closed culvert through a thickly settled part of the city. The outlet of

the brook was then into a pond on Hanover square, within a few rods of the trout. And yet many people think that man is the only animal that knows anything. The fish in the large Derryfield trout-preserves, a few miles south of us, have been also destroyed by minks. These depredations were committed within the last ten years.

Muskrat or Musquash, *Fiber zibithicus*. Common to-day and in all places where there is water and comparative seclusion. It is probable they even now prowl through the covered culverts of the city. The Indians made use of them for food, and Dr. Saccalexis Glossian, an Oldtown Indian formerly residing here, pronounced them delicious. This depraved taste is hard to be understood by delicate white men accustomed to pig's liver and stewed kidneys.

Hedge Hog or American Porcupine, *Hystrix dorsata*. This curious animal is seldom seen, as it is strictly nocturnal in its habits and haunts the most secluded spots, usually among rock-masses at the foot of high cliffs. Their food is said to consist of insects, worms, snails and salamanders. The dog that tackles a full-grown hedge-hog will be consumed with regret and his confidence in himself will be impaired for about three weeks.

Skunk or Pole Cat, *Mephitis Americana*. The less said about this unsavory animal the better, but we regret being obliged to record the fact that he is still with us, even at our cellar-doors. Within three years, in the basement of a house on Union street, between Concord and Lowell, and hard by the Bishop's palace, a box-trap was baited with the neck of a chicken, and his crown-lavender highness captured therein and afterwards successfully chloroformed by a woman; and yet some of us are deluded with the idea that woman needs our protecting care.

Woodchuck or Ground Hog, *Arctomys monax*. This troublesome farmer's pest has always been and is still common here, and is destructive to bean-vines and other growing crops, especially to the red clover, trampling down much more than is eaten. The tanned skins are extremely tough and durable, and were

formerly cut up in narrow strips and braided into whip-lashes. The process used by farmer boys fifty years ago was as follows : Bury the hides in wet ashes, to remove the hair ; then put them in soft soap over night ; take out and scrape the skin and hang it over the back of an old chair in the attic — this is important ; let it get dry but not too dry, and finally work by hand until it becomes soft and pliable. The writer has used these home-made whips when riding "the old mare," in the delightful pastime of plowing on a side hill. It is not generally known that the wood-chuck is a good whistler ; he has a habit of sitting in front of his burrow in a thunder-shower and uttering a series of short, sharp notes, twelve or more in number, in a curious diminuendo. They will sometimes whistle when about to be taken from a trap, but that performance is usually brief.

Rabbit or Northern Hare, *Lepus caniculus*. Common always and even now plentiful though hunters are numerous. It is a rodent and very prolific. From being brown in the summer the fur, which is of small value, changes to nearly white in winter, and affords an instance of protective coloring.

Weasel, *Putorious vulgaris*. There are several varieties, including the white weasel, stoat or ermine, the tawny weasel, the small weasel and the little nimble weasel. Though so small as to make a hole in the snow no larger than a broom-handle, the weasel is a terror to hens and chickens, which he kills by a bite in the neck from which he sucks the blood. They are said to be spry enough to get away between the flash of a rifle and the bullet. The fur is valuable, and some weasels with glass eyes may still be seen clinging to the necks of fair women.

Grey Squirrel, *Sciurus Carolinensis*. The grey and black, the chickaree or red, the chipping, chipmunk or striped squirrel, and the flying-squirrel, once very common here, are now comparatively scarce. In size the black squirrel equals or exceeds the full-grown grey ; these are now rarely seen but have been killed here within forty years. A white chipmunk is said to have been recently shot in Pembroke ; probably a freak.

Several other valuable fur-bearing animals were once found here, among them the sable or pine-marten, and Pennant's marten or fisher-cat. These were formerly trapped in great numbers but are now generally confined to the White Mountain region and northerly. We have seen the tracks of the fisher-cat along the mountain brooks in Albany.

There were several varieties of moles, some of which are still with us. Among these were the star-nose, shrew, Say's least-shrew, and Brewer's shrew mole. Similarly, we had Wilson's meadow mouse, American white-footed mouse, Leconte's pine or field mouse, the jumping mouse, and soon after the settlers had provided themselves with homes the house mouse appeared. The last-named are extremely dangerous. With advancing civilization came also black and Norway rats, which now make the lives of women one long-drawn and suspicious misery. We have also the common little slate-colored bat, which, unlike the flying squirrel, actually flies. There is not the slightest truth in the nursery fable that bats will suck the blood of sleeping infants, or that they purposely fly into heads of hair.

Concerning birds, now or formerly found here, it will be convenient to divide them into four classes: First, game birds or birds fit for food, hunted for that purpose. Among these were the wild turkey, spruce partridge, wild pigeon, and the ruffed grouse; our woods once abounded with these fine game-birds, but they are now practically extinct. Of those surviving, the brown partridge or American quail, woodcock, wild goose, the black duck, wood duck and sheldrake, and very rarely upland plover, may be mentioned. Second, song and other birds now rare—bald eagle, golden eagle, black hawk, goshawk, great horned owl, and long-eared and short-eared owl; three-toed banded woodpecker, the pileated, red-headed, yellow-bellied, and black-banded-three-toed-woodpecker, and the green and night heron. Third, in addition to the above the ears of the early settlers were greeted with the notes of not less than twenty native birds, all

rare at this day and rapidly becoming extinct. Fourth, the migrants, rapidly joining the class of rare birds ; these include also about twenty varieties.

Of birds which were considered common twenty-five years ago Mr. William Little gave a list of eighty-five, and even in the brief period which has since elapsed not less than one-third of the whole number may now be classed as rare. In another place we intend further comment upon the threatened extinction of our songbirds.

Under the head of reptiles we find to-day, although some are very rare, the following : The black or snapping turtle, and the mud turtle or musk tortoise ; also the painted, spotted, box and Blanding's box tortoise and the wood terrapin.

Of snakes we have the common striped snake, the green or grass snake, ribbon snake, house or milk adder, field and swamp adder, the black snake, the red or brown wood snake, the ring-necked snake, black water snake and rattlesnake. Ring-necked, ribbon, and rattlesnake are now rare. The latter, the only poisonous variety, was formerly common here. The writer knows of but one authenticated case of a rattler being killed within the city limits in the last twenty-five years, but it is said they still haunt the neighborhood of "The Pinnacle" and other rocky ledges in Hooksett. Until quite recently it was claimed they were killed there at the rate of about one per annum. Notwithstanding a wide-spread, popular belief to the contrary, not one of the other snakes mentioned is poisonous. The black water-snake, still common in the Massabesic and other neighborhood ponds, and the cause of so much unreasoning terror, is entirely harmless, its bite being no more fatal than that of a pickerel, and finally they never bite anything but frogs. They can be easily caught by tying a live frog to a string and sinking it in the bay or inlet which they haunt ; said snake having swallowed the frog aforesaid may be pulled ashore, whereupon he will at once disgorge his prey. The released frog, like Jonah of old, sometimes

escapes unhurt, perhaps to furnish food for another of these terrible freshwater sea-serpents.

Under the head of fishes we can make only brief mention of the commoner sorts remaining. The salmon, shad, sturgeon, ale-wife and lamprey-eel will be considered later, observing here only that their great abundance in these waters led to an occupation and settlement much earlier than that usually assigned by historians. The rivers once abounded with the red roach or bearded chub, the white chub or dace, suckers, shiners, silver eels, etc., the lakes and ponds with pout, perch and pickerel, and the contributing streams hereabout were fairly alive with the speckled trout. More than forty years ago the writer caught the red roach in the rapids of the lower canal weirs, and great pickerel, weighing from six to seven pounds each, were in those days caught from the end of a short plank wharf on the Offutt shore of the Massabesic. Several alewife brooks run into this lake and in recent years large numbers of alewives have been taken from them in the annual spring runs. Their presence is an anomaly, and like land-locked salmon they must be referred to a time when the sea covered a large part of the state. Sixty years ago silver eels were so plentiful in the Massabesic that they were salted down by the barrel for winter use. To-day a native fish worth the catching in brook, lake or river is almost a curiosity. We still have a few fine trout streams, some of which have been restocked; the removal of the timber, however, has so reduced their volume that we can never hope, even under "protection," that the brooks will again offer to anglers more than a shadow of the old-time sport. The lakes have also been stocked—with bass which no one wants, with wall-eyed salmon which no one can catch. Meantime lake, pond, river and brook grow less yearly and threaten by and by to dry up; meanwhile the work of felling the woods along the water-courses and upon the sloping shores of lakes goes on, and people begin to wonder if our water-supply will fail, and why. Massachusetts has in the

past come to us more than once for ice ; she now very strongly hints that she needs some of our water. While we desire to be very neighborly, it is just possible we shall soon have none to spare for either love or money.

We seem to see in dim colonial vistas a scene like one painted upon the canvas of a dream. Hardy trappers and hunters roam the woods ; through the thick glades the crack of the flint-lock musket rouses the echoes, answered by the call of early-risen birds, the noise of waters, the trampling feet of beasts. Over the wooded plains sweeping to the Merrimack, following the paths of brooks and guided by the roar of river rapids, children ranged without fear through thickets far from the rude shelter of their homes. The smoke of the settler's fire had supplanted the smouldering heap of the Indian ; but for years every sense was alert to interpret the sounds borne in upon the air of night, to question each fresh trail through the dew of morning. A broken twig, a fall of moss, the crushing of a tuft of deer-grass—did these betray the heel of a foe or of a friend ? No strange noise escaped the settler's ear ; startled, perchance, in the pursuit of game by a sudden bruit and clamor, he leans to listen only to the far-away cry of the loon or the crescendo in the forest where the partridge beats his drum.

Contributions

TO THE

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BY WILLIAM ELLERY MOORE.

PART FOURTH.

PRICE TWENTY-FIVE CENTS.

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CONTRIBUTIONS
TO THE
HISTORY OF DERRYFIELD,
NEW HAMPSHIRE.

INDIANS AND EARLY SETTLEMENTS.

PRELIMINARY—THE NIPMUCKS—INDIAN HABITS AND RELICS—MARRIAGE
AND MOTHERHOOD—PATRONYMICS—FAMOUS SQUAWS—SERMON ON
FISH—TRANSITION PERIOD—OCCUPATION AND SETTLEMENT.

BY WILLIAM E. MOORE.

A PAPER READ BEFORE THE
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PART IV.

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CHAPTER VIII.

PRELIMINARY OBSERVATIONS.

The historian who attempts to draw aside the veil which has for centuries hidden the annals of an obscure people, scant in numbers, low in civilization, destitute even of a written tongue, has before him no easy task, and one rendered still more difficult from the fact that in his first contact with civilization the Indian was surrounded with white men who were themselves illiterate. Only after the passing of the tribe was the effort made to put into some sort of order the scattered records and traditions concerning them, and this was so scantily done that a single paragraph might set forth the story, as who should say: There were Indians; there are no Indians.

THE NIPMUCKS.

There appears to be a general agreement that one or more tribes of Indians inhabited a belt of inland country in Massachusetts and southern New Hampshire, more or less removed from the sea, and that these were known as Nipmucks, signifying by a license of free translation, freshwater Indians. They seem to have been neither numerous nor warlike and probably

held a position of little importance among the stronger and more ambitious tribes surrounding them. It is quite certain they took no prominent part in the bloody drama of the French and Indian wars, since no Nipmuck name adorns nor deed disfigures the page of history. It is said that the tribe with which we are more immediately concerned was subject to the Penacooks ; and this is rendered more plausible from the fact that the headquarters of that tribe, generally made at Penacook, were sometimes transferred to Amoskeag, probably in the height of the fishing season, and in virtue of the right of the stronger.

INDIAN HABITS AND RELICS.

From evidence which appears conclusive we locate the headquarters of the Nipmucks at or near Amoskeag Falls, a place famous for hunting and fishing. Hunting has become a thing of the past, though to this day the search is kept up for any stray fish which may have escaped the Nipmuck nets. The chief village, or more accurately the village of the chief, was situated on the hill-bluff known as "The Willows," now owned by Ex-Gov. Frederick Smyth. In the steep banks of this bluff, and where the soil had been upturned, there was found a great number of broken fragments of rude pottery and other utensils used by the Indians. Nearly everything naturally grouped under the head of Indian relics has been found on the site of this village, including arrow and spear-heads in great variety, stone mortars and pestles, stone axes, gouges, clubs, and fish-knives, stone tools for removing fish-scales or scraping skins, bone fish-hooks, needles, hairpins, and numerous other relics, some broken, but many perfectly preserved. When making an excavation on the premises, for the purpose of forming a small artificial pond, there was unearthed a deposit of arrow and spearheads, knives, etc., of quartz, flint or chert, which with unfinished specimens and chipped fragments amounted in the whole to several bushels. This was probably one of the workshops or armories of the tribe, and un-

doubtedly the first Amoskeag manufactory. Over the whole section surrounding the falls, on either side, in fact from Goffe's Falls to Martin's Ferry, a great number of the various relics above enumerated have been picked up, several valuable collections having been made, perhaps the most interesting being that of the late Samuel B. Kidder. They were more numerous upon the village-site referred to, on the elevation west of the P. C. Cheney Company's mills, as well as elsewhere and near by, on the large island below the falls and the level stretch of land immediately below the great eddy. At all these points, as well as in the bed of the river, valuable finds have rewarded the patient relic-hunter. At the mouth of Christian brook, known also in later times as the "fair-ground brook," and also at the mouth of Ray brook, there have been found many interesting relics. The bank of the river north of the latter stream is quite steep, and here about twenty years ago the writer found a nest of a dozen or more large chipped slate-stones, wholly unlike the conventional spear-head, but yet of undoubted human workmanship, which had been probably used for cleaning fish. They were buried at a considerable depth, having been uncovered by a fall of earth occurring because of high water. There are signs of old fires, pieces of charred wood remaining at a depth of three or more feet. Throughout this entire section similar mementos have been discovered, especially on the sandy margins of lakes and ponds. A symmetrically chipped arrow-head of milk-quartz was found by the writer, when a mere boy, on the beach at Massabesic Lake.

The foregoing facts, even in the absence of other evidence, is ample to establish the presence of Indians here in considerable numbers and for a long period, probably centuries before the advent of the whites. Tradition assigns no spot which we can point out as an Indian burial place. It is said there are several Indian graves near the entrance from the highway to the Devil's Den in Chester. It is also said and has long been currently believed that the site of a number of wigwams was upon Brown's

Island in the Massabesic, and this is altogether likely. The sole indication of a burial place in this immediate vicinity, which has come to our knowledge, was the finding of human bones supposed to be those of Indians, in the grading of Penacook street, about 1875.

The only approach to a permanent settlement was that around the home of the chief. More than forty wigwams were scattered over this picturesque knoll, a fine view of the Merrimack being afforded from the willow palisades surrounding the village. It is quite certain that numerous temporary wigwams were erected at or near the more important points above mentioned, on both sides of the Merrimack, some of which may have been permanent. From the well-known roving character of the Indian it is likely that in the summer months at least they grew like the mushroom in a single night and as soon vanished.

The traditional, dark-red, fawn-like Indian maiden was not of the Nipmucks. She is the creation of a diluted sentimentality, a mere dream of a class of poets too lazy to saw wood but able to invent aboriginal lies by the gross. The bewitching squaw who leaped for love from the top of Rock Rimmon was not after mayflowers; it is much more likely that she was overloaded with muskrats and lost her way. The noble Nipmuck lover was also an invention, patented by Cooper. If these romantic types ever existed it was before the era of discovery. In contact with the white man the Indian adopted only his vices; these, superadded to savage traits, could not well produce heroes either in love or war. We have ransacked the records of the past, turned to the testimony of the dead, and listened to the lies of the living, but have failed utterly to discover proof of greatness, or even the dawn of a progressive and civilizing instinct among either the Nipmucks or Penacooks.

The red man was fond of fishing and hunting, but he killed solely to obtain food, clothing, or materials to give him shelter, and was not ennobled by the zest of sportsmanship. In him the instinct of self-preservation scarcely rose above the level of the

wild beasts he slew. Our people, however, seem to have a weakness for idols of all colors and stand ready to bow down and serve them. All that is needed is a remote historical episode, recounted by a white Ananias, and an ideal Pocahontas appears. But we soon tire of the old favorites, and one by one the saints, martyrs and heroes of history are knocked off their perch. Histories are no longer tales agreed upon, but begin to be viewed with suspicion. William Tell is a myth, the Scottish Mary was freckled, even King Richard was not a hunchback, and George Washington swore. Soon shall the frivolous generations pass, and as they die will fade the memory of men once deemed immortal. Philip, Tecumseh, Logan, Oceola and Passaconaway have vanished, to be followed by the red drunkard of the reservation.

With as little success we have sought for an æsthetic trait in the Nipmuck character, or for some evidence of a moral sense. Surrounded upon the one hand with beauty and upon the other by terrifying aspects of nature, he was blind to the one and by the other affrighted. A seen enemy he attacked and tried to kill ; before an unknown danger he cowered and prayed, his so-called acts of worship inspired alone by ignorance and fear.

About him grew myriads of flowering plants and shrubs, in dell or defile, glade or glen, in the natural meadows and over the upland slopes, terraces and plateaus. When following the chase or crouching in wait for game the moccasined foot could scarcely fall without crushing a blossom. Here the wind-flower and the blue and yellow violet grew, the laurel and the flower de luce ; the blue closed gentian and its white-fingered sister, and the great fringed orchis. These do not detain the hunter. He hears not the oration of Jack-in-the-Pulpit ; the wild rose spreads its bloom to him who hastens. To such a woodsman the scarlet robe of the cardinal-flower has no meaning, the sweet-brier no fragrance, the queen of the meadow no style. The red scalp or flaming coat of tanager or wood-tapper may allure him, but the

rare blush of *Arethusa* he passes with indifference. Concerning the world of plant life his thought is, if he has one, Can I eat it, or will it cure snake-bite? The wild deer for which he waits will reason as acutely.

The hues of the sky at sunset may suggest to the Indian rain or drowth, but never beauty; and as he looks from his hemlock bed to the crimson light of dawn upon the western summits, in his breast no emotion kindles, as with guttural accent he says, This is another day. To a meteor he gives a grunt, to a comet two; and when the Northern Lights begin to flash and in the intermittent gleam the stars grow pale, he sees only a reflection from the campfires of a mightier race of hunters in the far and frozen north.

The wants of the Nipmuck did not make him unhappy, though in this very evil case we find the civilized citizen of to-day. The savage saw neither virtue or sweetness in a useless plant; the average society atom sees no sweetness in character or loveliness in life without a bank-account. We wish to be just—even to an Indian.

The agriculture of the Nipmuck was of a rude sort, the rich soil of natural meadows or intervalles being usually selected as planting places, and when these were not available other tracts were reclaimed by fire and the larger trees killed by the process of girdling. The preparation of the ground, planting, hoeing and harvesting—nearly everything coming under the head of work—was performed by women and children. The men were kind enough to furnish the raw material for the manufacture of tools, such as the axe, the stone or clam-shell hoe and other cutting implements, his own time being otherwise fully occupied in making arms and equipments for the hunt and allied masculine occupations. So that numerous avenues of employment remained open to the gentler sex, and we are beginning to recognize in our time the wisdom of this arrangement. We now permit our wives and mothers, but more especially the larger class of sisters, cousins and aunts, to whom these relations of life are

closed, or which have been declined with thanks, to assume some portion of our burdens, at a reduced rate of compensation.

The range of cultivated food-products was generally limited to corn, squashes, pumpkins, melons and kidney-beans. They derived, however, a large part of their winter food-supply from nuts, sweet acorns, dried fish, smoked meats, etc., prepared in various unpalatable ways, but capable of supporting life. There were no seasons throughout the year when fresh flesh food, of fish, fowl or animal, could not be had in abundance, and if there were times of scarcity the cause usually proceeded from indolence or improvidence.

We are unable to give the Nipmuck name of the Indian afterwards known as Christian or Christo. This name is said to have been bestowed upon him soon after his conversion to christianity by the Apostle Eliot, but this lacks probability. It is much more likely that he had it from the Jesuits, or assumed it for purposes of his own. Like St. Paul he was at times all things to all men—a Nipmuck, an Arosagunticook ; a Puritan, a convert to catholicism. Christo is first heard of in company with a St. Francis Indian called Plausawa, a not very good pronunciation of François. They had sufficient intercourse with the settlers to ascertain that white christians made slaves of black men, and that the profits of the trade were large. Acting upon this hint they stole two negroes in Canterbury and started with them for Canada, one escaping upon the way and the other being sold to a French officer. Christo seems to have had seasons of back-sliding and repentance, such as the praying Indians generally enjoyed, and after a series of apochryphal adventures he settled at Amoskeag. His cabin or hut was near the mouth of Christian brook, which entered the Merrimack immediately west of the Amoskeag Paper Mills. Here he lived in an outward show of peace for some years, professing friendship for the whites, by whom he was distrusted. At length he was suspected of conveying intelligence and giving secret aid to the hostile St. Francis or Arosagunticook Indians, whereupon, during his ab-

sence they confiscated his personal belongings and burned his cabin. Potter says that Christo subsequently returned and forgave the whites for this cruel injury. Other accounts, more in consonance with the Indian character, say that he openly joined the Arosagunticooks and became an active and implacable foe. This little trout-stream is now hidden beneath the surface by the march of improvement, for nearly a mile of its course, and the generation to come will know neither name nor place.

Plausawa had also been an occasional visitor at Amoskeag, accompanied by another drunken brave called Sabbatis, a name representing his baptism into christianity, literally St. Baptiste. These Indian thieves and murderers, after the commission of a series of outrages in Canterbury, Salisbury and Warren, as well as in this neighborhood, were finally killed in Boscawen by one Peter Bowen. The full details of this affair are given in Little's History of Warren.

Upon the authority of certain early historians we are asked to believe that upon the death of the great chief of the Micmacs or Taratines, a powerful and warlike tribe in the Province of Maine, to whom the Penacooks were subject, a war of succession arose, which resulted in the choice of Passaconaway to succeed the dead Bashaba, who had been slain in battle. This war for supremacy became general and involved all the tribes from New Brunswick to the Hudson river and from Massachusetts to Canada. The exact limits were not known and probably can never be determined. The numbers engaged were large, the war continued for years; it is said to have been conducted with great ferocity and to have been especially disastrous to the coast tribes, who were no match for the hardy inland hunters. Many of the names preserved to us are those of chiefs and warriors who had become famous in this great war, which was the most sanguinary and relentless ever waged among the Indians of the east. The great plague, to which nearly all the earlier accounts refer, raged among the Nipmucks towards the close of

this war. The origin of this plague has never been satisfactorily accounted for, or its nature clearly understood, but we hazard a conjecture that the contagion was communicated by the Indians of New France, who in turn received it from the whites then in Canada in considerable numbers. At all events it was believed the loss by battle and plague literally decimated the ranks of the savages and brought the war to a close before the landing of the Pilgrims at Plymouth. The early accounts must be received with great caution, ample allowance made for the time in which they were written, and due regard had to the sources of information. "Broken English" is scarcely a fit vehicle for the transmission of historical data. The skeletons of those who fell in savage strife, or succumbed to plague and famine four centuries ago, might as easily be clothed with life as could the details of that distant scene be dug from their oblivion.

Upon this middle ground, between the Plymouth Puritan and the pioneer Jesuit of New France, there was another curious encounter, an episode in the struggle between two forces, whose declaration of war ante-dated the discovery of America. Whenever and wherever these met, in the long centuries, the hostile lines were drawn. And so it came to pass that in a new world, for the soil of which kings contended, the adherents of Pope and Protestant, in savage bands, the one inspired by a Mather, the other by a Marquette, each in the name of a common Redeemer, stood opposed in conflict. Thus, upon the virgin soil of New Hampshire, in that first century of its occupation, was shed the blood of religious hatred. Time has fortunately softened these asperities, and in the new dawn of a wiser christian charity we seem to see the promise of brotherhood and reconciliation.

As the light of the fire-fly is illusive or intermittent, so Indian lore and tradition lead us along a pathway sometimes overcast with darkness and often difficult to follow. The time is distant, the actors are defunct, and the record is becoming more indis-

tinct and uncertain. But we still follow the trail with ardor in an endeavor to enrich our barren annals, and we know that we are on the ground. Some may even thank us for this attempt to restore these fast-fading pictures of the past.

MARRIAGE AND MOTHERHOOD.

It is not certain that the Nipmucks were polygamous, but the line was not far removed. They seldom lived with more than one squaw at the same time, but on the other hand a healthy brave generally contrived to marry from six to nine maidens during an average life of four-score and ten years. The squaw was wedded when quite young, frequently at twelve years of age; but constant drudgery and exposure broke them down early, so that at thirty they became prematurely old and were wrinkled at forty. They endeavored for a time to keep up appearances, just as we observe the old hens of our generation in their efforts to parade with spring chickens. It made little difference to the mother, and none whatever to the pappoose, whether the medicine-man was called in or not. When his services were invoked he commonly made a great pow-wow in front of the wickypup before entering, and more pow-wow upon emerging, concluding with an invocation or chant addressed apparently to the great Square of Pegasus. In order that the old wife might be supplanted by the new, separation was made easy, and the discarded wife and mother did not complain, afterwards contenting herself with adopting some captive as a son or husband, as the case might be. Some of these captives, thus summarily wedded without ceremony or consent, were white men, and part first of the very pathetic story of Pocahontas rests solely upon this custom.

We have purposely omitted the disgusting details of home-life, suggesting merely that an ample water-supply was not diminished or contaminated, as the Nipmuck squaw never took a bath or any other step toward cleanliness.

INDIAN PATRONYMICS.

We have so long been familiar with the names of the neighbourhoods, streams and lakes that we seldom pause to inquire concerning their godfathers, and in many cases have not even suspected their Nipmuck origin. As will have been observed, the names of most of our larger rivers, lakes and highlands are purely Indian; the Merrimack, Piscataquog, Souhegan, Nashua, Cohas, Soucook, Suncook and Contoocook; the Baboosic and Massabesic, Pawtuckaway and the Uncanoonucks—supply us with instances. The manner of spelling these various names has from time to time been curiously varied, while their pronunciation has been no less capricious. The examples heretofore given, however, may from long usage be now regarded as settled.

The etymology of Indian names offers an attractive field for study, and if many are involved in obscurity it only adds zest to the chase. The scope of our contributions will not permit us to enter upon this department of inquiry, and it is relegated to experts in barbarous philology. We have observed that the modern author appears over-anxious to disagree with writers who have preceded him. Each latest-adopted history or school atlas requires the student to commit to memory a new set of names of persons, places and things never before heard of, and should he attempt in after years to repeat these his own children will laugh at him.

As to the survival of certain names to the exclusion of others we have been impressed by its significance; the law of euphony undoubtedly plays a part, but the reason must rest upon deeper principles. The sight of certain names appeals to the ear like strains of music; but they also evoke pictures to the eye, as if the name was the ghost of its owner, while we seem to see the shifting scenes summoned by these memories of sound.

Passaconaway is certainly the most striking figure among our native chiefs, and all accounts agree in assigning to him the

highest place in war or peace. We pass in silence the old-wives tales concerning him, his superhuman strength, his miraculous cures, his astounding feats of divination, nor shall we add another to the list of seven dying speeches reported by as many sober histories. The authentic record is brief, his fame rests largely upon tradition, but that by his people he was esteemed great is the highest praise that can be accorded. He was born about 1540 and was an old man when the Pilgrims landed. His old age was passed in poverty; once lord of thousands of acres, he was compelled to beg the poor privilege of living upon a patch of intervale and two little islands in the Merrimack. Even these were taken from him by the puritan rulers of the godly Commonwealth of Massachusetts. But the title-deeds to his vast possessions, wrung from him by white cunning, served to enrich the state, assisted in the spread of the gospel, and erected the cradle of liberty.

It is known that Passaconaway had four sons and two daughters; of the sons Wonolancet alone became famous in his time, and the Appalachian Club has given his name to a small mountain of the Sandwich range, which nestles like a pappoose under the towering shoulders of his sire.

When the first white hunter or trapper actually settled at the falls of Amoskeag, Acteon was one hundred years old and was alive twenty years afterwards; in 1726 he was known as "Old Acteon." The terrible Pehaungun, "Beware of Me," was killed in a drunken frolic in 1732. He was then one hundred and twenty-four years old, and in his youth no white man had stepped upon the soil of Derryfield. It will serve but little purpose to recount a further list of long-forgotten names, to which nothing authentic can be added. Acteon has gone to the home of the Coosucks, Wahowa lives only in the classic yell of Dartmouth; Watannumon rests by the Mikaseota, the bones of Paugus lie hidden in the white sands of Ossipee, and Passaconaway sleeps.

Forty years ago a worn-out locomotive of the Northern Railway was sent to the junk-shop. Emblazoned letters upon the

cab spelled the word "Tahanto." But this evokes no memories—it is a name but it is no more, and may as well be that of a cloud at midnight. The roar of iron and the rush of steam have supplanted the war-cry of the savage, but to-day the path of the shining steel follows northward the ancient trail to the home of the Arosagunticooks.

FAMOUS SQUAWS.

It is not from choice that we have spoken slightly of the Nipmuck squaw. She may have filled her place, and there is no doubt that wherever her home it was humble. But she must be put without prejudice in the column of silent factors—passing away without sign. Record, journal, memoir, narrative or history, shed little lustre upon her life or character; fiction and poetry have alone befriended her. The eldest daughter of Pas-saconaway, by her marriage with the great Nobhow, became a queen, but not even her name survives. Her younger sister, the fair Wetamoo, became the bride of a seven-syllabled son of Paugus and has been apotheosized in Whittier's verse. The wedded life of Wetamoo was not a happy one; the youthful pair soon separated and she went back to the paternal tie-up in Derryfield, where she held court for many years as a grass-widow. These are the facts—the rest is fancy.

After all, it is but a step from the dawn of tradition to our own times; with a stroke of the pen, the turning of a leaf, we pass to the century of base ball and cotton batting.

CHAPTER IX.

A SERMON ON FISH—THE TRANSITION PERIOD—EARLY OCCUPATION AND SETTLEMENT.

All narrators recount the same fish-stories about the falls of Amoskeag. Great salmon and salmon-trout, shad, and even the sturgeon were plentiful, while ale-wives and lamprey-eels were so numerous as to impede navigation. Probably the most complete account of the manner of taking these fish is found in Potter's History of Manchester.

Early in the last century there was printed a curious sermon, the title-page of which is as follows : "Business and Diversion inoffensive to God, and necessary for the Comfort and Support of human Society. A Discourse utter'd in Part at Ammauskeeg-Falls, in the Fishing-Season. 1739. * * * Boston, Printed for S. Kneeland and T. Green in Queen-Street. MDCCXLIII."

The very quaint dedication is as follows : "To the Honorable Theodore Atkinson, Esq ; and Others the Worthy Patrons of the Fishing at Ammauskeeg. *Gentlemen*, It's not to signify to others that I pretend to an Intimacy with you or that I ever had a Share in those pleasant Diversions, which you have innocently indulged yourselves in, at the place where I have taken an annual Tour for some Years past. Yet I doubt not you'l Patronize my Intention, which is to sence against Bigottry and Superstition. All Excess I disclaim, but pretend to be a Favourer of Religion, and of Labour as an Ingredient, and of Recreation as a necessary Attendant. I believe the *Gentlemen* who moved me to preach there in some odd Circumstances, and those at whose Desire and Charge this Discourse is Printed, (asking their Pardon if my Suggestion appear to them ungrounded) were moved more from the uncommonness of the Thing, than any Thing singular in it. I have put off the Importunity for near

these three years ; but least it should be, that I fear, it's being seen by the World, I submit it to sight and Censure. So little as I know you, *Gentlemen*, I heartily present it to you ; tho' all the Reason that I intend to offer is, that we have fished upon the same Banks. And tho' I know this will be no Bait, I am fond of being esteemed, in the Affairs of Fishing. *Gentlemen*, your most Obedient and very humble Servant. Fluvialulis Piscator."

This sermon was by the Rev. Joseph Secombe, a minister of Kingston, New Hampshire, and was delivered before a mixed assemblage of hunters, trappers, fishermen, settlers and Indians. From the tone of the dedication it is evident that among his hearers were a number of civil or military officers in the service of King George the Second, together with other "gentry-folk," from Portsmouth, Ancient Dover, and Exeter. The "some odd Circumstances" alluded to probably had reference to preaching in the open air, perhaps to the mixed quality of the congregation. The most significant statement, however, is that to these fishing-grounds he had "taken an annual Tour for some Years," and that the distinguished company, the Gentlemen of the dedication, had "fished upon the same Banks." This very clearly shows that the Amoskeag fisheries were not only known considerably earlier than the spring of 1739, but that the sport afforded was more enticing than that offered at "Great Salmon Falls" in Somersworth or the falls of the Cocheco at Dover. Otherwise we should not hear of annual tours to Amoskeag, made by considerable parties, involving a journey of from thirty-five to forty miles through the wilderness. We shall be prepared to show in another place that the reputation of Amoskeag as a great hunting and fishing place was known to white men for much more than a hundred years before Secombe's sermon was delivered.

Our preacher chose his text from John 21-3, "Simon Peter saith unto them, I go a Fishing." The discourse sets forth that the Apostles were fishers, and that "fishing is innocent as Busi-

ness or Diversion"; that "in fishing we are so far from delighting to see our Fellow-Creature die, that we hardly think whether they live. We have no more of a murderous Tho't in taking them, than in cutting up a Mess of Herbage." That God "has implanted in several Sorts of Fish, a strong Instinct to swim up these Rivers a vast Distance from the Sea. And is it not remarkable, that Rivers most incumbered with Falls, are ever more full of Fish than others. Why are they Directed here?" The preacher concludes from his ingenious reasoning that, "If they *may* be taken, any may make a Business of taking them for the Supply of others," and adds, "If I may eat them for Refreshment, I may as well catch them, if this recreate and refresh me. It's as lawful to delight the Eye, as the Palate."

The bulk and balance of the discourse is in the approved orthodox style of that age, with frequent reference to scripture texts, citations from the church fathers, Latin quotations, etc. The whole sermon seems to have been inspired by its romantic surroundings, and to be addressed not so much to unconverted men but more to a fellow-feeling of sportmanship in the minds of his hearers. While the way was pointed to godly living, the pleasant invitation of foaming waters held fast his fancy, and in the sunlight the glint of leaping salmon made a present heaven stronger to allure than the pictured joys of a new but remote Jerusalem.

Twenty-odd years ago certain enthusiastic citizens so exerted themselves as to move heaven and earth and the legislature, out of which agitation a fish-way was built at Amoskeag, to enable salmon and other fish so inclined to pass up to the headwaters, to deposit their spawn at their leisure and return unmolested to the sea. Time and money were expended, the fish protected by law, and everything was in readiness to revive the old time sport except the salmon and Massachusetts. It was said the fish-ways at Lowell and Lawrence were constructed, either in ignorance or by design, to prevent the passage of fish. Finally, after long

waiting, a few stray salmon, accompanied by a small colony of eels, actually made their way to the foot of Amoskeag falls and possibly some passed up the fish-way. Great things were hoped but never realized ; each spring the number grew less, and in a few years entirely ceased. The fish-way is falling to pieces with rot, the fish commissioners of two great states catch nothing but their salary, and the dream is over. The real difficulty, however, was not so much in the way as in the water ; this had become so contaminated by the wash and refuse of mills and the sewerage of cities that fish would not enter a stream loaded with sawdust, colored with dye-stuffs, and flavored with extract of garbage and gas-works. As with felled forests game-animals and birds have departed, so from our polluted streams the noble salmon has disappeared ; and these are among the sorry penalties exacted in exchange for calico and gingham.

THE TRANSITION PERIOD.

Not the least curious and interesting portion of the early history of Derryfield is the transition period—that stretch of time during which the white man appeared while the Indian had not yet departed. For the sole purpose of setting forth in orderly sequence the procession of events leading to permanent settlements in North America, we introduce the following dates as landmarks : The Cabots, under Henry VII, in 1497, seventeen months before Columbus touched the mainland of America ; Verazzano, 1524 ; Cartier, 1534. This is undoubtedly the date of the first but not of the first permanent settlement. But the fisheries at Newfoundland had in the meantime become known. Parkman says there is strong evidence that the trade began as early as 1504, and it is well established that in 1517 Spanish, French and Portuguese vessels were engaged in it ; he adds that from 1527 the Newfoundland fishery was never abandoned. In 1578 more than three hundred and fifty vessels visited the banks, and in 1607 there was an old French fisherman at Canseau who

had sailed thither for forty-two successive years. We pass rapidly to De Monts, at Nova Scotia in 1604, wintering with the colony at St. Croix. During that year he wrote from the banks of the St. Lawrence, "The Indians tell us of a beautiful river far to the south, which they call the Merrimack." The dream of this river haunted him, and in 1605 he accompanied Champlain on a voyage of discovery southward along the coast. In that year we find him at the Isles of Shoals and Portsmouth harbor. Passing down the coast they discovered the Merrimack, which Champlain named "La Riviere du Gas," (du Guast) in honor of De Monts. In 1611 the Jesuits came, to rescue the perishing souls of the natives, and incidentally to become proprietors of "the greater part of the future United States and British Provinces." To quote the text of Parkman, "On the banks of James River was a nest of woe-begone Englishmen, a handful of Dutch fur-traders at the mouth of the Hudson, and a few shivering Frenchmen among the snow-drifts of Arcadia; while deep within the wild monotony of desolation, on the icy verge of the great northern river, the hand of Champlain upheld the fleur-de-lis on the rock of Quebec."

In this brief recount of years we have almost unconsciously drawn the lines of a historical triangulation, with New Hampshire at the centre. The converging lines, in the years immediately following, drew toward us from three cardinal points—south, east, and north. Nearly a full quarter-century elapsed between the earliest white settlements at Quebec and Montreal and that of the Plymouth colony in 1620; this was separated by thirteen years from the date of the Popham colony at the mouth of the Kennebec, in 1607, while the Piscataqua settlement in 1623 closely followed that at Plymouth. The whole time embraced between 1600 and 1750—a round century and a half—constituted this great transition period from barbarity to civilization. It is the task of the careful student of the past to illustrate the striking details, at once picturesque and shameless, of this border-land of American history.

OCCUPATION AND SETTLEMENT.

In the century preceding the first settlement upon the soil of New Hampshire numerous attempts at colonization had met with failure, and it will have been seen that the first permanent settlements, made respectively by the French, Dutch and English, were nearly contemporaneous. It is definitely known that there were not less than four great through Indian trails leading from points upon the coast to the country of the St. Lawrence. One of these was from Portsmouth up the Salmon Falls valley, passing to the east of Winnepesaukee, west of Ossipee, and so northerly through the Pequauket region, leaving the White Hills to the left. This was the line of subsequent white extension from Exeter and Dover. The great Nipmuck trail followed the Merrimack, Pemigewasset and Baker River valleys, passing Moosilauke on the right, over Warren summit, and thence up the valley of the Connecticut. This was likewise the line followed by the stream of settlement from Massachusetts. These conspicuous routes, if they did not coalesce, were joined here and there by cross-country trails, one of these being from Ancient Dover, through old Chester to Amoskeag, to which further reference will be made.

These old Indian ways were probably first trodden by the feet of French explorers, nearly if not quite three centuries ago, accompanied by Indian guides from Quebec, and their footsteps were followed northward a few years later by the English. The Pilgrim father played the double rôle of Puritan and pioneer; while austere and saintly, he was adventurous and daring. The wilderness had no terrors and the sea no dangers to deter the hearts of oak who in the wake of the Mayflower settlers everywhere pushed on beyond the Plymouth homesteads. Without guide or compass they followed the fertile valleys ranging to the north, camping only when arrested by the gloom of night. Beside the flowing waters each hunter halted where he wished and chose his home.

There was another and darker side to the Puritan character. He was not only selfish but greedy ; compelled to be prudent, he became stingy. In a trade with his neighbor he stretched the tenth commandment and for the time being forgot the other nine. It was small wonder that the rights of savages weighed little in the presence of his wants, which he persuaded himself were necessities. It soon came to pass that bloody reprisals followed Indian cruelty and outrage, the sole answer which a barbarous people could make to civilized treachery. The wasp did not sting until the nest was ravaged ; smarting with pain, in hot revenge the spoiler trampled to death those whom he himself had driven to madness and revolt.

In a review of the first contact of the whites with the Indians, and by an impartial consensus of the records, the whole story of that contact, with scarcely an exception, is dishonorable to the whites. Bad faith and broken promises, advantage gained by guile and dishonest diplomacy, were followed by encroachment and dispossession. Through the centuries which have intervened our children have been taught to revere the rugged virtues of their Puritan ancestors ; poetry and romance, even the historic page, has surrounded them with a shining aureola of sanctity, but in this era of research and impartial scholarship an awakened national conscience sees them beneath the deceitful glamour of distance clothed upon with the old frailties of humanity. Again we witness the old paradox of saint and sinner ; the one erects a church, but for convenience of the other "the devil builds a chapel hardby."

Without a single exception, so far as disclosed by the record, every permanent settlement in New Hampshire was preceded by an actual or quasi-occupation. This took various forms ; the territory afterwards formed into townships was early overrun with hunters, trappers, fishers, adventurers of all sorts ; some of these were employed by French companies in Canada, some by the Dutch traders of New Netherland. Others came from the

Massachusetts colony, and many from the settlements at Portsmouth or Dover. The wilderness was threaded with lines of traps, running to and from depots of supplies, while to provide necessary storage for fur or other commodities bark-cabins and log-houses were built here and there at points of convenience. With the arrival of each vessel from the old world, there came an accession of rough and turbulent spirits, many with nothing to lose and all inspired by the hope of gain. Fabulous stories of wealth and exaggerated accounts of mineral treasures found ready acceptance, and the decks of vessels clearing for New England were crowded with saints and swash-bucklers, dissenters and desperadoes. To these, indiscriminately, some of our genealogical cranks are crazy to trace their ancestry.

Along all the avenues of exploration, on sea or land, by way of lake or river, the wilderness was traversed ; some merely inspired by the strong lust of adventure, some inflamed by the thirst for gold, others more soberly in search of homes. Out of these early exploitations came the first definite information of the character and topography of New England. Toiling through dense forests, the sudden sight of a mountain was as welcome as the first glimpse of land to the mariner, and afforded a landmark to direct his steps. One by one these great natural boundary marks were at least approximately located, lakes were plotted, and the course of rivers roughly indicated, sketched perhaps upon birch-bark maps with pencils of coal. Sometimes accompanied by friendly Indian guides, familiar with the territory, the way was made easier ; here a mountain or height of land, there a swamp or thicket was avoided ; here he was led past a broad lake or conducted to river shallows where the stream offered a fording place. One by one names were given to mountains, rivers and lakes, or other natural features, and it is one of the astonishing facts of the time that these early pioneers generally accepted without question the names given by the Indians, and that so many of these survive.

It is somewhat difficult for us to understand and appreciate the tremendous difficulties to be overcome, the hardship and privation encountered, and the resolute courage required to face the dangers that beset the first settlers, even in times of peace. The mere exhibition of physical strength and endurance almost surpasses belief. Aside from the inseparable musket and hunting-knife, powder-horn and shot, an axe or hatchet was always a part of the outfit ; to these was frequently added a pack of blankets, a pot or frying-pan, and other utensils and tools, the combined weight of which was often fifty or more pounds. In summer the pack was sometimes slung on poles, between two sets of stalwart shoulders, or in winter drawn upon sledges, and the varied yield of the chase or the treasures of traps were transported in like manner.

Further evidence of this early occupation and settlement will be considered in the next and concluding part of the series, to which will be added some sketches of home-life, churches and schools, the whole to conclude with an account of the rise, decline and fall of the Derryfield Social Library. These contributions will not at present bring the record of events later than the first quarter of the present century.

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CHAPTER X.

EARLY OCCUPATION AND SETTLEMENT CONCLUDED.

In the preceding chapter the attempt was made to present a long-distance view of the times preceding and immediately following the first permanent settlements in New England. Continuing the inquiry it will be our endeavor to ascertain and set forth in order the dates of the first authorized expeditions into New Hampshire.

The first patent granted by the London Company to the Mayflower Pilgrims was applied for in 1617 and granted in 1619. Landing and luncheon over, like cats in strange garrets, these colonists sent out exploring parties in every direction, and were not long in discovering the Merrimack, which they approached in the neighborhood of Haverhill, the course of the river at that point being nearly due east. Disregarding an earlier patent of 1606, under which some abortive attempts at colonization took place, we come next to the Gorges and Mason patent of 1620, superseded in 1621 by what was then known as the "Mariana" grant. It is only necessary for our purpose to remember that the grantors were so ignorant of the territory granted that they had supposed the east and west course of the Merrimack continued to its source, which was thought to be Lake Champlain. In

1622, however, another patent to Gorges and Mason conveyed what was known as the Laconia grant, including land "situated between the Rivers of Merrimack and Sagadehock, extending back to the great lakes and rivers of Canada." Under this last grant settlements were simultaneously made at Portsmouth and Dover Neck, in the spring of 1623. In March, 1627, a grant to Henry Roswell conveyed "the territory between a line running from the Atlantic ocean three miles south of the mouth of the Charles River, and every part thereof, and a line extending from the Atlantic ocean, three miles north of the Merrimack river and every part thereof." How far inland this great parallelogram extended from the sea no one knew, and at that time no one believed, not even the grantees, that the northern limit extended more than three miles beyond an east and west line projected from Newburyport to Haverhill. The last fatal misconception was the source of much subsequent trouble and disagreement, the last echo of which did not die for two hundred and seventy years, when the boundary line between New Hampshire and Massachusetts was finally and definitely agreed upon — in favor of Massachusetts.

Up to this time every grant and patent, and all the territory held or claimed to be held under them, as well as every occupation and settlement, were made in entire disregard of the right or ownership of the Indians to any of the territory in question. In the spring of 1629, however, the famous Wheelwright deed was executed by Passaconaway and three other owners of the soil in fee simple, conveying an extensive tract of land for a consideration of ten or twelve pounds in lawful money. This deed was subsequently pronounced a forgery, but no sufficient proof has been produced to show that it was not a genuine conveyance. Our interest in the question is mainly historical and especially in the local trend of the northerly line, described in the instrument as passing through the present towns of Strafford, Northwood, Deerfield, Candia, Hooksett and Manchester,

thus covering the whole of our title to Derryfield and the lands immediately adjoining. It is of further interest to remember that the identical territory thus acquired by purchase under this deed was afterwards, in November of the same year, granted to Mason by the "Council of Plymouth," at his request. No consideration was mentioned, but the obvious inference is, in the light of all the known subsequent facts, that this new grant was designed not only to repudiate the Passaconaway deed but to forever disallow an Indian claim of ownership anywhere. Thus early did these god-fearing and land-loving people of Massachusetts covet the soil, and from that time on they grabbed what was in sight and claimed the remainder.

In the meantime the Roswell patent of 1627 had been merged in an exclusive and inclusive charter from King George to the "Governor and Company of the Massachusetts Bay in New England." It is scarcely necessary to explain that this charter included Boston. About this time the authorities discovered what had long been known to hunters and rangers in the north country that the Merrimack made a great right-angled bend at Dracut and thereafter ran northerly, whereupon not only their maps but the plan of possession was modified accordingly, and a new boom of geographical discovery and exploration was born. Scouts and surveyors were at once privately commissioned to spy out the land and report. Some years passed, during which a number of expeditions were quietly set on foot to explore the country in various directions, some of which followed the coast, some the Merrimack and others the Connecticut valley.

From these various sources of information the Massachusetts Bay people took their cue, and in 1638 openly sent out "a committee to find out the most northerly part of the Merrimack River." The committee reported that "some part of it above Penacook was more northerly than forty-three and a half degrees." This means literally, allowance for error considered, that upon reaching Franklin the committee took the Pemige-

wasset branch, which they followed beyond Plymouth and past Baker river to the neighborhood of Woodstock. Here they would naturally halt for two reasons: First, the Pemigewasset near this point divides into a net-work of headwater streams, of which the East Branch, Hancock, and Franconia are the chief. Second, the explorers would find themselves in a veritable *cul de sac* formed by the mountains; on the right the water-shed of Sawyer and Swift rivers, tributaries of the Saco; on the left the water-shed of Baker river, and in front the steep dividing crest, down whose northern slope the Wild Ammonusuc tears down to the Connecticut. On the other hand the committee may have followed the valley of Baker river to Warren. Here they would have been surrounded by a circular sweep of mountains, among them Mt. Carr, Mt. Kineo and Moosilauke; it is likely the way by Baker river would be chosen, rather than that of the Pemigewasset, as the old Indian trail followed the former. On the other hand they must have halted before reaching the height of land at Warren summit; had they climbed to this point they would have seen the white foam of trout-streams tumbling down toward the north, might have caught glimpses of the frightful precipice of Owl's Head, and could not have failed to see spread before them the broad valley of the Connecticut, with the great ox-bow in Haverhill. None of these things were alluded to in the report of the 1638 committee. It is equally certain they did not follow the Winnepesaukee, since the lake would have been encountered before the parallel of $43\frac{1}{2}^{\circ}$ was reached, but the lake is likewise unmentioned. So that we are forced to conclude either that this committee followed the Pemigewasset, that they were themselves mistaken as to the distance traversed or that they made a false report.

In 1639 another committee was sent "to find out the northernmost part of Merrimack river." This committee must have made a lame and inconclusive survey, for they established the line at a great pine tree three miles north of the junction of the Pemigewasset and Winnepesaukee.

Early in 1652 still another commission was appointed by the General Court of Massachusetts, to establish the north head of the Merrimack, and on the first of August, 1652, it was formally fixed at $43^{\circ} 40' 12''$ —namely, at the outlet of Winnepesaukee, with an allowance of three miles more north, "wch run into the Lake." Thus, with rare forecast, the surveyors drove all other contrary-thinking people into deep water. This was the famous "Endicott Rock" expedition, concerning which there has been much misdirected enthusiasm. Upon the soil of the Bay State the shaft at Bunker Hill bears witness to the unselfish heroism and self-sacrifice of the sons of New Hampshire; the monument at the Wiers commemorates an act of Puritan greed and perfidy, committed against men of their own blood and lineage. The heirs of Mason, the assigns of Gorges, the possessors by purchase, and every claim of occupancy whatsoever was for years stubbornly denied by Massachusetts. Forced construction of charters, chicanery, indirection, falsehood and fraud failing to be sufficient, the General Court resorted to threats of force, in turn followed by arrest or banishment. The whole history of this usurpation, however, is too black to be painted.

All of these expeditions, with others set on foot by other parties in interest, passed directly through Derryfield and around Amoskeag Falls; and yet we are soberly told that these were first discovered in 1739, a hundred years later than the excursion of the first Massachusetts committee.

We should be glad to believe that the Apostle Eliot preached and taught at Amoskeag. Potter labors to show that he came here by invitation of Passaconaway a little later than 1650, and asserts that here were a number of praying Indians who were preached and prayed to, and that schools for the youth were also established. In 1648 Eliot wrote, with undoubted reference to Amoskeag, "There is another great fishing place about three score miles from us, whether I intend (God willing) to go next spring." In 1649 he again writes, "I had and still have a great

desire to go to a great fishing place, Namaske, upon the Merrimack river." In the same letter he adds, "But in the spring when I should have gone, I was not well, so that I saw the Lord prevented me of that journey." There is no direct evidence that Eliot ever carried out his intention, or that he came farther in this direction than Nashua. But it is important to note this cumulative evidence that Amoskeag was not only thus early known, but that it had been long familiarly known as a great fishing place.

Let us now briefly trace the course of advancing settlements in this direction from Massachusetts. Many towns contiguous to Boston were early settled, several of which, like Rehoboth, embraced extensive tracts afterwards formed into three or more townships. The date of settlement is given for Beverly, 1630; Andover, 1634; Newburyport, 1633; Salisbury, 1639; Haverhill, 1640, and Dunstable in 1659. A considerable number of other towns in Massachusetts were settled between the latter date and 1700, but few in southern New Hampshire. This was mainly owing to the fact that comparatively few emigrants came to New England during the period following 1640, and it is said that for a century and a quarter thereafter more people went back to England than came hither. These facts have been too often overlooked by historical students, who found it difficult to account for the delay in making settlements in this part of New England. The rigor of the climate, the fear of wild beasts and Indians, even necessary hardship and privation, had less effect in checking the tide of immigration than the disillusion of the dream of wealth in which many of the earlier adventurers had indulged. The golden bubble had been pricked, no longer compelling by its false and glittering allurements.

Old Dunstable, a portion of which was settled as early as 1659, embraced more than two hundred square miles, and out of this seven entire townships and parts of several others were subsequently carved. Litchfield was one of these, where a claim of settlement is made as early as 1656.

Following the list of towns referred to above we find Pelham, 1721; Amherst, 1728; Goffstown and Bedford, 1733, and Derry and Londonderry, 1719.

Looking to the east we see the settlers creeping toward us in much the same order, from Exeter and Dover. From these towns the people came to the Merrimack valley and became acquainted with its fisheries long before 1650. As to this western extension of our sea-coast towns most historians begin with the records and not with the facts. They agree in assigning 1719 as the date of settling the "Chestnutt Country," afterwards "Walnut Hill," "Cheshire," and finally Chester. Charles Bell's notes are extremely valuable, although written when he was but eighteen years of age. He died young, as the editor's preface naïvely says, "at the early age of 29½ years," and in his death the state lost a born historian. The courts have always claimed that records make the best witnesses—but there are others—and although we are historically limited to 1719 we shall attempt to project the reverted eye to an earlier date. For some years many towns not included in Ancient Dover were within the limits of Exeter, and those not in either were included in Chester, which embraced Epping, Raymond, Candia, Auburn, Hooksett, and parts of other territory known to the geography of guesswork. The early surveyors ran lines hither and yon, forcing a balance among the figures read from their rickety transits, but being always careful to add, include and reckon enough, with an extra allowance for error. So these early surveys, reinforced by conjecture, allotted the whole woodland acreage about us, with the exception of Derryfield, which was providentially reserved for greater things.

Here we are impertinent enough to inquire, Why not Derryfield? Let these four points be remembered: That the first step was discovery, the second occupation, the third either grant and survey or survey and grant as it might happen, and fourth an actual settlement. In the case of Derryfield the surveyors hes-

itated and finally halted, not because they were weary nor at the command of conscience, nor otherwise by any claim of prior grant or survey, but because they found the soil occupied and actual settlers in possession. This fact alone strongly reinforces our claim that the accepted dates must be revised and put back to a time certainly not later than the year 1700 and undoubtedly much earlier.

A society was formed in 1719 "for settling the Chestnutt country." The members were familiar with the land they desired to erect into a township, for they had hunted and fished in it for years and had eaten of its nuts. The record recites that a previous petition had been preferred in the autumn of 1718, by virtue of which the petitioners claimed some rights, setting forth that they had "been at a vast expense of blood and treasure to maintain the same against the enemy." No precise description is given of the enemy, but it was intended that those to whom they ever prayed should believe them to be Indians, though we are inclined to think them certain down-country people from Haverhill, who then claimed to have an Indian deed to the whole territory. In any event nothing is more certain than the fact that a considerable number of hunters, trappers, fishermen and scouts, if not actual settlers, had ranged back and forth for years before the society was formed and that the organization was only a step taken to keep what they already had, and at the very least to prevent others from getting it.

There was at this time and had been from time immemorial what was known far and wide as the "Pennacook Path," which ran all the way from Exeter through Chester, passing over the east shoulder of Mine Hill and so on by "Jake Chase his house," to the present highway in Auburn; thence, skirting the Auburn shore to Sucker Village, the trail turned west, making a detour northward around the Merrill brook swamp, and again easterly, leaving the Massabesic to the south, thence to Amoskeag and by way of the Merrimack valley to Concord. We are informed that the nearer easterly section of this path ran through "Sam

Bell's orchard," and down over Wilson Hill south of the poor-farm to the old falls road. There was a similar path to Kingston, another to Haverhill by way of Tyngsborough. At about the same date the bridge over Exeter river was only passable for foot-passengers or riders in single file, but was made "convenient for carts" in 1720. It is said the incorporators of old Chester had no shadow of right upon which to base their petition, which was only granted by preference over earlier combinations, although the secretary credited himself with five shillings for a "copy of an Indian deed." This was one of the pretences early employed by our forefathers, as it was an easy matter to induce any Indian under the seduction of Jamaica rum to affix his mark to a deed or any number of them, and the wily settlers were quick to employ these opportunities.

That the soil of Chester was occupied by actual settlers long before 1719 is sufficiently shown by the action of the new proprietors at their first meeting, when the selectmen were empowered to eject all trespassers upon the land covered by Governor Shute's charter, and a committee was subsequently chosen for the same purpose.

In August, 1737, Chester had a visit from Governor Belcher, and in the earliest account of his tour we read that "His Excellency was much pleased with the fine soil of Chester, the extraordinary improvements at Derry, and the mighty fall at Skeag." This was two years before the date of Secombe's famous sermon at the falls, and conclusively shows that even at that date there were good bridle-paths from Portsmouth to Amoskeag and from the falls to Derry. As a matter of fact nearly every part of the territory under consideration was much better known and easier of access than the historians would have us believe.

In May, 1739, John McMurphy was granted a privilege to build a grist-mill at "Massabesic River," below the great fall, "provided said McMurphy shall not stop or impede the course of the fish up the said river, but shall and will leave, continue and make sufficient passage for that purpose." This allusion

to "great falls" upon what we now know as Cohas Brook very clearly indicates that a much heavier volume of water commonly flowed from the lake at that date than has been known for two generations. The cause of the present greatly decreased and diminishing flow is obviously to be attributed to the disappearance of the great forests. The object of this old provision for a fish way was to protect the ale-wives in their run to the lake, as they furnished a considerable food-supply to the settlers. Laws were also passed to prevent the killing of deer and "Deer Inspectors" were duly appointed. On the other hand a bounty of twenty shillings was offered for each head of "a full-grown wolfe." In this year more than twenty wolves were killed in Chester and Derryfield, of which John Stark killed two.

In 1745 a man by the name of Bunten was killed by Indians in Hooksett. He was from Pelham and on his way to Penacook, following the old path to which reference has been made.

The 1719 Chester petition before referred to was "signed by about 100 hand," and modestly asked for a tract "on the east to Kingston and Exeter, on the south to Haverhill, and on the West and North to ye woods." This elastic piece of "waiste land," originally intended to be eight miles square, was afterwards increased to ten and finally to fourteen, which was under the limit, and extended from the Exeter line westerly to the Merrimack north of the Derryfield reservation. This latter appears to have been first known as Harrytown or Henrysburg, and originally consisted of about eight square miles, but in 1751 eighteen square miles from Chester and nine from Londonderry were added.

At various dates between 1639 and 1733—the Massachusetts century of dishonor—that commonwealth made an extensive series of land grants in the disputed northern territory, ranging as far north as Lake Winnepesaukee. These grants were of two classes, those given to friends and supporters of her claims and those made to soldiers. It was well understood that none others

need apply. Many of the grants issued to soldiers who had engaged in the old French and Indian wars were hastily made, the bounds illy defined and the land hard to locate. Whole townships were granted by guesswork. Of these the record remains as to Bow, Todds-Town, Beverly-Canada and Bakerstown. Of other early grants known to have been made one was of a part of Derryfield, but the records are lost, and we are inclined to believe this to have been the original Harrytown grant. The charter for Derryfield was not issued till 1751, and did not even then include that part of old Harrytown near Martin's Ferry, which was added later. The evidence as to Bow and Dunbarton is conclusive and the lines stand. Some grants were early settled while others were not ; but the Derryfield grantees came without delay, the fishery alone presenting the principal inducement, much of the soil being very poor.

Not a few towns changed names from three to six times in ten years, were granted and regranted to differing parties, lines and bounds over-ran, fell short or conflicted, and order only came after the Revolution, when the original claimants, like Gridley, had died out of court and chancery. The history of those old claims and counter-claims, though full of stirring incidents, can never be written ; many a settler defended his homestead gun in hand against the emissaries of the Great and General Court of Massachusetts, and his dogs were trained to discover in the wind the smell of Boston. In the general absence of fences, cattle and hogs ranged at long and at large, and we read of farmers who turned out cows to graze in Haverhill and the next day found them in Hooksett. Thus here and there are caught brief glimpses projected upon the scene by the side-lights of history. The most patient research and scholarship is in our day engaged in unravelling the tangled threads of our early colonial annals, and in this task any contribution, however slight, must be of value, and to this end we have labored.

The date of the settlement of Salisbury, for instance, is given as 1748, and yet it is traditional that as many as eight families

resided in the township before that year, the "Mink Hills" having been known and named in 1737, and Kearsarge certainly as early as 1657. A similar state of facts is generally true of all the earlier townships.

Nutfield gives a good example of historical uncertainty, the probable occupation ranging from 1629 to 1719, the latter date alone standing for settlement. But it is known that not less than four Indian deeds previously passed to the whole or a portion of that territory, one of which from Indian John was dated March, 1701. In one deed the description recites "a certain tract of land about thirty miles square, to run from the Merrimack river eastward and so up the country." In another the "northerly bound was the westerly part of Oyster river, which is about four miles northerly beyond Lampereele river." As Oyster river is in Durham and the Lamprey in Raymond it is easy to see the Nutfield people had a good margin.

Finally, the first presence of white men in Derryfield must be put not later than 1636, the date of a probable survey by Burdet, under instructions from Governor Winthrop, carried out by Captain Wiggin, and even at that time the route was familiar to hunters and scouts, to which the record adds "artists," which term was probably intended to mean surveyors. Waldron's testimony is conclusive as to this point. Peter Weare says that since 1637 he had "in the same way become familiar with the same region," he having "oftentimes travelled the country," and "some of the natives always with him." He adds that he had been on "a great mountain north of Lake Winnipicioket." All these expeditions went up the Merrimack because that river was the bone of contention, and without doubt followed and contributed to make the famous "Pennacook Path." We find also the record of Woodward and Stratton's survey in 1638, of Woodward, Howlet, Jacob Clarke and Manning, in 1639, and after that a deluge of expeditions by opposing factions. Some of these long-lost records may yet be brought to light.

The earliest map of the Merrimack river from its source to its mouth is also the latest discovered, but is unfortunately without date. It is finely drawn and certainly the work of an "artist." The "plot" gives the photography of the river, with lakes and mountains on either side. It shows the islands, bends and falls; the Uncanoonucks, Massabesic Lake and Amoskeag Falls are laid down, and the Suncook river is put where it belongs. The work is of such a character that the whole valley from Dunstable to Penacook is seen to have been pictured from an actual survey, probably the first undertaken by competent hands.

We cannot now further prolong our researches in this field of inquiry. We have purposely abandoned the beaten route hitherto followed by historians, and have hazarded an attempt to revise some of their conclusions by methods of historical deduction. Wherever possible ascertained dates have been assigned, and whenever by reasonable inference these were found to be misleading the known facts have been compared and the logical interpretation followed. In concluding our pictures of the past we may be pardoned for renewing the suggestion that we claim for them nothing not included in the title chosen, and that they pretend to be no more than contributions. Should these serve to awaken a new dawn of inquiry and rouse the spirit of research the writer will be well contented.

CHAPTER XI.

HOME LIFE, CHURCHES AND SCHOOLS—THE DERRYFIELD SOCIAL LIBRARY —SUMMARY AND CONCLUSION.

The home life of the first settlers of Derryfield, so far as the direct testimony can be relied upon, was in marked contrast to that of most New England settlements, and outwardly presented few characteristic Puritan features. All accounts agree in pronouncing them generally a rough lot, much more closely resembling the frontiersmen of our own day than the traditional religious community of that age. The negative evidence as to this point is still stronger, as the record discloses no movement or organized effort to provide for preaching or religious teaching of any sort whatever; public means of grace and an active spread of the gospel were of so little importance as utterly to escape the notice of local historians. If gospel privileges were enjoyed the opportunities were wide apart. There were no settled ministers, no stated supply, and occasional preaching was as rare as earthquakes. Before Secombe's salmon-sermon in 1739 it is not certainly known that any religious exercise or exhortation whatever took place within the limits of Derryfield, nor for rather more than a quarter of a century thereafter.

The religious record — or non-record — would be amusing if it were not distinctly disgraceful. Potter says McDowell probably preached here now and then before 1754, in which year the town voted to build a meeting house, but this was the next year reconsidered. In 1758 the frame was raised and the building boarded and shingled in 1759, though still without underpinning and having but one door, one layer of rough flooring and no pews, and this skeleton of the visible church was then badly in need of repairs. Fifteen years later, though some preaching intervened and the Rev. George Gilmore was called, the call was not answered, and the ravages of decay continued to affect both God's house and people.

The Revolution now became matter of concern to the exclusion of a multitude of interests ; there was no Sunday for soldiers or citizens, and the cause of Zion languished. In 1780 an effort to repair the building failed, three years later the repairs were not completed, and this state of affairs continued without betterment until 1790, at which time the "pew-ground" of the main floor was sold at public auction, and the gallery area similarly disposed of three years later. But the gallery pews were never built and no part of the house ever finished. In the thirty-five years which had elapsed the progress of decay had outstripped the process of repair. Potter says, "The house was fit for a place of worship at no time, but in summer and of a fair day it answered better than a barn." The old, weather-beaten structure is well remembered by the writer, and remained in a dilapidated condition in Hallsville till 1853, when it was sold, moved a short distance, and converted into a dwelling-house block, which is still standing.

Throughout this entire period we hear next to nothing about schools. It is said there were none in Derryfield before or during the Revolution, and Dr. Wallace asserts that no steps productive of actual results were taken until some years later than 1788, and adds that "for nearly a century after the settlement of the town there was neither lawyer, physician or minister among its permanent inhabitants." It is certain there was no schoolhouse untill 1795, and even that was built by private subscription, none being built by vote of the town earlier than the year 1798, possibly later.

In such a community the morals of the people must have kept pace with their ignorance and inattention to godliness. The pursuits of fishing, hunting and river-rafting were not calculated to favor a devout frame of mind, and the conventional restraints of the church were lacking. A considerable number of the earlier inhabitants were rollicking, devil-may-care roysterers, who spent their spare time in wresting, bowling, or pitching horse-

shoes for pennies, accompanied with a daily diet of rum. The records show frequent brawls and fighting, sometimes among themselves, sometimes with kindred spirits from Londonderry, who were not averse to liquor at home or abroad. The annual reproduction of Donnybrook Fair by our Scotch-Irish neighbors included the more lively features of its old-world model. The reverend historian of Londonderry, with an unusual devotion to truth, says that this fair "proved a moral nuisance, attracting chiefly the more corrupt portion of the community and exhibiting for successive days in each year scenes of vice and folly in some of their worst forms." These fairs were attended by large delegations of the rougher element of Derryfield. Our limits permit us to give no more than the setting and outline of the picture; details are not difficult to be supplied, since the same causes and like effects still surround us.

DERRYFIELD SOCIAL LIBRARY.

An opportunity has been afforded us to examine the book of records of the "Social Library," which has never been printed. Contrary to our first design, which contemplated a mere epitome, we have thought best to reproduce the entire record, with the exception of the charter, which may be found in the first number of the published papers of the "Manchester Historic Association." A verbatim copy follows:

At a Library Meeting held December 12th, 1796

Voted to form a society by the name of the Proprietors of The Social Library in Derryfield—

Voted To Raise Two Dollars on each Right or share

Voted Capt John Goffe Clerk to said Meeting

Voted Daniel Davis Receive the money & purchase the books

At a Library Meeting held January 12th 1797

Voted Capt John Goffe Moderator

Voted Daniel Davis Librarian & Clerk

Voted Capt John Perham Daniel Davis & John Goffe Inspectors

At a Library Meeting held on the 6th November 1797

Voted Capt John Goffe Moderator
 Voted Daniel Davis Librarian & Clerk
 Voted That the Proprietors keep their books three months
 Voted Capt John Perham, Daniel Davis, & David Young Directors
 Voted to accept Capt John Goffe book at 50 Cents
 Voted To Raise Fifty Cents annually as an increasing fund to support said Library

At the Annual Meeting Held on Monday the 5th November 1798 At 4 oClock P M

Voted Daniel Davis Moderator
 Voted William Farmer Librarian & Clerk
 Voted Samuel P. Kidder, Daniel Davis, & William Farmer Directors
 Voted That the Words (*Derryfield Social Library Annual Meeting First Monday in November*) be printed in each book belonging to said Library
 Voted That the Fifty Cents as an increasing Fund be Omitted the ensuing year—

Voted that the Two Volumes of the Magazine shall be taken out & Returned as one other Volume

At the Annual Library meeting on the First Monday of November 1799 at Four O Clock P M

Voted Daniel Davis Moderator
 Voted Daniel Davis Librarian & Clerk
 Voted To Raise Fifty Cents on a share the present Year
 Voted Samuel P. Kidder, Daniel Davis & William Farmer Directors
 Voted that the Fifty Cents be paid to the Clerk by the 20th December next
 Voted That Daniel Davis Purchase the books
 Voted That new subscribers be admitted the year ensuing at two Dollars Each share

Voted that no Proprietor that keeps a book three months shall take it out again at Return.

[Here follows the Charter.]

At a Meeting Legally Warned and holden on Monday 3d Novr 1800

Voted Capt John Perham Moderator
 Voted William Farmer Librarian & Clerk
 Voted Samuel P. Kidder, Benja F. Stark & Daniel Davis Directors
 Voted To Raise Fifty Cents on each share for purchasing New Books
 Voted Daniel Davis be the Person to purchase said Books
 Voted to allow Danl Davis \$1.60 Cts for Paines writing
 Voted to Purchase two Blk Books one for the purpose of Making Records the other for accompts—

Voted that the Clerk make the proper Records in said Books

Voted that Fifty Coppers of the Constitution be printed
 Voted that Benjn F. Stark be the person to hire the aforesaid printing —
 Voted that any person may be admitted the ensuing year For two Dollars
 Voted that the Directors be authoris'd to purchase a book Case for the
 use of the Proprietors.

At the Annual Meeting holden on the First Monday in Novr 1801 at the
 House of Wm Farmer

Voted Lft Benja F. Stark Moderator
 Voted Daniel Davis Librarian & Clerk
 Voted Samuel P. Kidder Daniel Davis & John Perham Directors
 Voted To Raise Fifty Cents on a share
 Voted that the Librarian Collect all arrearages by the First Day of Janu-
 ary next ensuing
 Voted that Daniel Davis Purchase the Books
 Voted that New Proprietors Come in at Two Dollar the year Ensuing

The Subscribers Finding it necessary to Call a special Meeting do hereby
 Notify and warn the Proprietors of Derryfield Social Library to meet at the
 Dwelling House of Daniel Davis in said Derryfield On Monday the Fif-
 teenth Day of March next at Four OClock P. M to Act on the Following
 Articles (Viz)

1st To Choose a Moderator to Regulate s'd Meeting
 2d To Choose a Clerk Librarian & one Director for the Remainder of
 the present year A punctual attendance of the Proprietors with their Books
 are Requested —

Derryfield 24th Febry 1802

John Perham	} Directors
Daniel Davis	
Sam'l P Kidder	

At a Special Meeting Legally Warned & Holden on Monday 15th March
 1802 at the House of Daniel Davis —

Voted Benja F. Stark Moderator
 Voted Saml P. Kidder Clerk & Librarian
 Voted David Flint Director

We the Subscribers acknowledge ourselves to be members of the Derry-
 field Social Library Company and promise to Conform to all rules and regu-
 lations which may at any time be adopted by the society while we remain
 members of said society

James Griffin paid
 Philip Haseltine Jr
 John Dickey Jr paid
 Stephen Worthley
 Peter Hills
 Moses Davis interest of John G. Moor Joseph Farmer Jr

Asa Haseltine sold his rights to his son
 Asa
 David Flint
 Reuben Sawyer
 Ephraim White

James Parker	Wm Walker
Jesse Baker	Israel Webster
Moses Heseltine for Pingrey	James Nutt
Amos Weston	William Perham
Isaac Huse	David Webster Jr
John Proctor	Job Rowell
Elijah A. Nutt	John Ray
John Hall	Saml McAllaster
John Frye paid By Book No 30	David Adams
Nathan Johnson paid	Phinehas Pettengail
Daniel Hall Jr	Ephraim Stevens
John Dwinell Paid	Jacob Chase
Samuel Jackson	John Stark Jr paid
Nathaniel Conant	Saml Moor Jr paid
Phinehas Bayley	Stephen Moor
John Perham	Joseph Moor paid
Benja F Stark	Robert Hall in lew of John Gammel
Saml P Kidder	Asa Heseltine 3rd

[These names were all signed in the handwriting of the subscribers. The following names were also written, but for some unknown reason were afterwards crossed out with a pen: "Benjn Leslie, Ann E Couch Paid Stephen Pingrey Wm Farmer transferd to John Gambel Mrs Edna Davis".]

At a Library Meeting held on the first Monday of November 1802

Voted Lt Benj F Stark Moderator

Voted to admit new members at two Dollars Each

Voted to Relinquish John Tufts fines

Voted Saml Moor Jr Clerk and Librarian

Voted Saml P Kidder Saml Moor Jr Capt John Perham Benj F Stark and David Adams directors

Voted to except the Constitution in lue of the old one that was lost

Voted that all fines due be paid the first of January 1803

At the annual Library meeting held on 7th Novr 1803

Voted, John Stark Moderator.

Voted, to excuse Philip Heseltine Jr his taxes and fines for the Book case

Voted, Philip Heseltine Jr Librarian—

Cash on hand six Dollars and seventy two Cents

Voted,

Philip Heseltine	}	Directors
Voted, Samuel Hall		
William Farmer		

Voted, to buy Gordens History and Rollins,s antient History

At the annual meeting of the members of Derryfield social Library held on the fifth of November AD 1804

Voted, to adjourn the meeting until the 12th of Novr

Derryfield 12th Novr 1804 meeting being opened according to adjournment

Voted, B F Stark Moderator

Voted, to admit new members at two Dollars each down

Voted, Samuel P Kidder Treasurer —

	B F Stark	} Directors
	Samuel Moor Jr	
Voted,	Capt John Perham	
	John Stark Esq	
	Ephraim White	

Voted, the Directors meet the first Monday in February May and August

Voted, Benjamin Leslie Librarian and Clerk

Voted, that the Librarian collect all the Debts and fines that now is or may become Due the year ensuing

Voted, to give Lieut Daniel Davis two Dollars in full of all accounts he hath against the society —

Voted, to abate Samuel Hall his fine of twenty five Cents

Derryfield, November 4th 1805 at a Libraiarys Meeting held for the purpose

Voted Saml P Kidder Moderator

Voted to Choose three directors

	} Nathaniel Moor
Voted directors	
	Ephraim White
	Capt John Perham

Voted Samuel P Kidder Treasurer

Voted New members be admitted for two Dollars

Voted to Choose an agent to Collect the tax and the fines that are due

Voted Capt Perham Collect the above tax &c

Voted the Money be Collected in thirty days

Voted the directors overhall the Books and Select out such as they think proper and sell them to the highest bidder this night

Voted to Choose an agent to lay out the money and purchas the new books

Voted Saml P Kidder purchas the Books

Voted Saml Moor Jr Librarian and Clerk

Derryfield November 3d 1806 Annual Meeting

The proprietors of the Derryfield Social Library Met Novmr 3d agreeable to Constitution and acted on the following articles

1st Voted Capt Joseph Moor Moderator

2d Voted John G Moor Librarian and Clerk

3d	} Lt Job Rowell
Voted	
Directors	
	Benjamin Leslie
	John G Moor

4th Voted that Each man pay the Money which is due Before he recev a Book

Voted New members Come in at 2 Dollars Each

Voted to reconsider Capt Perham as Collector

Voted John G Moor Collector of the whole

Voted the Librarian Purchase the Books

Voted the Librarian Call on the last years treasurer for Money which belongs to the Library

Derryfield November 2nd 1807

At an annual Meeting of the proprietors of the Derryfield Social Library, holden at the house of John G Moor's in sd Derryfield, proceeded as follows

Voted 1st Lt Job Rowell Moderator

2nd To ajourn this Meeting to the 2nd Monday in November to Meet at John Hall's Jr in sd Town at four of the Clock Afternoon

Novemr 9th Mett according to ajournment

Voted Mrs Farmer Clerk & Librarian

Voted	James Nutt	}	Directors
	John Stark, Jr		
	Job Rowell		

Voted the Directors Collect all Taxes & Moneys that shall be found due

Voted not to raise Money the present year

Voted the Directors sell all such Books as they may think proper

Voted to Reconsider the 4th article in a Meeting of the year 1806

At a meeting of the proprietors of the Derryfield Social Library holden at Mrs Farmers house on February 8th 1808

Voted Joseph Moor Moderator

Voted To Excuse Mr Flint one Dollar for the two first Taxes Charged to him

Voted to relinquish 50c of Capt Moor's fine

Voted The remainder of the fines be Colected

Voted to Dissolve this meeting

Mrs Farmer Clerk & C

Derryfield Novr 7th 1808

At an anual Meeting of the proprietors of the Derryfield social Library, holden at the hous of Mrs Farmer's in sd Derryfield proceded as follows

Voted 1st Robt Hall Moderator

Voted 2d To ajourn this Meeting to the 1st Monday in December next at four of the Clock P. M.

December 5th 1808

Met according to adjournment and Chose Amos Weston Clerk and Librayan

Voted	Samuel Moor Jr	}	Directors
	Amos Weston		
	Joseph Moor		
	John Adams		
	Robert Hall		

Voted the Directors Collect all the Money that shall be found due to Library by the next annual meeting Voted the directors lay out the Money due to the Library and purchase the Books

Derryfield 6th of November 1809 the proprietors of Derryfield social Library met and voted as follows

1st Voted to adjourn the meeting the 13 day of this month at 6 of the clock P M

November 13th 1809 then met according to adjournment and Voted as follows 1st Amos Weston Clerk and Librarian the present year

2nd Voted Amos Weston Collect all moneys due to the society and be treasurer

3rd Voted Isaac Huse Esq Robert Hall & Saml Moor Jr be Directors the present year

4th Voted that new proprietors be admitted to the society on paying two Dollars

5th Voted that the Laws of the State of New Hampshire be bought for the society

6th Voted that the Laws of New Hampshire be returned within forty five days from the time it is taken out

7th Voted the Directors purchase such Books as they see proper

Manchester 5th of November 1810

At an annual meeting of the proprietors of the Derryfield Social Library holden at the house of Amos Weston in S'd Manchester proceded as follows

Voted 1st Isaac Huse Moderator of sd Meeting

Voted 2nd Amos Weston Clerk and Librarian

Voted 3d	Isaac Huse Samuel Moor Jr Robert Adams	} Directors
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Manchester November 4th 1811

At an anual Meeting of the Proprietors of the Derryfield Social Library holden at the house of Mr Amos Weston in said town proced as follows

Vot 1st Isaac Huse Moderator

Vot 2nd to adjourn this Meeting to the last Monday in November

November 15 1811

Met according to adjournment Voted Isaac Huse Librarian and Clerk

Voted	Job Rowell Robert Adams John Perham	} directors
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November 2d—1812 Four of the proprietors met and agreed to ajorn our anual meeting to 16 Novr ins at 4 oclock P M

Novr 16th 1812 Met agreable to ajournment

Voted Samuel Moor Moderator

Voted Moses Haseltine Librarian & clerk—

Voted Capt Perham Job Rowell & Robert Adams directors

Voted to Relinquish to Mr Ephraim White a claim of 50 cts

Voted Isaac Huse Agent to Collect what appears to be due to the Incorporators

Manchester November 1st 1813 Isaac Huse Moderator the proprietors Met and Agreed to ajorn our anuel meeting to the 15 of November Instant at Six oclock P M

November the 15 1813 Met according to adjournment and voted to ajourn to the twenty Ninth of November Instant Met acrding to ajournment and procded as follows Voted Robt Perham Libirian and Clark

Robert Adams	}	Directors
Samuel Moor		
Job Rowell		

November Manchester November 7th 1814 this Being the Day of the anual Meatting For the Proprietors of the Manchester Socel Library Not a Nuf to hold a meaten or to Do Buseness Chose John G Moor Moderator and adjourned the meating to this Day Fortnight at the house of Robert Perrams at four Clock P M

November 21th this Day Met accordang to adjournment and Chose John Dwinnell Clark and lybrarein

And

Samuel Moor	}	Durectors
Samuel P Kidder		
John Stark Esq		

November 6—1815

The Members of Manchester Social Library Met and proceeded to the Choice of officers for the year ensuing

Choose John Stark Moderator John G Moor Clerk protem

Choose; John Dwinel Clerk & Librarian

Directors	}	Isaac Huse
		John Stark
		Job Rowel

Voted John Frye be Treasurer

Voted that the director be authorized to examin the Books and sell at auction all such Books as they shall think proper for sale

Voted that new propititors be admitted for the usual price of \$2.00

Voted to adjourn the meeting to the 20th November

attest John G. Moor Clerk p t

November 4th 1816

At a meating of the Proprietors of the Derryfield Library holden at the house of John Dwinell on Monday the 4th of November 1816 and proceeded as follows

1 Chose John Stark Esq Moderator

2 Chose John Dwinell Librarian and Clark and Colector and treausury

Chose	}	Isaac Huse	}	Drectors
		John Frye		
		James Nutt		

November Monday the 3th 1817

at a meating of a number of the Proprietors of the Manchester Library holden at the house of John Dwinells and Chose Isaac Huse Esq Moderator and Voted to agorn said meeting till the 17th Day of November instant at 4 oclock afternoon

November 17th 1817 the proprietors of the Social Library met according to a agournment and Voted that Isaac Huse Esq stand Moderator of said meeting and Chose John Dwinell Clerk and libarien and Chose

John Dickey
John Stark Esq } Directors
and Nathan Johnson }

and Chose Isaac Huse Colector and tresurer and Voted that all the fiens Due on the Book be Corlected

Voted not to have anything to do with any Books of Elijah Nutt Except that one which was Excepted and that was the Columbian orator Price \$0=75
John Dwinell Clark

November Monday 2th 1818

the members of the Manchester Sochal Library met and

1 Chose James Griffen Modorator

2 Chose John Dwinell Clark and Libaran

3 Chose James Nut

Capt Ephraim Stevens Jun } Derectors
John Proctor }

4 Chose Israel Webster 3 (?) treasury

5 Chose James Nut Collecttor

6 Voted to adjorn this meeting till the first Mondy in february Nex at 4 oclock at the hous of said Dwinells

Monday Febary 1st 1819 Som of the Propritors Met according to agornment and Chose John Dicken Moderator Protom and Did adjorn said meeting till the first Monday in march next at 4 oclock

Novembr Monday the 1th 1819

At a meeting of the Proprietors of the Manchester Library Holden at the House of John Dwinell and Quimby and Chose Isaac Huse Esq Moderator and Chose John Dwinell Clark and libarien and Voted that the Clark Be autherized to Examon all the Books that are taken out of the Librey from time to time and to Examon them when taken in and to see if any Damiges are Don to any Book and to Prise the Damige Done and to keep a true a Count of Said Damage and make a Return of the same to the Directors at Each of their meetings and the Directors are to Exhibit the same at the aneuel Meeting and Chose Isaac Huse
and Jobe Rowell } Directors
and John Dickey }

Novembr Mondy the Sixth Day 1820

This Day a full Number met at the house of John Dwinells and Elijah Quimby of the members of the Sochal lybry in Manchester and Voted John Dwinell Moderator of said meeting

Voted John Dwinell Clark and lybarin and Voted Elisha Quimby for Clark Proteem

Chose Jams Grifin	} Directors
Samuel P Kidder Esq	
Capt Joseph Moor	

the Prest year

Voted adjourn this Meeting until the 1th Monday of Feb Next 1821 5 Day at 4 oclock

John Dwinell Clerk

Met agreeably to the adjournment and Read the Constitution and Voted as Follows

1ly to excuse Saml P Kidder from the office of Director

Chose Robt Adams in his stead

Voted to excuse said Adams

Chose Capt Ephraim Stevens 2nd Director

Voted to dismiss this Meeting

John Dwinell } Clerk

Manchester Nov 5 1821

Met at the Annual Meeting a Few of the Members and Voted to adjourn this meeting until Saturday the first day December Next at 4 Oclock P M

Saturday December 1. 1821 met according to adjournment

1st voted Capt Dwinell Moderator

2d voted Samuel Jackson Librarian

3d voted John Dickey	} Directors
John Gamble	
John Proctor	

4th voted to adjourn the meeting until the 4th Instant at three OClock P. M. to be holden at Dwinell & Quimbys tavern

Tuesday December 4th met agreeably to adjournment and voted to make a further adjournment until Tuesday the 18th of December instant at 4 O.Clock P. M. to be holden at Dwinell & Quimbys tavern

December 8th 1821

We the directors met and examined the Library and found in said Library Seventy four Books besides those that are taken out —

John Gamble	} Directors
John Dickey	

Manchester, December 18th 1821

Met agreeable to adjournment

Voted Coll Nathl Moor Moderator

Voted S P Kidder Clerk and Librarian

Voted J. G. Moor Assistant Clerk

Voted John Dickey }
 Robert Hall } Directors
 Robert Adams }

Voted Capt John Dwinell Collector

Voted Samuel Jackson Treasurer

Voted That an Inventory of all the Books be taken by the Directors previous to the Removal of the Library

S. P. Kidder, Clerk

Manchester December 2th 1822

this Day the Members of the Sochal Librey a Greeable to agornment

1 and Chose John Stark Moderator

2 and Chose John Dwinell Clark and Librarian
 the moderator has withdrawn

3 Chose Jese Bakar moderator in the Room of said Stark

4 Chose Ruben Sawyer }
 Nathan Johnson } Directors
 Job Rowell }

5 Voted that the Director shall Be Colectors of all moneys Bac

6 Votted to Give mis Elize Stark hir fine

Voted to Desolve said meeting

Manchester November 3th 1823

this Day a Number of the membrs of the Sochal Librey met but not a Nuf to act Business only to open the meeten, and Chose John Proctoter moderator and adjorned said meeting untill the 17 Day of this Present month at 5 oclock afternoon

Manchester November 17th 1823

this Day a number of the Proprietor met But not a Nuff to act Busies But have a Gorned said meeteen untill the first monday in November Next

John Dwinell Clark

Manchester November 1 Day 1824

and a fool meeting of the Propriertors and held thir meeting and Voted as follows

first Chose Israel webster moderator

secontly Chose John Dwinell Librain and Clark

thirdley Chose Capt Ephraim Stevens John Gambel and Isaac huse Directors

forthly Chose John Gambel Corlector

fifthly Chose John Dwinell tresurer

John Dwinell Clark

1824 at a meeting of the Directors of the Derryfield Social Library December 11, 1824

Examined the Records and found due to the said Library from sundrys persons—fines—\$2,62

Manchester December 25 1824

This day settled with Lieut Job Rowell and found due to the Social Lybra
seventy eight cents

John Gamble } Directors
Isaac Huse }

Manchester January 14th 1823 this Day Received of Lieut Job Rowell the
Sum of Seventy Eight Cents Received by me John Dwinell

November 7th 1825

this Day a number of the Proprietors of the Social Library in Manches-
ter met but not a nuf to hold a meeting But Called the meeting and Chose
Isaac huse moderator and aJorned said meeting untill the 28 Day of Novem-
ber instant John Dwinell Clark

November 28th 1825 this Day the Proprietors of the Sochall Libre met ac-
cording to ajornment tho not a Nuf to transact Busines and Voted to aGorn
said meeting untill the first monday of November in the year 1826 at four
oclock after Noon at the place whear the Libra is kept

Manchester December 11th 1826 this Day I the Subscriber have taken the
Sochall Librey and 92 Books from John Dwinell which I am a Countabel
for as witness my hand Daniel Hall

Received December 8th 1827 the Social Library consisting of 81 volumes
and it appears by Lieut Daniel Hall's account there are eleven Books out
Samuel Jackson, Librarian

Attest Ephraim Stevens Jr } Committee
Job Rowell }

[The foregoing include all the meetings of the proprietors. Meetings of the directors were held during this time in November, 1817, December, 1819, January, 1823, November, 1823, February, 1824, September, 1825, and November and December, 1826. Subsequently to the last meeting of the proprietors the directors held two meetings in 1828, and one each in 1829, 1830, 1831 and 1832. The following books were bought in 1823: "The holy War Price \$0-80, Gaseteer Price 1-67, the life of Eaton 1-75 and one Vollom on the World to Come which we have received of Mr finis Baley for a shear in the librey \$2-00." In addition to the list of fifty-four subscribers before given on pages 116 and 117, we give the following additional names: John Goffe, Daniel Davis, David Young, John Tufts, Samuel Hall, Nathaniel Moor, John Adams, Isaac Huse, Robert Adams, Elizabeth Stark, Mrs. Farmer, Israel Webster, Thomas Stickney and Elisha Quimby. The whole number of names of proprietors as shown by these records appears to have been sixty-eight. Of these but four have middle names; nine have military titles; two have the title of "Mr." and two—John Stark and Isaac Huse—are honored with the title of "Esq." The whole number of books on hand in 1826 was eighty-seven, with "one Book misen."]

Eight additional names are given by Mr. William H. Huse, from records in his possession, which names appear in the paper before referred to. He gives also a list of books which exhibits some inaccuracies. In the copy of the charter which he reproduces the attesting signature is given as "Philip Carrigian," but in the copy engrossed in our record-book it is given as "Nathl Parker, Depy Secy." The appended lists give the titles of all the books bought, with the cost of each in pounds, shillings and pence up to the close of 1798, after which the accounts were kept in federal currency :

The Proprietors of Derryfield Library Bot of E Larkin Boston 4th Jany 1796 1 Spectator 8 Vol £1.16.0 1 Fool Quality 3 V 15.0 1 Newton on Prophesies 2 V 13 6 1 Christian & Farmers Mag 2 V 18.0 1 Cooks Voige 2 V 15.0 1 View of Religion 10.0 1 Watts on the Mind 6.00 1 Pleasing Instructor 5.3 1 Franklins Works 6.0 1 Valuable Secrets 6.0 1 Burtons Lectures 5.3 1 Farmers Letters 4.6 1 Carvers Travels 5.0 1 Female Jockey Club 4.6 1 Looking Glass for the Mind 4.6 1 Forresters 6.0 1 Pomfrets Poems 4.0 1 Medical Pocket Book 4.6 1 Ovids Art of Love 3.9 1 History of America 2.3 1 Bold Stroke for a Wife 1.6 1 Provoked Wife 1.6 1 Agreeable Surprise 0.9 1 Arabian Nights Entertainments 2 V 10.6 1 Winchester's Dialogues 4.6 [This amounted to £9.13.9.] Deduct 10 pr Ct 19.4—leaving £8.14.5 1 Blank Book 3.0 Equal to \$29 57 Seven Wise Masters Rome 06 Howards Life 72 Priest Craft 3 Vol 2.09 Infant Baptism 50. Total \$32.94

The Proprietors of Derryfield Library Bot of E Larkin

1 Morses Geography 16.6 1 Don Quixote 12.0 1 Dyers Titles 6.0 1 Erskines Sermons 6.0 1 Doddridge Rise & Progress 5 3 1 Ditto Sermons 3.3 1 Ditto Ditto 3.0 1 Ditto on Regeneration 5.3 1 Boyles Voyage 4.6 1 Religious Courtship 4.6 1 Saunders Journal 3.0 1 Ladys Miscellany 4.6 1 Gentlemans Ditto 4.6 1 Hive 4.6 1 Rassalas & Dirabus 5.3 1 Browns Oracles 3.9 1 Christian Life 4.0 £4.17.9 Discount 10 pr Ct 9.9 £4.8.0 Equal to \$14.67 Decr 1797

The Proprietors of Derryfield Library Bot of E. Larkin Decr 26 1798

1 Josephar 6 Vol £1.10.0 1 Mores Journal 10.6 1 Robinsons Proofs 10.6 £2.11.0 Discount 10 pr Ct 5.2 £2.5.10 Equal to \$7.65

The Proprietors of Derryfield Library Bot of E. Larkin 26th Decr 1799

1 Goldsmith's Animated Nature 4 Vol 9.00 1 Morses Gazetteer 2.50 1 Pilgrims Progress 75 1 Herveys Meditations 87 1-2 1 Maria Cecilia 87 1-2 14.00 Disct 10 pr Ct 1.40 \$12.60

Derryfield Social Library Salem Feb 12th 1802 Bot of Cushing & Appleton
 Adams History of England 2 25 Davis Sermons 2 Vol 4.00 Hunters Sacred Biography 3 V 6.00 Adams Flowers of Travels 2 V 2.00 Lendronis (?) American Revolution 2 V 2.00 Ortans Discourses to the Aged 1.00 Life Joseph 62 1-2 Petitpierre on Divine Goodness 87 1-2 Phillip Quarll 75 Repository 75 Dickinsons Five Points 75 Female American 75 1 Blk Book 2.00 1 ditto 1 00 24.75 Disct 10 pr Ct 2.47 1-2 \$22.27 1-2 the Washingtonia 1 ct (?)

Manchester January 1st 1813

Mr Thomas Stickney Brot forward 1 Book Exercises of Piety 1 An Explanatory Catechism 1 a Short and Easy Method with Deists

In addition to the foregoing five volumes were subsequently bought of Capt. John Dwinell; three of Job Rowell, one of Mr. Phineas Bailey and five volumes of Washington's Life, bought of Job Rowell; two books were added in 1800 and one in 1817. It appears from these records that the whole number of titles was eighty-two and the number of separate volumes not less than one hundred and twelve. In 1825 Betsey Kidder executed a deed to the Library, conveying her right and title to Jonathan Young. These names should be added to the list of proprietors previously given. It is probable that all the books were finally sold at public vendue. As each volume, by vote of 1798, was inscribed "Derryfield Social Library," etc., it is probable that some of these books are still in possession of the descendants of original proprietors or purchasers and may thus be identified. The suggestion is made that should any volumes of this curious collection be brought to light that they be deposited with the Manchester Historic Association for safe keeping.

CONCLUSION.

With this number we conclude the series of contributions to the early history of Manchester, throughout which we have kept up the pleasant fiction of Derryfield. The work has already outgrown our first design, but the field of inquiry is still inviting additional research. We have scarcely more than covered the

period antedating the first actual settlements in Derryfield, and in the events occurring from 1750 to the date of the city charter much matter of interest remains to be made of record.

We may attempt the task of gleaning the field already reaped, gathering perchance here and there a straw which has been jolted from the historical wain, and prolonging a little further the search amid fast disappearing annals. For the period following 1841 the writer will have the advantage of personal recollection, and he has already reached that over-ripe stage of life in which the pictures of past events are more vivid than those of recent occurrence. We should be permitted to add that the work is a labor of love, undertaken and published wholly at the expense of the writer, with little prospect of reward, but he is abundantly satisfied if he has succeeded in casting an added light upon the fading pages of the past.

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