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THE

VIGNERON;

AN ESSAY

ON THE CULTURE OF THE GRAPE

AND

THE MAKING OF WINE.

By I. G. HUTTON,

HONORARY MEMBER OF THE N. YORK STATE SOCIETY
FOR THE PROMOTION OF AGRICULTURE AND THE ARTS.

— Deus nobis felicia vini
Dona dedit, tristes hominum quo munere fovit,
Reliquias ; mundi solatus vite ruinam.

PRÆDIUM RUSTICUM.

WASHINGTON:

PUBLISHED BY THE AUTHOR, F STREET.

1827.

DISTRICT OF COLUMBIA, to wit :

BE it remembered, That, on the 22nd day of November in the year of our Lord one thousand eight hundred and twenty-six, and of the Independence of the United States of America, the Fiftieth, ISAAC G. HUTTON, of the said District, has deposited in this Office the title of a Book, the right whereof he claims as Author, in the words following, *to wit* :

The Vigneron ; an Essay on the Culture of the Grape, and the making of Wine. By I. G. HUTTON, Honorary Member of the N. York State Society for the Promotion of Agriculture and the Arts.

“——Deus nobis felicia vini
Dona dedit, tristes hominum quo munere fovit,
Reliquias ; mundi solatus vite ruinam.”

PRÆDIUM RUSTICUM.

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L. S.

In testimony whereof, I have hereunto set my hand, and affixed the public seal of my office, the day and year aforesaid.

EDM: I. LEE,
Clerk of the Dist. Columbia

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Advertisement.

Ms. W. 2/13/04.
“*The Vigneron*” contains the result of several year’s inquiry and experience relative to the culture of the vine. The form in which it is now presented to the public is thought to be more suitable than prose to the desultory nature of the subject. Instruction cannot be gained so well from books as from practice.

The object of this work is, therefore, not only to elucidate the science of this branch of Agriculture, and in part to harmonize the conflicting opinions which have been expressed relative thereto; but, if possible, to induce the reader to consider the importance of the subject, with a view to the reform of those evils which the culture of the grape, and the substitution of wine for other spirits, are well fitted to remedy. Critics and literary cutthroats out of the question, this production is submitted to the judgment of those who are more particularly concerned with its recommendations.

THE VIGNERON.

COLUMBIA'S wealth I sing, as yet unknown,
Tho' doubtless since the earth last chose her poles,
Binding them fast in dreary circling ice,
And the sun shed on thee a genial ray,
And thy Almighty planter bade arise
The first tall growth; doubtless on it the vine
Hung her blue clusters in the autumnal sky,
Food for the passing bird, or the sparse race
Of man or beast inhabiting beneath.
But history shuts her eye on all the past,
And seals from keenest search the narrative
Of ages, numberless, forever gone.
In this what saith the Providence of Heaven?
'Look to the present and the coming days,
'Let useless speculations be restrained,
'And take the real blessings of my hand.'

Our fathers thought not of the purple stream
That asked their leave to flow, and was denied,
While the tall forest tree murmuring bore
The pendant pirate load of blushing grapes.
Then the vine roamed aloft from tree to tree,
Enamoured of the sweet refreshing breeze,
And all beneath was dreary, dank, and wild.
There crawled the deadly snake; and the wild beast
Rushed from his covert, when thro' matted gloom
The red man's arrow found his sly retreat.
Perched on the lofty branch, peering with caution,
The squirrel, skilled to store his winter's food,
At man's approach, screams loud his shrill alarm.

Our fathers came not from a land of wine ;
Hence was extermination soon decreed
On the tall forest, and the spiral vine.
The clanking ax, and all consuming fire
Allowed the glebe to drink the sun's full rays ;
The plough, the hoe, disturbed the long repose
Of our old mother, she who feeds us still,
And frequent ears of corn their toil repaid.

Soon as the desert took the name of home
The apple tree was planted : patience was then
Coeval with its long minority.
Year after year blushed but a virgin bloom :
Year after year in vain the search for fruit,
Yet, let me not be thought Pomona's foe,
While half her gifts I spurn as meagre trash,
Unworthy of the palate, or the mill,
Or the rich pastry shrine fair fingers form.
Should now the orchard feel the feller's stroke,
Commissioned only to lay low the vile,
What havoc would ensue ! yet wish I not
To pluck up apple trees to plant the vine,
For this is needless. There is room for both.

Even thou, Columbia, forty measured miles
Reach round thy quadrilateral domain,
Yet bound thy reason's wishes ; though around
The borders of her giant sisters spread,
From chill St. Croix to the far western Lakes,
Or inland Oceans, (such they may be called,)
To where Geography's in childhood still,—
Fabulous land, and rivers still unknown,
Save to the adventurer, whose *narrative*
Makes us, admiring, wish we had been there ;—
Vast copper rocks, shewn but by Angel guides,
And islands where the sand is sparkling gold,
Of which the sordid hand that dares essay
To touch a grain, falls palsied by his side,
And drops the tempting dust. The ghostly guard

Advancing, makes the hapless man his prey,
Unless with speed he hastes to his canoe,
(His fragile vessel now his only hope,)
If, haply, in th' unfathomable deep,
The giant spirit, striding at his heels,
May get beyond his depth, and cease pursuit.
Let him return and guard the baneful coast;
Our little District boasts a better soil.

Seek ye, who wish, Missouri's distant source,
Or the broad Mississippi's bayou'd shores;
Or the Columbia, where Pacific waves
Receive her tribute, brought from unknown lands.
Search out the land, and may you there find rest:
I envy not, nor offer hinderance,
Since thou, Columbia, from thy stony hills,
Canst shed a purple rill of rich Tokay,
And fill the ample vat, at labour's call.
Yes, I have tasted it. What is't to me,
If others choose the wine of France or Spain;
The taste, untutored at the vintner's school,
Prefers it to the most "particular" brand.
And wo is he who swallows liquid fire,
Rejecting unsophisticated wine;
Wo to the bubbling witchcraft cauldron,
The styx where wholesome food to poison turns!
What taste could relish it? what infant lip
But turns in agony from such a draught?
Mix it with sugar and the lemon's juice,
Warm it, or cool it, and dilute it well,
And let the nutmeg hide its odious stench,
Then it goes down—and thus go fetid drugs.

See ye the yellow ague shake the land
From Dan to Beer-sheba? freezing in summer,
Or, maugre winter's wind, drying the bones
With fire, I ween, that dropped from whiskey still.
As the corporeal, so the mental man
Feels the dire influence of the maddening draught,

And latent rage lays wait for slight affray
To kindle into deadly raging fire.
Who has not grieved for Martin? who has checked
The glow of indignation 'gainst the wretch,
By whiskey heated up to murderous wrath,
Who pierced his bosom with the jagged slug.
The innocence of childhood is not safe,
Nor woman's delicate endearing form.
When the drunkard rages, worst of ravenous beasts,
Father and husband are unmeaning names.
The tie he severs by th' exploding spark.
Vengeance cries loudly; but th' unpleasing sound
Suits not my present strain:—yet take one glance
One transient glance. Nay start not back! approach
And with determined hand remove the cause.

View, in one mingled mass the still's product,
For but this age of ours, a spacious sea!
In it the ghosts of all the slain behold,
Writhing in all their various agonies,
Like the deep groaning Kiraucan lake.
There, midst a squalid group on yon black knoll,
The widow sighs. There flows a rill of tears.
There orphans sit, whose fathers are not dead.
Their cries for bread are lost in the wild roar
Of bitterest torment; for beyond you see
The brothel's turmoil. In the noisome flood,
Sinks, momentarily, the sad deluded wretch,
And momentarily the lifted head eructs
In nauseous accent, the dank poisonous fumes;
And notes of mirth and strife together rise,
With vomitings and groans of deadly sick,
And unrepenting desperate remorse
Yell hideous discord.——

What to the healthful stomach can a flood
Of sheer erosion do but sap its powers?
Nature, offended, throws up her commission,
And art's crude fire urges the nice machine,

For a brief time, with more than natural speed.
Complain ye of Dyspepsia? endure
Your real sufferings, sprung of fictitious wants,
Alike unknown to temperate toil and fare.
Need your craz'd wheels of life essential oil?
Are ye so spiritless ye must drink spirits?
Eschew such tinkering! learn to prize heaven's gift.
Reject not "wine, which cheereth God and man."
Unlearn, depose your fictitious nomenclature,
And learn to relish the true native juice,
Nor ask th' adulterous tincture from the still.
Then undulating hills, in prospect wide,
Shall hold sojourner's eyes in rapturous gaze
On vines entrusting to the chesnut pole,
The wine-grape's cluster and the desert's pride.

He who is merry with excess of wine,
Is merry.—Crackling thorns under the pot,
And the fool's laughter, leave no glowing coals;
No pleasing recollection, none of the warmth
Of virtuous energy, exalted thought,
Or generous purpose. Mirth is hungry fare.
And let him who has been deceived with wine
Hence forth repudiate its mockery.

Wine would not answer half of his intent,
Who wills to be a *drunkard*: for he dies
By his own hand, by more than dev'lish spite
Against his own existence: all agog
To peep into the bottomless abyss;
The which, by chymical affinity,
As well as moral, seems a menstruum
In which he may be blended with his kind.
Hell was prepared in mercy for the sot!
Where else could he retire? for from this earth,
With ever quickening speed he hastes away.
Spirits and water suit his taste at first,
Then stronger and still stronger as he wheels
Along the spiral track of the vortex

That soon shall drink him up, unless, in mercy,
Not often asked in hatred of the crime,
Not oft vouchsafed, he stands a miracle.

Let the imagination for a while
View the volcano's lurid precipice.
Who can describe th' affright that nature feels
When forth the lava issues from the cave
Where rage resistless unextinguished fires?
At times the heavens, portentous, spread a veil
Of darkness, and the distant thunder rolls,
And lightning shews the horrid face of things.
The beasts betake themselves to doubtful flight,
And oft their feet the trembling earth betrays.
The sea no less partakes the general dread:
Her mighty bosom swells, her trembling waves,
Frightful and devious, dash the mountain rocks.
Then soar aloft on awful wings of fire,
As sails the thistle-down in autumn's gale,
The massive vitreous rocks, to other lands;
Leaving a flaming track that follows far behind.
Then from her opening jaws, the molten earth
Prepares destruction for the fated plain;
Horror stalks forth, and all is petrified:—
Th' engulfing torrent follows.—It is done!
The city, that in pride and beauty shone,
Incindere and entombed, oblivion's prey,
Sinks! unless accidental picks descend,
By need, or antiquarian inquest urged.
When, in the lapse of years, the awful wave
Is cooled, congealed, and clothed in living green,
Inducing him whom penury impels
To seek another home, there to retire;
Build him a covering for his houseless train
And break the scorious earth, while providence
Befriends his labour, and the elements,
And changing year, attemper the dry glebe,
And verdure and abundance clothe the waste.

Then the luxuriant vine yields her increase,
And humble labour drinks, and lifts to God
An eye of gratitude, an honest heart.
Nature's delightful works, spread wide around,
Shew nothing of the charnel house beneath,
Found when unsought, and sought for long in vain.
Let not the modest maiden's eye explore
The subterranean streets and private rooms,
The temples, palaces and splendid baths.
There stare the lasting monuments of crime,
Sculptur'd obscenity, and luxury's arts ;
The gorgeous banquet and the guest's attired,
Readily inferred :—there, of the coquette's form
Regardless, time has spared her jewelry.
The lordling's haughty look is blotted out ;
Unknown his mouldering fragments from the
slave's,

Save where th' incarcerating chains are on.
He who endured the blight of poverty,
And he who made himself a fool with wine,
Met here a common death a common grave ;
Such Herculaneum, such Pompeii.

Sleeps, then, the vengeance of all ruling powers
Which not the prayer of Abraham could restrain ?
The cities of the plain were overthrown.
And Tyre and Sidon—where is all their pride ?
What tears were shed at Sion's coming fall !
And yet Jerusalem fell !—What has not fallen,
Where is the prosperous city built with blood,
Or man, who, impious, hardeneth himself ?

Shriek not, if, all around, the burning wave
Shew thy affrighted eye-balls the last ray,
Then seal thee up in deep oblivion.
Thence may the soul, to realms of peace and light,
Find easy egress. Fear Intemperance
That sweeps to hopeless shades his hecatombs :
Fear not the lurid sky, the molten earth,

The ocean straying from its usual bed,
The tremor, noise, and darkness that is felt.
Lava is an innoxious stream to that
Which dribbles from the alembic's crooked neck.
That deluges the land, insidiously,
Under false labels—Medicine, Friendship, Wit.

See the lycanthropist in grisly rage,
Or vacant body awfully reel along!
Better had it in lava been encased.—
Speak to it—not a beast's instinct remains!
An earthly spectre! there the man is not!
A living dead! an open sepulchre
Whereinto youth and thoughtlessness oft fall!
But not in vain, surely not all in vain
“To advertise in verse a public pest,”
For him who, labouring with a good intent,
Brings out a substitute delectable—
The honored, the acknowledged gift of heaven!
But wine can mock: and what of heaven's best gifts
Has not been oft abused? Let the abuse
And not the blessing, be objected to.
What use hath brandy? Frenchmen once propos'd
The driving Cornish mills, where streams are not.
Or, when the Apothecary's trembling scales,
Per recipe of Esculapian skill,
Deal cautiously, as rats-bane may be dealt.
Then and thus only give it tolerance.
Disdain, ye rulers, tho' ye ruled in rags,
The filthy lucre drawn from taverns' toll.
Where native wine abounds, intemperance
Alien becomes—expatriate it hence,
But nurse the vine with all your influence.

What do ye with the drunkard? what is done
To maniacs, whether from fam'ly taint,
Or disappointed love, or care, or fright,
Or cause obscure, their malady took rise?
The mad house for the mad. Now, if you can,

Define the word inapposite to *the drunk*.
 I'd wrench the murderous weapon from his hand,
 And let the Orphan's Court his substance guard:
 Should the asylum's discipline dislodge
 The demon legion, let him reassume
 His trust, and hold it during competence.
 But if this generation must be damned
 To fire on earth, to fire—horror bars utterance!
 Plant ye the grape before ye hence depart.
 Another age will drink with temperate joy:
 And thou O sacred Wine, emblem of love,
 Deeper and higher far than thought can reach,
 Thou shalt efface the stain of drunkenness
 From our else glorious land, and substitute
 Bland habits, mental and domestic peace;
 As the black load of sin which bids him groan,
 Whose conscience slumbers not, falls off at sight
 Of blood and water on Mount Calvary's brow.

Blood of the Son of God! strange virtues thine!
 He who was dead shall live if once he taste
 The sacred stream, and know from whence it flows.
 Blood of the Son of God! when, (of thy flow,
 Predictive,) the memorial of th' escape
 From Egypt's bondage, as observed by him
 By whom all things were finished, all fulfilled,
 Thou wast appointed, when that feast was o'er,
 Emblem of love unknown on earth before.
 It was a heavenly strain that filled the air,
 When the angelic escort hailed the birth
 Of him whose life was all an act of love.
 First when a guest at the connubial feast,
 Water obeyed his half expressed desire,
 And glowed and sparkled a delicious wine.
 And last, what could he give? or what withhold?
 He gave, in *wine*, his very blood to drink.
 "Do this in memory of me: 'tis my blood,

The pascal sacrifice for many slain.
 I shall not drink thus of the vine's product,
 Until I drink it in the reign of God."
 Beverage of heaven! who shall presume to drink
 T' inebriation of thy holy stream?

Theme sacred! If a spark of heavenly fire
 Be kindled, shall I quench it? ye who war
 With heaven, and the best extacies that thrill
 In human veins, and bid men recognize
 Their heavenly origin; who deprecate
 The dawning day of long millennial rest
 From evil's domination—mirthless joy;
 Turn these few tedious pages, or go join
 The drunkard's song, and share his joyless mirth.

O thou art doubly dear, Heaven's favourite gift,
 When saints commemorate undying love,
 And feel its glow reflected each on each;
 While many a sweet remembrance fills the soul,
 And silence best bespeaks the extacy;
 And circling all around, that sacred wing,
 As erst upon the Head of the church, so now,
 Seems to alight on all its humble parts,
 And bind them in one common tie of love.

What pity that contention long has rent
 Faith's household! as if different hopes were theirs,
 And different ends pursued! unmindful sure
 Of the chaste emblem of commingling love—
 The *many* berries, that make but *one* wine.
 O, is it not at hand, the promised day
 When he, the sire of falshood and deceit,
 Shall be imprisoned; and truth's noon-day beams
 Shed unobstructed, all-pervading rays,
 And every eye receive the heavenly light,
 When the first favoured sons of liberty
 Shall deem the tawny aboriginal
 Of kindred flesh, a brother and a friend,
 And at one table hold the sacred feast:

When Niger's stream shall bear the notes of joy,
Swelling, in simple melody; the song
Of sable crowds, rejoicing in the light
Of gospel truth, and *perfect liberty*;
When Niger's streams shall hear no more the sigh
Of slaves, whom hope, kind hope forbears to mock
With the most distant view of happiness;
When Greek and Mussulman shall join their hands
In mutual fraternity and peace;
And Europe thirst no more for power and blood,
And Chinese leave their Pagods to the owls,
And hear, submissively, pure gospel truth:
While India's ample plains and fragrant woods,
Rivers and mountains—all her populous clans
Joy at deliverance from their bloody rites,
And substitute the easy yoke of Christ.

Ah, the scene opens as we farther go—
Let holy thought pursue it. I return:
And to the vigneron's toil, the homely Muse,
Unskilled in graceful circlings, drops at once,

Ask not of transatlantic realms the Plants
That shall unfailingly reward thy care:
Here, sterner winters bite th' unshielded earth,
With fructifying frost, at times too sharp
For frail exotics. Trust the native vine;—
The Fox, the Bland, Schuylkill, and Catawba.
These have withstood the chill northwestern blast,
The burning sun-beams, and the summer's drought,
The shade of trees, and most untimely rains.
While naught of tillage at the root appears,
No pruning knife has lopped the useless growth
Of vagrant tendrils, yielding only leaves.
What from the matted canopy that spreads,
Untutored and at will, its tender shoots
O'er tall tap-rooted trees, can you expect
But grapes, (if grapes at all,) diminutive,
And branded with a vulpinary name,

Yet take the *fox* or *raccoon* and their kinds,
 Into thy fertile soil, and tend them well,
 And but a year or two shall pass away,
 'Till a fair promise shall inspire thy hope.

Strange mysteries are in nature: It is said
 The ivy and the vine grow not together.
 And, note ye, do the pine's unceasing shade,
 The walnut's odorous leaf, and fetid herbs
 Offend the delicacy of the vine?
 Some say the quince tree blasts contiguous fruits:
 Then catechise experiment. Offence
 By some are given, others may give delight,
 And to thy cup transfer it, thrice endeared,
 The product of thy soil, thy hand, thy mind.
 Does not the bean in flower receive a dye
 From neighbouring plants of simultaneous bloom?
 See how the progeny confess the theft.
 The leek and rose, 'tis said, when side by side,
 Respectively a stronger odour yield:
 And let experience ponder and explore
 The varying forms and flavor and perfume,
 That busy nature gives her curious works,
 As if in playful mood, or else disposed
 To recompence man's curious research.

But let us first by obvious means reclaim
 The long neglected grape of native growth.
 Let the rich man, for whom adventurous ships
 So long have brought the wine of foreign lands,
 And carried off our silver and our gold,
 Revolve my exhortations in his mind;
 Bid his attendants to the woods repair,
 And bring him wherewith to experiment.
 'Tis done. The well bruised grapes, (bruise not
 the seeds,) Look like fallen warriors in a sea of blood.
 Let the mass stand, fearless of the result
 Measure not success by the first essay.

Six hours may be too short ; extend the time,
Note your experiments on various fruits,
And soon, as in the oldest vineyard lands :
Each shall account his plan the paragon.
The *mere gout* of pale wine stands a short time.
By longer mashing, will the purple rind
Yield up its colouring and encysted sweets.
Others account it all unneedful toil
To bruise the grapes at all. Archimedes
Can press the pumice dry, bruised or not bruised.
The screw relaxed, economy supplies,
With limpid water, the shrunk vesicles.
The mass well stirred about, again is pressed :
And a small table wine, abundant flows.
Happy the day when labour's urgent thirst
Shall, at the fatal pump or tippling house,
No more be quenched in death or worse than death.
'Tis done—the well girthed tun can hold no more.
The weltering flood casts forth uliginous scum,
And watchful hands supply a purer juice.
But of the pure blood of the grape beware.
A sextary may all thy secrets tell ;
It may unseal thy lips and blab that out
Which cost the many a nice experiment,
Ere half seven years, or half of that has passed,
For Galen's law is abrogated now.
Nor make we wine for men of future days,
Boiled or evapoured to tenacious gum ;
Nor do we prize it for extraneous drugs,
As pungent herbs, or pitch, or turpentine ;
Nor yet because two hundred leaves have dropped
From the deciduous grape since it was made,
Nor yet because 'tis weight for weight of gold.
We have a generous wine at twelve month's old,
Maugre the squibs of Bacchanalian fools.
Let temperance taste and prejudice shall die.
Long may I toil for you, ye plodding throng,

Whose daily labour checks but daily want,
(Of custom, you the soil, but not the seed,)
E'er on your thirsty lips the rummer rest,
Decanting cheerfulness and rosy health.

What! hath the Muse already votaries gained?
See where the thrifty poor, now sally forth
With baskets, to the humid slashes bound,
Where Tiber's tributary rills supply
The fox grape's thirsty root, much fruit is there;
But long may not remain. Geometry
Has spread its magic measurements; and soon
The hum of commerce and the boatman's voice
Will chase the mocking-bird and change the scene,
And these meandering streams be found no more:
For the far fetched canal will sweep along this vale.
Doth the Muse falsely prophesy? Will men choose
Sheer phantoms, and the good at hand reject?
Even as the youthful band that caught my eye,
Not to the grape, but to the bramble bush,
Obsequious bend the knee. He deigns to shed
Imperial purple on their outstretched hands.—
'Twas thus to royal dignity he rose;
The trees went forth to choose themselves a king,
And to the olive said reign over us;—
The peaceful plant refused the offered crown,
Pleased with its lot, to honour God and man:
Nor would the fig tree cast away her sweets
To go and be promoted over them.
Then said the trees unto the vine, come thou
Reign over us; and thus the vine replied:
What! leave my wine that cheereth God and man,
And go to be promoted over you?
Not thus the bramble.—Vile obreptious weed!
Haste to thy doom, the flames; or if thou live,
O'er thriftless hedge-rows spread thy royal arms,
But wake me not again from my sweet dreams.

As if to suit the most fastidious taste,

Wine varies in the flavour. There 's no end
 In the variety : nor is there found
 A full solution for the subtile change.
 Each *climate* has an influence of its own ;
 The *season's change* the *aspect*, and the *soil*,
 Each brings a tribute to the general whole.
 Ours is the latitude : and north and south,
 For ten degrees each way the zone may stretch.
 Along West Florida and Orleans' coast,
 Through to the great Pacific, grapes will grow :
 And northward, part of Canada may hope,
 With native wine to cheer her winter's gloom.
 For *seasons* when the vine yields her increase,
 Invoke not Bacchus, but the Living God
 To smile upon the labours of thy hand,
 And shield from blight its promised rich reward.
 Hath Heaven a favorite plant, it is the vine.
 The *aspect* too, whether septentrional slope,
 The summit, or the slope to the southeast,
 Is matter for experience to decide.
 Theory prefers the last or airy height,
 But nature, in our District, plants the vine
 Promiscuous o'er the hills, near running streams,
 In deep alluvial, though not marshy lands.
 And why ? This is her climate : she asks not
 For the sunny side of hills, but rather seeks
 Congenial moisture, and congenial soil.
 In every clime let *nature* be the guide.
 On rich alluvial *Soils* a hope may rest
 Securer then when built upon the rock.
 The roots of plants by nice experiment
 Have oft been found descending to a depth
 Almost as great as the ascending growth.
 Yet rocks are better than tough humid clay :
 Midst these, by rains brought down from age to age
 From neighbouring mountains, debris thick is
 found.

The vineyards of the far famed Hermitage,
Amongst the debris of its granite rocks,
Boast of the wine produced, and well they may.
And where volcanic fires have spent their force,
The lava, once a fiery flaming sword,
Becomes, by time and culture, fertile soil.
And there the grape its richest nectar yields :
The Mediterranean shores give proof of this ;
Madeira's blackened rocks and scorious soil
Evince the same ; yet the vine freely grows
On a red earth ; clay, sand, and marle combined,
Unmixed with pumice stone. Such soil have we,
And such a soil does Adlum recommend,
The father of Columbia's vineyards.

Madeira's subterranean fires were quenched,
Long ere fond lovers found enchantment there,
Or raging flames had laid the forests low.
There cedars grew, and lignum klodium,
Pines, walnut, chesnut of superior growth,
Now flourish ; and who fells a tree is bound
Forthwith to plant another in its place.
There, first in all the new-found hemisphere,
Grew the rich sugar cane, whose fine product,
Of vi'let fragrance, sank to disregard,
As bowed the forests to the princely vine.
The plains and scorious hills one livery wear,
All striped and girdled with the trellis rows,
That pour their streams into one reservoir,
The never failing fountain of her wealth.

Our verse, regardless oft of flowing sounds,
Will name Madeira's chief varieties :
Bual Barterdo Preta, Negro Mole,
Verdelha, and Boalerdo Branca,
Malvazia Rocho, Sercial Groça,
Alicant, Malvazia, Sercial,
Babosa Tarantey, Neprinha, Ferral,
Marotta, Lestrong Galija, Bringo,

Dodo de Dama, Alicante Branca,
Casuda Neprinha de Agoa de Mel,
Muscatel, Malvaziam, Castelnaw,
Uva de Lisboa, Preto. The three first
(The rest rejected) would make better wine.
The Tinto grape gives wine like Burgundy,
But generally is blended with the rest.
Reserving Malmsey, sweetest of the sweet,
Sercial, that of dry wines is the best,
And a large desert fruit of massive bunch.
But lo! what toils of late, await the swain :
At six feet depth his labouring pick must search
For humid soil, and there immerse the plant ;
Or where factitious streams may chear the root :
For the parched land pines for its desolate groves,
And has not aught to shield it from the sun,
Or catch the vagrant moisture of the clouds,
Or shed abroad exhilarating air.
Here, may the forest still retain due bounds,
And no such arduous culture, ask the grape.

From every land with care let us collect,
The costly lessons of Experience.
As yet no prejudice has shut the eye
Upon the light of reason and of truth.
And I shall glory when far in the shade
These humble lines are cast by juster thought.
Were I required in a brief word to say
What most requires the vigneron's ceaseless search,
SOIL—its best use and culture were the theme.

The earth is covered, like a gilded ball,
With a rich coating, yet are evident
Marks of attrition and commotion found.
In many places, lay uncovered beds
Of solid clay and rock and barren sands ;
In other places an unmeasured depth
Of soil is found mingled with the above ;
Hence clayey, loamy, sandy, gravelly soil,

Scorious, stony, chalky and the like.

Thus far the muse, if muse that should be called
Which strings prose matters up in careless verse,
Sheer Typographical convenience, careless
Reckless of collocation, rich and sweet,
Tho' by the measuring rod of Milton scanned.
(Thus school boys, striding in a giant's track
With effort quaint, presume to keep his step.)
And thou, O Mantuan bard; temerity
Itself must shrink from poaching on thy ground:
I enter as a labourer—let me pass.
Philips! when sweet facetious strains are named,
'Tis almost sacrilege to name thee not:
If e'er example could direct the foot
That knows no beaten path 'twere thine alone.

Thus far the muse has culled from means at hand,
Experience, converse with observing men,
And men who have long dwelt in vineyard lands.

From England, land of science and research,
Come my remarks on soils. Invention there,
Nursed by her mother, has supplied the lack
Of nature's bounty, and transformed the waste
Into productive fields: nor feared "to plant
Somewhat, that may to human use radound."

Soil in good heart will bear some stately tree,
Congenial to its nature; thus the oak,
At Brampton, not at Cramford, richly thrives,
At Cramford the witch-elm shoots beautifully,
And beach in Sussex, elm in Buckinghamshire.

To soils these local names have been applied:
In Lincolnshire they talk of *moory* land,
A dark and *crumbly* soil, similar to that
In Leicestershire and Warwick called *hen-mould*,
Better for pasturage than for the plough.
What they call hen-mould in Northamptonshire
And Huntingdonshire, is a rich firm earth,
The best of which is streaked with mouldy white.

That in Northamptonshire called *woodland* soil
Is damp and tough ; a vegetable earth,
Mixed with black clay that lays unmixed beneath.
Sand is in miniature the native rock ;
No soil is free from it, where it abounds :
Its colour as with clay, supplies the name.
A *kealy* soil, so called in Warwickshire,
(Bespread with slates and stones, like mason's
chips,)

Freed from large stones, good crops of barley bears.
Lastly a loamy soil that from the plough
Falls off in little flakes, called *chisley* land,
For wheat, or rye, or barley suitable ;
Thus, then, we judge of land by its product :
The plough discloses its particular kind,
The moory mellow earth turns freely up ;
The hen-mould when fresh ploughed shews its
white streaks.

Sandy and pure loam soils turn easily
And make an even furrow. Chalky land
Is ever dry and hard. The stony soil
Falls as you may suppose, rough from the plough.

How to improve each soil be now our task.
Clay soils require most care in breaking up.
The more of clay they have the more they need ;
The plough, the sun, the air ; and these at length
Will break the toughness. Let it be oft ploughed,
And to the depth the coat of earth admits.
Stiff is the clay of Thrapston, yet the care
In dressing, and the labours of the plough
Make it the richest in Northamptonshire.

Red clay requires most labour to subdue :
Deep and repeated ploughings break the clods,
And then manure of any kind does good.
The best is chalk, next ashes, lime, and soot ;
And dung, if well ploughed in, is of great use.
A field of red clay soil, thoroughly dressed,

Will keep in heart fifteen or sixteen years.
Indeed all clayey soils are much the same :
Neglected they are barren ; but thus dressed,
No soil has greater, better qualities.
Till thus prepared, let not a clayey soil
Be chosen for a vineyard :—thus prepared,
An ample vintage will the cost repay.
But let me reprehend the use of dung ;
'Tis said it sensible affects the wine,
It also draws together insect tribes :
Yet, mixed with lime, no danger need be feared.
'The city's nameless filth, on some wine lands,
Brings in abundance an ill flavoured wine.

From red clay soils the harvest comes in late,
And later in proportion to the depth
Of the pure clay, that lies beneath the soil.
The soil when well prepared is good for wheat ;
And in dry seasons barley answers well.
Its long retained humidity well suits
The English bean. Here clover nevers fails :
For turnips there's no better soil than this.
In wood-lands or in pastures, this becomes
A darker coloured soil. With care and thought
Convert such pastures into arable.
Such pastures, if they catch the wash of hills,
If dressed with river mud, yield plenteously :
Tho' a few years of tilth, without manure
Would rob it of that rich luxuriance,
Which, but with cost and pains, can be restored.
Here the tap rooted tree has healthy growth,
And mounts aloft by steady slow advance.
A light and superficial soil yields food
To spreading roots—nay for a while may seem
To nurse the oak, but soon the exploring root
Finds there is naught beneath to feed upon.
The stunted horizontal limbs above,
Reprove the planter for his want of skill.

The trees that spread their roots in quest of food
Rob the contiguous growth. Not so with those
That deeply penetrate the pervious earth :
And such they are that suit the red clay soil.

Of *yellow clay*, as next of kin, we next
Shall take brief notice. Much that we have said
Respecting red clay, will apply to this.
For yellow clay a sandy marle is best ;
But here with closest scrutiny observe
The difference between yellow clay and loam ;
The last is mixed with sand, the first is pure
Except a little vegetable earth :
The more of this the richer ; hence, to add
Black vegetable earth, will make the soil
A hazel mould, excellent for wheat or rye.
A yellow clay is poor, yet with good heart ;
Turn up the long tough flakes : plough deep and
oft :

Lay up the land in ridges east and west,
And the sun's rays will mellow down the clods,
Then see what is at hand—if clayey marle
Avoid it, it is best for sandy land.
If no attention to these things be paid
Thy labour and thy confidence are lost.
Where proper marle is not, dress first with sand,
Spare not in quantity ; loam thus is formed.
And hast thou sandy land, returning carts
May carry back stiff clay and spread it there :
This labour once well done, is done forever.
Next you may add well rotted stalks of plants ;
What pity corn stalks are so often lost
To every useful end ; excellent are they
When decomposed, for land of which we speak ;
Saw dust is also excellent ; ashes, too,
Break the tenacity and nurse the soil
With genial warmth. The soil when thus subdued
May with great profit be manured with soot.

Lastly, by burning this or red clay soil
Fertility ensues. The calcined heaps
Become manure for that or other lands.

Tho' red clay bottom lands are good for grass;
'Tis not so with the yellow. Upland grounds
Free from o'erflowing and excess of wet,
Suit the more plastic texture of this soil;
There cowslips flourish and few weeds are found,
Save thistles, which all hearty lands produce.
Pastures on yellow clay soil guard from wet
By trenching deep. Uplands may thus be made
To yield their utmost gain; let them be dressed
With hay stack bottoms, (both manure and seed,)
With dung and mud from river, ditch, or pond,
Well mixed and spread when signs of rain appear,
So that the sun dry not its virtues up,
But these be drunk by the retentive soil.

In timber trees no postdiluvian need,
In hope of personal gain, plant such a soil,
Unless long shaggy moss be all he asks.
And he who loves not rotten hearted fruit,
Must plant his orchard on some other soil.
And thou, O favourite vine, shun yellow clay.

Men often talk and write about *clay* soil,
What say they? 'something nothing' right and
wrong

They lead their proselytes. Houghton has said
That 'clay contains a fourth part of fine sand':
True of the red, not always of the yellow,
And white without a particle is found.

White clay requires another mode of tilth
From the preceding. Now his care must be
To guard lest it be too much pulverized.
This land with soot baulks not the reaper's hope:
Eight bushels for the acre well suffice—
Eight loads of good manure the substitute;
And turf well mingled, mellowed a long while

With the manure, answers extremely well.
 Let industry thus multiply thy means,
 And these applied with judgment : then aghast,
 Lank laziness shall stand, with wondering stare,
 To see thy heavy sheaves at harvest home,
 Brought from the white faced plains he little
 prized.

For pasturage or trees or pleasant fruit ;
 This soil with profit cannot be employed.

Black clay, the richest in its native state,
 By skilful culture, doubles its product.
 This soil contains more sand than the two first,
 More vegetable mould ; yet not so short
 And delicate to manage as the white.
 A little rich manure, and lightly ploughed,
 This land will render back a rich return.
 That which when somewhat wet sticks to the
 plough,

Is purer clay. Here modify thy mood ;
 Marle and more manure is here required,
 But sandy composts here are not required.
 As this is usually a low land ground,
 Lay it as high as may be with the plough ;
 Abounding moisture is its common foe.
 If thou wouldst see the magic of manure,
 The pigeon house will furnish thee the means.
 Manure from hence sprinkled when barley's sown,
 At harvest will convince thee of its power.
 In pasture, black clay asks but little care :
 If you will dress it, spread well rotted dung,
 When rains descend, that they may wash it in.
 If it be intermixed with stones beneath,
 Here trees will prosper ; but if solid clay
 That long detains the wet, oft mortal chills
 Bring swift destruction. Here plant not the vine.

Loam soil is the most common, hence oft called
 The mother earth ; all plants will grow in it

But 'tis the part of art to make them *thrive*.
 Its composition is of clay and sand,
 With more or less of vegetable earth.
 Let patient inquiry be still alert
 And see what most preponderates; then with skill
 Unfailing of success, suit the manure.
 Burned turf, and lime and hog's manure have been
 With great success applied to clayey loam;
 And strange as it may seem, as good manure
 From farriers' shops and tanyards may be had.
 Horn shavings, hoofs, scrapings and scraps of skin.

On clayey loam a sandy compost spread,
 On sandy loam the opposite observe;
 Spread clay and river mud and rotten turf.
 When vegetable mould preponderates,
 Soot, yielding genial warmth, is requisite.
 A stony gravelly loam of little worth
 To indolence, by industrious is made
 A very fruitful soil. Bring out your store,
 From stable, cow and hog and poultry yard;
 Mix it with mud from river, ditch or pond;
 And the large heaps, already in the field,
 Cover with fresh cut turf and let it rest.
 When mellow spread it, rains will wash it in.
 Consult your leisure and your judgment too:
 Let not this work be done in summer's heat;
 He who regards not this may toil in vain,
 Compare with him whose mind directs his hand.
 The moisture of manure is its best part,—
 On loam soil, trees and grass will kindly grow.

On *sandy soil* our inquest next we hold.
 Pure sand is different from a sandy soil,
 Yet sandy soil is crumbly loose and light.
 A soil that holds together, yet consists
 In greatest part of sand, is sandy loam.
 Of *sandy soil*, the definition is
 Neither prue sand, nor yet much else than sand.

And named red, yellow, white, and black; the last
From mixture of black vegetable earth.

A sandy soil is generally but poor,
Yet with judicious dressing yields good crops.
These soils are dry and warm; the danger is
Lest its quick products immaturally die:
No soil so illy bears continued drought.
Yet this great evil, will good dressing cure,
While the advantage of quick growth remains.
Good management two or three crops may reap
In each revolving year, from such a soil.
Soil that is very sandy should be dressed
With clay—this gives it a consistency;
Then spread manure well mixed with mud or turf
As heretofore described.—Undressed with clay,
Unmixed with mud or turf, the pure manure
Would be engulfed and lost in the deep sand.
For generally beneath the soil, there lays
A strata of loose gravel that absorbs,
By every rain that wherewith thoughtless hands
Might think to fertilize the barren plain.
The poorest of these soils are often deep.
This process gives a steril sandy land
A warmth at heart. To plough it very deep,
Burying old rags, skins, hoofs and the like things,
Then spreading on the compost just prescribed.
My reputation for veracity
I would not risk, to tell the ignorant
What wonderous virtues are in filthy rags,
And those that ere have seen need not be told.
A land called *chisley* some account a loam,
Yet as a touch dissolves the brittle flakes,
Or slightest frost, it may be called a sand.
This dressed with dung alone, will give good
crops.

In a wet season, barley, wheat or oats
Do well on sandy soil. But great's the risk

In case of drought. 'Tis dressing saves the crop.
For turnips and all other esculent roots
This is a favourite soil. Here they are free
From worms that cannot burrow in dry soil.
Potatoes, not to name would be a slight
Unmerited by that much valued root;
And carrots also and leguminous tribes
All grow delightfully in sandy soil.
A little but rich wine this soil will yield.
Some think no pastures in the world excell,
The yellow sandy soil in Oxfordshire,
With a large share of vegetable earth
By nature mingled : while continued care
Gives frequent dressings with the compost name'd.
For kitchen gardens, this or sandy loam
Would I select, if fortune left me free
Conveniently to make what choice I would.

Such sandy soil as cannot give support,
Nor a firm hold, nor moisture to the root,
Suits not the forest tree. Except, indeed,
To nurse the seedlings to convenient size.
With shrubs, small fruit trees, and perhaps the vine
This soil agrees ; but, as of Marcley-hill,
“ I nor advise, nor reprehend the choice ”
Of sandy soils for vineyards. They perhaps
Were better thus than otherwise employed.
I judge no soil would bring a better wine,
And none from mildew better guard the crop.
Not the mere surface, but the depth below,
If you would be assured of success,
Must be explored ; and once in two or three years
An ample dressing must sustain the growth.
Judgment must guide, for not a close research
Respecting soils, in vineyard lands we find ;
Yet by *analogy* we safely judge :
And here the apology, if such be asked,
For all this inquiry regarding soils.

In Spain they deem both sandy and wheat land
Unsuited for the grape. Their favourite soil
Is what the English would call chisley land :
Their next best is red clayey. Hence we see
That stiff sequacious clay no where will suit
The vine, that lives not in cold plastic earth.
Spain has not often a cloud-blotted sky :
There, note ye, how around the thirsty root,
The wide expanded concave spreads its brim,
That stragling drops may meet in confluence there,
Elsewhere the vine may thrive in sandy soil.

The northern limits of the grape's broad zone,
Where rain most frequent falls, grapes may do best
In sandy soil. Where parching drought prevails,
'Twere vain in sandy soil to plant the vine,
Unless factitious streams may shed at will,
O'er all the land, their fertilizing store.
In valleys where there is a proper soil,
The grape in southern climates will do well.
From winter's rain the Spaniards thus protect
Their valley vineyards. They are deeply dug,
And thrown in ridges up towards the stem ;
The mid-way furrow drains superfluous wet.
Then in the spring, when the young shoots can
bear

The vigneron's careful contact, he again
Digs all the superfice and leaves it smooth ;
But not as deep as when he dug it last.
And when the grape has nearly got its growth,
Before it ripens, he again bestows
A shallow digging ; then the spade must rest,
Where 'er the vineyard be, 'tis nature's law.
With us 'tis much the same. With tassled corn,
The time arrives when hoes must cease to stir
The fruit-sustaining soil. 'Tis thus with mind:
The pedant, ever pondering o'er his books,
May be a fool, though learned, not less than he

Who never learned to read. Lay the broad base
 In early culture : let the vigorous growth
 On it, not on thy tutoring rely.
 Nature is uniform in all her works :
 The philosophic tiller of the soil,
 Her happiest favorite, shall her secrets learn.

From this digression, which is meant to show
 How much the *climate* has to do with soils,
 We will return to our remarks on soils.
 That which is a mere *gravel* least deserves
 The care and labour of the husbandman.
 Yet *stony soils*, forbidding at first sight,
 Have often a productive earth beneath.
 Manure, adapted to that hidden soil,
 And so laid on that rains may wash it in,
 Is hid, indeed, from view, and from the sun,
 But roots can find it, and a moisture dwells
 Beneath the stones and feed the stalk and ear.
 Here trees, if trees are found, find far beneath
 Their sustenance, and injure not the grain.
 Here beech trees grow ; see then if vines are found
 To flourish near the beech, and judge and act.

On *chalky soils*, as on bare gravelly soils,
 Folding of sheep is found of great account.
 But we will pass.—The last that claims our thought
 Is *mellow earth* or *vegetable mould* ;
 In marshes, fens and praries often found
 Beneath the sward, unmixed with other soil.
 Oft in deep beds this fine black mould is found ;
 Spongy when wet, when dry it crumbles down
 To a fine powder. *Peat ground* some suppose
 Nearly allied to this : it differs thus :
 The soil, where peat is found, will often shake
 Beneath the heavy tread ; the peat itself
 Is a tough spongy substance, black or brown ;
 Of parts of plants composed ; flag leaves, stems,
 roots,

Cemented by a pitchy bitumen :
When wet it cuts with ease : it breaks when dry,
And shows a shining fracture. Plough with care
The soil that lies upon a bed of peat,
For peat is steril as the naked rock.
The ashes only may be used on land.
'Tis said that in our District *peat* is found.

This mellow earth is oft called *moory land*.
There is a kind called *fen land*, mixed with clay
Of a dark colour : when this soil is wet
'Tis somewhat plastic ; and more firm when dry.
The bed of clay that lies beneath this soil
Often subjects it to injurious wet.—
This evil shuned, clay renders such a soil
Fit for the growth of grain, which, else, 'tis not ;
Unless, as usual with moory land,
Sand give it the required solidity.
When portions of both sand and clay are found
In this rich mould, then hath it not a peer.
But little dressing does this land require ;
The compound being right, stable manure
Is all it asks, at times to renovate
Its powers, exhausted by repeated crops.
In grass it answers best. Trees seldom thrive :
The willow tree “rejoices in rich mould,”
The willow tree alone adorns the fen.
A sable ground may yield “most ample fruit
Of beauteous form and pleasing to the sight,
But to the tongue inelegant and flat.”
As mellow earth partakes of other soils
So doth its products vary. Where there's loam
In small proportion, there white poplars thrive.
This earth when still less pure, gives common trees
A rapid growth ; but rapid the decay
Of timber thus produced. Hence let us learn
When nature is our guide, she'll be our friend.
Each soil has its own product, and 'tis that

Which under our improvement best succeeds.

Of various *earths combined*, we have said much;
And more have left unsaid, yet briefer still
Shall be our view of these in their pure state.

Red clay is found at a small depth below
The soil of which it forms the greatest part.
Canals or ponds may be secured by this
From leakage: let it be well beaten down,
Then spread with stones, and these well beaten in;
'Twill be as firm and durable as lead.
This and chopped hay is used for pice work,
For wall a substitute not to be scorned.
This clay calcined and sprinkled o'er the ground,
For pastures or for grain is excellent;
And may be used in potteries and for bricks.

Yellow clay oft is found as pure as red,
But wants its firmness, and more readily
Dissolves in water to a sobby mess.
This, duely mixed with loam or sand, excells
For earthen ware or bricks; a bed of this
By nature well prepared, is a rich boon.
Of this the ware of Staffordshire is made.
The best is firm and tough and streaked with white.

Pure *black clay* is not common, there's a kind
Of which pipes may be made, that, burnt, are white.
The common kind is blueish—used for tiles.
There is a black clay which when burned is red;
Another of a dusky leaden hue,
Makes a good ware, and burns a yellow white.

White clay is valuable though various,
For instance, that from Pool in Dorsetshire
Is very tough, that from the Isle of Wight
Is somewhat brittle—they are both combined
And make the pipe clay of most common use.
Now this would I advise, when e'er you find
A specimen of clay, try it by fire;
If it have faults, these other clays may mend;

If well it promise, search at greater depth.

Loam when unfit for culture, serves for bricks.
Try a small piece; if to a brilliant red
It quickly burn, deem it well worth thy thought.
There is a brown loam, worthy to be named,
Of which blue bricks are made, and Roman urns,
Found at this day in Kent. Some loams are used
In figuring and in staining earthen ware.
But what is most deserving of regard,
Is a harsh feeling loam, a yellow brown;
Composed of a large grained micaceous sand,
And yellow clay. He who shall find these mixed,
Or mix them, and therewith make good fire bricks,
May deem himself a rich and useful man.

On the Potomac's margin, as you go
From Georgetown to the Falls, this sand is found,
(If not the loam well mixed,) else I misjudge,

Sand, Gravel, Chalk we shall not now discuss.

An olive coloured marl, called *Fullers Earth*.
Is used in manufactories and on land;
And found at no great depth beneath the soil.
A skillful search for this will not be vain.

Ochres, when found in lumps in beds of clay,
May, with good prospect of success, be sought
Beneath the bed of clay—Well worth the search.

Marle might be mentioned, not as simple earth,
But as the king and chief of all manures.
Nature has done her part with bounteous hand,
Man's ignorance or indolence forbids
Our drooping fields to riot on the food
She has prepared, and left within his reach.
Has not the least inquiring eye observed
Somewhat that is not rock, nor clay, nor sand—
A soapy or a laminated mass,
Yellow, blue, red, white, or of leaden hue,
That crackles in the fire, in water melts,
Or on the land crumbles in open air,

And spreads arround a fertilising cream ?
 O try it, pure, or mixed with clay or sand ;
 Only, adapt it to the proper soil ;
 And, persevercing, you will soon discern
 Your labour well repaid ; and bless the hand
 That, ever bounteous, forms not aught in vain.

A sandy soil is much improved by marle,
 But use the clayey kind : this oft is found
 At a small depth beneath a clayey soil.
 Some to the acre use but twenty loads,
 And foolishly complain no good is done ;
 Others profusely bury up the soil—
 Fifteen to eighteen hundred loads they 'll use.
 One to four hundred loads is deemed enough.
 When well adapted, smaller quantum serves.
 An acre that could scarcely bring a weed,
 Four hundred loads of good fat marle restored,
 Which, for four years, equalled the best of land.
 Some lands, for twenty or for thirty years,
 Retain their richness when well dressed with marle,
 Such richness as the farm-yard can't impart.
 In using it, observe, the stony kind
 In the young year is spread, or left in heaps
 To crumble by the influence of the air.
 The clayey marle in summer is applied,
 The loamy spread in autumn, after which,
 Sandy and pure marle (these for clay ground fit)
 Should be well spread and mingled with the soil.
 And thus no day throughout the circling year,
 Need pass unoccupied to good account,
 Whether to corn or wine thy wishes tend.

River mud, generally, is mellow earth,
 And, as manure, gives brief fertility
 With this, in planting cuttings of the vine,
 Sure work is made : first, in an oblong hole
 The cutting horisontally is laid along,
 With the top upwards bent, this batter then

Is dashed upon it ; then the ambient earth
Detains the moisture till the far spread root,
Secures the youthful plant its sustenance.

Clay is an excellent manure for sand,
But if so tough as to remain in cakes
In spite of plough or harrow, then apply
Loam which will oft ameliorate a soil
In which clay will not mix and dung is lost.
Both *sand* and *gravel* will return to clay
An equal benefit to that received :
The coarsest sand best breaks the jejune clay ;
The finest sea sand fertilizes most.
Ten tons per acre make a good wheat land,
And thickest, sweetest grass is thus produced.

For cold lands *horse manure* is suitable,
And *cow manure* is better for hot soils.
These when well rotted must be soon ploughed in,
Or their best properties are lost in air.
When high in ferment, mix them well with earth,
Such as will mend the soil ; thus you may check
Annoying weeds and worms and the tall growth
Of stems productive more of leaves than fruit.
Soils that produce much straw and little ears,
May be improved by burning ; and I judge
All scorious substances will urge the vine
To yield rich bunches and restrain the growth
Of far spread fruitless limbs and foliage :
Hence ashes are approved for this intent,
And smoking horse manure as much condemned.
This last and all its kind have been compared
To yeast—a little leavens the whole lump,
But more effectually when first combined
With a small portion of th' intended mass.
Yeast has itself been used with great effect.
These hints may well suffice observant minds,
And they who follow books best not go far.
Books may propose and counsel, thou must *judge*.

The food of plants, thus skilfully applied,*
 Will makethy wine press burst forth with new wine,
 And ample granaries bend beneath their load,
 Strewing thy path with the best joys of life.
 To him who entered thy confiding breast,
 (Thy service rendered, and thy cash all gone,)
 Thy visits oft are made when "he's engaged :"
 Thy parent earth, thy ever faithful friend,
 Greets thee with new discoveries of her love,
 Delights thy senses and augments thy store,
 And all thy labour with new strength repays.

Salt when profusely scattered o'er the ground,
 Produces barrenness ; yet accident
 Has proved its virtues to observant man
 Wheat, from a stranded vessel, has been found
 To grow luxuriantly and free from smut,
 And by unusual tides, the poorest lands
 Have been made fruitful ; and have been kept so
 By following nature's hint, and sowing salt.
 Two bushels to the acre was prescribed
 By England's ancient agriculturalists ;
 The moderns deem three bushels not too much

* The following beautiful paragraph from Sir H. Davy's Agricultural Chemistry, contains a world of instruction on this subject.

"The doctrine of the proper application of manures from organized substances, offers an illustration of an important part of the economy of nature, and of the happy order in which it is arranged. The death and decay of animal substances tend to resolve organized forms into chemical constituents ; and the pernicious effluvia disengaged in the process, seem to point out the propriety of burying them in the soil, where they are fitted to become the food of vegetables. The fermentation and putrefaction of organized substances in the free atmosphere, are noxious processes ; beneath the surface of the ground they are salutary operations. In this case the food of plants is prepared where it can be used ; and that which would offend the senses and injure the health, if exposed, is converted by gradual processes into forms of beauty and of usefulness ; the fœtid gas is rendered a constituent of the aroma of the flower, and what might be poison, becomes nourishment to animals and to man.

For the first dressing of the poorest soil;
Afterwards, one per acre is enough.
This species of manure suits every soil:
And with the seed in sowing lay it on.
Sea weed, collected and at once ploughed in,
Gives the soil energy for two or three years.
And *sea shells* half calcined and their young spawn,
And parts of trees and plants, wood, leaves and
bark,

As that from tanyards,—all is good manure;
And better yet, perhaps, for hasty growth,
All animal substance, offal of beast or fish;
But a bland compost thoroughly decayed
The vine's luxuriance alone should prompt.
The farm yard's obvious manures ask not
A special notice; we have sought to bring
More latent treasure to the Vignerons' view,
That he may know all soils and all manures
And find resource of fertility
Where ignorance would think all effort vain.

Geology has formed her alphabet,
Let the observing farmer therewith spell
The nature, use and tilth of every soil,
With accuracy science only knows.
'T will guide him when he seeks himself a home,
And if he have one keep him there content.
While ignorance forsakes his worn out land,
Seeks others, these depraves, and thence removes.
The rudest waste perhaps may bring a wine,
In *quantum* small, in quality the best;
Hast thou such fruitless lands in thy domain,
There plant the vine, and make th' experiment;
But look not there for bunches that the fox
Might leape at, while his dernier resort
Would be to call that sour he could not reach.
Keep the vine closely pruned and near the earth,
And thus a vintage, not to be despised,

Bedecks the barren soil : what other crop
Could ever bring a better revenue ?

What ever land thy judgement shall decree,
Convenience or economy prescribe
For the vine's precincts ; there let fire consume
The tangling brush wood and disgraceful weeds.
Should it, for instance, be a southern steep,
Cross ways from east to west the busy plough
On the descent should form alternate plains,
A vista where the planter works at ease ;
Then copious showers will feed the thrifty plants,
But let not stagnant water mar the ground :
The scullion's wash, and vermiparous filth,
And noisome offal shun with pious care.
Yet spare not rich compost : the faithful soil
Will recompence thee double for thy cost,
The pigeon house, and hen roost yield manure
That none excells, but all, when mixed with lime,
Or ashes or what e'er the soil requires,
(For thou hast learned its nature,) do much good.
Be the soil what it may, I most commend
To let calcareous energy provoke
Nature's mysterious reproductive powers ;
A wonder that remains when wonderers
Drops into the vast laboratory.

Is there no death in death ? does death prorogue
But congregated life, and bid the parts
Go search for new associates, some to earth
Grossly assembled, some too pure for sight,
To roam the air, and feed respiring lungs,
Or leaves, the pulmonaries of the plant ;
Others to feed the stomach or the root,
With water, sugar, mucilage, and oil,
Carbon, phosphorous, and calcareous earth,
(As sayeth the assayer,) though ten thousand
shapes
And palpable appearance, taste and smell,

Mock our minutest search of natures change.
 First how the vagrant molucles can find
 Their kindred in the germinating seed
 Or swelling bud. For instance what was grass
 A year ago, can it presume to mix
 With the nectarious sap that feeds the vine?
 Again: who would abide the humbling thought
 That the rich draught that nerved Ulysses arm,
 Flashed from his eye, and gave his arrows flight,
 When all but Phemius felt his jealous rage,
 Has since, a thousand times in foul embrace,
 Become rank weeds that flourish round his grave.
 The cup perhaps that gave the deathless glow
 To song that lives when pyramids decay;
 Yea, for a hundred ages, has it been
 Exhaled to heaven and merge into the sea,
 And in its changes taken forms of life.
 The mighty power that bids these changes roll,
 Knows that the wisdom of the wise is vain,
 As microscopic tenants of a drop,
 Lording it each o'er each, to us would seem.
 What if man's vigorous orb take in its view
 A Quito's plain? Or his gigantic thought
 To Chimborasean heights undazzled rise?
 If there another Chimborazo towered,
 Another Quito's plain as wide were stretched;
 (Arduous research, and demonstration clear;)
 These and an hundred more if thou ascend,
 Vain wisdom of a worm! canst thou from thence
 Subtend an angle to infinity?
 What hast thou seen and known? thy paralax
 Is a lean cipher at its utmost stretch.
 The humble heart, the lamp of sacred oil,
 By grace supplied, sends upward to its source
 A purer flame; sheds clearer light around
 Then awful avalanchs' cold fitful glare.
 Proud science, will thy tangent ever meet

The secant of the good man's thought of love,
 Ascending uncontrolled by finitude ?
 Thou know'st (and at the tho't let thy crest cower)
 That the remotest star's unmeasured bound
 Brings thee no nearer than the startling point.
 Him who inhabiteth eternity
 To fear and love in truth, is wisdom's wing
 That palls not in its flight, but gains the goal.
 This wisdom may be his who tills the soil ;
 His who enchains the soul with silver tongue ;
 His who a nation's destinies controuls ;
 And his whom knowledge lifts above his kind.
 Be mine the humblest lot—yea, let me now
 In the wine garden unobtrusive toil,
 Repress errattick thought, nor turn aside
 To where a doubtful light directs the way.

Let us observe what food experience finds
 Best suited to afford a generous wine ;
 For 'tis the soil, the culture, and the skill
 Rather than the variety of grapes,
 That shall affix the seal to native wine :
 O let no care be spared, e'er fate has fixed
 The destiny. Try all varieties
 Of grapes, of tilth, of aspect, and of soil,
 And moods of preparation—if 'twere rocked
 In cradles in thy cellar, by device
 That art would hit on with far less expence
 Than equatorial voyages that are famed
 And justly, for the richness they impart
 And hale maturity, unknown before.
 " But the trite proverbe !" ah, there's truth in it :
 And wine from the same cask, the price enhanced,
 Has pleased the palate which contemned before.

Of *planting vineyards*—burthen of my song,
 Need I with studious care directions give ?
 For now Experience lends me his best aid,
 Apprised of, and approving this my theme ;

But, with the rolling year, the annual round
Of labours to be done, attempt a sketch.
Our year begins in nature's midnight sleep.
Nor much the vineyard needs labourious hands ;
Yet preparations for more active scenes
May now be made ; the stakes may be prepared,
And, frosts permitting, in their places set.

The vines are most endangered, when a frost
Succeeds a rain while the young wood is wet.
In Germany they cover o'er the vine
With earth to shield it from this dire attack.—
This, then our remedy, if need require.

The day when sons of Liberty rejoice,
The birth day of her champion, on that day,
Or soon thereafter plant well hoarded seeds
Of choicest grapes, and in the richest soil.
A cutting might be planted with the seed,
If one should perish the alternative
Is where it ought to be, and will remain.
If both should grow, let them have each two limbs,
And keep them pruned and see what fruit results,
The worse may be pulled up—grafted, and placed
When ere 'tis needed: (but if an old vine
Should perish, let it not be planted there ;
For thus such vacancies must be supplied:
A neighbouring limb, unsevered from the stock,
Must be bent down into the oblong hole
There fastened, and the hole filled with good earth
In other words a layer must supply
The casual vacancies that decussate
The veteran phalanx, long to blood enured:)
And thou mayest bless the day when hoarded seeds
Of choicest fruit, to faithful soil was given,
And men of future days, if folly live,
May feel the thrall of juice that bears thy name
And leering, lisp it in apology.
With cuttings, is the least adventurous mode

Of planting out a vineyard : than you know
 What you may hope for—and what would you wish
 Better than *Catawba*, for wine or fruit.

Seeds, layers, cuttings, all afford thee plants ;
 And if the last thou plant, select round shoots
 Thickly beset with eyes, and one or two
 May be of last year's growth ; then cut away
 The top that it bleed not upon the eye.
 Cuttings and seedlings of a former year
 Should now be pruned down to three eyes at most.
 Judge not the seedling's cluster by its taste
 Nor ask of infancy the strength of age,
 But when in mixture or alone it yields
 A pleasant flavoured wine ; the plant by age
 Yields juice more saccharine—a stronger wine.
 The early sweet and acqueous grapes should
 crown

Thy hospitable board, and please the child :
 While oft the austere grape, like truest friend,
 Conceals till saught, its latent generous worth :
 Nor scan the grape by its diameter ;
 If it have drunk the sun's maturing rays
 And filled with saccharine its viscous cells,
 What ere its name thence may flow generous wine.

With the fallen leaf the planting time begins,
 And ends when Aries meets the sky's bridegroom.
 For then the sap, warmed in the vernal rays
 Begins its flow, gushing from every wound —
 Yet some experienced vignerons prefer
 To prune when the vine bleeds ; these vignerons
 Appropriate, without grudging, their best soils,
 Rich gravelly debris, to the grateful vine.
 By other mood of pruning might the vine
 Run up too much in wood.—superfluous sap,
 Of the most acqueous kind, thus runs to waste :
 And useless growth restrained, and fruit improved.
 A thin dry soil may no such surplus yield ;

Hence autumn is preferred, or early spring
By other vignerons, each experience taught,
Tho' few are able to assign a cause
Of their wide difference, each possessing truth.
May it be yours, Columbia's favoured sons,
Quick to acquire, sagacious to discern
Truths that to human happiness conduce,
To teach the world the mystery of the tie
Of decomposing and reforming power ;
As ye have taught that which binds man to man,
And the shy fluid linking earth and heaven.

In early spring let the plough, spade, and hoe
Perform their various functions ; to firm stakes
Tie up in airy festoons the prone shoots
Designed for fruit ; those for supply of wood
Fix closer to the stake and let them mount
Yet not too high—judge what the soil can bear.
Rub from old wood the shoots that now appear
Unless required to fill a vacancy :
And when an eye produces double shoots,
Or evident superfluity appears,
Rub off the worst, so shall the rest have room
To inhale the sun beams and expand their fruit.
But caution on all hands will be required :
Pruning too closely is a grievous fault,
And an affront to nature. I once striped
A thrifty sapling of its ample leaves,
And now it stands a black and withered stake.
The vigour of the root, indeed, sent up
A new supply of shoots—thus mortal wounds,
(As they might seem, youth's energies surmount.
While somewhat from the track, let me relate
What bootless care I lavished on the vines
That I first planted. From the liberal hand
Of Carberry the hopeful cuttings came ;
I planted them upright, and many died :
Of those that lived, vain were the guard of stakes ;

The laundry made them all a lawful prize ;
 And careless feet broke down my choicest plant;
 And with it fell, and with it rose again
 My eagerest hope : for, from beneath the ground,
 Up sprang luxuriant runners, round and thick,
 Which far outstriped the choicest limb that grew
 On th' hide-bound parent cuttings that escaped.

In *April* let thy planting all be done :
 And now with thumb and finger rub away
 The useless buds old branches may put forth,
 With all redundant shoots, as has been taught ;
 And bear with me if I again enforce
 Merciless slaughter of intrusive weeds.
 Pursley may be attacked in time of rain,
 For water soon dissolves the humid stems
 Which, if exposed to droughth, and seeming dead,
 Congenial moisture will recuscitate.
 Let other weeds be left to the sun's ray
 E're they have formed their seeds for future toils.

In *May* with thumb and finger still break off
 Small shoots that would entangle and impede
 The limbs that now shew fruit ; but act with care.
 In Europe's colder climes the sunny hill
 Reflects the scanty warmth through foliage thin.
 That climate may forbid th' aspiring vine,
 In umbrage deep arrayed, to mount aloft ;
 Ours may—particularly in fertile soil.
 Experiment, and hide not the result.
 From this time till the vintage is brought in,
 Thy walks of pleasure may in gain result :
 Ever be heedful of the flexile vine,
 And with tough bark secure it to the stakes.
 The blossom-scented breath of summer breathes
 A lesson, which, let me again repeate ;
 Suffer no quick reviving weeds to rest : —
 The shuffle hoe makes hasty and clean work
 And as the flavour of the grape is prized,

From fetid weeds and filth keep the ground clear.
The grateful promise of the vintage now
Will prompt the kind attention requisite.
And here again conflicting practices
Ask sage experience to decide what's best.
Some clear out the young wood below the fruit,
Others above the fruit the runners stop,
And others say "by all means let these run."
No further speculations shall I urge
In queries or solutions; nor to books,
Save nature's book refer the disputant.
If he have but one talent and that be
To turn the leaves of books, best wrap it up
And hide it in the ground—a hopeless case.
If he have mother wit, use it I say;
And 'Tweedledums' and 'Tweedledees' decide.
Such champions does the vine's good cause
require.

October is the time for making layers.
Some vignerons the parent vine extend
Like the Banian tree, from root to root.
The long curved limb is planted deep,
The top ascends and spread again its shoots,
Which in like manner may be stretched along,
And an indefinite space be planted thus.
Of certain growth and meanwhile bearing fruit;
But generally cuttings are preferred.

Pruning may in *November* be performed.
Cut out old useless wood, and needless shoots
As judgment and experience may decide
The shoots of last year's growth bear fruit the next
From these and these alone the vernal sun
Will draw forth little shoots that bear the fruit:
Of these be careful of a good supply.
Here notions differ widely and of course
Truth may be looked for in the middle ground
Let reason and reflection guide the hand--

Shall the vine's healthful growth be lopped and marred

When in a rich deep soil that fears no drought
When down to depth unknown tap-roots descend?

Or on a dry and hunger-bitten soil

Should not th' attenuated shoots be pruned?

Surely; and thus the loose and gravelly soils

Such as produce Madeira's richest wines

A dark red earth; clay, sand, and marl combined,

Unmixed with scoriated substances.

A general rule is to leave but six joints

On strongest shoots of the last summer's growth

Some may have twice that number others half;

But be not covetous of present gain;

The wine deteriorates and the plant droops

When more than fair proportion is allowed

To oppress the vine, especially when young.

In open weather vines may yet be pruned

And now unfearful of vile grubs and worms,

Manure in ample heaps may be applied

To the roots of vines, to guard them from the frost.

In *making wine*, if boastfully inclined,

America might boast preëminence.

But where is he whose habit is not formed

To deem "Imported" and "the good" all one,

"Domestic" and "the bad" synonymous!

But time's sure tread shall folly's foot supplant,

And truth on falshood's ruins firmer stand.

Are all French wines Burgundy, Hermitage,

Or from the Clos de Vougeot, made with care

By Monks observant of peculiar spots?

Does the five million acres of French vines

A thousand million gallons yearly give

Of wine that for six francs per bottle sells?

No, and no emulous detractive thought

Dwells in my breast—at truth alone I aim.

Much wine of Europe sees no second year,

But the light beverage in the first is drank.
Nay, the best vineyards yield unequal wines :
Some favoured spot alone claims excellence ;
Thence duly ripened fruit well culled is brought,
And sometimes partly dried, sometimes piled up
On concave tables, whence there percolates
Syrup-like *must* that makes the richest wine.
Next, when the grape is bruised, rich wine flows
forth ;

And last, the screw's reiterated power
Drains to the vilest dregs the noble fruit.
The wine that last flows from the precious grape
Abounds in spirit ; mixed with slender wines
It gives them body and a rosy tint.

The sparkling Champagne from *de la Marne*
(Its two best Districts, *Reims* and *Epernay*)
Needs no eulogium. In extreme old age
They froth and sparkle with the glee of youth ;
And delicately pleasant is their taste.
Some of the sparkling wines take slight ferment,
Through cause obscure ; and much this wine is
prized.

But, oft unasked they burst their brittle bounds,
Lost in a startling sound, while far and wide
The splintered glass throws missiles sharp around.
Of black as well as white grapes it is made :
The grapes are shielded from the eye of day,
And hurried to the press ; where several times
They feel its force ; till a tinged liquor flows
Which to the fourth class sparkling wines gives
strength ;

Or, to account, with common red wines mixed.

The grapes for fabricating the *vin-rose*,
Are gathered carefully, as for the *white* ;
First from the branches striped, then slightly pressed
In the appropriate vat, and there remain
Till fermentation has at last commenced.

Also when the fruit ripens, it ferments,
 Elaborating its component parts,
 Which when complete, and the proportions just,
 And feculence removed, it fears no change
 Of seasons, nor regards the lapse of time.

What is proportion just? may we not ask
 All Europe, and in answer only hear
 The echo vain, 'what is proportion just?'
 We for ourselves will answer. We have found
 The saccharine deficient in our grapes;
 A common fault, by guess work remedied,
 Till the ingenious McCall applied
 The sacharometer and found at once,
 The failing and the certain remedy:
 And the first Vigneron our District boasts,
 Leaves the wayfaring man no room to err.
 And this the sum: take unfermented juice,
 Fresh from the fruit, say, if you please, a pint;
 If a fresh egg will to the surface rise,
 No more is requisite; but should it not,
 From a known quantity of *sugar* add
 So much (allowing it full time to melt)
 As till the egg shall to the surface rise.
 If only potent liquor please thy taste,
 Add sugar till like a broad thumb the egg
 Above the surface lifts its orb'd end:
 Weigh the remaining sugar, and you have
 Within the school-boy's reach the weight required
 For the whole quantity, which must be known.
 Then bung it tight; yet, lest the cask should burst,
 Let some air from a gimlet hole escape,
 For a few weeks, then drive the peg in tight.
 Nature will do the rest: thy task is now,
 Into clean casks, from the subsided lees,
 From time to time, and when the sky is clear,
 To rack or bottle up the clear, pure wine,
 When no extraneous sediment remains.

But why prolong these strains? If I have made
To ardent spirits a determined foe,
If I have filled with cheerful hope a swain,
Determined now to bless his native land
With the chaste beverage that the vine affords,
And if the fair approve my good design,
To dash to earth the drunkard's poisoned bowl,
And of the fire side arch increase the power,
Warm, with the temperate glass, the social glow;
While industry, assured of its reward,
And on its means relying, throws around
An ægis that defies th' approach of care;
Yea, and the legion issuing from the still,
Rags its broad banner, and the wretch its prey,
Shall beat upon this arch, and be subdued;
Then have I gained my end. Further detail,
If needed, may experience soon supply;
And soon our white winged ships, with their full
freight,
Shall dance upon the brine in haste to pay,
To foreign lands, th' accumulated debt.

Not that a reputation or reward
Attends my toil, nor that these humble themes
Have music in their sound. Nor I well skilled
As Virgil was, to give the daily scene
Beauty unknown before; maternal thought
That bringeth forth, and nature owns the fruit;
Nor have I sought in verbal flowers to dress
Fruits of experience and research, designed
To aid Industry in his daily toil;
Intent on labour, and in homely dress,
Unstudious now of dignity or grace.
Let the green arbour spread inviting shade,
Then may enraptured strains more sweetly flow,
The Muse, not always faithless, whispers thus.

Appendix.

I can in no other way so well do justice to the subject I have undertaken, and to my friends whose practical skill has been highly serviceable in the prosecution of it, as by annexing, by way of appendix, a part at least, of their communications *as received*. Every reader who feels at all interested in the general subject, will esteem as a treasure, the very concise yet clear and comprehensive detail of the most approved method of planting and managing a vineyard, furnished by Major John Adlum, comprising his latest improvements in this growing branch of agriculture, to which he has devoted the attention it deserves, and has ever entertained the patriotic desire to diffuse as far as possible the information he possesses on the subject.

The method of tying up bearing wood, as shewn by a young man from York county, Pa. and which we have here endeavoured to explain, has been found, on the test of experience in this District, to possess advantages worthy of consideration,—in the tending of the soil, economy in comparison of trellises or arbours, avoiding the bad effects of bleeding from pruning, and the observable improvement of the fruit.

Of the valuable extracts from "*The Topography of all the known Vineyards*," pointed out to me by Mr. Adlum, I have deemed the insertion of a very few sufficient to shew the diversity in the quality

of wines,—that the first quality is the product of peculiar *crus* (spots) only. The object of the work is to aid the merchant in making his importations; not to enter into a practical disquisition relative to these or the like peculiarities, with a view to benefit the cultivator. No one acquainted with the advance, at present made in the U. States in the fabrication of wines, can rise from a perusal of it without a conviction that our wines will far surpass the ordinary wines of Europe. And there can be no reasonable cause of doubt but that *crus* will be found in this country, capable of producing the very best.

It is fair that I acknowledge having in some few instances, availed myself, in the body of the preceding essay, of information which this work, and perhaps it alone contains.

AUTHOR.

ON PROPAGATING GRAPE VINES IN A VINEYARD.

1st. After having made choice of a situation which I would recommend to be as near the top of a hill as possible, so as to have all the advantages of a free circulation of air.

2nd. Prepare the ground by raising potatoes or other ameliorating crops, or by frequent and deep ploughings.

3d. Mark out the rows, viz. two rows within four feet of each other, and then leave an interval of ten feet, and then again two rows within four or five feet then again ten feet, by this mode of planting they will have a free circulation of air, and they may be worked with the plough, taking care not to go too near the vines where they must be worked with a spade or hoe.

4th. Stretch in the course a line, and at every four feet dig holes for planting the cuttings four feet apart and about eighteen inches deep, and have some good compost, or well rotted manure to mix with the earth, and for want of these take the best earth near the surface of the ground.

5th. Provide your cuttings, for I would always prefer these to rooted plants, when the cuttings are well chosen, which should be of shoots that are strong and well ripened of last year's growth: the bottom part should be cut off smooth near the joint, and the upper part should be cut about half an inch above the upper bud or eye, sloping from the opposite side of the bud, so that if it should chance to bleed, the sap will not run on the bud. The cuttings should be from sixteen inches to two feet long, and have five or six eyes.

6th. Having your holes dug, and your cuttings provided, plant one in each hole so deep that the

upper bud only is above the surface of the ground; then fill in the earth, pressing it to the cutting, and if it should be in the fall or winter that they are planted, cover the upper bud with a small hillock, which must be removed in the spring as soon as the buds begin to swell, and if from any cause the upper bud should perish, remove the earth to within half an inch of the next bud below, when there is but little danger of its not growing—when you plant your cuttings set a stake by each, a common lath will answer for two years.

7th. Keep your vineyard clear of weeds by working it occasionally, and suffer but one shoot to grow this season, by rubbing off all others with your thumb and finger.

8th. In the autumn raise a little earth about the young plant, which must be removed the next spring; and at the same time, after rubbing off the lower bud or eye, prune to three buds or eyes, and after they shoot preserve the two strongest of them rubbing off all the others; there will frequently be two shoots from one bud; rub off the lower one of the two, as it is always the weakest; and keep the vineyard clear of weeds as last year.

9th. In the autumn, say in the month of November, after rubbing off the lower bud prune each of the two shoots again to three eyes or buds; (except where they may have grown very strong, then there may be more left at the discretion of the person pruning;) and provide good stakes this year seven feet high, and about an inch and a half square, and tie two of the shoots one to each side of the stake, and suffer them to grow at full length, and rub off all side shoots; and if there should fruit appear suffer but one cluster of grapes to each shoot to ripen so that the shoots may gather strength to produce a fair crop the next year.

But there may be some of the vines so strong on the third year, as to produce a fair crop of grapes, and as there is no mode of describing it, it must be left to the discretion of the Vignerón ; for more can be shewn in a vineyard in five minutes, than could be satisfactorily explained on a sheet of paper.

10th. This season the vines must be pruned for bearing fruit—which is done by cutting of the two shoots (that are to bear fruit) from twelve to sixteen buds or eyes, and tying them to the stake on each side, crossing each other in manner of a ring ; and as the stake is square, train two shoots for next year's bearing on the two other sides off the stakes at full length to bear fruit on the following year.

11th. When the grapes are the size of peas cut off the end of the vine at least two joints beyond the last cluster of grapes, that the grapes may come to the greater perfection.

12th. When you again pruin your vines, cut off those that have born fruit close to the vine, and the bearing shoots must be pruned as last directed; those that are to bear fruit to be tied up in a circular manner, and those that are to bear fruit the next year, to be tied up as above directed, and suffered to grow at full length.

By planting the vines in rows of ten feet and five feet apart, and the plants at four feet distance in the rows, there will be about 1400 plants to an acre, and each plant, according to the number of bearing shoots left, will have from 30 to 60 clusters of grapes.

By having the rows at ten feet and four feet apart, and the plants four feet distant in the rows, there will be about 1500 plants on an acre, which will also produce as above.

*Extracts from "The Topography of all known
Vineyards." London—1824.*

Before the appearance of this work, the French were unacquainted with their own vineyards, and the comparative state of their products; and with the exception of Bordeaux wines, the English, at this time, have only a superficial knowledge of the names of certain vineyards. To this ignorance may, in a great measure, be attributed the continual disappointments experienced by the importer of French wines. It is notorious, that a bottle of good Burgundy or Hermetage, is seldom to be met with, however dearly purchased: the fault is immediately laid upon the change of temperature and carriage; but these are not the only causes. *Page 6.*

Few persons are aware, that the most famous vineyards do not produce a liquor of equal quality throughout, but owe their celebrity to certain favoured *crus* or spots; such is the case with the *Clos de Vougeot*, which gained its fame from a particular mode of collecting the grapes and from certain parts by the Monks; whereas Mr. Tortoni Ravel, their successor, followed a direct contrary practice, gathering the whole produce indiscriminately, and selling it all at the same price, six francs per bottle, each sealed with his name; thus, as the people of the country accuse him, sacrificing the quality to the quantity. Again, the best grapes produce juice of different qualities according to the different pressings, from the best to the very lowest; all which are kept separate, and used according to the will and discretion of the wine-maker. In both the above cases the wine may be the real product of the vineyard quoted, and yet bad.

Pages 6, 7 & 8, preface.

FRANCE, situated about the centre of Europe, is, by its position and the nature of its soil, the country richest in vines. According to the documents collected by the minister of the interior, it contained, in 1815, about 1,734,000 hectares of vines, [the hectare is 2.346 acres,] which produced, upon an average crop 31,000,000 hectolitres—[each 26½ gallons.] Since that time considerable plantations have been made; 1,900,000 hectares, now appropriated to this purpose, produce about 34,000,000 hectolitres of wine. In the provinces unfavourable to the vine about 7,000,000 hectolitres of beer, and 10,000,000 hectolitres of cider are annually fabricated.

Page 1 & 2.

Loan is situated upon a hill, and surrounded with vines. The vines on the south side are the best.

Chateau Thierry produces, upon the sides of the Marne, wines tollerable delicate, but without body or spirit. page 5.

Beauvais, Clermont, Senlis, Compiègne.

3500 hectares of vines produce annually 124,000 hectolitres; bad wine, which does not bear carriage.

The wines of *Champagne* are too well known to require any eulogy. The vineyards of the department *de la Marne* are those only which furnish the famous wine. Some *crus* of the department *de l'Aube* produce *red wines* justly esteemed: those of *Haute Marne* are less exported. The wines of the department *des Ardennes* are of inferior quality, and do not leave the country. Page 13.

The environs of *Saint Dizier* produce a great quantity of small wines; the proprietors are accused of increasing their colour by black wines and elder-berries and archil, called *brinbelles*. Pa. 30

Uhan near *Befort*, a wine, called *rangen*; it attacks the nerves violently, and causes paralysis.

The wines, called *gentils*, come from a fine grape called *riesling*, which is called *gentil raisin*, to distinguish in from the common, called *burger*. The proprietors have of late years mixed brandy with this wine, and added common wines, have much injured its reputation. Page 39.

Cote d'Or. In good seasons these wines unite all the qualities of perfect wine. They want no mixture or preparation to reach the highest degree of perfection. The operations, which in other countries are called *soins, qui aident la Qualite'*, are hurtful to these wines. They have their peculiar *boquet*, which is not brought out under three or four years. The introduction of *Aromatics*, or other wines, changes them. Even the mixture of two wines of the first class destroys the *boquet*, and reduces them to the second class, and even to the third. The *red* wines join to a beautiful colour much perfume and a delicious taste, and are at the same time *carse's*, [bodied,] fine, delicate, and spirituous, without being too heady. The *white* possess the same qualities, they are *moelleux*, [substantial,] and grown old of an amber colour.

In the department of the *Cote d'Or*, and district of *Chalons sur Saone*, about 21,200,000 gallons of wine are made, of which the inhabitants consume 8,480,000, the rest is exported. Page 66.

The *crus* forming the first class of red wines of Burgundy are, excepting *le Chambertin*, situated in the canton of *Nuits*, three leagues north-west from *Beaune*; the real wine is seldom procurable, as the vineyard consists of only one hundred and seventy-two ares of ground, [about 4 acres,] producing on an average, not more than ten or twelve pieces, or *demi queues* [about 56 gal. each.] P. 67.

The wines of *Torins* are finer and riper than those of *Chenas*, which have more body. The mix-

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ture of the two, which spoils the wines of other vineyards, forms with these a perfect wine. They will keep ten years. Page 81.

Pouilly, two leagues from *Macon*. These wines appear with credit in the third class of wines: they are *moelleux*, *fins*, *corses*, *agréables*, and have *du bouquet*. They are accused, with reason, of being too *fumex*. [heady.] Page 85.

La Rochelle, bad, with a disagreeable taste of soil. *L'Isle d'Oleron*, and *L'Isle de Re*, wines similar or inferior. Page 97

Marseillan et de Pommerols, wines called *de Picardan*, the name of the grape; *liquoreux* without being *muscat*; a very good flavour and *boquet*.—They keep long and bear carriage; they are used to give flavour to wines which fail in this; they become dry by age. The must of this grape is used to make the wine *Muet*, or wine whose fermentation is stopped by sulphur. A *vin de liqueur*, called *Vin de Colàbre*, is made by pouring in brandy.

Montbasin muscat wines, called *Muscatelles*; unless drunk within three or four years, they lose their flavour and sweetness. Page 134.

St. Estephe, Villeneuve de la Riviere, a great quantity of common wine; they are used for mixture with other wines. The best are more drank as tonics than used as table wines. Page 144.

SPAIN. In all the provinces of this country a considerable quantity of wine of different kinds is made, which forms the base of a great commerce. These wines differ from the French in the quality of the plants, the heat of the climate, and manner of preparation; the grapes are suffered to become quite ripe, and part of the *must* is moreover concentrated by boiling for forty-four hours. It requires a length of time to acquire the flavour and perfume; and the price varies accordingly. P. 174

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