Agricultural History – MV and New England

Miscellaneous Typed Notes (Many more untyped in archives)

1850 Map note from Brian H: Coastal survey 1860 and 1840 different scales but similar minimal mapping unit. 1860 discriminates fields: open areas interpreted as pasture/hayfield, open with line fill as cultivated. Woodland bounds identical on both maps. 1860 has more topo. 1890 at BPL has same land cover as 1860.

1777 Grey’s Raid Important consequence for agriculture and economy. Banks 1911
[It has always been unclear (1) how thoroughly the British confiscated agricultural livestock; e.g., see comments about citizens of HH being most heavily impacted and Chilmark losing 50% of its cattle; (2) how livestock numbers recovered so rapidly. Does 10,000 represent the majority, 75%, 50%? Did the British leave a substantial number that allowed a widespread and rapid recovery despite major impact?]

Jan. 20, 1777 General Court: “The removal of stock &c to the main-land is recommended.”  Council March 29, 1777 - Therefore Resolved: that it be and it is hereby recommended to the Inhabitants of Martha's Vineyard to send off said Island as many of their cattle, sheep and other goods as are not absolutely necessary to their present support.

September 10 - 15 1778 Raid - General Sir Charles Grey,
Supported by more than four thousand troops, convoyed in a dozen ships of the line and a score of transports… requisitioned the arms of the Militia, the public money, 300 oxen and 10,000 sheep… all horned cattle (milch cows excepted), all sheep and swine… 4,333 troops in detachments scoured nearly the whole island, and gathered up everything that was eatable that they could lay their hands on; live stock, vegetables, corn, rye, etc. … Totals for Livestock Taken: 10574 sheep; 315 cattle

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(Banks 1911) Chilmark lost about 50% of sheep

“they caryed off and Destroyed all the corn and Roots two miles round Homes Hole Harbour: Dug up the Ground everywhere to search for goods the people hid; even so Curious were they in searching as to Disturb the ashes of the Dead: Many houses had all Rifled and their Windows broke. …Those living about Homes Hole were the greatest sufferers from the raid…much was done to annoy and damage.

In Old Town Harbor, Martha's Vineyard: 1 brig of 150 tons burthen, burnt by the "Scorpion." 1 schooner of 70 tons burthen burnt by ditto. 23 whale boats taken or destroyed. A quantity of plank taken.

At Holmes Hole, Martha's Vineyard: 4 vessels, with several boats, taken or destroyed. A salt work destroyed and a considerable quantity of salt taken.
Arms taken at Martha's Vineyard: 388 stand, with bayonets, pouches, etc., some powder, and a quantity of lead…1000 sterling…Cattle and sheep taken from Martha's Vineyard. 300 oxen, 10,000 sheep.
CHARLES GREY, M. G

General

Early divisions of land in Edgartown included "thatch lots" (salt hay for roofing)

Ploughing and all heavy farm work was done by oxen.

Rights to cross land to take seaweed and pond grass (Lloyd)

Hay a principal product, with sowings of "Turkey wheat" (corn), rye and oats, some barley; salt grass (meadow grass) highly prized by early settlers.

Livestock arrival: Cattle 1651; hogs 1652; horses and sheep 1653; goats 1668; fowl before 1660

1653 Edg - right of commonage among proprietors feeding of eight cows or equivalent; firewood
1663 A commonage is 12 great cattle or horses; sheep and goats 8 for one cow or horse: for more must hire commonage of others at 12 d a year per beast (Banks 1911)
1664 a "general fence" to corrall their herds…private "ear marks". The lack of fences was made up over time by the growth of hedges in some places, and digging of ditches in others.
1668, second division in 1679 - division of the meadows

Chappy - excellent grazing, safe pasture without need of fences; Each of the "five and twenty" lots had its share in the division of the land, with rights of pasturing a specified number of great cattle and small stock to a commonage…. rights of grazing were rented out by those with no cattle. In 1703 proprietors or their tenants had nearly two hundred and fifty "great" cattle, besides sheep. The "great" cattle, horses, oxen, cows, over ~October 5, back ~April 25, by the Swimming place at slack tide when animals made to swim across the "river." October 1712 - Indian Sachem (Joshua Seeknout)… entered suit against Thomas Pease and others of trespass "on the southeast part of it (Chappaquiddick) at a place called Wassaechtaack alias pocha."

1715 Dec. 19, decision: (i) English should have the undisputed fee of the neck called Menechew, saving one share to the sachem; (2) Indians should have the sole possession of the Island of Chappaquiddick for themselves…never to be sold without the consent of the Provincial government; (3) English should have the right to mow the salt marshes (saving the "wobshaw grass" for the Indians use in making mats), paying therefor one shilling per acre annually; (4) The winter herbage should be shared in common by
English and Indians "as stented for the number of grate catle, goats and sheep between October 25 and March 25th yearly," the English paying Seeknout " the fifteenth goat and for every fatted Beast one Shilling & Sixpence" annually; and (5) proprietors were restricted to a total of one hundred head of great cattle for grazing. Usual loopholes for the English…

EGP – fresh connected to salt Mattakesett Bay- Herring Creek. Conflict with farmers whose land may floods, would prefer direct cut to sea. CG Hine 1908

**Sheep**

Photo – sheep grazing Wasque after a fire; many perish each winter; 1775 - 20,000 sheep (L. Raleigh). Where does this number come from? 1778 – 10,574 sheep; 315 cattle (Edg 3719 and 112) taken by the English Capace 1782 – 20,000 sheep, 2,000 cattle; Chilmark carding mill – 5,000 lbs annually Capace ~1800 15,600 sheep; Horses and colts 400; Neat Cattle 2,800; pigs 800; cattle 600 killed year 1803 T - 5568 sheep 1803 people 1810 – MV 15600 sheep (MHC 1986) 1837 – 6470 sheep in Chilmark, 1600 were merinos, average fleece weight two pounds. Wool production that year $5,180. (Banks 1911) 1846 – Sheep decline with removal of tariff to restrict wool imports Capace 1850 - 5,568 sheep (Chilmark?) (Banks 1911) 1880 – 9,225 on MV 1890 <3,000. Capace 1880 – 323 horses; 557 dairy cows; 700 neat cattle; 9225 sheep; 265 swine 1930 – 58 horses; 661 dairy cows; 700 neat cattle; 1941 sheep; 49 swine 1938 – 65 horses; 312 dairy cows; 233 neat cattle; 611 sheep; 129 swine (Dean 1939)

1831 and 1855, the number of sheep fell CC (86%), Nantucket (80%), Martha's Vineyard (22%). During Civil War virtually every town added a few sheep to their flocks in order to profit from the premium on locally produced wool. Rise short-lived; in the forty years to 1905 the Cape lost nearly 88% and Nantucket 94%. decline in Dukes County was slower. In 1905, Dukes reported 21% of the state's sheep. Gosnold and Chilmark were the leading sheep-grazing towns in the state.

Chilmark more grass; upland mowing 1,800lbs/ acres; salt marsh 1 ton/acre; black grass 1½ ton; along brooks into Newtown Pond 70-80 acres fresh meadow 1½ ton/acre. Grass, called creek stuff grows on pond borders, greatest part of it in the water; coarse sedge, and is worth about one third of English hay. Tisbury no upland English meadows, except those made by manure, small extent, produce about a ton to an acre. Very little salt marsh, creek stuff, black grass, within the limits of the township. Edgartown ~140 acres of English mowing land; 130 fresh meadow; 170 salt marsh. Little English mowing deserves the name, the greatest part of it being strips of land on the borders of the salt marsh, between it and the upland. Produces a fine grass, resembling spear-grass, 1-11/2 tons/acre. The proper English upland mowing ground yields ~1500/acre. Fresh meadow on pond borders good quality 1 ton/acre. Salt marsh yields ½-1ton/acre. Some marshes produce great burden of black grass. Best hay of the island excellent quality;
affords more nutriment, than hay at a greater distance from the sea. Edgartown and Tisbury much less than Chilmark: butter (2/3) cheese (1/4), sufficient for inhabitants consumption (Freeman 1802)


1800 farming economy slowed; much of forest cleared; signs of reaching land’s capacity (Lloyd)

1803 T - 1,803 people; productive farming community. 5568 sheep; 553 tons of English Hay. MV-wide: 60% cranberries, 80% firewood, 50% butter from Tisbury.

1815 MA Hist Soc grazing intensity: MV 15,000 0.25; Naushon 2,600 0.47; Nashawena 1,000 .64; Pasque 500, Cuttyhunk 600 1.16; Pen 150 1.54; No Man’s Island 600 0.92. (land area used?) (Dunwidde and Adams)

1838 (Devens) “The soil of the island is in many parts fertile, producing good crops of Indian corn, rye, potatoes, &c. more than enough for home consumption. Some of the grass land is as good as it is upon the continent. There are some fine orchards and different kinds of berries are plentiful.” “Gayhead, which contains the best land on the Island…Some of it is cultivated by them [Indians], but the larger part is used for pasturage”; v little corn; pretty good gardens; sell 100-200 bushels of cranberries annually; fishing and selling clay ($3 ton on spot); one Indian house and 3 wigwams at C;

VT 1839 - 1.68 m sheep; most farms – mix of chickens, sheep, cattle, cows, swine and possibly horses with hay, pasture and arable production – small grains – wheat, rye, oats and corn, potatoes and carrots, buckwheat, turnips, peas, flax, beans and squash and fruits – apples and plums; iverse and flexible retinue. (Demerrit 1991)

1850

MV: 265 farms; 79 E, 90 T, 96 C; Wool: E 3,258, T 5,933, C 13,199 pounds; Butter: ~50% of the 23,147 pounds from C (van Tassel 1974:43; Eric Peters). 4,200 pounds of cheese from Tisbury.

GH – annual decision where to plant/fallow; N, S, E common pastures; middle, south, old east, divided by walls. Hog Pasture, Middle Pasture, Fatty Pasture (best for livestock).
N pasture and cranberry bogs (Lobsterville) – wiped out in 1938. (*Aquinnah Cultural Trail*)

Cattle – sold on Nantucket and whaling ships. (Huntington 1969)

19th C swamp at Long Cove cranberry bog, 2 bridges - little bridge and large bridge passing N and S of bog; dike to control water flow. Walronds and Athearns land surrounded this bog. Wm Athearn land: English meadows near home Nahommon’s Neck, meadow, pasture, Quince orchard, tillage land, 65 acres of wood land “Long Point Woods,” 125 acres land at Charles’ Neck, 100 acres of unimproved land. Pasture worth 460% more per acre than unimproved. 146 sheep, 2 cows, 1 heifer, 2 horses. Center of Long Point - “stackyard” hay for winter. Jonathan Athearn: sheep, cow pasture + wood lots at Oakdale Farm on Scrubby Neck and Nahommon’s Neck or “Cranberry Cove Point”; 118 sheep, 2 steer, 3 cows, 1 horse, 1 yearling. Long Point less heavily grazed than other areas but most LP open with three woodlots.

Peaked Hill - Unimproved pasture 18-19th C; summer grazing land for winter stock (horses, cows, oxen, cattle, swine, sheep) from WT and C. James Adams kept Guernsey heifers there until the mid-1920s, worked on stonewalls. Drove animals from West Tisbury. Died 1920s – land out of use ~ 1925 to present oaks. No field evidence older trees. (*MVLB Records*)

Jeremiah Pease Diary: 6-15-1847 WSW to WNW very heavy gale. I think the most severe I ever saw at this season of year from that quarter the sand from the plowed ground was driven in clouds before the wind so thick that the hills at the swimming place could not be seen at times.

Decline
1874 “...Yet agriculture here, as elsewhere in Massachusetts, is in decay. One never sees a field newly won from the forest, while on every side are signs of the gain of the woods on the fields. There are many deserted houses and every little while there is a little pile of crumbling brick, or an old well…. The fields were once cultivated, but now the fences are falling away and a few sheep that browse on them are all there is to mark the presence of man.”

Great soil potential. WT “Some of the fields of maize and wheat are as good as one finds in the CT Valley. I have never seen better ground for the gardener. Strawberries grow as in Southern France; roses have a glory unattainable anywhere else in New England.”

C- “These fields we are looking across are down on the map of 1782, as “the best mowing grounds in the island, yielding four tons of black grass per acre” “As long ago as 1867 there were 40 miles of stone walls in Chilmark, these walls where they surmount the hills and silhouette against the sky, being made almost entirely of round stones…” (NSS 1874)

WT – slow population decline; farming chief occupation
1895, 460 year-round; 3% Portuguese; 1st census after incorporation -
1905 population decline, Portuguese doubled; 1915 441; leading town for milk and vegetables 1940 – 260. *(MHC 1984)*

1880 – 4.9% dairy cattle *(Dean 1939)*  
1938 – 22.5% dairy cattle  
1870 – 39 Barley; 9 Buckwheat; 2552 corn; 263 oats; 252 rye; 45 wheat  
1930 – 41 acres corn; 14 oats. *(Dean 1939)*

1858 March 26 announcement Vineyard Gazette - meeting to be held on the subject of island farming. Many counties in Commonwealth had agricultural societies. MV better known to seafarers, fishermen. Attendees 3 April 1858 meeting in WT resolved; "that the attainment and diffusion of scientific and practical knowledge in the cultivation of the soil, is a subject of such importance as to demand the associated effort of the farmers of Dukes County." Committee established to draw up constitution for new MV Agricultural Society; membership fees set, ladies were admitted. 1865 publication Society's goal: "To improve the agricultural interests in our county." To encourage agriculture and promote farming knowledge, Society held an annual agricultural fair. The first fair 1858 held at the Dukes County Academy in WT. By 1859, Society had fundraising efforts, sought State Board of Agriculture support, purchased land and built a new exhibition and meeting hall. The 1859 fair held at recently constructed West Tisbury Agricultural Hall, also known as the Grange Hall. As fair grew in size the Society needed a new location. 1994 Society erected new Agricultural Hall on Panhandle Road; 1995 on site of Livestock Show and Fair. 1862 on "Statements of Crop," gathered data on produce and livestock from across the island. MVM RU 233 MV Agricultural Society. Series I formation and administration of the MV Ag Society, mgt of fair and livestock show. Records: constitution, correspondence, minutes, reports, fair entries, premiums, statements of crops- reflect contemporary farming practices, conditions, crops and livestock raised on island. Letters between Pres. Leavitt Thaxter, Sec. Henry L. Whiting, MA Board of Ag and other MA societies.

“The island is every-where…[travelling from VH to E] a perfect desert, excepting the garden-plots in its several towns...It is astonishing how these Yankees can talk about their “farms” as if a wide sand barren, incumbered with dwarfy, miserable, moss-covered, scrub-oak bushes, with scarcely a square yard of natural soil, where the lichen of the dumpy trees has hard work to live, can be called a farm in the American sense of that English word. * (Rev BF Tefft 1850)*


“A definite effort can and should be made to increase the use of native grown vegetables instead of those imported”...“A campaign to impress adults with the value of milk as a food in an effort to increase the consumption of milk and decrease the use of beer, tonics, coffee, tea and other beverages should be made.” *(Dean 1939)*
MV Land Bank Records


Dwelling House, farm and Chaise House $900
60 acres Pasture and woodland $17/ac. 1020
90 acres Pasture and tillage $7/ac. 630
2 acres Meadow $75/ac. 150
1 acre of swamp $20/ac. $20
10 acre of woodland $7/ac. $70
10 acre of woodland $1.50/ac. $15
Marsh Meadow at Long Point, Chilmark $320

Pew – Meeting House – Holmes Hole 80
½ pew – Congregational Meeting House, Tisbury 20
1 yoke oxen 63
3 cows 45
1 steer three-years-old 19
1 heifer 10
2 yearlings 12
1 calf $3.50
64 sheep 72

and then lists of equipment


1839 Various notes from the Deed – Horatio Norton to John P. Norton and Eliakim Norton: Old House Pond; Savage’s line; Run of water; Tract wood land; old cart path; Ruins of old fence; Old “cord wood road”; Other lot of woodland; Piece of Marsh Meadow – Chilmark Long Point

Homestead of Peter Norton; West cherry orchard; Swamp field; marked white oak by fence wall; Cow pasture; old fence on Savage’s line; Road to Christian Town; Old House Pond; water fence; Two lots of woodland.

Katama Ranch – SE corner between EGP and KB. “It is natural sheep country: flat and sandy, and ideal for grazing.” F.A. Paris has 328 sheep from MT, PA, ONT, WY. Plans to feed all with grains from farm.

Through 1930s – Wasque sheep pasture (Capace 2001)
A tannery or two seem to have been uniformly a part of the economic outfit of the inland town. The working dress of the people was largely composed of leathern garments, not only their shoes and leggings, but shirts, breeches and coats as well. A large part of the material came from the hides of animals slaughtered on the farms and prepared at the village tannery. This was a primitive affair, quite on a par with the mills in the size of its plant and in the scope of its operations.

The evaporation of salt from sea-water was a quasi-manufacture carried on in many of the towns along the Cape. In all, there were, in 1802, 136 works established for this purpose. They consisted merely of a series of shallow vats or tanks, into which the water from the ocean was pumped by the power furnished by windmills. The salt thus obtained amounted to about 100,000 bushels per annum, which at that time was worth nearly $42,000.

The township on the island of Nantucket in 1810 was entitled to rank as the fourth in Massachusetts, in wealth and in the number of its inhabitants. Here on an area of about 42 square miles there lived 6,800 persons, most of them in a compact village containing some 800 houses. The chief industry of the place was the whale fishery, which employed a fleet of 120 ships, manned by 1,200 sailors. On the island were 15 or 20 spermaceti works, which refined the oil thus obtained and manufactured large quantities of candles. The former of these products was exported widely to the cities of the United States and to London, Marseilles and the Levant. Owing to the sterility of the soil and to the greater profit to be obtained from whaling, agriculture received scanty attention. More than one-half the area of the island was given over to the pasturage of flocks of sheep, amounting to 7,000 in all, together with cows, oxen and horses in smaller numbers. The land under cultivation amounted to 1,350 acres, about one acre to each family on an average, yielding a small amount of maize and a few vegetables. For most of their food supply, consequently, and even for firewood, the people were dependent on the mainland. Flour and Indian corn were brought in coasters from New York, Philadelphia, and Baltimore; provisions for the whaling vessels were obtained in Boston and from the shore towns in Connecticut. The only export of an agricultural nature was wool, less than one-
half the total product being consumed on the island. The importance of the market in Nantucket to the farmers of southern New England seems to have been considerably diminished by the import of grain referred to above.4>

Doesn’t mention MV

The New England region was by nature better fitted for grazing and pasturage than for agriculture in the strict sense of the word. Its soil, although of a good quality, was thin and the fields were much encumbered by stones and boulders, varying in size from small pebbles to huge rocks and ledges.1 Hence the farmer's meadows and pasture lands tended to assume more importance than his tilled fields. The natural grass, which sprang up and grew abundantly as soon as the land was cleared, was of excellent quality.

"The introduction of clover, . . . has within the last 10 years made a very sensible improvement in the agriculture of the country ....

The pasturage furnished subsistence for the farmer's cattle, sheep, and horses during the summer months;1 the hay, supplemented to some extent with com stalks, rye and wheat straw, and potatoes, supplied their winter fodder. Grain was rarely fed, except to hard-worked horses, or to beef cattle which were being fattened for slaughtering. A typical inland farm of 100 acres was able to support in this manner 10 or 15 cows, including young stock, one or two yoke of oxen, one or two horses, a flock of from 10 to 20 sheep and about as many swine as cows.

The beef cattle were the descendants of the Devonshire breed originally imported by the earliest settlers, but had received considerable intermixture from the Danish breed imported into New Hampshire and probably also from the Holstein breed brought by the Dutch colonists to New York. These influences, as well as lack of sufficient winter fodder and inattention to selection in breeding, had developed in New England a breed known as "the native cattle," more remarkable for their hardiness than for the production of beef or dairy products.

Although horses were steadily coming into more general use, they did not seriously compete with the slower-moving steers for general farm work for many years after 1810… President Dwight as follows: "The advantages of employing oxen are, that they will endure more fatigue, draw more steadily, and surely; are purchased for a smaller price; are kept at less expense; are freer from disease; suffer less from labouring on rough grounds; and perform the labour better; and, when by age or accident they become unfit for labour, they are converted into beef. The only advantage of employing horses instead of oxen, is derived from their speed."

Swine were kept on every farm, furnishing the salt-pork which was a staple article of diet.

No feature of the farm economy shows more clearly than the management of sheep the neglect and want of progress which the lack of a market brought about; and on the other
hand, no department of the agricultural industry responded more promptly in improvement when once the market was supplied. Up to 1800 no attempts had been made to improve the breed of sheep.

The attempts to improve the breed of sheep by the importation of the Merinos is a typical illustration of a larger movement towards the betterment of the agricultural industry as a whole, which began to make progress in the closing years of the eighteenth century. The impetus came from the patriotic impulses of men of education and of public affairs, who had come to learn of the "new husbandry" of Tull, Bakewell, and Young, which had created such a stir in England.

The preface to the Laws and Regulations of the Massachusetts Society for Promoting Agriculture1 reads: "One great object of this Society will be, to obtain and publish an account of the improvements of other countries, and to procure models of the machines in which they excel. It will attend to what ever relates to rural affairs, and especially to promote an increase of the products of our lands, ... To encourage the utmost attention to these objects, the Society will, from time to time, offer such premiums as their funds will admit. They consider agriculture in all its various branches and connections as highly interesting to all mankind. The wealth and importance of the community, is so intimately connected with, and dependent on the extent and success of agriculture, that every one who is desirous of advancing the happiness, prosperity, and dignity of his country, its commerce, and convenient subsistence of individuals, will lend his aid to this most useful institution."

1 There were perhaps a dozen of these societies organized, principally in cities on the eastern seaboard, before 1800. Among this number were those organized in Charleston, S. C, in 1784; in Philadelphia, in 1785; in New York, 1791; and in Boston, 1792. Besides these there were a few smaller societies such as the Western Society of Middlesex Husbandmen, 1794; the Kennebec Agricultural Society, 1800; and the New Haven County (Conn.) Agricultural Society, 1803.

eighteenth century was without results. It is difficult to see how a cheaper labor force could have produced any different results. The revolution in agriculture, as well as the breaking down of the self-sufficient village life, awaited the growth of a non-agricultural population. Between the years 1810 and 1860 such a population arose in the manufacturing cities and towns of New England, and the market thus created brought changes which opened up a new era to the farmers in the inland towns.


For the New England Farmer. MARTHA’S VINEYARD AGRICULTURAL SOCIETY. MR. EDITOR—Having noticed a request in your paper that some one would give you a short description of the several agricultural fairs as they were held, and not being aware
of your having a correspondent on the Vineyard, I have concluded to send you a few
items concerning the Third Annual Meeting of the Martha's Vineyard Agricultural
Association, which was held on the 15th and 16th of the present month. This society is as
yet in its infancy, consequently much could not be expected of it. The Fair was in many
respects superior to either of its predecessors, yet there is much room for improvement.
On the first day the grounds were devoted to the exhibition of fat cattle, sheep, swine and
poultry. The show of fat cattle was unusually good. The sheep were not numerous.
Among them were two bucks which I understood were brought from China; one of them
had four horns. The were covered with a coat of hair instead of wool; and in my opinion
better deserved the name of goats than sheep. During the exhibition of the swine, my
attention was drawn to some very fine pigs from four weeks to two months old. The show
of poultry was very small. On the morning of the second day of the Fair I was much
gratified in witnessing the fine display of horses and colts. I was particularly interested in
the colts, some of which in a few years bid fair to equal, if not surpass, any of the horses
imported from Vermont. In the hall I observed huge pumpkins and squashes, long ears of
corn,- samples of wheat, and other vegetables, which I think no society in the State would
be ashamed to place upon its tables. The ladies’ department was not contributed to as
largely as would be desirable to have it. There were some articles, however, which
reflected great credit on the skill and taste of those who manufactured them. The most
attractive were several bouquets of prettily formed wax flowers, that almost equaled
nature. On one of the tables, in a conspicuous position, was a very large shoe, said to be
seventy-six years old, which, when placed beside one of the present day, would show not
a little improvement in appearance, though perhaps the former would be the most
durable. On the opposite end of the table was a brick on which was the impression of a
child’s foot. This brick was recently taken from the chimney of a house built more than a
century ago. On the afternoon of the second day the people assembled in the hall above,
to listen to the speeches, which were very entertaining. The President, Mr. Thaxter, of
Edgartown, was prevented from being present by sickness. His place was filled by Dr.
Pierce, of the same town. He congratulated the farmers on the bountiful harvest, which
had been as a reward for the labors of the past season. He was followed by several other
gentlemen who were, with but one exception, professional men. Why is it that there are
so few practical farmers to speak on such occasions? Is it for want of education? With
the present advantages enjoyed in our common schools, the young farmers, at least, ought
to be as capable of speaking upon agricultural topics as the young physicians. North
Tisbury, Oct. 19, 1860. H. G. N.

Wet meadow use – describes a wetland with deep peat.

Illustration of a steam plow – the first.; only for big flat tracts like western.

Many articles and comments throughout on “Is Farming Profitable?”

Canada thistle – plow in 6 inch furrows

Discusses Liebigs work on mineral nutrition to plants.
CT Ag Society 1857-8 report by Prof Samuel Johnson at Yale on Peats and mucks.

Letter about the situation in Concord where goo river bottom lands is flooded for grist mill. Concord and Sudbury Rivers.

Report of Legislative Ag Society at State House. Speaker of the House John Goodwin on: What will tend to make agriculture profitable and pleasant as a pursuit? Young people who have once been to the city become dissatisfied to remain at home as no sociability or amusement. Middlesex County – 4500 farms yet 2/3 of land not occupied for any purpose at all. Subsequent Meetings: Agricultural education; Stock Feeding – English hay, meadow hay, root crops, turnips, buckwheat, corn, potatoes, carrots; most profitable breeds of cattle; most profitable crops; best kinds of manures;

New England Farmer 1856
The swamp lands after being thoroughly drained, one part was plowed and planted with corn, manured with green horse manure, and afterwards seeded; another part was covered with about one hundred bushels of loamy sand to the square rod, manured and seeded with grass and oats; and an other part plowed and seeded in the sod in August. This last method I consider the best.

Value of seaweed as a fertilizer.

1856 "MUCK IS THE MOTHER OF THE MEAL CHEST." No truth ought to be better established than this old homely one of the Scotchman, and yet, strange to say, comparatively few have yet received it in its broad signification; while a large majority reject it altogether. And, although no modern discovery has been of such essential service to the farmer as this, that muck is not only one of the best substances in nature to gather up and preserve for future use other valuable agents, but it is in itself a powerful fertilizer, many will not only refuse to avail themselves of its benefits, but discourage others from so doing. Entertaining these views, we were gratified to find Steamp Muck and Salt Marsh the subject of discussion at the American Institute Farmers' Club in New York city, on Tuesday, the 15th of January.

As to the use of muck as a fertilizer, he thought comparatively few as yet properly appreciate it, or well understand its composition and powers, and the true way to use it. The muck of our swamps is a mixture of mineral and vegetable matter, — but principally the latter. It is formed by the growth of moss and annual grasses or rank aquatic vegetables, of dead leaves, rotten trunks, and branches of trees, where in some cases, a heavy vegetable growth has been burned and the ashes left, together with the refuse mould and mineral matter of the hills, washed down through long ages into the common receptacle — the swamp. Here then are the materials we need as fertilizers stored up for us in reserve like the coal beds, and waiting for light and air to become the food which our plants require.
These low places, these swamps, are then the very store-houses of Nature, for her treasures of fertility. So theory teaches, and experience verifies the theory.

July 1837
XII. Manures. 1. Animal manures. Animal excrements; varieties; comparative value; preparations; uses. Decayed bodies. Refuse of slaughter house. Bone; horn; hair; feathers; wool. Fish; fish oil; Gurry and blubber; Soap suds. 2. Mineral manures. Lime in various forms and compounds. Snlt; Marine shells; Gypsum; Clay; Sand; Marl. Dock mud; ashes of mineral coal; Burnt clay. 3. Vegetable manures. Ashes of wood and peat; soot; tanners' waste; straw. Leaves; sea weeds; rape dust; street manure. Green dressings, ploughed in; buck wheat; clover. 4. Artificial manures. Composts. 5. Modes of applying manure. Mixed or clear; solid or liquid; in drill or in broadcast; in fresh or fermented and decayed state; — at what season of the year or crop; — annually, or how often; in what quantity. Use and application to permanent pastures and mowing lands. 6. Manure' houses or cellars; vaults for the preservation of urine; and provisions for forming compost manures.

XXXI. Fences. Stone walls; rail fences; live hedges; hedge and ditch; raised banks, &c.


**Four grasses common to farms.**

Orchard Grass – *Dactylis glomerata*. One of most valuable and widely known. Palatable to most stock. English. Endures repeated cropping by animals. Feed it close (low before seeding). AKA Cocksfoot.


Red Clover. *Trifolium pretense*. One of most valuable and economical plants. AKA Trefoil. Fertilizer of soil.


Meadow foxtail. Valuable. Early, rapid growth, palatable.

Kentucky bluegrass.

Timothy. Unsurpassed as hay.
JULY is the month when the principal portion of the hay crop in New England is secured. It is our staple crop—the one by which we mainly increase the fertility of our farms, and having a greater money value than any single crop produced at the South;—either their cotton, tobacco or corn crop is insignificant, compared with it; and New England, rocky and sterile as much of it is, and whose soil is condemned by those living on easier and richer lands, produces a surplus for those who possess every facility for raising it, if they had industry and knew how.

Much of our best land for this crop still lies waste; it is in meadow and swamp that need either thorough reclaiming, or if partially reclaimed, draining and deep plowing. When such lands are once well set in grass, they will produce profitable crops for many successive years, with little annual expense.

The farmer must remember that it is not so much the bulk of hay on his scaffolds, that is to afford nutriment to his cattle and take them through the winter in good flesh and health, as it is that the hay is secured with all its natural juices which it is possible to preserve. In order to secure this it must first be cut at the right time. If cut too soon, before the sap is fairly elaborated into nutritive properties, such as sugar, mucilage, albumen, &c., it shrinks immensely, and when dry has but little bulk or nutriment. On the other hand, if left too long, the plant expends its energies upon the seed in accordance with the natural law to perpetuate its kind. The seeds ripen, and fall to the ground and are lost, while the stem and leaves are little better than oat or barley straw. But if the favorable moment can be improved to cut the grass just as its blossoms begin to fail, when the seed has formed, but is not perfected, then we secure all its nutritive properties if the

EQUIVALENTS OF VARIOUS PLANTS TO HAY. (1856) Mr. Editor:—Farmers are often at a loss to know how much of one kind of ordinary fodder is equal in nutrimental value to an equal amount, in weight or measure, of another kind. For instance, if I find my horse is kept in good working condition on eight quarts of oats and ten pounds of hay every twenty-four hours, how much corn must I give him in the same time with the eight pounds of hay to produce the same result as the eight quarts of oats? In Berger's Economy of Farming, translated by Smith, there is a "Table of Equivalents," which will be found useful to those having the management of stock. The following is an extract:—100 pounds of hay are equal to 90 pounds clover hay, made when fully blossomed. US * made before it blossoms. second crop of do. 68 M Lucerne bay. 80 u Sainfoin. 410 II Green clover. 467 it Vetches and tares, green 275 t (Green Indian corn. 374 it Wheat straw. 244 u Rye straw. 164 U Oat straw. 1 3 n Pea straw. 2i-l it Raw potatoes. i::, II Boiled potatoes. 3-V,') II Maagei wurtzel. 514 it English turnips. 275 II Carrots. 3'.1 " Ruta baga. 54 « Rye (grain.) 4* 1L Wheat. 50 It Oats. 01 Buckwheat. 57 Indian corn. 4.: It Peas. bo * Beans. eo II Horse-chestnuts. £S :1 Acorns. 62 Li Sun-flower seed. 69 Unseed oake. lu--. Wheat bran. 103 167 II Rye brao. u Wheat and oat chaff. 167 II Rye and barley chaff. An ox requires two per cent, of his live weight in hay per day; if he works, two and a half per cent.
PASTURE GRASSES. I have a field of fifteen or twenty acres of pine plain land, so
called, of a rather gravelly soil, which I wish to seed for pasture. Will you inform me
what is the best kind of grass seed to sow? _Putney, VT, 1860.—After manure and
cultivation sow a mixture of Timothy, Orchard, Meadow Foxtail, Kentucky Blue, Rough-
stalked Meadow, Meadow Fescue and Redtop and White Clover.

How shall we reclaim our worn-out fields and pastures, and bring them back to their
former fertility? Major question that augurs an interest in farmland revitalization.
LI – great improvement – sea weed and fish, but chief resources: barnyards and hog pens,
plus ashes, bone dust (from Boston), Peruvian guano,

1856 PASTURE GRASSES. The subject of improving our pastures is receiving much
attention, and is one well deserving of much more consideration than it has yet received.
In our natural pastures, from four to six acres are required for the pasturage of one cow.
In pastures properly prepared, half this number of acres is found sufficient. Indeed, many
instances may be named, in which one acre h i yielded an ample supply to a cow for five
months. But most of our pasture lands are of such a character, that we can never hope to
reach this standard. Land that will feed one cow per acre, will yield from one to two tons
of good hay, worth from twelve to twenty dollars. This is too expensive pasturage. The
land is worth more for hay or other crops. Some years ago, I pastured a cow upon an acre
of intervale land, and she did well, tut the land would have yielded a ton and a half of
good hay, worth fifteen dollars standing. Cows were pastured in the vicinity for 7 or 8
dollars per year. This was not good economy. It was merely a matter of convenience. But
if our pasture lands can be made to yield double the amount of feed they now do, the
advantage must be too obvious to need a word of comment. Our native pastures contain
from twenty to forty kinds of plants. Many of them are little better than worthless weeds.
Some of them contain so much bitter extractive matter, that cattle will not eat them.
Others are so dry and tough that cattle will not eat them, so long as they can find any
thing green and succulent. These various grasses arrive at maturity at different seasons of
the year. This is a circumstance of great importance — and shows the necessity of having
a variety of grasses in a pasture that is to be fed during the whole sea son. Some grasses,
as the meadow foxtail, the or chard grass, the meadow fescue, the herds grass, the sweet
vernal grass, and the brome, put forth early and are productive in May and June. Oth ers,
as the oat grass, the dogs-tail, the various mead ow grasses, and red and white clovers,
and the smooth fescue, yield most feed in the summer months. The various bent grasses,
the wheat grass, the birds foot clover, and some others, are green and vigorous in the
rutumn. By a mixture of these various grasses, a green and tender herbage is fur nished
through the season. This is seldom or nev er done in artificial pastures, where but two or
three kinds of grass are sowed. The various grass es and plants on which cattle feed,
possess very dif ferent properties. Some contribute more to the production of fat. Others
yield more milk, while others furnish in larger quantity the bone-making materials.
Others again have properties by which they affect the various glands of the body. Some
promote the secretion of urine, others the bile, oth ers the saliva. When obtained in due
proportion, they promote the health and vigor of the animal. The finest natural pastures
contain about twenty kinds of valuable grasses, some one or more of which is in a green
and thriving state every month in the season, from early spring till late in the fall. The
spring grasses are, the Alopecurus Pratensis, (meadow foxtail,) Phleum Pretense, (meadow cat’s tail or herds grass,) Anthoxanthum Odorato, (sweet vernal grass,) Dactylis Glomerata, (orchard grass,) Festuca Pretense, (meadow fescue,) Holcus Avenaccus, (tall oat grass,) Solium Perenne, (rye grass,) Bromus Arvensis, (field brome,) and the Poa Annua, (annual meadow grass.) The summer grasses are, the Cynosurus Crista-tus, (crested dogstail,) Poa Trivialis and Poa Pra tensis, (rough and smooth stalked meadow grass,) Festuca Duriasculus, (hard fescue grass,) Trifolium Pretense Perenne, (perennial red clover,) Trifolium Repens, (white clover,) and the Festuca Glabra, (smooth fescue.) The fall grasses are, the Agrostis Vulgaris, (the various red tops,) Triticum Repens, (creeping wheat grass,) and the Lotus Major, (birdsfoot trefoil.) Some of these are annual plants, that is, they arrive at maturity, drop their seed and die in one year. Others are biennial, or require two years to attain maturity, and then die, like winter rye and wheat. Others are perennial, that is, spring up from the root every year, for many years in succession. Where pastures abound in worthless grasses, the best remedy, if the nature of the land admits it, is to plow and cultivate two or three years, with some hoed crop — by which they will be killed out. Some times the larger and more vigorous grasses may be brought in by means of plaster or ashes or ground bone or compost spread upon the surface. These grasses thus stimulated, will attain a rank growth, and choke out the less valuable and sour grasses. Harrowing old pastures with a sharp harrow, and sowing them with oat grass, herds grass, or red and white clover, and dressing them with plaster or bone dust, will often succeed in bringing in a much larger and better growth of feed, and is money and labor well laid out. Dry plains, that yield but lit tle grass, may be greatly improved by this treat ment, applied to them in August, so that the grass es may get well rooted before winter. The late excellent Daniel P. King, of Essex county, had a tract of light, sandy plain land, which he brought into good condition, by plowing it in the summer, and applying a dressing of compost manure, and seeding it down with different kinds of grasses. He usually took off from one to two tons of hay, the next season — and then pastured three or four years, and repeated the same process. He was highly satisfied with the result of this treatment.

1856 IMPROVEMENT OF PASTURES. BY FREDERICK HOLBROOK. I am interested in the improvement of some sixty acres of pasture land, now in low condition, hav ing been formerly impoverished with successive crops of rye, and in later years too closely fed by village cows. The land is covered with grasses of inferior quality, interspersed here and there with ferns, shrub-pines, and bushes of various sorts ; it early feels the influence of summer droughts, so that the pasturage is scanty and poor after about the middle of July each year, — indeed, it is not of very good quality at any season. The land lies pretty well for plowing, being either level or mod erately undulating, and free from large boulders or fast rocks, though cobbly in some places ; its soil is rather thin, but naturally a tolerably good quality of yellow loam. It is an important object to improve the land, pasturage in this locality being quite scarce, and commanding a high price. Various modes of improvement have been consid ered ; and the plan adopted is to plow up so much annually as leisure from other employments will permit, say ten to twelve acres, in August or the forepart of September, top-dressing with some con centrated fertilizer, and reseeding to grass, Bowing winter rye at the same time, for pasturage, while the young grass is getting foothold. It is not the intention in any case to
allow the rye to ripen for a grain crop, as the removal of such a crop would draw upon the land too heavily, and in a large measure defeat its improvement for pasture. In August of last year, twelve acres of the old pasture were measured off, for treatment in the way above-mentioned. Before starting the plow, the piece was cleared of the shrub-pines and large bushes, by taking a chain-hitch around the tops and pulling them out of the ground, roots and all, with the oxen, and drawing them off the field, piling them in heaps for burning. A few furrows were then turned around the field, with a light plow, drawn by one yoke of oxen; but finding the 'low and team were quite too light to contend success fully with the stones and roots of brakes and bushes still infesting the ground, a larger and wide turning plow was substituted and an additional yoke of oxen employed. The larger plow was set to run from six to seven inches deep, and with the double team the work of breaking-up was easily and thoroughly done. In plowing, particular care was taken to over turn the sod completely, and shut the furrow-slices down flat, side by side, so that the vegetation then standing should be entirely turned under and smothered, leaving a clean surface-soil for the reception of the grass-seed, in which the young plant might grow without obstruction. In attempting the improvement of an old pasture, it is quite important that the vegetation of poor quality which has taken possession of the deteriorating soil, should be handsomely turned beneath, to decompose and furnish nutriment to the new grasses. A superficial "cut and cover" mode of plowing, therefore, although it may seem to save a little time at the outset, is in the end just no economy at all; for wherever there is a balk in plowing, or the furrow-slices are not matched in at the edges, there the wild herbage will at once begin to spread its roots and spring up again, choking down the young and tender grasses of the new seeding, instead of yielding them sustenance by its own decay beneath, and growing all the better for having the land in a measure stirred up and mellowed. After plowing the land, it was harrowed lengthwise the furrows; then top-dressed with the following fertilizers, sowing them by hand, broadcast, the same as one would sow grain: eight acres with ground bone, four hundred pounds to each acre; two acres with guano, three hundred pounds to the acre; and two acres with fresh unleached ash eat twenty bushels to the acre. The field was then stocked down with twelve quarts of herds-grass and one bushel of red-top seeds, together with five pecks of winter rye to each acre, and thoroughly harrowed across and lengthwise the furrows, and the surface pressed down smooth with a heavy roller, — the work being all finished before the first of September. The weather during the autumn following being quite wet, the rye and grasses came up finely, covering the plowed land with a handsome green — the rye giving the cows considerable feed in October. The rye and young grasses survived the winter well, and started up green early in the spring, giving pasturage before vegetation had started much in the old sward of the adjoining land. The rye mostly disappeared, however, early in July, but the young grass took its place, standing well through the summer, and affording a fresh, tender bite for the cows, even in the dryest time, when the old fields adjoining were so parched by droughts as to yield but little feed, and that not very good. In deed, just as far off as the eye could discern the pasture lot, it would readily mark off the newly seeded portion, by its deep green color in contrast with the brown and sombre appearance of the surrounding land. The rye paid for itself well in the pasturage it afforded; and hereafter, six pecks to the acre, instead of five, will be sown. It was the intention to have sowed about five pounds of red and three pounds of white clover seeds to the acre, on a late snow « April last, but through the pressure of
other employments it was erroneously o.-nitted. It is generally admitted to be doing well to make two spires of grass grow where but one grew before ; but these twelve acres give fair promise of a greater increase over former products than that ; and the quality of the grass produced now is much superior to that yielded before the land was plowed and seeded, which superiority is likely to last for several years. The cows have congregated on the twelve acres every day the present season, keeping the grass clipped as close and smooth as a newly-shaven lawn. Not knowing by experience what stimulant would be most valuable as a top-dressing for this land, but feeling quite certain that the young grass would need something of the kind to start it into life vigorously, and that the land might thus be profitably helped, it was thought advisable to try several concentrated fertilizers side by side, comparing one with another as to expense and results produced, and thus determining what top-dressing would on the whole be best for future use. It was an additional reason for trying several applications that the land was of very uniform quality, and treated in all respects alike, saving the variations in kinds of top-dressing used. It would be drawing a hasty conclusion to say thus early, which, all things considered, is the best of the three fertilizers tried. It may, however, be fair to say, that up to the present time, the ashes give the thickest "stand" of grass, and a trifle the deepest green color; the bone-dust ranks next, and the guano last — though all have done remarkably well. It would be theoretical rather than practical to venture an opinion now of the comparative future effects of each manure applied; but the land will, in the end, show for itself, and upon that showing may say something at a future day attractive, and it cannot fail to be so to all those who have read the delightful and instructive Essays of Mr. Flagg, in Hovey's Magazine, and in our own columns. He is a writer of rare excellence in the department which he has selected, and his work will be eagerly sought by all lovers of rural life.

RECLAIMING PASTURE. I have a pasture away from home which is growing up to hardback and pod-brake. I wish to know the best way to get rid of them. P Harris, N. H. — Cut the bushes, and then depasture it with sheep.

BUSHES ON PASTURE. If cut in fall then just regrow and with deeper roots. Need to cut 2-3 times per year and burn stubble whose ashes are spread, will exterminate.

In review of a new book on Addison County VT (L Champlain) alludes to the fact that some farmers in NE are dreaming of prairie lands in the midwest.

Young men, determined to prosper in the world, do not hesitate to seek good and cheap lands in Kansas and California, severing all the dear ties of home and kindred, and risking health, too, in the enterprise, when oftentimes there are lands within the sound of the church-going bell, as good and as cheap, close by good markets and civilized society, which are overlooked, because they are so near, and require so little enterprise to attain.

By this census, the fact is made apparent that the population of a considerable number of the agricultural towns in New England has decreased since the taking of the last census, in 1850. This fact will be considered by some without connection with other facts, and will be taken as evidence of decay, and that farming is not a profitable employment. In some cases, the valuation of the town will undoubtedly become less with the depreciation
in the population—but they will be those rocky and mountainous regions that never ought to be used for any thing but the forests which they produce, and the pasturage which may be made to succeed them by burning the refuse wood after the timber is taken away…The writer adds, “it is probable that the census of nearly all the purely agricultural communities in New Hampshire will show a falling off in population during the last ten years, the gain, if there has been any, having been in the manufacturing places."

The reason, then, of this depreciation of population in the rural towns, whatever else it may be, is not that the farmers of New England manage their business with less interest or skill than formerly, or that the occupation itself receives less consideration, but that it springs from natural causes:

1. That, aided by a better knowledge of the Art of Husbandry, and by better varieties of plants and breeds of stock, a better knowledge of the modes of securing them through the winter, and the advantages derived from the use of labor-saving machinery, vastly more is produced than formerly an the same extent of land.

2. Farmers have found that mountainous and rocky lands, remote from markets that demand vegetables and grains, are more valuable for timber which they will produce once in twenty to forty years, than to be devoted to any other purpose and that in nearly all cases, the moist low lands are the best ad opted to cultivation.

3. The forests of the hills being cut off for manufacturing purposes, the persons living in their vicinity are naturally called upon to aid in the process of the manufacturng of innumerable articles of convenience and value that find their way into the remotest regions of the earth. So that it is neither a want of perception, nor decaying energies that prompt them to leave the farm, but an intelligent foresight that induces them to engage in some remunerating employment, while nature in her steady processes of beneficence recuperates the soil and restores the crops which man had exhausted for his convenience and comfort.

1856 On all lands where there is a growth of red sorrel, acids of some kind abound in a free and uncombined state, and it is only by adopting some emendatory powers of culture, or by the application of neutralizing substances — such as lime, ashes, &c, — that they can ever be rendered fertile in the production of valuable crops. On lands where sorrel seemed determined to overpower every other plant, we have eradicated it effectually, by the use of lime and ashes, but at the same time giving the soil a more generous manuring, and more careful cultivation with the hoe. We have, therefore, no doubt of the correctness of the statement by Mr. Ruffin, who is a very careful and experienced cultivator himself.

"Third Annual Report of] the Secretary of the Massachusetts Board of Agri culture, together with the Reports of the Commit tees appointed to visit the County Societies,"

Something for Hope
Robert Frost
At the present rate it must come to pass
And that right soon, that the meadowsweet
And steeple bush, not good to eat,
Will have crowded out the edible grass.

Then all there is to do is wait
For maple, birch, and spruce to push
Through meadowsweet and steeple bush
And crowd them out at a similar rate.

No plow among these rocks would pay.
So busy yourself with other things
While the trees put on their wooden rings
And with long-sleeved branches hold their sway.

Then cut down the trees when limber grown,
And there’s your pristine earth all freed
From lovely blooming but wasteful weed
And ready again for the grass to own.

A cycle we’ll say of a hundred years.
Thus foresight does it and laissez-faire,
A virtue in which we all may share
Unless a government interferes.

Patience and looking away ahead,
And leaving some things to take their course.
Hope may not nourish a cow or horse,
But spes alii agricolam ‘tis said.

LI writer addresses what they use for cellar walls in absence of stones – use bricks. And what about water – several streams and can use wells 20-40 feet deep. What about fencing? Better to keep cattle yarded and recover all the manure. But can use locust and chestnut. Clear, burn over, plow, turn over to clear land. Also have grist mills, saw mills and schools.

Discussion of thinning pines, pruning pines.

Discussion of exhausted lands going back to forest. “my upland is very much exhausted, and my timber lot is also on the decline”

1. One acre of ordinary pasture is not sufficient. to provide suificient sustenance for a cow for half a ear, or the pasturing season.
'That agriculture is unprofitable, compared with other business in Massachusetts, is the practical judgment of farmers generally, deny it as you may, gloss it over as you will; else why do so many of their sons desert the plow, hardly enough remaining at home to take care of the good old fathers and mothers? Have they not seen their fathers and neighbors, hard-working and frugal, farmers till sixty years of age, still relatively poor, while their relatives and equals who have engaged in other pursuits are rich, clad in fine linen, and fare sumptuously every day, with leisure to enjoy life, with means to purchase its pleasures, and comforts, too? Why are farmers willing, even desirous, to have their sons quit the farm, and seek an easier and shorter road to fortune and happiness, than they have trod? The truth must be told, the 'desire a better life for their children than they have had, and sigh for the means to put them into a position to attain it. The inevitable conclusion to be drawn from this general desertion of agriculture is, that farming is unprofitable. The almighty dollar is the moving principle, the stepping stone to command the blessings of life, and not the avoidance-of hard work, but work that does not pay; the condition of eminent success in all the arts, is honest hard work, indomitable labor with the head and hands united. There is no other potent to success. Farming is the most delightful of all occupations, where it can be pursue for its unalloyed pleasure, and not for its dubious profits….Yes, a man can live in Massachusetts by farming, but only by economy and self-denial, unknown and unpracticed in other pursuits.

Fences
The safety of our flocks and herds, the protection of our orchards, of our door-yards and fields of waving grain, and of our cemeteries, and in some cases, even our forests, cannot be accomplished without them. They are not only of absolute necessity, but of almost incalculable cost. A distinguished writer upon national wealth says: “Strange as it may seem, the greatest investment in this country, the most costly production of human industry, are the common fences which enclose and divide the fields.

Nothing that pertains to the farm has been so much neglected, and in no one thing is there room for so much improvement as in the construction of fences.

Of the kinds of fences ‘in general use, and considered by farmers the best, are post and rail, or 0st and board fences, stone wall, the Virginia fence, and hedge, or live fences. These are considered the best, and in the end more economical than those of a more frail and perishable character. Posts of chestnut or cedar in some soils are found to be durable, but in sandy soils soon de cay, and on clayey, heavy soils are speedily thrown out of the ground by the action of the frost. In soils of this description they soon manifest an inclination “to rise in the world,” and require great trouble and expense to keep them down. Stone wall fences, from time immemorial, have been considered the very best, to ection which, even now, might subject one to “a arper strikes" and severer criticisms….unquestionably a good fence; but it is often otherwise. All will admit that is an expensive ope to build. Other objections are, it requires something more than the wall to stop sheep; it takes up a great deal of land, and it is the poorest of all fences except. stone post fence upon heaving soils. I have seen a wall which cost not less than $1,50 per rod, so thrown out of shape by the frosts of a single winter, that some parts of it required to be rebuilt to make it a good fence. Farmers say we build our wall fences broad and
high, to get rid of the stone. But when you divide your cultivated lands into small and inconvenient fields, and inclose them with wide wall fences, are you rid of the rocks any more than 'on would he were they piled in the centre of those fields? Inclose an acre of ground with a four foot wall, and see how much there is left for the sun to shine upon.

I am happy to see that a new topic has been introduced in the Farmer, i. e., fences, and I hope 'our farming correspondents will give the subject Justice. Our experience is, that a good half wall is the best fence. It will certainly stop all kinds of stock better than another, and it is not very costly to build, where there are stones enough to bail it. I think the well should be about two feet on the ground, and two and a half feet high. The posts should be set one foot in the ground, and about eight feet apart; the boards being seven teen feet long, an about eight inches wide. Always spike the board on to the round side of the post, otherwise the wind, in swaying the boards to and fro, will draw out the spike. Where cedar, chestnut or oak is not plenty, brown ash makes a very good fence-post.

Building fences “to get rid of the rocks” is not quite so bad as the Irishman’s arithmetic of taking one from two and three remain, but is just about as absurd as his proposal to dig a hole in the earth by the side of another to get the dirt with which to fill it! But what shall be done with the rocks? Many farmers have yet to learn their value for road making. Fill all low and wet laces any convenient depth with them, putting in the large ones first, then fill the spaces with the small ones, and cover with dirt. Line the banks of streams with them, fill deep gullies, do almost any thing with them rather an build unnecessary fences. Much of this can be done in winter.

New England Farmer 1837
Eradicate chicory.

Concern over the Canadian Thistle

“Mr. Howard said that it was the duty of every farmer to save all the excrement, both solid and liquid, on his farm, as also that in his house hold, and, if this were done, there would be no deficiency in our State.” Muck, sea weed, plaster, ashes, guano,

For the information of all who are wishing to obtain a cheap and valuable paint for buildings, I would say, take common clay, (the same that our common bricks are made of,) dry, pulverize, and run it through a sieve, and mix with linseed oil. You then have a first rate fire-proof paint, of a delicate drab color. Put on as thick as practicable. If any one has doubts with regard to the above, Just try it on a small scale—paint a shingle and let it dry. Recollect that it must be mixed thicker than common paints. The clay, when first dug, will soon dry, spread it in the air under a shelter, or, if wanted immediately, it may be dried in a kettle over a fire. When dry, it will be in lumps, and can be pulverized by placing an iron kettle a few inches in the ground, containing the clay, and pounding it with the end of a billet of hard wood, three inches in diameter, three feet long, the lower end to be a little rounded. Then sift it. Any clay will make paint, but the colors may differ, which can easily be ascertained by trying them on a small scale as above indicated. By burning the clay slightly, you will get a light red, and the greater the beat you subject it to, the brighter or deeper red—Country Gentleman.
**New England Farmer 1856**

We know of no way in which the many thousand acres of poor, sandy lands in this State, can be made so valuable, as by planting them with either White or Pitch Pine seed. Such was the favor with which the Barnstable County Agricultural Society viewed the experiment we made in planting the seed of the Pitch Pine, that a liberal premium was awarded therefor in 1853. We trust similar experiments to our own will be made by many others, and with equal success. — Barnstable Patriot.

1860. For the New England Farmer

**CULTURE OF PINE TREES.** DEAR SIR—Ill accordance with my promise made to you, I will now give you some account of the “Culture of Pines” on our Island. I think it was in the spring of 1846 that Mr. JOSIAH STURGIS, (now of California,) planted a lot of five acres, after taking off a crop of corn the year previous, with the seed of the common hard pine of Cape Cod. The seeds were put in with a common seed lanter, in rows about six feet apart, and came up in the rows from one to four feet apart. Two years afterwards be planted five acres more adjoining, sowing broadcast, and harrowin in a mixture of the hard pine seed with that of the “Pinus Montimo,” of France, both of which came up well and grew finely. In 1851. Mr. Sturgis called on me to look at them. and also proposed to me to buy several hundred acres of land in connection with him, and plant it. I found his trees looking healthy and vigorous; some of those of the first planting were five feet high, and about five inches thick near the ground. We purchased about four hundred acres of light sandy land, for about two dollars per acre, and expended about one thousand dollars in procuring seed from Barnstable county, and in the spring of 1852, planted the whole tract, using a common seed lanter with a sharp cutter to out the sword, and a common cast iron broad harrow or cultivator tooth following, and the seed dropped behind. This method planted the seed too deeply, but enough came up, had they not been in ed by a severe drought, and by the ground moles which ran along the rows, leaving a hollow space beneath the young trees. The following year we put in three spike harrow teeth, and the trees came up abundantly, and neither drought nor moles disturbed them, and now the largest of them are six feet high, and three to four inches thick near the ground. This last method of planting is not the best. I think the better way is to plow the ground and cultivate it one year, and then plant it with a common seed lanter. Until 1852, the common and French pines had grown alike, but in this car, the French grew about twice as much as the others, and in some instances the centre spike grew three and a half feet in length and near an inch thick. I now gave my whole attention to the Pinus Montimo, and imported over fifty bushels of seeds, and several hundred acres have been planted with them. In the fall of 1855, many of the first trees of the French kind, which were planted by Mr. Sturgis, were fifteen feet high, and six inches at the trunk, but the following winter when the thermometer stood for several days at or near 12° below zero, many of the finest trees were killed. Those of mine which were only a few inches high, and covered with snow, survived, and are now doing well. The last tract which I planted was planted in summer, sowed in the fall, and planted with the seed planter the following spring with the Pinus Montimo seeds, and the trees are now growing well. The cost of the land was about two dollars per acre, the plowing three dollars, the seed rye one dollar, the incubator two dollars, the planting one dollar, making nine dollars, and it produced twelve bushels of rye, which sold at one dollar per bushel; the straw was
worth more than the cost of harvesting, thus making a profit, after allowing another dollar per acre for harrowing, of two dollars per acre, and the land all planted to pines, besides. Many persons think our waste, barren lands can be used more profitably by stocking them with sheep, than in any other way, but let us make some figures and see what they will as \', for they always tell the truth when properly used. An acre of land will cost about two dollars, and it will take about two acres of it to feed one sheep during the summer. It will cost about one and one half dollars per acre to stock it with sheep, and about the same to plant it with pines, supposing the crop of rye only pays for its own cost. There is no doubt but the land will, in thirty years, produce twenty cords of wood per acre, which is now worth here, six dollars per cord, and deducting for cutting and carting two dollars per cord, will leave four dollars, which is equal to eighty dollars, for the thirty years, or two dollars and sixty-six and one-half cents per acre per annum, or three dollars grown to eighty-three in thirty years. If any sheep husbandman can make out the other side of the account to match this, I shall be pleased to hear from him. E. V. GARDNER. Nantucket, Feb., 1860. Somme Sean ' \n
THE WILD LANDS OF LONG ISLAND. LETTER FROM JUDGE FRENCH. Islip, Long Island, April 4, 1860. MY DEAR Mr. Brown—Take the Long Island Railroad at the South Ferry in Brooklyn, just across from the great city of New York, and rattle along about forty miles, and stop at North Islip Station, and devote two or three days to agricultural observation, and you may find as much to interest you as you would be likely to meet were you to travel a thousand miles in many directions. Young men, determined to prosper in the world, do not hesitate to seek good and cheap lands in Kansas and California, severing all the dear ties of home and kindred, and risking health, too, in the enterprise, when oftentimes there are lands within the sound of the church-going bell, as good and as cheap, close by good markets and civilized society, which are overlooked, because they are so near, and require so little enterprise to attain. Whether any such lands are in this neighborhood, our readers may judge from the facts I shall state. Long Island is about 120 miles long, and from eight to fourteen miles in width. The two ends were settled nearly two hundred years ago, and for nearly that time, roads have been opened along both shores, and the land through nearly the whole extent has been under good cultivation, yet when the railroad was opened, about 1845, there remained a tract some forty miles long and four to eight miles wide, with no more signs of cultivation or improvement than may be found in the desert of Sahara. Even now, though the railway passes nearly through its centre, the wild deer have not been scared entirely from their haunts, and trout abound in many streams. 'What has doomed this land to desolation with in less than two hours, by rail, of the great commercial city of New York, with its 700,000 inhabitants, daily offering their gold for the products of the soil? What's in a name? Through a rose by any any other name may smell as sweet, yet were you to advertise it for sale by the name of a skunk cabbage, probably few noses would go out of their way to test its fragrance. Whoever was author of the names of places in this island probably christened his boys Judas Iscariot and Benedict Arnold, and named his homestead Sodom. King's County and Queen's County are not names inviting to revolutionary ears; Flatbush and Bushville and Hardscrabble are not suggestive of grand old forests or vines and fig trees, or even of “green pastures by still waters ; there is not much of harmony or poetry in Quogue and Patchogue and Yaphank. Jerusalem and
Bethpage have not much of the Young America progressiveness in their associations, and finally, when you see as a principal place on the map, actually Babylon, the matter begins to grow serious. They say Long Island is of more recent formation than the world about it. Some say it came up from below, and a timid man might suspect that he who reigns over the lower regions may have restored his favorite city, which we read of as “fallen,” to the earth, in a new place. No, there is not much in a name, but you and I would not advise a young farmer to buy a farm in Hardscrabble, or to look for a wife among the ladies of Babylon. The railway excavations have a red and sandy look; the slightly undulating, prairie-like surface, is mostly covered with scrub-oaks, and has been recently blackened by fire, so that one’s judgment is in no danger of being seduced by appeals to his emotions of beauty. There is, much, however, to interest a careful observer of this strange region, and after a critical examination occupying several days, spade in hand, I feel qualified to present the condition of these lands to the consideration of those who are looking for new homes, advising no one, however, to purchase, without a thorough personal investigation. Although Cobbett, who was a prophet in agriculture, had his American home on the island, and although some of the wealthiest farmers in the country have elegant homes and farms here, yet there is room for some slight improvements in particular localities. For instance, at Farmingdale station, to-day, we saw a cow harnessed with a horse-collar and rope traces to a plow which was held by one man while another led the animal, plowing a garden. In all Europe, I never saw the beat of that for plowing. Again, on the road from Babylon to Islip, I saw a load of manure on a wagon drawn by four poor oxen, driven by a man sitting on top of the load, with ropes fastened to the noses of the forward yoke, halter-fashion, the driver holding the ends of the ropes in his hand like reins. On the same road we met a gentleman, or some other kind of man, driving a poor thin ox in a single wagon, probably on a pleasure excursion. A young friend with us kept a sharp look-out for a lady of whom he had read, who used to live in Babylon, and dressed in scarlet clothes, but she was not visible. Babylon is a good farming region, with tasteful parks and fertile fields. From there to Islip, on a fine old road, are beautiful residences and grounds, occupied in summer by New York millionaires. Several places were also pointed out adorned with grape-houses, fish-ponds and elegant mansions, which were valued at more than $60,000 each. The lands, which I particularly examined, and have spoken of as wild, lie four or five miles from this highway directly on the railroad, but there is evidently a great uniformity, and so all writers agree, in the structure and quality of the whole interior of the island. At Hempstead, only ten miles from the city, is, however, a tract known as the “Hempstead Plains,” which presents a different appearance from the rest. It is a prairie, slightly undulating, of smooth, grassy surface, entirely free from tree or bush, 17,000 acres of which are owned by the inhabitants of Hempstead in common, and used for pasture. Leaving now this superficial sketch, I will give a more particular description of the soil, climate and capabilities of the wild lands near Islip, which have been recently advertised for sale in the Farmer. As, however, any tolerably accurate impression of them must occupy more room than can now be spared, I will continue the subject in a future number.

THE WILD LANDS OF LONG ISLAND, second LETTER. From Judge French. In a former letter, I gave a general idea of the immense tract of lands lying on Long Island, within two hours of the city of New York, by the Long Island railroad, which divides
them nearly in the centre. Thousands of acres of them are for sale, at prices from twenty to fifty dollars an acre. The soil would seem, in many places, to a casual observer, to be far more sandy than in fact it is, there being in it more or less of white water-worn pebbles, which, washed by the rain, show white on the surface. A slight examination will show, however, that the soil is a sandy loam, with alluvium enough almost to entitle it to be called a clay loam. Taking up soil from six inches below the surface, I found that by working it a little in the hand, it had almost the consistency of soft putty, and rolling it into little balls, and drying it, it became quite hard, so that the balls might be rolled across the floor without crumbling. Again, in pastures and fields, it is a common practice, where there are no streams, to provide watering places for cattle, by scooping out hollows three or four feet deep, and there the rain water will stand through the summer, by merely treading and thus puddling the bottom, without the addition of clay or any other substance, on land perfectly drained by nature, and where water will not be found by digging twenty feet. This is a common method of supplying stock with water in some parts of England, but there the bottoms of these artificial ponds are usually puddled with clay. These lands have been often described as barren sand, and I am therefore particular in stating my reasons for a different opinion. There are no stones for miles too large to throw at a dog, and the land is easily plowed with two horses after it is once broken up. My way to clear it, would be to dig up by hand the few trees or stumps too large for the plow, then mow the bushes and burn them, and then plow with a strong team. I saw a team of five horses breaking up a new field of forty or fifty acres, for the first time. The plowman said they could plow nearly two acres a day, that he had tried oxen, and they could not plow one acre a day. He intended to sow winter rye and grass seed, and said that he had got 28 bushels of rye to the acre the year before, and 30 bushels of winter wheat; and 300 bushels of potatoes to the acre, over 10 acres, getting a crop of 3000 bushels. This is on Mr. Wilson’s farm at Deer Park, which he purchased for $5 an acre about six years ago. My informant is a Scotchman, a very intelligent man, who is, to my certain knowledge, a first rate plowman, and who gives the farm on which he labors, the appearance of an old country farm, such as few American farms present. I may add, that persons who know the farm, have full faith in these statements about the crops. The soil seems precisely the same as that of the Island generally. It is on the railroad, 7 miles nearer the city than North Islip station. All these lands are nearly as level as a prairie, and there is no waste land, so that large square fields may be laid out, and fully cultivated, whenever it is convenient. A farmer at North Islip, whose farm I visited, said that his winter wheat averaged 18 bushels to the acre, and his spring wheat 22 bushels, and his potatoes from 125 to 150 bushels. For potatoes, he plows in barn manure, and manures in the drill with 300 pounds of Peruvian guano to the acre. He said that the guano thus applied plainly showed the rows, after a crop of wheat and two crops of hay, four years after the application. Everywhere over the Island, so far as I went—and we drove 40 miles in an open carriage in one day, on purpose to observe the agriculture of the region—the wheat and clover appeared finely, and wherever a field had lain in grass two or three years, there was a thick heavy sod, with every indications of a good crop of timothy. Not a mile from North Islip station, we observed a peach orchard of several acres, as handsome and thrifty trees as I ever saw, some three or four years old. The ‘buds then (April 3) were uninjured, and several trees which I examined closely, were full of blossom buds. Strawberries and black berries flourish finely wherever planted. I observed
a few young apples and pears, and some grapes, all of which looked well. The climate must be more mild than Boston, the winters being tempered by the sea, and the extreme heat of summer in inland places cannot be experienced on the island. Like Ireland, which is the best country for pasturage in the world. Long Island must be much protected from summer drought by the heavy dews, which the sea breezes deposit in the sultry summer nights. One singular fact deserves consideration by the scientific. The railway runs about four miles from the south shore. In a passage of 40 miles from Brooklyn to North Islip, we scarcely cross a stream large enough to require a culvert, yet all the way along by the common highway, which keeps near the south shore, are beautiful ponds of crystal water, abounding in trout, and supplied by streams large enough in many cases to carry mills, and having their rise within the four mile breadth. The summit of the railroad is about 150 feet above tide-water, and there are no hills worthy the name in all this part of the island. The streams are fed by springs, which have a very uniform flow of water. A friend who accompanies me, insists that it is impossible that all this water can come from the rain, and that it must come up from the sea in some way by capillary attraction. In support of his theory, he says that on Fire Island, which is close by Long Island, the cattle find fresh water by digging holes in the sand through which the sea-water is filtered and becomes fresh. I have not seen any rain-tables kept on the island, but am inclined to think the rain-fall will be found to be very large, and the evaporation heretofore has been small, the land being covered with a low growth of pines and oaks, so that the filtration would be comparatively large. There is very little opportunity on Long Island for the exercise of my favorite agricultural science of drainage, as nature has got the start of us, and thorough drained nearly the whole island. The wells are from 20 to 40 feet deep, and the water is always found before reaching rock. Indeed, the inhabitants say there is no rock under the island. In all my travels, except near Brooklyn, I have seen no ledge of any kind, no such thing as a stone fence, nor any stone of a hundred pounds weight, except a few on the north side, in Smith town. Bricks are used for wells, and brick clay is found in some localities. Long Island ought to be the kitchen garden of New York. The climate is mild, the land is well drained and early, is very easily cultivated, and must be productive. From some chemical tests which I have had applied to the soil, it seems to abound in potash, to have aluminum enough, but to be deficient in lime and phosphates. Bone, or super-phosphate of lime would be the specific manure, if this impression prove correct. These lands are surely worthy of careful examination by those seeking for market garden farms. Any farmer who will visit them in the heat of summer, while the crops are on, may determine readily the only points which can admit of doubt, namely, whether the soil will endure a drought, and whether the statements as to the crops of wheat, rye and grass, which I have given, are true. Upon these points, I give the authority of others. I feel confident that the Wilson farm, at Deer Park, is a fair test of the North Islip lands, and I could find no person who would say that the lands in that region were peculiarly subject to drought. Let any man who feels interested, examine for himself, and he will be sure, at least, at Stillenwerfs Hotel at Islip, to find a first rate house, with sea-fowl and trout and oysters, and all other creature comforts that a reasonable man can ask, and he will find enough of interest in this wilderness by a great city, to compensate for the journey.
By way of ratchets each man exerts the force of 20 men.

Possibly 1837 NE Farmer
Why are farms deserted? They are natural causes—causes which puny man cannot control—and instead of being evidences of poverty and decay, they are to us clearly evidences of progress and prosperity. That is, man has exhausted the soil, cut off its timber, and carried off innumerable crops of rye and corn, and herds of fat cattle, and with these nearly all the minerals near the surface, together with the vegetable matter that had been accumulating by the agency of trees, bushes and coarse plants, through the lapse of countless generations. Why should he remain there longer? If the land is of easy access and cultivation, and he has managed it skillfully and economically, he can remain forever and it will never fail to reward all his labor and care. But if it is not of this character, his course is precisely that of the miner,—he lays bare the vein, extracts the precious ore, exhausts it, and then seeks another and more promising spot, and in so doing proves himself to be a man of discernment and progress.

1856 YOUNG MEN. Whatever may be your choice of future occupation — whatever calling or profession you may select, there is certainly none more honorable than that of a farmer. The patriarch of the fields, as he sits beside his cottage door when his daily toil is over, feels an inward calm never known in the halls of pride. His labor yields him unpurchasable health and repose. I have observed with more grief and pain than I can express, the visible tokens which appear in all directions of a growing disposition to avoid agricultural pursuits, and to rush into some of the overcrowded professions, because a corrupt and debasing fashion has thrown around them the tinsel of imaginary respectability. Hence the farmer, instead of preparing his child to follow in the path of usefulness himself has trod, educates him for a sloth; labor is considered vulgar, to work is ungenteel, the jack-plane is less respectable than the lawyer's green bag; the handles of the plow less dignified than the yard-stick. Unfortunate infatuation! How melancholy is this delusion, which, unless it be checked by a wholesome reform in public opinion, will cover our country with wreck and ruin! This state of things is striking at the very foundation of our national greatness; it is up on agriculture that we mainly depend for our continued prosperity, and dark and evil will be the day when it falls into disrepute. What other pursuit offers so sure a guarantee of an honest independence, a comfortable support for a dependent family? Where else can we look but to the productions of the soil for safety of investment, and for ample return? In commercial speculations all is chance and uncertainty, change and fluctuation, rise and fall. In the learned professions scarce one in ten makes enough to meet his incidental expenses; how, then, are we to account for this fatal misdirection of public opinion? The cultivators of the earth are the most valuable citizens. They are the most independent, the most virtuous, and they are tied to their country, and wedded to its liberty and interests by the most bunds.

— Jefferson.

Possibly 1837? We know not why it is, but so it is, there is in the Northern States, a most unconquerable aversion to agriculture, and the consequence is, with New England in particular, that a farming people are fed from abroad, by the agriculture of other States, or of foreign nations. The multitude seem more to love the throng — the city — the tinkling of money in the shop of the broker, or the rustle of silk and calico in the shop of the dealer, than the notes of the sweet songster of the woods, the rich beauty of the trees, or the inviting verdure of spring and summer. One reason is, that we have no farmers, such
as the farmers of England, of Holland, or of Lomhardy, who embellish Nature, and make their homes more delightful than the loftiest palaces of the town.

Mass Agricultural Society

**Naushon Papers**
The Naushon papers consist of loose papers and volumes relating to Naushon Island and some other islands in the Elizabeth Islands, part of the town of Gosnold, Massachusetts. The collection contains deeds and other documents tracing the ownership of Naushon and other islands from 1641 through 1867 (including some items relating to Native Americans); papers of General Salem Town of Charlton, Mass., agent for the owners of Naushon, in charge of timber operations on the island (1811-1826); papers of James S. Russell, agent for J. M. Forbes in charge of commercial farming and timber operations on the island (1894-1899); and four bound volumes of records including timber accounts (1824-1826), farm records (1833-1885), sheep records (1899-1947), and a surveyor's notebook of the Elizabeth Islands (1837-1838).