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## LOWER CANADA



MANUFACTURING，COMMERCIAL，AND COLONIZATION INTELLIGENCER；

OFFICIAL SERIES OF THE AGRICULTURAL BOARD AND SOCIETIES

PUBLISHED UNDER THE DIRECTION OF

## M．J．PERRAULT，

Member of the Provincial Parliament for the County of Richefieu．
Pupil of tho Royal Agricultural College of Cirancoster，Glouccatershirc．England and of the Imperial Agricultural School of Grignon，Scine and Cisc，France Lfombor of the Lisporial Zoological Sociely of Paris，\＆e．

## SEPTEMBER 1864.


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# AGRICULTURAL REVIEW. 

## SEPTEMBER.

CONTAENTS:-Agricultural Reviow.-Ofleial Department.-Exhibition of the District of


 of tho Agricultural Societies in Lower Canadn.- Editeorlal Dopartnene. -Tho signifleance nad dignity of country lifo-lligh farming a nd olean culture-Why should I stay on the farm? - Large farms-llesitify your homes-Education of farmers.-Garm operntlonis,-Tho sun's hent exsentina tor corn-Ventinting hay stacks-Manurink grass lands atter mowing-ionj) suds as a fertilizer-Improvement of the soll by charringCuring of beans-WVorking the different solls $\rightarrow$ Green crops as manure-Top dressing krass lands-liradication of bushes nad shrubs-hoss by selling hay.- Breedors' Dopartment.-Shall eastern furmers raiso m.ore stock -Stork breedink-On the management of puntry -Thrkeys and chickens-A debate on thorough brods -Arilicial swarmint of beey-Soilhutested on a dury farm-poor pasture and short feed. - Ir orticultural Dopartment.-The apple-Qualities of ino vegetables-Planting overgreen treos in Aukust and septem-ber.-soup-Valato of oatnasal-How to pickle cucumbers.

## 罗ftrial <br>  <br> 

DISTRICT OF BEAUHARNOIS AGRICULTURAL ASSOCIATION.
HE first exhibition of the Agricultural Association for the District of Beaularnois will be held in the village of Durham on Wednesday, 21st Sept., 1864, when the following prizes will be awarded, viz:
Class 1st-Section 1st-Horses. No horse will be allowed to compete in more than one section. Horses shown as Pairs must not be stallions. Brood mares will be disqualified unless their colts be exhibited with them, so that the judges may be enabled more accurately to determine their merits as brood mares.

Class 2nd-Cattle.-The sum of fifty dollars for pure bred cattle will be left for distribucion by the judges as they may think proper. Cows must be giving milk at the time of the exhibition, and have calred before the first day of Juiy previous, to the show. Young cattle may compete, if the exhibiter think fit, in any older class than that to which they belong, but no animal will be allowed to compete in more than one of the foregoing sections.

Class 3rd-Sheep.-Sheep will not be allowed to compete with more than the present season's growth of wool upon them.

Class 4th-Swine.-No breod sow shall be entitled to a premium unless it be satisfactorily proved that she had alitter of pigs this season.

Class 5th -D Dairy Produce.-Dairy produce must have been made during the present season in the house of the competitor.

Class 6th-Domestic Manufactures.Etoffe, flannel, dressed cloth, and Canadian linen must have been manufactured at the
house of the competitor by a member of his or her family, during the present year, but the weaving may be done elsewhere.

Class 7th-Agricultural Implements.All agricultural Implements, wagons, harness, \&c., must have been manufactured in the district and by the exhibiter.

Rules, Regulations, and By-Laws.
Of the association, to which particular attention is requested, as they will be strictly enforced by the directors:
I. Every competitor must reside within the parliamentary boundaries of either of the countics of Beauharnois, Chateauguay, or Huntingdon, and be a member of one, or more, of said county $\Delta$ gricultural Socicties.
II. All competitors shall abide by the rules and regulations $c^{-}$the association, and in the event of any dispute the matter shall be referred to the directors, whose decision shall be tinal.
III. Every competitor at the time of entry or exhibition shall produce a ticket of membership, setting forth that he is a member of one of the above county societies.
IV. All entries must be made with the Secretary at Durham four days previous to the day of exhibition.
V. When there is only one competitor, or when the animal or article entered is not deserving of a premium, it shall be left to the diseretion of the judges to award it or not. The judges will also have the power to exclude any animal which they may consider has been overfed.
VI. All animals must have been the bona-fide property of the competitor for at leasi sis months previous to the show, im-
: ported animals excepted, which must have been the property of the competitor at least three monthis previous to the exhibition. In all cases the competitor must be prepared, if required, to give the month of the birth of cach animal, and the exact age of young animals must be stated on cards attached, which will be taken into consideration by the judges in making their awards.
VII. No person shall be allowed to interfere with the judges while in the discharge of their duties; exhibiters or their atteudants so interfering will forfeit their right to any premium which they might otherwise have been entitled to.
VIII. Any competitor who by wilful and corrupt means, fraud or misrepresentation, may be awarded a prize, shall forfeit the same, and not be allowed again to compete at any future show of the association.
IX. No competitor shall be allowed to have his name, or initials, on anything for exhibition, or on any firkin, bag, \&c., containing articles for exhibition; all so marked shall be set aside by the judges.
X. All animals and articles must be on the show grounds by 9 o'elock on the day of exhibition, and to prevent confusion parties in charge of stock will come provided with means for fastening the same, as none going loose will be judged.
XI. On the morning of the show exhibiters will be furnished by the secretary with a card specifying the class, section, and number of entry, which must be attached to the animal or article and remain so during the exhibition, any animal or article not so ticketed will be excluded from competition.
XII. No animal or article exhibited will be allowed to be remored from the show ground until the close of the exhibition without the consent of the directors under a penalty of two dollars, and forfeit any premium that the exhibiter might have been entitled to.
XIII. The officers, directors, and members of the association, will dine together at the close of the exhibition in Mc Eachern's hotel: all competitors who have obtained first prizes will be required to attend. Dinner at four o'clock p. m.

> A. Mceachern, Scey-Treas. D. B. A. S.
Hen A fair will be held during the show for the sale of fat cattle, swinc, slieep, farming implements, horses, \&c.

## BONAVENTURE AGBICULTURAL BOCIETY

 No. 2.OTICE is hereby given, that the Agriculiural Society No. 2, County of Bonaventure, will hold their general Fall Show of cattle, agricultural and dai y produce, and ploughing matehes, at the Township of Maria, on the first, and at Mission Point, Tomnship of Mann, on the second Wednesday in October next; and the Winter Shows of grain, seeds, and domestic manufactures, at Carleton, Township of Carleton, on the second, and at Cross Point, Township of Mann, on the third Wednesday of February nest.

By order. Mann \& Meagher,
Scc.-Treas.
Carleton, 23d July, 1864.
DRUMMOND AGRICULTURAL SOCIETY NO. 2. $\overparen{\int T}$ HE Agricultural Society No. 2 of the County of Drummond will hold their Anuual Exhibition of animals, agri5598 cultural productions, and domestic \& manufactures, on the 29th day of September nest, at the furm of Benjumin Reed, Esq., in the Township of Durham, County of Drummond.

James Bothwell, Sec. Treas.
Ulverton, August 12, 1864.
WOLFE AGRICULTURAL SOCLETY.
HE Wolfe County Agricultural Society will hold their Annual Exhibition at Marbleton, on Thursday, the 29th September neat.
A. Lothrop,

Sec. Treas.
Dudswell, August 17, 1864.
AGRICULTJRAL SOCIETY FOR THE COUNTY OF BROME.
HE Fall Show will be held in the Village of Knowlton, and near the County Flouse, on Tuesday, the 13th day of September, 1864, at ten a.m., and the winter show at the same place on Wednesday the 4th day of January, 1865, at ten a.m. Josepa Lurebvie,

Sec. Treas.
Knowlton, August 15, 1864.
COUNTY OF OTTAWA AGBICULTURAL SOCIETY No. 2.
HE Annual Exhibition of this Society will be held in Thurso, on Thursday, the 13th day of October, 1864.

Abel Waters,
Sec. Treas.
Thurso, August 12, 1864.

## AGRICOLTURAL SOCIETY OFTHE COUNTY OF BOULANGES.

IIE Annual Show of this Society mill bo held at St. Zotique, at Mr. Joseph Inalonde, hotel-keeper, on Truesday, the 27 th day of September, 186.4, at ton a.m.
G. II. Dumesnel,

Scc. Ireas.
Coteau Landing, August, 186.t.
agbiculitural society for tie county of VAUdREUIL.
HB Annual Lixhibition of the Agricultural Society for the County of Vaudreuil will be held in the Village of St. Marthe, on the 29th September next. E. N. Foulnier, Sce. I'reas.
Rigaud, 4th August, 1864.
l'assompition agricultural society. HE Annual Exhibition of the County of L'Assomption Agricultural Society will be held at St. Henry de Mascouche, on the 5th of October next. Alex. Archambalifit,

Sce. Treas.
L'Assomption, 12th August, 1864.
AGRICULTURAL SOCIETY FOR THE COUNTY of temiscodata. HE Annual Jxhibition of the Agricultural Society for the County of Témiszouata, will be held ait $S t$. George do Kakouna, near the Chureh, on the 4th October next, at ten a.m. I. N. Gauvreau, Sec. Treas.
Isle Verte, 20th July, 1864.

## COUNTY OF PONTIAC AGRICULTURALISOCIETY.



HE Annual Exhibition of the Agricultural Socicty of the County of Pontiac will be held on Wednesday, the 5th day of October next, at Clarendon Centre, at ten o'clock a.m. By order of the Board of Directors, G. M. Judason, Sec. Treas.
Clarendon, August 19, 1864.

## COURTY OF ROUVILLE AGRIOULTURAL SOOLETX.

HE Annual Exhibition of this Society will be held on the 23d Soptember next, at ton o'elock n.m., at liougomont, on tho farm of Michel Frégeau, jun., Esquuire.

> J. B. St. Onae, Sce. Treas.

Rouville, 15 th August, 1864.

An Act to change tho period for thronnual mootings of Agrioultural Sociotios in Iower Canada.
 HEREAS the third week in January has been found to be an inconvenient period for the holding of the anmual mectings of Agricultural Societics in Lower Canada: Therefore, Her Majesty, by and with the advice and consent of the Iegislative Council and Assembly of Canadn, enacts as follows:

1. So much of the seventy-ninth section of the act "respecting the Bureau of Agriculture and Agricultural Societics" forming the thirty-second Chapter of the Consolidated Statutes of Canada, as provides that Agricultural Socicties in Lower Canada shall hold their Annual Meetings in the third reek of the month of January in each ycar, is hereby revealed, as to all Societies elsewhere than in the Districts of Saint Francis, Bedford, Arthabaska and Beauharnois.
2. The snid Socictics shall hold their annual meetings in the course of the month of December, in each year, in the manner prescribed in the said act.
3. At such meetings the said Societies may do anything which br the said Act they are authorized to do at their annual mentings in January.

4 This Act shall form part of the said Act, which shall henceforth be read and construed as if the annual meetings of the said Societies were therein and thereby requiredto be held in the course of the month of December.

## EDITORIAL DEPARYMENT.



THE SIGNIFICANOE AND DIGNITY OF COUNTRY LIEE.
E hear a great deal of vague and loose talk about the benuty of the country and the delights of country living, among persons who have had very little experience of the latter, and who possess very
little capacity for the enjoyment of the former. It is one of the requirements of fashion or custom for the better-to-do class of our citizens to spend a portion of the season either at the seaside, or in the upper country; and with many of them this custom has become a necessity; and positive advantages
acerue to them physicully, if not morally, in the change of air, objects of interest, and modes of living. C'meniderations of health, also, induce many fanilies to repair to tho country, whero the children, emanoipated from many of the city restraints, and let loose to a wider range of the free air and bright sunnhine, undoubtedly thrive better, in overy way, than they could possibly do in their narrower city homes.

Most of this large class of our citizens who go wandering up and down at watering places, fashiomblo mountain resorts, and rural seclusions, " seeking rest, and finding" -mhat they may, are abliged to resort to hotels and summer boarding houses, where they are necessarily deprived of many of the comforts of home, such as adequate houseroom and comfortable privacy and retirement. And still, notwithstanding all these privations and discomforts, they return to their city homes in the autumn much bencfitted, on the whole and in various ways, by their said into the rural districts.

But this, we take it, is not what is meant by country living; nor is there in these instances any real appreciation of the meaning or dignity of country life. To appreciate them, one must live in the country, with all the appliances and comforts of home about him; not as a visitor or occasional sojourner, but as one " to the manor born."

It is not impossible, we fully comprehend, for the eitizen-the habitud of pavements and alleys-to enjoy, in brief and occasional visits, the beauty and freshmess of the country, and his enjoyment is not merely poetic and ideal. With true and profound aprreciation he looks upon

[^0]And seeing and feeling all this, he enjoys it with a keen sense of what is charming and transcendant in nature, fully sympa-
thising with tho gentle poct, and comprehending with her that "God is with us on the earth," and that the richest gifts of His hand are to bo found where He has most profusely bestowed them, in the broad, open and smiling country.
llut to know how to live in the country is yuite a different thing, and sure we are that it accords with the experience of many a man who has abandoned the busy marts of trade for the delights of a country home, that in this matter "ignorance is" not " bliss."

There aro certain conditions necessary to the due enjoyment of life in the country which ought not to be overlooked by those who propose to retire from business.Among these wo may mention two as absolutely essential-society and adequate employment.

We have inherited from our English ancestry a love for rural employments and a taste for rural beauty. The suceessful statesman, professional man, merchant, tradesman and mechanic,--all look forward to the period when they can retire from the more absorbing duties of their callings, and in communion with nature, enjoy that repose with which they have long desired to crown their declining years. But there are social natures, and they have long been accustomed to the delights and incitements of social intercourse. Set there men down in a retired conntry home, surrounded, if you will, with all that is lovely and picturesque, or grand and sublime, in seenery-woods, streams, mountains, valleys-a perfect Ar-cadia,-but without the charms of society to which they have been used, and even the glorious country, with all its beauty and inspiration, will soon become dull and prosaic. Books are a great resource for cultivated minds. Literature affords many inspirations and gratifications. But all these charms, even, will become wearisome and insipid without congenial society, the sympathy and friendly attrition of other minds with our own. But the seclusion of the country docs not imply, of necessity, the absence of society; if it did, it would be manifestly unsuited to the most cultivated minds. All over the land there are neighborhoods where this genial and agreeable social intercourse may be enjoyed. Let the man, then, who is seeking a comfortable country home, provide that these refinements and gratifications of social life shall not be wanting. Pure air, bright sunshine, flowing streams, breczy hill-tops, charming
reaches of landscape, excellent roade, trees, flowers, fraits-the whole garniture and glory of the perfect country-are all good and desirable, but to every mind capable of appreciating and loving these things, society is an indispensable need. Wien at the feet, of the Delectable Mountains, or in the " Plain of Jordan that was well watered everywhere, even as the garden of the Lord," we must have friends about us to share our pleasures, to sympathise in our tastes, and to enjoy with us the delights of home.

Not less needful to the full enjoyment of rural life is suitable employment, which shall absorb a due proportion of our time, and impose a due burden of care. There are two mistakes to which men of active lives are liable on their retirement into the country. One is in providing nothing to do, and the other is in laying out too large an amount of work. The American people are somewhat ambitious. We have never had in our employment a raw lad from the Green Isle who did not profess to understand any and all kinds of work, or who would acknowledge his ignorance of the uses of any implement or tool of husbandry, even if it huppened to be yesterday's product of the inventive Yankee brain-ind we have had some experience with this worthy class of able-bodied men of fresh importation. The home-born native smerican is, in that respect, very like the foreignborn. Your New York merchant or mechanic, who has been employed all his life with cotton-bales and their products, or with brown-stone and mortar, retires to the country and commences farming on a large scale. He knows little or nothing of the composition of soils, or the nature of seeds, or the laws of vegetation. He may have had some experience with stocks in Wall street,-Bulls and Bears,-but precious little with farm stock, except through the medium of Washington market. He is over-confident of his agricultural aptitudes and abilities. He undertakes too much. He produces grain and veretables and other farm products at gold prices; they bring in market greenbach prices. His farming is not a profitable speculation, estimating it by money values, or by the satisfaction it brings him, or by any other standard, and he becomes disgusted with the whole thing, and concludes that the country is a humbug, that country life has no dignity, and its only meaning is " vanity and rexation of spirit."

And his estimate is correct, so far as he is himself concerned. He has made an enormous mistake, and the best thing he can do is to sell off his extra five hundred acres, turn his full-blood stock into TenForties, discharge his numerous staff of Irish farmers, subseribe to the Horticulturist, and contine his attention to the "firm of ten acres" he has remaining from his original domain, and employ his time, and the labor of his one fuithful man-servant, in cultivating flowers for his wife and daughters, and raising peas and strawberries for the New York market. He must have employment for his hands and for his mind, and centres for his social sentiments and affections. He may have all these with his house, his garden, his graperies, his stable, his poultry-yard, his fish-pond, his dogkennel, in his modest, well-selected library, around his own hearth-stone, and in the interchange of loving, manly charities and social sympathies. Country life, if rightly comprehended, has a serious significance and an exalted dignity." To those in whose nature is implanted a sentiment that interprets the tender and the loving, as well as the grand and sublime lessons of the universe," a country life is "a life full of joy and beauty and inspiration."

And there is no land, we believe, on which the blessed sun shines in all his course, more beautiful than ours, with larger capabilities for that excellent culture which will secure suitable country homes for the American gentleman. We have, as yet, only begun to develop these inexhaustible resources. Our rural improvements, our landscape gardening, our domestic embellishments, are as yet in their infancy. Enghand, with her hundreds of years of careful and expensive cultivation, her exquisite taste in rural art, her immense wealth of the comparatively few landed proprietors. which is freely and lavishly expended in keeping up and improving her country estates, is far before any other land in the beauty and perfection of her country homes. Years and improving taste in rural affairs must do much for us, as much has been realized in the few years past. With the restoration of the peace and integrity of our land-for which she has our carnest prayers -we can anticipate what may be accomplished in the coming twenty years, by remembering what has been done in the past two decades.
"Whoever lives true life, will love true lore. I learnt to love that Englaud. Very off,

Hefore the day wns born, or otherwiso
Through seeret witulings of the afternoons, I threw my hunters off and plunged myself Among the deep hills, as a hunted stag Will take the waters, shivering with the fear And jinssion of the courso. And when, at last Escaped,-so many $n$ green slopo built on slope
Betwixt me nad the enemy's houso belind, 1 dared to rest, or wander,-like a rest Made sweoter for a step upon the grass,And view the ground's most gentle dimplement: ( $A$ s if God's finger touched but did not press, In making Edglandl) such an up and down Of yerdure,-nothing too much of up or down A ripple of land; such littlo hills, the sky Can stoop to tonderly and the wheatfields climb;
Such nooks of valleys, lined with orehises, Fed full of noises by insisible streams; And open pasiures, where you scarcely tell White dnisies from white dew,-at intervals The mythic oaks and elm-tries standing out Self-poised upon their prudigy of shinde,I thought my father's land was worthy too Of being my Shakspeare's."

Such are the pictures of English seenery, and the intimations of English life, which are presented by the poets. The years may come when famericin literature, moved by like inspirations, and furnished with as exalted themes, shall chant to listening ears in numbers as sweet as these, the beauties of American landscapes, and the happiness of American rural life.-Horticulturist. .
high farming and clean colture.
following aticle froun this chusetts Plowmm, and hope our farmers will heed and give practice to the important truth it contains.]

The farmers who make money in this part of the country by the cultivation of the soil, are those who understand and appreciate the force and meaning of the words at the head of this article. They are those whose native common sense enables them to comprehend the difficulty of making "an empty bag stand upright," and thus save themselves at the outset from all the disappointment and mortification incident to such attempts.

There are good farms all over Massachusetts and elsewhere, whose proprietors are steady, industrious, pains-taking men, upon which, from year to year it is difficult to produce any more than a bare subsistance. Could such farmers be prisuaded to adopt new and improved modes of culture, such as has been proved the best by the experience of hundreds and thousands, both in this country and in Europe, they would be able
to ald to the value of their farms, and in. crease the comforts of their homes with every sadeceding harvest, and lay up a litthe money every year to provide against any pressing emergency in the future.

Fong bushels of corn to the acre and a ton of hay, satisfies the ambition of far too many whose lands are capahle of a production of twice the quantity, just because they will follow in the old routine of their fathers. In the first place they plow twice the land theyean fertilize with the manures made upon the farm: they will not buy a dollar's worth of bone dust, superphosphate, or guano, for fear they shall never see the money it costs come back to them in an increase of production, and they thus subject themselves to the trouble, cost and inconvenience of double the labor, in plowing, tending and harvesting, which their more enterprising neighbors perform in accomplishing the same results.

What is required to accemplish the needed reform in the modes of management upon New England farms, is more faith in the land. The cultivator must come to a realizing sense that profit, which is the sum and substance of success, comes not so much from the carcless cultivation of a large number of acres, as from the thorough cultivation of a few. And in that word "thorough" is included everything which relates to managing, pulverizing and cleaning the land.There are what are ealled "small farmers," cultivating from eight to ten acres of land Whose annual returns in cash rould excite the envy of many who cultivate our largest farms; and yet they accomplish such results under greater disadvantage than the large farmers who achicve little in comparispn. They do not hesitate sometimes to bestow upon the land in a single year, manure to the value of the land itself, and they seldom fail of their reward in the shape of immense crops; while the old fashioned cultivators are toiling over a vast surface to "gather the scanty products of the oid system.

In a season like the present, when farm 'abor is so dear and difficult to be obtained, the advantages of a thorough cultivation of less land over the usual method, by a careless husbandry of a large number of acres, will be most apparent; and there are few who will make the trial of doubling their crops in the manner we suggest who will ever desire to return to the "good old mays" of their fathers.

But high manuring of less land, and thorough pulverization of the soil are not
alono the means of adding to the farmer's gains. Ho must not neglect that other prime essential to good farming, a thorough eradication of the weeds. The richer the land the more rapial will be their growth, and they should never be permitted to obtain the mastery. Butter abamdon every acre, even after the crop is planted, which the farmer fiads he camint keep thoroughly clean, aud confine his effor s to the feer that he can, than suffer useful crops to strugglo with the tares through an enfeebled existence, only to result in a mengre harvest and the resceding of the hand with weeds for future years. The profits of farming are often discussed in public and in private, in tho newspapers and in social circles, and opinions are yory diverso as to the compurativo advantages or disadvantages of the calling, as compared with the other pursuits in life. But the discussion of the question always turns upon the uncrits of the two systems of agriculture, viz., that while the largest farms in good localities, half cultivated, in the shiftless, slovenly manner which too often prevails, barely affords a competence to their owners; it is diflicult to find ono having faith in the land enough to manure it liberally, till thoroughly, and kecp all the weeds from his rows and head lands, whose weans do not increase from year to year with a regularity and certainty which the same amount of capital and labor invested in other pursuits rarely surpass.

## " WHY SHOULD I STAY ON THE FABM ?"



HERE is a great deal suid about farmers' boys leaving the farm as soon as they become of age. They are often advised by agricultural papers to stay on the farm. Now as I an one of that class, it would be interestiug to know their reasons for giving us this advice. We know that the trades pay larger wages, and they are not so labori...us. Then why should we not leave the farm? I know that it is said (as a bugbear to scare us into staying on the farm) that 95 out of every 100 merchants fail, but boys of common sense know that this is false. Agrain it is said that stable-boys and counter-jumpers serve for inferior wages rather than work on a farm. Now I am not aware that they leave the farm to nbtain inferior wages in any instance except it is to learn a trade. Then, of course, they don't expect full wages at first. And as to its being honorable, I conclude they employment of a stable-boy
or a clerk is as honorabls as that of a farmer. Now it is not the hard work that we are afraid of, but it is hard work without sufficient remuneration. If any of the farmers who read the Cultivator can show us why we should atay on the farm, I shall be very grateful. Let us hear the reasons. Fabmer Boy.
[Our correspondent denominates himbelf "Farmer lBoy." If so, then he seems to sot his face toward somo other vacation that he thinks will pay better, whilo he asks those whom he is about to leave, "why they and agricultural papers advise him to stay on the farm?" "The reasons he would have. Some of these shall be given. When a young man with a common education, or little or no capital, but skill and the habits of industry acquired on his father's farm, comes of age, he can, ordinarily, live a more hanpy, cheerful, and independent life on a farm than anywhere else. Farming is a healthful vocation, none perhaps more so. It is promotive of manly feelings and of manly character, and it is favorable to high moral and religious training.

But, says "Farmer Boy," the " trades pay better and are less luborious." This is anssertion, and proof is wanted. Show us that 500 or 100 tradesmen are better off than the same number of farmers.Then he says, "as a bugbear to scare us into staying on the farm it is said 95 of every 100 merchants fail," he adding, "that bors of common sense know this is false." It was the distinguished Dearborn, a Bostonian, after careful observation for half a century, who stated that about 96 of 100 who engage in trade die bankrupt. When our currespondent refutes this statement by such evidence as it rests upon, then will he prove to be false, what " every boy's assertion" utterly fails of doing, as he must see.

Ex-Governor Washburn, now Law Professor in Harvard University, in an address lefore the Worcester County Agricultural Society, in the autumn of 1854 , said he was informed that " of all the merchants who did business on a certain wharf in Boston, within the space of forty years, only six per cent. of them became independent; the remainder either failed or died destitute of property. Of 1000 merchants with whom accounts had been ol ened at one of the principal banks within forty ycars, only six of the number were ascertained to have become independent." An-
other highly intelligens scuthoman of Worcester County, who bad been both a farmer and a morchant, stated, that "from actual inveatigation it had been ascertained that in every 100 traders, but seven succeeded in nequiring wealth." Tho Governor added, "of 111" bankrupts who tonk the benefit of the bankrupt law in Massachusetts, only fourteen were farmers; and of 2550 bankrupts in Nuw lork, only forty-six were farmers."

And then he sail, "when I turn to my own profession [he ig a lawger] in Worcester County, where he then resided, it is painful to recall the number who, within the limits of my own memory, toiled through life in a constant struggle to sustain an appearance which public opinion imposed upon them, and who left at last little clse as an inheritance for their children but a name which a lifelong struggle had preserved from oblivion. In respect of another profession, 'If in this life only they have hope, they are of all men the most miscrable.' What I mean is, that he who allows himself to be dazaled by the brilliant show of others in different callings from his own, then that for wheh he is trained, and, consequently, is led to indulge in fechings of discontent, acts against the light of reason and experience; and above all, the farmer who yelds to such a weakness, overlooks the ineans of independence lying within his grasp."
"Nor do I," he further adds, "in this measure life by worldly gonds-by tons of hay, bushels of grain, or heads of cattle or sheep; nor do I test its value in reference to the books of assessors. I take a young men, as I find most of our farmers' sons in New England, carefully trained in morals, well taughe in the rudiments of knowledge in our free schools, his common sense sharpened by the very expedients to which they may have been obliged to resort in bringing upa large family upon the income of a small farm, and send him into the world with nothing but his hands and a hopeful heart, with which he is to win his way in life. Labor he finds honorable and well rewarded. Soon he becomes, or may do so, the hopeful master of his own acres, with a roof to shelter himself and his wife, who in the contidence of a woman's love has joyfully and lovingly embarked with him on the voyage of life." Good reasons for staying on a farm.
"Farmer Boy," remarks, that " boys do not leave the farm for inferior wages." That may be true; bat when, as a rule,
after yenrs have gone by, the boys that staid on the farm are found the best off, it shows the former class have not dove so well as they would to have remained on farms. The employment of a "stable-boy," he says, is as honorable as that of a farmer. Persons differ in taste; hence wo quote the Roman maxim: De gustibus non dispatundum. Farming, industriously and skilfully followed, will be found remunerative, as ficts in this paper do abundantly show to the reader. We conclude then by saying, that we have presented good and substantial reasons why farmers boys should be contented and remain on farms, and therefore say to all such, 'Let well alone.'] -Buston Cultivator.

## LARGE FARM.

FARMER in England tills 3000 acres under the 4 -course system, as follows: to wheat, 750 acres, barley and oats 750 , pease, beans, secds, \&.S. , 750, and to roots 750 . His live stock is estimated as follows : sheep $\$ 35,000$, horses, $\$ 15.000$, cattle $\$ 12,000$, and pigs $\$ 2500$. Oil-cake and corn bought annually eost $\$ 20,000$, and commercial fertilizers $\$ 8000$. The manure used annually cost $\$ 25,000$. Sheep are his most profitable stock, realizing therefrom $\$ 20,000$ annually. His income is stated to be about $\$ 50,000$ a year.

## BEAUTIFY YOUR HOMES.



S I sit at my window and gaze abroad, my cye mects nothing that may in any wise inspire me to admire the locality much less its scenery.

But this is owing, no doubt, to the sad reality, that many of our farmers lack energy in endeavoring to procure that greatest of blessings, viz., a beautiful home.

How many there are who will spend hour after hour, day after day, year after year, I might say, in carcfully attending to the wants of some pet animal, and at the same time neglect to spend one moment in beautifying that hoone in and through whioh they receive all their earthly happiness.

As we pass through the country our eyes are constantly being brought in contact with old rickety fences, straw covered sheds that have been broken down for ycars, hog pens almost buried in manure, and a dozen other sights too distressing for mortal eye to gaze upon.

Were this only to be seen in a few isolated casce, we might hope that the example given by those who know how to appreciate a beautiful home, might tend to reform the habits and ideas of those who are given to recklessness and enkindle in them a love for the beautiful.

But as it has become so universal we can simply appeal to conscience, and in the name of justice ask, is it right that man should first destroy the works of nature and then place in their stead a forlorn uninviting home?

Go then, farmer, and plant trees, straighten and repair your fences, tear down and rebuild those old sheds, and do everything which lies in your power to render your habitation a blesising to yourself and an ornament to your country.

Your family will never fail to aid you in this noble work, and they will ever rejoice to bring into fond recollection the pleasant scenes of their carly childhood, and will ever commemorate that spot as their dear old home

Then, when the blossoms of your earthly career shall have ripened into the sweet fruits of eternity, posterity will gaze upon the works of your industry, and behold in them, inscribed to your name, a memorial which nothing but the ultimate decay of centuries can obliterate.-Troy Center.

Grass, like wheat, recuires a heavy soil.

EDUCATION OF FARMERS.
HERE is no pursuit in life that requires more thought and care than farming, and there is no man that should nore clearly understand geology and the great laws of nature than the farmer. The earth is not a mere mass of dead matter. It is a vast chemical labratory, filled with various and curious materials. The farmer should know how to select those soils whose mincral composition is best suited to particular crops, and to determine when they contain mineral elements that unfits them for his use. Nothing but a scientific investigation, and a close inspection of soil will enable man to make a discriminate use of manure. Upon his knowledge in this respect depends the great and important guestion, whether he will succeed or fail as a firmer.

He should also understand the gancral principles and rules of mechanism. Although at this age of the world he is not required to mannfacture his orn farm implements, yet he should know the exact principle upon which every implement he uses should be constructed, so that he may know when it works right or w.ong.

A carcful and thoughtful study of these bramches of knowledge will tend to refine our feclings, and elevate man in this scale of his being; besides it can scarcely fail to put money in our pockets.-Rural Amer.

## FARMI OPERATIONS.

## the sun's heat essential for corn.

3VERY farmer who has studied closely the growth of cerea!s, has not failed to mark the wonderful influence which sunshine has upon their growth. The following remarks on the value of warmth in corn culture are from an essay by Mr. Randill :
"As corn, more than any other of our cereals, requires, during the whole period of its grorth, an unstinted supply of sunshine, not only over the surface of the field, but down, in, through and among it, thic economy of planting should always, as far as circumstances will permit, be adapted to this requirement ; the row in the field running as nearly cast and west as may be, that the gromn and lower piortions of the stalks may have the full benefit of the
morning and evaning sun. During the corn growing season, the sun during the middle of the day is at an altitude so nearly vertical, that its rays find their way down through the foliage, and between the rows very readily. If, instad of planting their corn in hills, rowed both ways, fonr feet apart, two stalks in a hill, our farmers would plant in drills, six fect apart, running always cast and west, having the stalks from 10 to 12 inches distant frum each other, they would soon find the benefit of this mode of culture, both in the excess of crops and the carlier maturity of the grain. A prodigious yield of pumpkins may be obtained from a field thus planted, and as the vine of the pumpkin draws more than so per cent, of its nourisment from the atmosphere, they return a good deal more than value received to the soil, in the grate-
ful shade of their broad leaves during the fierce heat of a mid-summer's a day. An old farmer, of long practic-ll experiance, onee argued to us that actual sumshine was by no means a neeessity of the best development of Indian corn, provided it was supplied with plenty of common daylight. In order to test our position fiairly, we planted 20 hills of the ordinary Kentucky gourd seed corn, on the north side of a close board fence ten feet high, and running due east and west. On the south side of the fence, we planted a like number of hills of the same corn. As from April to September the sun rose and set, north of our parallel, of course the corn on that side got a little sunshine in spite of us. Nevertheless with exactly the same culture as its neighbor over the fence received, it only attained two-thirds the height, not half the size of stalk, and matured ten days later, yielding one very modest ear per stalk, while the south side stalks gave us in almost every instance three; one on each stalk being invariably larger than any three we could find over the fence."

## ventilating hay stacks.

T often happens that farmers have to secure sume portion of their hay in stacks, and the compract manner in which they have to stack it, in order to have it keep its proper shape to: ard off the falling showers, does not giveso free an escape of the heat caused by fermentation, as less compactness does in a barn.
The surrounding air is, most of the hours of the day, cooler than the body of the stack, which has a tendency to drive the heat to the centre, the same as the rareffaction of air by fire causes the surrounding air to drive the heat towards the centre of the burning pile. I had last year some clover of large growth to stack, and not curing it as much as usual, Iadopted the folloming plan to ventilite the stack: I first set firmly in the ground a 4 by 4 scantling, sisteen feet long, more or less, according to the size of yourstack, with two pieces of boards tive and a half feet long and sis inches wide, nailed on the top in the form of a cross. A sirr-tooth notch was cutin the ends of each. Four scantlings of like size, one end resting on the ground, and the other in the notches in the cross. These should be set slighthty inclining to the centre, and temporarily kept in check by a rope until the hay should conine them, when the rope may beremored. When the stack has reached the
top of the seantlng, you will have passed the swell of the stack; you may then withdraw the seantling, put some strips of boards over the hole, and top it out. The well hole made by this plan, will be suffioient to relieve the stack of. internal heat, as its termination is so near the top that the surnounting bay will not materially offect its escape. I tried this plan with three large stacks last year, with good results.-Hibian Waleer in Country Gentleman.

MANURING GRASS LANDS AFTER MOWING.
IIE application of manure to grass lands in summer, after the yield of hay has been removed, is a neglected matter, but a subject of great monent ; and it would seem that no one could walk over a hay field, from which the grass has recently been taken, in the heat of a scorching midsummer day, and notice the burning experienced by the newly exposed grass roots, without feeling the importance of the matter, and at once forming a resolution to remedy it. Notwithstanding the apparent necessity and benefits of summer manuring for grass lands, it is seldonn practiced on account of two serious dificulties, viz., a want of manure and a wamt of time for applying it. We think both of these can be remedied, and without entering at length into arguments to show the inportance of an application of manure to morring lands in summer, knowing it must be already understood by all thoughtful far-mers-wiil briefly indicate how it can be done.

The first can be overcome by makiug calculations for it, the same as calculations would be made for any other operation which the farmer considered indispensable as entering into his plans to be carried out during the year. Determine in the fall the number of acres which you intend to top-dress the succeeding summer, and so arrange your plans as to have a sufficient amount of manure left after the planting season is over to perform the work. From four to cight cords-estimating a cart load to be half a cord-will form a good dressing. It should be fine, old yard manure, or a compost of two thirds muck and one third manure, with the addition of ashes or lime, plaster, Sce. Or if from any failure of phans sufficicnt manure is not left after phating, it will be a good plan to occupy a weck-which time, or more, usually intervenes betreen "the carly and late harrest,"
or even in the autumn after the work of harvesting has been fully completed-in drawing muck for the purpose of forming a compost to be used the season following, for the very purpose herein indicated. This is the only way to begin. Farmers very often say they would top-dress their mowing fields in autumn, or immediately after haying, if they only had the dressing, when in fact the only way to obtain manure, and to secure it in readiness for each year's application, is to go to work and obtain it for the first season, and then keep the supply up for the annual demand. In this way, with but little additional labor, and without robbing the other crops of their allotted amount, sufficient manure can be had on hand after haying, for thoroughly dressing two or three acres of grass lind each year. It is not so difficult a thing to find the time for performing this job as it is to obtain the means for doing it; let the manure be at hand, and time will be found for applying it. After the bencfits of a single application are seen, we judge farmers will complain less about having no time in which to top-dress grass fields after haying.

The benefits resulting from making an application of fine, old, well-rotted manure, to mowing fields soon fiter the grass has been cut, are so well stated by the American Agriculturist, that we copy the following, giving it our endorsement, remarking in the meantime, that if the phan were more generally practiced we should see better crops of hay, hear less about fields being "all dricd up" in summer, and find them not to require plowing so often as now :
"First, it is a mulch to the exposed roots and tender shoots, defending them from the scorching rays of the sun, preventing the drying of the surface of the ground, and retaining in itelf the moisture of rains and dews. Second, it furnishes at once stimulating food to the plant cut off in its prime, enabling it to recover quickly from the eheck it reccives from close cutting, which is fatal to many grasses. It is necessary for us to cut the grass just at that of all others, when cutting does the plant the most injury, namely, when it has cxerted all the strengtla of its nature in the production of flowers, and in the preparation for producing seed. A little later, when the seed is formed, many grasses begin to store in their ronts material which they draw unon the following spring, and in which the rigor, and vitality even, of the
plant is maintained through all the vicissitudes of the season. Timothy is a striking example of this. Third, the manure, exposed as it is to moisture and warmth, rapidly decomposes. It is soon covered by the growing grass, and contributes to its growth during the remainder of the season, and soon disappears from the surface altogether. Fourth, it ordinarily induces a growth which warrants cutting a heavy aftermath aud sometimes a third cutting, without injury to the sward."-Maine Far.

## sOAP SUDS.

E presumed that all of our readers are aware that soap suds contain a great deal of fertilizing matter; but they should not apply it in great quantities to fruit tre ${ }^{\mathrm{e}}$, grape vines, de. It often happens that at the close of cuery washing day, the suds are saved and turned around some favorite trees or vines; but in some cases we have known trees and vines to be killed by two frequent applications of soap suds. A washing once a month is as much as any kind of vegetation will bear and grow well.

A writer in the Germantown (Pa.) Telegraph says:

The value of this article as a stimulant of vegetable life, cannot be too highly appreciated. It contains the aliment of plants in a state of ready solution, and when applied. acts not only with immediate and obvious effect, but with a sustained energy which pertains to ferv eren of the most concentrated manures! When it is, not convenient to apply it in irrigationthe most cenomical method, perhaps, of using it-it should be absorbed by some material which may be used as an ingredient in the compost heap. Soda, muck, and other similar articles should be deposited when the suds from the sink and laundry may find its may to them, and be absorbed, for the benefit of crops. In this way several loads of menure, suitable for the support and sustenance of any crop, may be made at comparatively small expense. The highly putrescent character of this fermentable liquid qualify it admirably for the irrigation of compost heaps of whitever material composed. Being a potent fertilizer, it must, of necessity, impart additional richness to almost any material to which it may be added. Try it, and mark the results.

IMPROVEMENT OF SOIL BY CHARRING.


NE of the most permanent and paying improvements that can be made to a garden, in which the soil is heavy and cloddy, although well drained, is effected by collecting chips, brush, stalks, and other vegetable matter, and, during the dry weather of autumn, eharring it into coal. The heat of this coaling will also clear a quantity of sod and the sod itself, and all the coaled matter thus produced, will remain for ages light and friable, easy and safe to work in wet or dry weather.
Another advantage resulting from this simple process of amenduent, is that the light-colored clay becomes dark, absorbing heat, and advancing plauts fully two weeks carlier than the un-ameliorated soil.

Another important advantage is that the charring destroys from the soils, for the season, all the minute, predaccous, scarcely suspected, insects which destroy so $l_{i}$ rore. a proportion of our cultivated crops. The sceds and roots of weedsare also effectively destroyed.

Another is that the mellowed earth never compacts with rains, and the needed air is constantly admitted, without a constanto uecessity for hocing.

The carbonized matter at the open surface absorbs the gases which nutrify plants, much more freely than the unporous clay, and the rains carry down to the roots rich supplies of carbonic acid and ammonia; these impart the luxuriance of color and the rich foliage which alvass follow the use of a charred dressing. Vegetables are more tender and succulent and swecter. A handful of charred stuff applied over a clump of florrers, bulbs, or budding plants, brings out color and growth " like a charm."

Some soils are not bencfited. Perhaps in some cases unfavorable chemical changes are induced by the heat; in others, favorable ones. So far as texture of soil is concerned, a ready test of the adaptation of the process is made by putting a handful of the soil into a small pot or pan which can be covered closely, and placing it in a fire until charred through. It will surprise many a one who has never made the experiment, to find a lump of tough, clayey subsoil, apparently devoid of vegetable matter, after a short roasting, changed in color to nearly black, and so permanently friable that a mire or paste camot be made out of it.

The process of charring requires more of time and watchfulness than of skill. If
the fire passes into the heat of flame, it will consume the crol and leave nothing but valueless brick-red earth, and a little ashes. Some other job should be on hand within view of the charring-pit, so that a constant eye can be kept on it for a day or tro.
The material should be dry enough to burn readily; brush should be cut or broken up, so that it can be packed closely forburning. A shallory trench about two fect wide, and as long as may be necessary, is prepared, and sods are dug or plowed up alongside, and exposed to the sun to dry. When ready to burn, the brush, chips, dic., are packed in closely to a height of about three or four feet, to admit of firing it near the bottom and middle of the pile. Sods are laid over the heap, leaving only openings for draught. Set the fire early in the morning. As the flame breaks out, it is checked and stopped by applying other sods and clay, and the fire is drawn towards unburnt parts of the pile, by making openings there for draught. When all is charred, the heap may be pulled apart to cool, and unburnt sticks can be heaped together with some coals, and covered until charred.

Keep the material thus prepared, for use in the spring as a surface dressing.-W. G. Waring in Country Gentleman.

## CURING OF BEANS.

OCCASIONALLY notice directions for the plantiug and raising of beans, but none for saving them after they are raised. Now it is well known that there is no great difficulty in raising this valuable crop; all it wants is to be planted on moderately rich ground, and kept clean from weeds, as should any other crop, but the curing after it has grown is the difficulty, but no great difficulty after all, if you will follow my directions. Beans are always spoiled, or very much injured after they have grown, by being pulled and left lying on the ground until the vines have become so dry that they may be safely housed. The consequence is that if there comes rain on them the pod is softened, many of hem shell out, and the balance are colored so that they are hardly fit for use. Fou can hardly find in any store town, where such articles are sold, a sound lot of beans; nearly all are more or less damaged, for which there is no necessity. Now for the directions:
'lake a stake about cight feet long,-a fence stake is as good as anything,-and by the use of an iron bar set it firmly in
the ground, then put around the bottom some bits of old rails, broken boards, or brush, to keep the vines from the ground, then cummence pulling your beans, keeping the roots all one way, and when jou have got your hands full lay them around your stake. Ihis operation continues until you have piled them as high as you can reach, after which cap with straw. Now your beans are safe from the storm, and can stand in the field until the vines are cured, and when threshed you will find them clean and bright.-Exchunge.

## WORKING THE DIFFERENT SOILS.

 HERE is much difference in soil. A gravelly soil can be treated with impunity. In some sections plowing is done almost immediately after a rain, and no injurious results seem to follow. There is heavy grain-there are heavy crops throughout the locality. Such soils are of a gravelly nature-commonly dark loam. But keep a plow out of yellow soil sencrally, when wet-even when sandy. Time must be given to yellow soil to drain and dry. As to clay, it is simply destructive to plow it when wet. And the hurt it receives at one plowing, will always last for years, not withstanding the mellowing influence of winter. Frost will help, but will not cure; it takes many years to do that. We have had ample demonstration of this. The ground will be "hubby;" and the axe and pounder will be of little avail. So will the roller and the harrow. They will only make smaller the lumbs, which are still lumps, still brick-bats-dead ground. Nothing grows in them, or but partially. There may be some dry soil at the top, when plowed, or gravel mixed in, enough to support a shrimp vegetation; but the rest is like so much gravel - the hard little grains of baked earth. Here, then, is a delicate thing-the proper time to plow clay soil. To plow dry, is to be equally reprobated. This will also produce lumps, unless it is in the rich, black loam, that will withstand pretty much the wet plowing as we have noted above. A soil just right will stand severe treatment. Plow the delicate, meagre soils, when neither uet nor dry. This is the best time-this is the only time. You will then avoid the ill effects of the two extremes. The ground will come up mellow, if it has any mellow principle in it. And no time is so good as after a rain in midsummer-a day or two.

## GREEN CROPS AS MANORE.

 Lhear every day more and more of plowing in green crops. 'lhis is well-it is excellent. It not only pulverizes the soil by fermentation and tillage, but-and here is the nice point -the crop draws nutriment in tro ways-from the sub-soil and from the atmosphere, and brings it within reach of the grains, among the tillable soil, besides enriching the sub-soil with its long roots (of clover). Thus, the soil that has lain dormant in the depths, is drawn upon for supply, and at the same time prepared (by the tillage of the roots and the nourishment they afford) for corn and other long-rooted grains. But the atmosphere is made to impart most-and this is all clear gain.So beneficial is the green crop, that even a well manured soil is treated to it in some parts of the world-in Italy, for instance. The green crop contains what the soil held in solution, ready for use-and this, by plowing in, gives it back to the soil again, where it is held in solution as before, ready, with increased amount, for the nest crop.

But many farmers are afraid of the labor of plowing in-and the "waste of land," as they term it. Let such men alone-they are lazy-and, in the best case, will do little for the improvement of the world. But, to those who are willing to do their share, and to avail themselves of all the bencfits within their reach, we will say -a green crop may be plowed in, and followed (the same season,) by winter grain, or by turnips, or buckwheat, or other grains.
Particularly is the green crop the thing for uplands, which cannot well be reached by manure in any other way. Peas, buckwheat, clover, are all eacellent crops to grow in. For corn, clover would perhaps be preferable-certainly excellent. Where there is a will to do, the thing will be done. And the plowing in of green crops, especially on uplands, is one of the necessitics of the time, as well as one of its greatest benefits.

TOPDRESSING GRASS IANDS.
$T$ is the practice of many farmers to topdress their grass lands with composted manure as soon as they conveniently can after getting off the hay crop. It is a good practice. The manure protects the roots a little from the rays of the sun, and
the first shower washes some of its nutritious properties into the soil and about the roots of the grass, so that they are stimulated to throw out new sets of leaves, which afford a still further protection, both to plants and the manure. The surface is also sufficiently hard in summer to allow the teams to pass over it without cutting ruts, or being poached by the feet of the animals draving the load.

We refer to this matter at this particular time in order to suggest to those who have grass lands newly laid down,--that is, that have been mowed only one or two years,-not to postpone the application of some sort of dressing, if they desire to continue eutting a remunerative crop for several years. The mistake made by most farmers is, in postponing the topdressing too long. If clover is allowed to seed, and is then cut, the roots die and there can be no further crop from them. If the clover is cut while in blossom, there will be a second crop the same year, and perhaps two crops the succceding year, if the land is rich. Red top and herds grass will continue longer than clover, but the roots of both of these gradually dic out, or yield to stronger grasses, until the whole crop is changed from the swect and nutritious grasses just named, to the wiry "June grass," weeds, or some other plants of little value. All this comes from not topdressing in season. If this were done, even though but slightly, after the first crop is cut, and afterwards, cach year, the roots of the grasses sowed would be kept in a vigorous condition, and our nowing fields would not "run out" as they do now. Under such a practice, moist, and naturally good lands would yield a ton or a ton and a half of hay per acre for cight or ten years in succession, with more certainty than they now yield two thirds that amount.

A neglect of this important item of farm work brings a train of losses that should be avoided. In the first place, the farmer, feeling that he cannot afford to plow so often, allows the field to remain in grass fer several years, when he gets but, a scanty erop, not half, perhaps, what the land is capable of producing under skillful cultivation. The next expense incurred is that of plowing and preparing the snil, and the cost of seed to stock it again. These are all expensive, and if their frequency could be lessened one-haif or one-third, the saving would amount to a handsome sum in a twenty years' practice.

## ERADICATION OF BUSHES AND SHRUBS.

 HEN pasture grounds become overrun with bushes and shirebs, one method sometimes adofted for cleansing the surface is to plow them in. To do this well, will require a very strong plow and a stout team. It should be a plow made for the purpose, and sufficiently strong for three pair of oxen, so that it will turn out partially decayed small stumps, and the green roots of young alders, berry bushes, d.c. As many of these as possible should be covered by the furrows, where they will gradually decay and feed the living plants upon the surface above them.

Everything that has been produced by the soil, and vitalized by the principle of life, possesses the power of assisting the development and growth of plants, and when resolved into its original elements, by the action of chemical affinities, which occurs on the cessation of the vital principle, of adding also to the improvement of the soil.

There are certain constituents involved in the structure of all vegetable substances, which are, strictly speaking, of a nature at once permanent and indestructible. Thus the lime cuntained in certain vegetables, when those vegretables cease to live, is returned immediately to the soil. The ash, or residuum, which remains after burning, possesses, likewise, the same imperishable character, and becomes, as before, a portion or constituent of the soil, and a powerful and indispensable adjunct in the reproduction of future crops of hay and grain. Thus the bushes, whether burned or left to decay by a slower process, are by no means lost to the soil, but impart to it valuable fertilizing agents.

There are some lands, however, which cannot be subjected to the plow, and which must be reclaimed by some other process, which will clear them of the spurious vegetation which prevents a growth of grass. When such is the case, it has been found a judicious plan to cut, and either burn the crop on the soil, or remore it to some convenient situation where it can be changed, by the assistance of chemical agents, or by the natural process of putrefaction-which, in all green and succulent vegetables is soon induced-to the condition of mamure. In this way the expense necessarily involved in the operation of cutting and clearing, will be partly reimbursed by the fond obtained, while the actual improvement of the soil,
resulting from the application of that food -and which is by no means an insignificunt item in such efforts, will be obvious and enduring.

Most shiup ranges are more or less covered with rocks, rising, occasionally, into steep and abrupt acclivities, and filled with small cobble stones, or large embedded boulders. When such is the geological character of the soil, the surface must be cleansed with the scythe, as no effort to invert the sward and cover the vegetable matter beneath the furrow slice can prove otherwise than abortive. Where the bushes are cut clean, numerous new shoots will be throrma out, and if the pasture be slightly overstocked, the sheep and cattle will continually browse them and greatly retard their growth, and in many instances entirely suspend their growth. We have known lands completely reclaimed, and filled with the sweetest and most nutritious herbage, where the bushes were cut as suggested, and then the land stocked with sheep. This is probably the easiest and cheapest method of restoring rocky lands, as on such there will remain many places where the plow cannot operate successfully. In such a case, nothing but a useless and unproitable expenditure of time and effort can possibly ensue.

By thoroughly cleansing the surface of such land, and soring gypsum, lime, wood ashes, and other energetic mineral manures over the surface, a very decided increase of vegetable matter may be produced, and at comparatively small expense. Argillaceous, or clayey soils, it is supposed, are better able to bear repeated applications of lime, than that of a sandy texture, as, in the first place the action of the mineral tends, by its physical action, to disintegrate and loosen the tendency which all clays have to retain the humus, or decomposable matter, left after the decay of all organized substances, whether of animal or vegetable origin.

On low lands, such as bogs and marshes Which have been thoroughly drained, the operation of lime may be highly bencficial, because they are filled with substances which are susceptible of decomposition which the decomposing power of the lime tends powerfully to accelerate and perfect. The effect produced by the solvent influence of the mineral on soils of this description, is far more potent, immediate and beneficial than that of any other manure. But on thin, light soils, if applied too frequently, or in excessive quantitics, it will tend to
impoverish them, and reduce them, after a time, to actual sterility, even though eaoh application may, when separately contemplated in its results, appear to have a favorable effect.

A good pasture is a valuable appendage of the farm, and without which no farmer can comfortably succeed. As yet, far too little attentiou has been given to this important department of the farm.

## LOSS BY SELLING HAY.

 E believe that if farmers would rear and feed more stock, cultivate more corn and roots, and feed the hay they now sell as surplus, there would be a greater profit:
All of the feed produced upon a farmespecially hay- should be consumed there, and the profits be derived from the increase of manure, and the sale of beef, pork, mutton, butter, checse, \&ic.

Some two years ago Mr. Brooks of Princeton, touched upon this subject, in some remarks before an agricultural society in Mass. He said it was his belief that a ton of good hay would make two tons of solid manure, and that the liquid excretions discharged by an ordinary cow or ox, while consuming one ton of hay, with a suitable supply of water, will be admitted by all who understand the matter, to be equal in value to the solid. Thus four tons of manure is produced by a cow while consuming one ton of hay. Four tons of manure are equal by measurement, to one and a quarter cords, weighing $6,400 \mathrm{lbs}$. to the cord, or 50 lbs . to the cubic foot, the value of which is estimated at $\$ t$ per cord, and one ton of hay we will call worth $\$ 6$ to the ton, for feeding stook upon a farm. If these premises are correct, the amount stands thus.
Delivery of 1 ton of hay sold,.......... $\$ 1.5^{0}$
Cash paid for 14 cords manure,........ 5.00
Carting 4 tons or $1 f$ cords manure to farm 6.00
Value of hay for feeding stock on farm,. 6.00
Total,............................... $\$ 18.50$
One ton of hay sold at average price, ... $\$ 15.00$
Loss to balance,...... .................... 3.50
Total, . . . . . . . . . . . . . . . . . . . . . $\$ 18.50$
Thus, we see, by the practice of selling hay, instead of gaining as many believe they do, there is a loss of $\$ 3.50$ per ton, for every ton sold.

We hope that our readers will give a little attention to this matter.

## BREEDERS' DEPARTMENT.

SHALL EASTERN FARMERS RAISE MORE STOCK?


At a late meeeting of the Fitchburg (Mass.) Ag. Suciety, the subject for discussion was-" The expe lieney and economy of raising stock, and making meat in Worcester county." Mr. Isaac B. Woodward gave his views as follows:
There is no part of farming that can be done at a profit unless the person understands his business. When I was twenty years old, I worked for a farmer in this country one year; and had charge of the barn, the owner hardly going there once a month. There was on the farm two horses, four oxen. cight cows and young stock in proportion. As I would report to him that we had a new calf at the barn, he would consider a few moments, and say, "You may fat that calf, or you may raise it, without once looking at the animal to see if it was worth raising or not, and his whole stock bore testimony of that careless or ignorant managenent. There was hardly a decent cow among the herd; full onehalf did not pay for their keeping, and one pair of the osen were no better matched than to harness a horse and a mule together.
The fact is, there are too many farmers who are somewhat like one I heard of once. His wife said to him one day that he ought to shut up the hog so as to fit him; but the man said, " You know, wife, we have to keep a hog to eat the slops, and this one is good natured and never bites the chidren, and I guess we had better keep him." Now I have thought that many farmers raise stock who never get paid for their pains; but, if they get a grood calf to begin with, and then keep it well, I believe that they would find their profits three-fold to what they now are. I am not in the practice of buying cxen and cows, but do buy calres when I can, if they are nice and of the right breed, and I would sooner give away tro than raise one poor one. Within nine years $I$ have sold five pairs of four years old at an average of one hundred and fifteen dollars and sixty cents, and three pairs of three years old atan average of cighty dollars, and I have a pair which are three years old this month, that girth six feet and two inches. Cannot tell how many cows I have sold during the nine years, but have sold a goodly number. Last year I sold four and have four for sale now. I calculate by saising thre heifers I shall get two which will
do to keep for cows. If a heifer does not have the evidence of being a number one cow, I fat her the first fall after she comes to mill. Had five cows come in last spring and summer, four of them were eight ; the fifth one was two last April ; began to give milk that month, but was not what I wished for a cow. I dried her the last of September, feed her until the 22d of December, and her dressed weight was six hundred pounds. She was a grade Durham; if she had been a native, she most likely would not have weighed more than four hundred pounds, I am free to own that I prefer Short-Horn Durhams to any other breed. Some people say that they do not make so good oxen as the Devons; be it so, if you please; I raise them for the profit, and I believe that you may take a pair of Durhams and a pair of Devons when they are calves, and keep them all alike, and when they are four years old the Durhams will bring, under the hammer, twenty-five per cent the most. I will give you the experience of a friend of mine, Mr. F. D. Ruggles, of Hardwick, in this county. I will give his own words: "The heifers averaging in age from seventeen to twenty-two months old, ten in number, and with calf, brought, under the hammer, on an average, $\$ 28.50$ each, or from $\$ 22$ to $\$ 34.50$. They were raised by myself. They had milk, after taking off the cream, of four cows, with an addition of water and meal made into a gruel, and could just as well have raised twenty as ten in the same way. Ten heifers averaging about thirty manths old, and with calf, brought from $\$ 4.50$ te $\$ 62.50$, an average of $\$ 5325$. Six cows, $\$ 60$ each I think, with proper mangement, stock can be raised to a great profit ; especially calves, by giving them warm gruel, with milk enough to color it a little.

I will state here that MIr. Ruggles sold his stock at auction the Sth of last December. I endorse his statement about feeding calves. Have raised quite a number with less than two quarts of milk per day. I am very partial to oil cake meal for young calves, by scalding it with boiling water, about one gill, and mis with their milk. I think there is a fair profit in raising stock. I believe also that we must have the nght breed. I will not undertake to say that raising stock is more profitable than making milk or cheese, or keeping sheep. But making milk would i be too much work for me, and making cheese
too much work for my wife, and as for sheep I am not worth enough to buy a flock at present prices.

## STOCR BREEDING.



EW topics are of equal, and perhaps none is of greater importance to the farmer, than the one now selected for consideration with a few practical surgestions. The question is sometimes put by Massachusetts farmers, who in these latter years, sell their calves for veal, whence is to come the stock for our farms? The reply usually made is, we are to get our cows and osen from Maine, New Hampshire, and Vermont. Accordingly, soon after haying farmers go and buy in, and drive from these States to supply their needs in this direction. This is deemed by them cheaper than to raise calves; for, say they, we can sell a calf six weeks old for enough to buy one nine months old, or a year old, even; hence we thus save cost, care and risk attendant on raising calves; and, besides, where milk is sold by the cau or used for dairy purposes, they camnot afford to use the milk for raising calves. Hence the use and price of milk, with the price of veal calves, must continue to do as they have done, to determine the practical economy of raising calves, not only in Massachusetts, but in the other New England States. Where calf-breeding is out of the question, great indifference ordinarily prevails about the character of the bulls used for sering the cows. Accordingly cows are driven to scrub bulls not unfrequently where a shilling or twenty-five cents only are charged for service, instead of paying for the service of a well-bred stock bull. Now there can be no doubt that where calves are bred for the shambles, to be sold when six weeks old, it is better cconomy to pay for the service of a good bull than to use a miserable scrub, for nothing. There is no apology for using the latter, except when calves are killed and thrown to the hogs as soon as the milk is fit to be used. If calves are to be raised or vealed, ordinarily, those of good sires are worth double those that are begotten of scrubs.

It has been said that farmers and graziers must breed their own stock. Where the calves are to be raised, regard should be had to both bulls and heifers, else it will be difficult to raise stock, a point that never should be lost sight of. the good result of crossing well-bred bulls, on the best selected native stock, as it is popularly called, are too
apparent to all observers to need comment or demonstration. To have good grades, the breeders must have or pay for good bulls, such as have been proved to be good stock animals. It is not every bull that has a good pedigree, that is a good stock animal, as farmers are fully aware. tEvery good husbandman who either intends to raise his calves, or to sell them for veal, is equally interested in employing none but a good bull for his cows, tor the service of which he can afford to pay, and therefore should be willing to pay liberally for the service of a well-bred bull of some breed for which a preference is given, be it Ayrshire, Alderney. Devon, Hereford, or Shorthorn.

The same will apply to the males of other animals, whether horses or hogs, sheep or poultry. "Breed from the best" should be the moto of every farmer; and if himself unable fully to live up to this, then strive to come as near to it as possible. By doing so farmers will find their stock of all kinds improving from generation to generation in value far beyond the increase of the extra cost of breeding and freding ; for ordinarily it costs little or no more to keep good animals than inferior ones. Let these surgestions awaken more interest on this highly important subject among farmers and gra-ziers.-Plowman.

ON THE MANAGEMENT OF POULTRY. OULTRX, we understand to mean ducks of the different species, geese, Guinea fowls, peacocks, turkeys, chickens, \&c., in their different varities. As the space devoted by the Farmer to the treaties on poultry is too small for the whole, I shall speak of the management of those most common.

## TURKEYS AND CHICKFNS.

There is as much difference in the management of these, as there is in the management of children, with about the same results. There, observe the full fed, selfsatisfied, matronly look of that hen! She picks around for her own amusement ; here a worm, and there a bone, or charcoal, or broken oyster shell, and soon she is off to lay her accustomed egg, which, when done, is published to the world, with strong lungs and good digestive organs. Then look on the other side of the picture; the poor, puny pale comb of the ill-fed hen, one leg under her, while she has hardly strength to balance herself with the other. Into all kinds of mischief; the farmer's pest. We
hear him exchaim-"I never saw such hens in my life! We must change the breed! Here we have to huy eges at twenty-five cents a dozen, and have ever so many hens!"

Then, again, hehold the full-fed monarch of the yard! Ilow haughtily he spreads his wing's in the sun's rays, seeming to understand his nobility among his feathered wives, who, from their docile, happy looks, never venture we presume to dispute his right of sway.

On the other hand, did you ever see a lean turkey? If not, I will not mar this page by describing one.

Turkeys need about the same kind of management as that of chickens in respect to food, \&e., though I think turkeys require less care. I have seen the best results from feeding them near the house for two or three weeks, with equal quantities of corn meal and curd from suar milh, and then leaving them to scratch for themselves; save once in a while looking after them with feed to keep them from straying far away.

This kind of food (curd and a little meal, is the best food for young chickens, and even older they prefer it to any other. They should not be kept too long in the coop, as their growth will be very much retarded, and they will be subject to many diseases. From two to three weeks I think long enough for them to remain in the coop.

Corn, without change of food, will fatten poultry; but they will fatten in much less time on corn with boiling water poured over it, and some kernals of wheat seattered through it.-Genesce Farmer.

## A DEBATE ON THOROUGH-BREDS.

 N the 28th of June, the i'ritish House of Commons gave a part of an evening to the discussion of the interesting question, brought up by Mr. Wyndham, member for Cumberland, whether the breed of horses in England is deteriorating or not. Mr. Wyadham held the affirmative, and moved that as the appropriation for "Queen's Plates" no longer answers its purpose by encouraging the breeding of good horses, it should be discontinued. After a good deal of "horse talk;" General Peel, member for IIuntingdom, gave the authoritative opinion of the evening as follors:

General Peel-"I disagree with the opinion that the breed of horses in this
country has deteriorated. I have been for at least forty years a brecder of this class of horses, and if my authority is worth anything it is certainly opposed to that of Mr. Dickenson. [Hear, hear.] The hon. momber's proposal is that the grant for Quecn's plates should be put an end to, " as it no longer encourages the breed of good horses." Now, I requested the hon. gentleman to postpone his motion, and I did so because on the first of next month there is a show of horses in this town, and I believe there will be 400 hunters, 40 thorough-bred horses, with hacks and horses of every decsription. I wanted the Mouse to judge for itself whether the breed of horses had fallen off or not. In the Easter vacation I went to see two studs of horses-one belonging to a noble lord who unfortunately did not run first but ran second for the Derby. He had 36 horses in training, and I think 18 of them would have carried me. I don't think I can give better proof of the quality of the present breed of horses. [Hear, hear.] My other visit was paid to the hon. member for Hythe [Baron Rothschild,] who possesses as fine a stud of horses as can be seen any where. [Hear, hear] So far from the breed of horses having fallen off, I believe there never was a time when thor-ough-bred horses were more surely going back to that size and power which for merly distinguished them. [Hear.] Objection is taken to the racing of two-year-olds. And what is proposed? Why, to do away with all the races for old horses, all the weight-for-age races, and to abolish the Queen's plates. I say it is impossibie to tell to what degree these Queen's plates encourage the breed of horses. You cannot judge of this at all by the number of horses which run for them. After horses have passed their third year, a man is inclined to ask, "What can I do with them?"-"Oh!" he thinks, "I can race them for Qucen's plates; " and this attaches a value to these horses which otherwise they would not possess, and without which they might go out of the country. [Hear.] But then it is said, "These horses ought to run longer distances and with heavier weights." Well, I say in reply that Admiral hous is quite right, and that if you do so, you will have none but common hacks running for Queen's plates-[Hear, hear.] No man would run good horses in four-mile heats with heavy weights for $£ 100$. At the same time, horses now-a-days are as capable of running-four-mile heats with 10
stone on their backs as they ever were. Well, then, 40 years ago I recollect it was thought a miracle when a two-year-old won the leather Plate at Newmarket. Now, nothing else wins. I had much rather that the two-yearsolds did not run in these races, but the fact I mention shows how the breed has improved. If the breed of horses has fallen off, buyers must certainly be extraordinary people, because they now give higher prices for thorough-bred horses than they ever did before.-Look at the prices fetched for yearlings at sales during the present year, including that of the Royal studs at Mampton Court. Depend upon it, the public don't give these higher prices for brutes. [IIcar, hear.] Among the starters for the last Derby there were four or five of the finest horses that have run for many a year-certainly as fire as have run during my recollection. In my opinion there is nothing in the world like a thorough-bred English horse; and if you tried to produce large coach-horses you certainly would not improve the breed. I recollect the match of 200 miles in 10 hours that Mr. Osbaldeston won at Newmarket. Did he choose great hunters or strong halfbred horses? Not at all. Every horse he rode was a thorough-bred, and he did not care what they were; he took any horse which had had any training, and never varied in this choice. He rode each horse four miles, his riding weight being ten stone. One horse carried him four times. It went 16 miles in 32 minutes, and no half-bred horse would ever have done that. Well, then hon. members say, "Why should the public give this money for Qucen's plates?" Now I am prepared to make this proposal to the Government:-They give $£ 3300$ a year in Queen's plates. But they take $£ 7000$ a year in the tax levied on racehorses? Why put an additional tax on race horses? Why not let them pay the exact tax that other horses pay?-If this is done, owners of race-horses dont want the Queen's plates. [Hear, hear.] There is no class of men who enter more into the free-trade spirit than racing men. We have not sought to shut out forcign horses. We have always upheld free trade for the turf, we have challenged foreign horses to come over here and compete with ours: and we have even given them weight because it was thought that they hardly stood upon equal terms with English horses. [Hear, hear.] It is true that in France they have better horses than they used to
have, but these horses are every one of thems of English blood. There is not a single country abroad where country-bred horses are run-all of them are English bred, and buyers come to England for them. [Hear.] I can only say again that I think the hon. member is quite wrong in holding that our breed of horses has deterionated, and is still more in fault in the manner in which he sceks to rectify this supposed deteriorationthat is to say, by doing away with the Queen's plates, the only races left for old horses to run in. [Hear, hear.] If the government have determined to reconsider the question of weights and distances, I only hope that they will consult those who are best judges of what is likely to promote the interests of racing. I should not have ventured to express these opinious if I had any interest in the question ; but, as I no longer own a horse of any description, I have no personal interest in the matter whatever, except what arises from my great desire to assist in any measures that may improve the breed of English horses.[Hear, Hear.]"

After a little more discussion Lord Palmerston closed the subject, by proposing that the Master of the Horse should consider the question, whether a return to great weights and distances would tend to improve the breed of racers; when Mr. Wyndham withdrew his motion and the subject was dropped.

## ARTIFICLAL SWARMING OF BEES.

PROPOSE to give for the benefit of your bee-keeping readers, an outline of a system practiced by me, whereby swarming is accomplished artificially, and the stock multiplied with the same certainty, and by a method similar to that adopted by the farmer in multiplying flocks and herds. What I shall give will be found demonstrably true and entirely practicable, even to those to who use the common box-hive, so that I think no one need suspect me of having an "axe to grind," at anyrate.

When the drones appear in the spring and the hives are full of comb and bees, is the time to swarm them by this process. It never should be attempted after a swarm has issued in the natural way, nor should a second one be obtained in less than twentyfive days after the first.

In the middle of a pleasant day when the bees are abroad, go to the hive and blow into it at the bottom, a few whiffs of
smoke from a pipe of tobacco, or a roll of cotton rags. Let enough smoke go into the hive to arouse the bees and set them to scizing on honey-which will be known by a long buzzing within the hive-but not enough to stupify them. Let the hive stand five minutes, until you blow a little smoke into all, the hives within four or five rods; now gently raise one edge of the hive and blow in a little more, and immediately remove them three or four rods, carefully setting them down under a shade, if it is at hand, bottom up. By this time the bees will have become filled with honey, and will not sting unless you pinch them, or they are otherwise provoked Piace an empty hive or box orer this hive. mouth to mouth; tack together with a couple of nails, and cork all crevices with rags. Now drum or rap on the sides of the bottom hive for about ten minutes; draw the nails, lay the sheet on the ground, and very carefully remove the top box, setting it down upon the sheet. Remove the old hive a few feet away, covering the mouth with a cloth.

Now, having another empty box, turn it down on the sheet with one edge up, after the manner of hiving a swarm of bees; then with a ladle or large spoon, slowly dip the bees from the box that contains them, and pour them down in front of the empty hive. If the weather is very hot, sprinkle slightly with water to prevent the queen from taking wing, and they will run in. Should there be several swarms where the old ones stood, and close to it, it would be well to cover them with a sheet, while this is being done, to prevent the queen from entering them should she chance to fly.

As the bees are running into the cmpty box look out for the queen. She will be readily seen, as she is at this season nearly as large as a drone, and much larger than a worker-bee. Should she not be found immediately, reverse the boxes and try until found for she is among the bees sure, as she is among the first to leave the old hive upon inverting it.

When found, secure her as follows: Cut a piece of wire cloth, say 12 meshes to the inch, two by three inches, roll it round the finger in a form of a cylinder, pinch close one end, and putting the queen into it, close the other end with a cork. She can be safely taken by the wings in your fingers, for she will not sting however roughly she is handled. Now place your old hive on a new stand, at least four rods from where it stood before, and put the bees into it, except
about one pint; these put into a new hive on the old stand, having a hole in the top, one and a half or two inches in diameter, through which the queen cage is suspended by means of a wire two or three inches long, with a block over it to keep out the light.

The shects are now removed from the other hives, and you will find daily additions to the new hive from the old one, as it occupies the old familiar spot, while the old one will retain the young brood, of which great numbers will be hatched daily. The third day, about an hour before sundorn, blow a whiff into the top of the new hive, draw up the cage and release the queen-put her by the entrance, and she will go in at once. Considerable comb will have been already built, and by morning the breeding cells will be stocked with the eggs. Thus you will have swarmed your bees certainly, and without watehing them, or of running the risk of their leaving for the roods.

By one who has performed this operation a few times, the queen may be found in three minutes, by simply turning up the hive and blowing the smoke into one side, looking for her among the bees running up and over the opposite side, accomplishing the feat of artificially swarming a hive from the old box, in the necessary to hive a natural swarm.

One word to those who practice artificial swarming by this method or any other. Queen cells can be procured by simply caring for the queen, as above, without removing her from the hive. This expedites the business and aids greatly in preparing queens; since it obviates the necessity of removing her to a strange colony. Some will ask how a queen will be supplied to the hive? In answer I will say, the bees will do this by raising one from the other worker brood already lain by the queen just removed.-Michigun Farmer.

## sOLLING TESTED ON A DAIRY FARM.


R. Willard, of the Utica Herald, in his interesting notes from the dairy region, gives the following account of the farm of Dr. Wight, a successful and experienced manager, and one of the owners of the cheese factory described by us in the last annual register of rural affairs.

The intervale lands along the borders of Mohawk vary somewhat in character and fertility, but, from the earliest settlement,
have always been in high repute. At Whitesboro, these flats are broad and are divided up into highly cultivated fields. Dr. Lyman L. Wight's farm lies about a mile west of the village, and consists of 2.40 acres, twothirds of which are flats. The farm has been used for grain, but is now carrying 50 cows. It is finely locatel, and the grass, eorn, and vegetables were looking unusually well for the season. On the newly seeded meadows the yicld was estimated to reach 21 tons, but old meadows were not doing so well.

The soil is a sandy loam, and is well adcapted to grass. The meadows will run her about 8 years, when they need plowing and re-seeding. The higher grade of flats are manured, but the lower, on which the waters from the river annually leave a deposit and fertilizing material, do not require it. The islands on the river bank are some $2 \frac{1}{2}$ feet higher than those further back, and some trouble has ensued from the water flowing back and up the ditches. This is now prevented by an arrangement of gates that will allow the water to pass down, but prevents it from flowing up from the river. These gates cover a space of $6 \pm$ feet; and one single gate 13 feet high by 13 feet wide, costs no less than $\$ 200$.

The Dr. made an interesting experiment last year, by adopting in part, the system of green-soiling for 30 cows. Twenty acres were employed for the purpose of producing food for these cows, and were divided up in the following manner: pasturage, 15 acres; clover, 3 acres; rye, $\frac{1}{2}$ acre: oats, $\frac{1}{2}$ acre; sowed corn, 1 acre. The rye is put in the previous season, by the last of August or first of September, and is therefore ready to be cut early in the season following. By the time this is used up the clover will be large enough to be used, and after that the oats, which are sowed carly in April. The corn fodder comes last, and different parts of this acre of land are sowed with the corn, so as to have a succession in food, the earliest corn being put in by the 5th of May. In this way twenty acres are amply sufficient to keep the cows in feed until some time in October, when they were turned into the after grass. The Dr. is of the opinion that the cows do as well if not better, botin as to health and yield of milk, as they would at pasture, and that when land is valuable and arable, or not adapted to this system, it can be employed with profit. The cows were generally fed by 6 o'clock in the morning, and remained at their feed about three hours, when they were
turned into the pasture, and at three o'elock p.m., they were brought up and received their afternoon's meal. T'o cut the feed and take charge of the cows, it takes one man's work about half his time.

It may be observed here that it usually takes from two to three acres of land to pasture a cow, while, by the system adopted as decribed above only two-thirds of an acre suffice. The system of green-soiling is not generally understood, nor are its advantages appreciated by the dairy farmer. All eaperiments of this kind are valuable, and it is well worthy of thought and investigation whether the smaller farms, under this system, may not be enabled to keep quite as much stock, realizing more profit annually than farms of double and treble their size under the ordinary methods of culture.

Dr. Wight grows mangolds to some extent for stock feeding, and prefers them to other roots, taking the cost of cultivation and the relative nutritive value in account. We look over a field which appeared to be forward for the season, though considered by the Dr. as a very ordinary crop, their growth having been checked by the dry weather. On this farm there is a large handsome barn, fitted up with hay scales and hay press, where hay is pressed and put up in bundles for the market. The cows on the farm are grade cattle, being a cross of Durham and Devon, and were yielding on an average 27 pounds of milk each per day. The farm is one of the best in this locality, and indicated neat, thorough and intelligent culture.

## POOR PASTURES AND SHORT FEED.

HE dry weather, which by its long continuance has parched the fields and dried up the pasture lands, cannot fail to have a material effect in lessening the quantity of butter and cheese. But the worst effect will be upon the animals themselves which produce it. Unless the utmost care is observed that the milch cows shall not be stinted in their food, they will suddenly dry off, and no amount of good pasturage afterwards will bring them up again the present season to their average quantity of milk. It is an unwise cconomy, which under any circumstances deprives a milch corv of an abundance of food, and therefore what the pastures do not supply, must be dealt out with an unsparing hand, even if it requires some of the best hay from the barn, which has been stowed for winter use. It may seem to be a losing business, but it will prove to be a saving busincss at the end.-Plowman.

## HORTICULTURAL DEPARTMENT.

## THE APPLE.

\%HE flowers of the apple are perhaps the most beautiful of any tree's, so copious and so delicious to both sight and scent. The walker is frequently tempted to turn and linger near sonic more than usually handsome one, whose blossoms are two-thirds expanded. How superior it is in these respects to the pear, whose blossows ${ }_{s}$ are neither colored nor fragrant.
By the middle of July,"green apples are so large as to remind us of coddling, and of the Autumn. The asward is commonly strewed with little ones which fall stillborn, as it were-Nature thus thinning them for us. The Roman writer Palladius said: " It apples are inclined to fall before their time, a stone placed in a split root will retain them." "Some such notion, still surviving, may account for some of the stones which we see placed to be overgrown in the forks of trees.-They have a saying in Suffolk. England :
"At Michaclmas time, or a little before, Half an apple goes to the core."
Early apples begin to be ripe about the first of August: but I think that none of them are so good to eat as some to smell. One is worth more to scent a handkerchief with, than any perfume which they sell in the shops. The fragrance of some fruits is not to be forgotten, along with that of flowers. Some gmarly apple which I pick up in the road reminds me by its fragrance of all the wealth of Pomona-carrying me formard to those days when they will be collected in golden ruddy heaps in the orchard and about the cider-mills.

A week or tro later, as you are going by orchards or gardens, especially in the evenings, you pass through a little region possessed by the fragrance of ripe apples, and thus enjey them without price, and without robbing anybody.
There is thus about all natural products a certain volatile and ethereui quality which represents their highest value, and which cannot be vulgarized, or bought and sold. No mortal has ever enjoyed the perfect flavor of any fruit, and only the godike among men begin to taste its ambrosial qualitics. For nectar and ambrosia are only those fine flavors of every earthly fruit
which our coarse palates fail to perceivejust as we occupy the heaven of the gods without knowing it. When I see a particularly mean man carrying a load of fair and fragrant early apples to the market, I seem to see a contest yoing on between him and his horse on the one side, and the apples on the other, and, to my mind, the apples. always gain it. Pliny says that apples are the heaviest of all things, and that the oxen begin to sweat at the mere sight of a load of them. Our driver begins to lose his load the moment he tries to tran-port them to where they do not belong, that is to any but the most beautiful. Though he gets out from time to time, and feels of them, and thinks they are all there, I see the stream of their craneseent and celestial qualities going to heaven from his cart, while the pulp and skin and core only are going to market. They are not apples, but pomace.
There is another thinning of the fruit, commonly near the en of August or in September, when the ground is strown with windfulls; and this happens especially when high winds occur after a rain. In some orchards you may see fully threequarters of the whole crop on the ground, lying in a circular form beneath the trees, yet hard and green-or, if it is a hill-side, rolled far down the hill. However, it is an ill wind that blows nobody any good. All the country over, people are busy picking up the windfulls, and this will make them cheap for early apple-pies.
In October, the leaves falling the apples are more distinct on the trees. I saw one year, in a neighboring town, some trees fuller of fruit than I remember to have ever seen befo:e, small yellow apples hanging over the rowd. The branches were gracefully drooping with their weight, like a barberry bush, so that the whole tree acquired a new character. Eveu the topmost branches, instead of standing erect, spread and drooped in all directions; and there were so many poles supporting the lower ones, that they looked like pictures of banian trees. As an old English manuscript says, "The mo appelen the tree bereth, the mo sche boweth to the folk."
Surely the apple is the noblest of fruits. Let the most beautiful or the swiftest have it. That should be the " going" price of apples.

The time for wild apples is the last of October and the first of November. They then get to be palatable, for they ripen late, and they are still perhaps as beautiful as ever. I make a great account of these fruits, which the farmers do not think it worth their while to gather-wild flavors of the Muse, vivacious and inspiriting. The farmer thinks that he has better in his barrels, but he is mistaken, unless he has a walker's appetite and imagination, neither of which can he have.
Such as grow quite wild, and are left out till the first of November, I presume that the owner does not mean to gather. They belong to children as wild as them-selves-to certain active boys that I know -to the wild-eyed woman of the fields, to whom nothing comes amiss, who gleans after all the world-and, moreover to us walkers. We have met with them, and they are ours.-These rights, long enough insisted upon have come to be an institution in some old countries, where they have learned how to live. I have heard that "the custom of grippling, which may be call apple-gleaning, is or was formely, practiced in Hertfordshire. It consists in leaving a few apples, which are called the grippl.s, on every tree, after the general gathering, for the briss, who go with clim-bing-poles and bags to collect them."

As for those I speak of, I pluck them as a wild fruit, native to this quarter of the earth-fruit of old trees that have been dying since $I$ was a boy and are not dead, frequented only by the woodpecker and the squirrel, deserted now by the owner, who has not faith enough to look under their boughs. From the appearance of the treetop, at a little distance, you would expect nothing but lichens to drop from it, but your faith is rewarded by finding the ground strewn with spirited fruit--some of it, perhaps, collected at squirrel-holes, with the marks of their teeth by which they carried them-some containing a cricket or tro silently feeding rithin, and some, especially in damp days, a shelless snail. The very sticks and stones lodged in the trectop might have convinced you of the savoriness of the fruit which has been so eagerly sought after in past year.

Almost all wild apples are handsome. They camnt be ton gnarly and crabbed and rusty to lonk it. The suarlicit will have some redecming traits even to the cje. Tou will discover some evening redness dashed or sprinkled on some protuberance
or in some cavity. It is rare that the Summer lets an apple go without streaking or spotting it on some part of its sphere. It will have some red strains, commemorating the mornings and evenings it has witnessed; some dark and rusty blotches, in memory of the clouds and foggy, mildewy days that have passed over it; and a spacious field of green reflecting the general face of Nature -green even as the fields; or a yellory ground, which implies a mild flavor-ycllow as the harvest or russet as the hills.

Apples, these I mean, unspeakably fair -apples not of Discord, but of Concord: Yet not so rare but that the homeliest may have a share. Painted by the frosts, some a uniform clear bright yellow, or crimson, as if their spheres had regularly revolved, and enjoyed the influence of the sun on all sides alike, some with the fantest pink blush imaginable, some briudled with deep red streaks like a cow, or with hundreds of fine blood-red rays ruming regularly from the stem dimple to the blossom-end, like meridianal lines, on a straw colored ground, some touched with a groenish rust, like a fine lichen, here and there, with crimson blotches or eyes more or less cenfluent and fiery when wet, and others gaarly, and freckled or peppered all over on the stem side with fine crimson spots on a white ground, as if accidentally sprinkled from the brush of Him who paints the Autumn leaves. Others, again, are sometimes red inside, perfused with a beautiful blush, fairy food, too beautiful to cat, apple of the Mesperides, apple of the evening sky! But like shells and pebbles on the seashore, they must be seen as they sparkle amid the withering leaves in some dell in the woods, in the Autumnai air, or as they lie in the wet grass, and not as they have wiltel and faded in the house.- Thoreau.
PLANTING EVERGREEN TREES IN AJGUST and september. VERGREENS are always in leaf, and it is therefore important, in planting, to sccure a quick action of the roots, in order to sustain the foliage. Farly in the spring the ground is cold and wet, and the roots cannot take hold; and therefore sharp, drying winds are very likely to exhaust the tree of all its juices before a new supply can be furnished. Late fall planting is still worse-for the roots remain dormant a much longer time, and cvaporation from the leaves is goins on, to some esteut, throughout the winter. In May
and June the ground becomes warm-the roots are ready for action, and consequently, the time is favorable for removal.

But the conditions are even more favorable in August and September. At this season the ground is thoroughly warmed through, and as the night begins to be cold and dewy, the earth gives, as it were, a gentle bottom heat. It is surprising to find with what readiness and vigor the roots now act-often showing signs of growth within three days after planting. There is this additional advantage over many,-
that the tree has made all its growth for the season, and early matured its wood,so that it is not in need of such a flow of sap as when the young growth is starting, or is succulent, and the plant has need of all its energies. During the autumn months, the earth being warmer than the atmosphere, while the wood is simply maturing, not growing, the roots on the contrary are in vigorous action, and will insure sufficient streugth to resist the succeeding winter, and also the best possible condition or subsequent growth.-Mass. Plownan.

## DOMESTIC ECONOMY

## SOUPS.

为HILE deemed indispensable to a fashionable dinner, are yet one of the most enconomical forms of food. Not the most digestible, however, as used to be deemed when prepared at random for weakly and sick people. It is excellent food for laborers in cold, but too stimulating in warm weather.

First rate soup, like all first rate articles requires the best of ingredients. But the neck, shanks, any good scraps of fresh meat or old fowls, will make soup as well as the most sightly pieces or youngest birds. Let your meat-becf, mutton, fowls or game, be cut into small pieces, and the bones cracked up rell. Put the picces, into a pot and cover them with as much water as will stew them into rags. This process should be a slow one, and they should be stewed very low; then pour in some boiling water, and liecp the soup boiling to within a fer minutes of serving. Skim it entirely free from grease. Take out whatever you wish to set away for the morrow before you put in the vegetables, as they, in warm weather, gire it a tendency sour. Now cut up vegetables (previously conked by themselves) in it, slice potatoes, okra, turnips, carrots-any regctable you like, or rice or barley. If there is any regetable, for instance onions, cabbage, or tomatocs, which you wish to give distinctive character to your soup, use that regetable entircly, in connection with potatoes and okra, which gives consistence without any very discrnible taste.

If your soup iacks richness, a fers spoonsful of dramn butter will help-if consistence, some gelatine may be dissolved in it. a bouquet of srect herbs is indispeusable. A rich
soup is sometimes flavored with wine or catchup. We think it better to offer those articles to each person, as also the castor at the table.

## White Soup.

Take tro large old fat chickens; chop upthe pieces and mash the bones. Put in a few slices of boiled ham, if not too strong. Stew slowly until in rags. Then pour on three quarts of boiling water, and boit it down to a half gallon. Chop up the chick m 's heart, the yolks of six hard-boiled egess, and stir with a teacup half full of grated bread crumbs, into a cup of rich, swect cream; strain the soup, return it to the kettle with a bouquet of herbs, boil five minutes, stir in the cream, etc., and take it off quickly.

Any forl or soup of game may be made in the same way. Instead of the thickening prepared as above, you may boil in it some rice, on use vermicelli or macaroni, previously simmered until soft.

## Vegetable Soups.

May be made of veal, becf, mutton, fowls or game-the single regetable you wish being used in it-or,

You may boil any delicate regetable, such as corn, peas, asparagus, etc., in water until they are nearly dissolved. Always use with them a little rice. When strained, put in a sponnful of cream, mixed with the beaten yolk of one or two egss, and a piece of butter rolled in flour.

## Gumbo.

Take alarge fowl. cut in piecos, beat uprand fry very brown, and make with it a highly seasoned and rich gravy. Cut into it a half gallon of tender green okra, as many ripe tomatocs, and pour on three pints of boiling water; boil until the regetables are of the softest consistency, and chicken in rags.

Stii in a heaping tablespoon of young sassafras leaves, duicd and reduced to a powder. Strain into your tureen hot. When well made, this will almost rope like candy. Pepper, onions, and sweet herbs are used profusely in this soup, with salt to savor it.
soup made of equal quantities of rice and corn, is very palatable. See vegetable soups. Egg Soup.
Make a rich custard; instead of swectening, season with salt, pepper and savory herbs. Melt a lump of butter-a piece as large as a walnunt, to every quart.

Potatoes and Dry Beans.
Each make a good family soup in winter. You may use slices of pork or old ham, not too strong, instead of fresh meat.

Oyster Soap.
Mix one pint of water with whatever liquor you can drain from tro quart cans of fine fresh oysters. When this liquor comes to a full boil, put the oysters in, and boil until nearly done; pour in then a quart of fresh milk. Season with salt, pepper, and a blade of mace, if you like it. If you like this a little thick, powder, a half dozen erackers fine, and sift them into it

## value of oatmeal.

即N Ecotland, the nourishing quality of oats, both with respect to man and brute, is well known. With respect to oatmeal, the people of England seem © to bave fallen into an egregious crror respecting its qualities; from its producing, in some a sensation of heartburn, or heat at the stomach, they have condemned it as heating; and from a mistake in regard to the mature of diseases, have supposed it to give cutancous affections-not more frequent in Scotland than in other countrics ; and which indeed, arise from no peculiar ailment, but almays from a contagion communicated from one person to another. Besides the most eminent French physicians speak of oatmeal as cooling, and conseçuently prescribe it in fever; and the inhabitants of the Fast and West Indies prefer it to arrowroot, when laboring under inflammatory diseases.Though oats be the food of the horses in England, yet the people of Scotland live principally upon it; and in no country in Europe do we find a more healthy and virorous race of men. Oatmeal porridge is the best food for children; and, as an old author has justly oberred: "It is the king of spoon meats, and the queen of soups, and gratifies nature besond all others."-Dr. Iihitlnoo.

Small Tea Came.-Scren ounces of flour, four and a half ounces of butter, thres
ounces of white sugar, the peel of one lemon, the yolk of three eggs, worked well together, rolled into small rolls, and pressed on one side with a linife, and then baked.

## HOW TO PICKLE CUCUMBERS.



U'T the clicumbers from off the vines without bruising the stems; lay them carefully in a basket; take them to the cellar; sort and pack them in barrels, putting different sizes in separate barrels, spread a layer of salt between each layer of cueumbers; there should be sufficient salt to entirely cover the pickles betreen the layers. Continue to pack the cucumbers daily as they are picked, never using any but fine cucumbers, discarding all that are crooked or of slow growth. Keep boards over the pickles, and weight to press them under the brine .hich will be formed without the addition of water, with the juice extracted from the fruit by the salt. Pickles packed in this manner may be preserved for years, if there are no impurities in the salt; but if the salt is mixed with lime, they will soon soften and spoil. In two months after the barrel is filled, take them from the brine, freshen and green. To green cucumbers, prepare alum-water; put the pickles in a vat or boiler, lined with tinned copper; heat the alum-water, and pour it over the pickles. This is the process which is usually cm ployed by pickle-makers, except that they throw steam into the vats to heat the alumwater, and if managed properly the pickles may be greened with less action of copper than when scalded in the usual method in bright brass kettles. Take the pickles from the vat when a little green, and pour over them rater boiling hot. If not greened sufficiently, xepeat the hot water until they are the desired color, and when cold, put them in good rinegar, let them remain until quite soured; then change to pretty strong vinegar, which will keep the piekles hard and sour: add to a barrel six large peppers, without bruising, and keep the pickles under the vinegar with weights.

## ST. ThaURICE AGRICJLTURAL SOCIETY.

HE Amual Exhibition of the County of St. Maurice Arricultural Socicty, mill take place at Yamachiche on the 12th of October next.

By order,
T. E. Min.ot,

Sec.-Treas.

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[^0]:    " the skies, the clouds, the fields, The happy violets hiding from the roads, The primroses run down to, carrying gold,The tangled hedgerows, where the corrs push ollt
    Impatient horns and tolerant churning mouths
    TTwist dripping ash-boughs,-hedgerows all alive
    With birds and gnats and large white butterflies,
    Which look as if the May-flowers had caught life
    And palpitated forth upon the winl.
    Hills, vales, woods, netted in a silver mist; Farms, granges, doubled up among the hills, And catle grazing in the watered vales, And cottage-chimneys smoking from the wood, And cotinge-gardens swelling everywhere, Confused with smell of orchards."

