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ON THE  
MANAGEMENT  
OF  
**ORCHARDS;**  
TO WHICH IS ADDED  
THE  
BEST AND MOST CERTAIN  
**METHOD**  
OF  
MAKING  
RICH AND MELLOW  
**CIDER.**

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BY  
J— H—.

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ON THE  
**MANAGEMENT OF ORCHARDS,**  
AND ON THE  
*BEST METHOD of MAKING CIDER,*  
&c. &c.

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ON THE  
*Management of Orchards,*  
AND ON THE  
BEST METHOD OF MAKING  
**CIDER;**  
TOGETHER WITH THE  
*Necessary Instructions for its After Care,*  
SO AS TO INSURE IT  
**GOOD AND MELLOW.**

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DEDICATED TO THE OWNERS AND OCCUPIERS OF  
ORCHARDS IN DEVONSHIRE,

BY  
J—— H——.

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*Omnium rerum ex quibus aliquid acquiritur, nihil est  
Agriculturâ melius, nihil uberius, nihil dulcius, nihil  
homine libero dignius.*

CICERO, DE OFFIC. 1, c. 42.

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“ *LO! thoughtful of thy gain,  
Not of my own, I all the livelong Day  
Consume in meditation deep, recluse  
From Human converse; nor at shut of Eve  
Enjoy repose; but oft at Midnight lamp  
Ply my brain-rocking studies, if by chance  
Thee I may counsel right; and oft this cure  
Disturbs me slumbering. Will thou, then, repine  
To labor for thyself; and rather chuse  
To lie supine'y; hoping Heaven will bless  
Thy slighted Fruits, and give thee Bread unearn'd?*”

“ *Wouldst thou thy Vats with gen'rous Juice should froth?  
Respect thy Orchards: Think not that the Trees  
Spontaneous will produce an wholesome draught.*”

“ *And shall we doubt  
To improve our vegetable wealth? or let  
The Soil lie idle, which, with fit Manure  
Will largest Usury repay, alone  
Empow'rd to supp'y what Nature asks  
Frugol, or what nice Appetite requires.*”

JOHN PHILLIPS.



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ON THE  
MANAGEMENT OF ORCHARDS,

§c. §c.

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AS the purport of the following Tract is to convey information, tending to promote an increase of Profits to the Agriculturist, in that branch of rural economy, at present, either, not well understood, or, too much neglected, because the Climate affords liberal returns without much Labor, it becomes quite unnecessary to offer apology for its publication; particularly, as those who read attentively, will immediately discover, how, by attentive and judicious management, they may insure to

themselves a high degree of pleasure and satisfaction, at the same time that they derive a considerable pecuniary advantage.

The cultivation of the Vine in France, was greatly improved, and the art of making Wines, Brandy, and Vinegars, put upon a regular system of beneficial product, by the united efforts of CHAPTAL, ROZIER, PARMENTIER, and DUSSIEUX, men of the highest scientific intelligence, and Members of the Societies established for the improvement of Sciences and Agriculture in France.

When it is considered how great the benefits have been, that have resulted from their exertions to establish a System that all might understand and practice, and how very similar our Orchard productions are to the Vineyards of France, it becomes a wonder, that some simple publication has

not been addressed to our Cider Growers, particularly in the enlightened County of Devon, developing a more regular, systematic, and consequently beneficial Plan of Management, than that too generally followed.

On almost every Farm in Devonshire, there is a sufficiency of Orchards to produce in what are vulgarly called "Good bearing Years," enough Cider to pay more than the Rent of the whole Farm, although their extent shall not exceed from one-thirtieth to one-tenth of its measurement.

This "Good bearing Year" is looked for about once in Three Years, and is regularly waited for by the Farmer as a matter of course,—he, taking few, if any, steps beyond a very moderate Dressing, in quantity far less than he would apply to a

Meadow usually mowed for Hay, and leaving the Crop of Apples to the chance of a "Lucky Year."

Should a Farmer (there are many, no doubt, besides PINSENT, of *Chudleigh*, and the MAYS', of *Dunsford*,) by better management than common, have Apples in his Orchards every Season,—such Orchards are denominated, by the unthinking, "Lucky!" and little or no observation would be made on his superior Knowledge, or the superior Method of Cultivation he practised.—No! "Lucky," is the term preferred by self love, as that passes no strictures on the observer's mis-management! Indeed, it would occasion no surprise, if, rather than be guilty of such a libel on himself, he were to attribute PINSENT'S success to the protection and visits of Mr. COLERIDGE'S friends, "*The Pixies of Chudleigh Rock.*"



It is not intended, in this little Tract, to occasion any individual to feel personal offence; and, although some prejudices may be rather hardly touched upon, it must be kept in mind, this is merely with a view to their eradication, that a better feeling, the result of knowledge and understanding, may be substituted.

In matters not well understood, much mis-information, and a far greater portion of mis-conception, are sure to prevail. As, for example,—It is a generally circulated opinion, “that frequent rackings make sweet Cider,”—hence, it is no uncommon affair for a Devonshire Farmer, on a wet day, to assemble all his People in his Cider Cellars, to rack his Cider; and this, from the false impression of its being essential to its mellowness, is so frequently repeated, that Color, Flavor, and Body, become considerably impaired.—On inspection after

this process, the Farmer finds some few Hogsheads mellow, and to his wishes,—many scarcely so good as they were,—and the rest much worse. In his surprise, he declares “ he cannot imagine how this can have happened, as *all were equally well managed and racked at the same time.*”—Hence, he concludes that racking is useless, and is induced to neglect it altogether, as unnecessary ;—and even here, he finds some cause of confirmation of his views, as those Hogsheads that have been longest in getting into a state fit for racking, when sold, being drawn off into clean Casks just at the time required, maintain a superiority, that to his mind, biassed in favor of that plan which brings least trouble with it, is conclusive.

One Farmer hears that another, (famed for sweet Cider,) always rots his Apples, and, in consequence, puts his Fruit in

Heaps, and lets them remain 'till he is compelled to use a Scoop to load his Press with the disgusting mass;—and he, too, expects mellow Cider!

Want of true knowledge,—want of system,—is all we have to complain of; and this once made known, will be sure of being kept alive by interest and competition, to the benefit of the Growers and the Consumers of Cider.

Every Vegetable has a Pabulum or Food peculiarly adapted to its healthy growth; and, as this naturally abounds or is furnished by art,—or, on the other hand, is either absent or neglected,—so does a soil become congenial to what is grown in it, or otherwise.

The Earth is the stomach of Vegetables, and the fibrous Roots are their absorbent

Vessels. As these Vessels are largely and healthily formed, to take up their Food,—or are deficient;—and, as that Food abounds or is wanting,—so is the Plant or Tree more or less healthy, flourishing in luxuriance of growth, or perishing by degrees—the victim of disease and parasitic plunder!

How often is it to be observed, that Apple Trees throw forth a fine luxuriant Blossom, which, through the kindness of Nature, appears, as it were, during a long period, to stand still as to growth or decay,—thus, giving time to the fibrous Roots to push their Mouths in the Earth in search of the requisite Nourishment to perfect the Fruit. But, alas! it is not to be found,—and those Blossoms, whose growth would rapidly have proceeded to the formation of a Crop of Fruit, had Man done his duty, fall off abortive,—form small unwholesome

Apples,—or become the Nidus for the deposit of the Egg of a Fly, whose thus continued race will commence fresh depredations the ensuing year, to the disgrace and disappointment of unthinking Man.

By long practice, all Farmers are aware how to prepare their Lands for Wheat, Barley, Oats, Peas, Beans, Turnips, &c. and when they fail of obtaining a Crop, are at no loss, however they may try to qualify the fact to their Landlords and Neighbours, to account truly to themselves for the cause of such failure.

Why should not the Culture of Orchards be brought under as certain a Management as Corn, or any other Vegetable production?

It is not meant, here, to be asserted, that a greater degree of difficulty will not be experienced than in the Management of

Corn! But, then, the increased difficulty will be merely in proportion to the absence of knowledge; and, as pains are taken to cultivate information, so will the obstructions to success disappear.

How many times do we notice that a piece of Wheat, which carries all the appearance of good management through the Winter, falls away in Substance and Color in the growing months of the Spring,—while other, that appeared thin and scarcely worth letting remain, grows away to an abundant Crop! This is owing to the Plant, at that Season of the Year, throwing out its Fibres in search of Nourishment to perfect its Seed Stem, (for Moisture, Light, and Air, will alone produce the grassy matter of a Plant;) and, in proportion as the necessary Pabulum and good Husbandry have been applied,—or, on the

other hand, neglected,—so is the Crop ample or deficient.

Who has not seen this frequently in Orchards?—Who has not frequently observed, as has been remarked before, Trees covered with Blossoms and Leaves—neither of which have had support enough from their Roots to come to perfection?—It is not the “*Lucky Year!*” That is, the whole is left to Nature, and she had not had time to concoct in the Earth a sufficiency of matter for the production of a Crop.—Will not, however, the thinking mind be convinced, that had the proper Pabulum and Attention been bestowed, the Crop (the Season being favorable,) would have resulted? *For, let it be well understood,* that all Vegetables, before the Blossoms can burst forth, send out their fibrous Roots to take up the Food necessary for perfecting the Seed; and while the Blossom

stands stagnated, they are pushing their subtle Mouths through the Earth in search of the required Nourishment;—where this is plentifully provided, in a Soil kept light and mellow around the Roots of the Trees, the difficulty is not how to obtain a Crop,—but would be found, if Experiment were made, how to prevent one! This is instanced in some Orchards, which are under highly superior Culture, where Frosts have cut off the promised Fruit, by the Trees bursting out into second Blossom on the same Year; and that this is the Truth, is a matter of easy inquiry, by Experiment among the minor Vegetables, such as Turnips, whose quick growth gives time for the observation, and whose disposition to form their Seed, when once excited, cannot be stopped by cutting off the Seed Stem, however frequently repeated.



By the way of illustrating what has been remarked of each Vegetable requiring a peculiar Food of its own, it is here worthy of observation, that although a Crop of Wheat, (generally speaking,) cannot be successfully grown after a Crop of Wheat, without dressing,—still, a Crop of Barley, of the most saleable Color, can! This is owing to the Wheat never taking up what forms the peculiar Nourishment of Barley: Wheat requiring *Gluten* and *Phosphate of Lime*,—and the Barley, *Nitrate of Potassa*, all of which are contained in Animal Manure and Urine.

Some Farmers, being made aware of the different Pabula required by Vegetables, and of their not interfering with each other's growth, have, very beneficially, cultivated their Horse-Corn for their own consumption, to a much larger production, by sowing Oats, Barley, and Peas, together in the

same Field,—reaping, of this “*Omnium*,” frequently upwards of Eighty Bushels per Acre, where neither, separately, would have furnished Fifty.

Although it is generally admitted that Wheat cannot be grown after Wheat with any prospect of beneficial result, yet, it is certain, if the matter abstracted from the Land by a Crop of Wheat, could be restored, Wheat might be again successfully cultivated to the end of time in annual succession,—and, in all probability, should this desideratum in Agriculture be ever ascertained, in Quantities per Acre, of which, at present, we have little or no idea.

Every Farmer, in the Vicinity of Exeter, is aware that the quickest growth of Turnips is promoted by the use of the Scavenger’s Dung, composed of Ashes of various sorts, and the Sweepings of the Streets;—the

cause of this is easily attainable: Turnips abound in what Chemists term *hydroguretted Sulphuret*, and this matter is contained in the Scavenger's Dung, in a higher degree than in any other Manure that can be easily obtained.

These Remarks on Grain, &c. may be considered as somewhat foreign to the object of this Tract; they are, however, introduced, by way of leading the mind through a subject so fully understood by Farmers, as the Cultivation of Corn, &c. to a conviction of how great has been the general neglect,—and how much may be accomplished by judicious Management of Orchards and their produce.

Somewhat or other, notwithstanding the immense production of Orchards, their Produce claims the least attention of the Farmer in general;—that is, as relates to

any really assisting management or helping hand! Thus, though Fifteen Seams of Hay per Acre would be a very large Crop to calculate upon from his best Meadow Land,—and Ten Hogsheads of Cider per Acre a common produce in good Orchards in “Fortunate Years,” besides the undergrowth of Grass,—he gives his Meadows nearly Two Hundred Seams of Dung per Acre every Three Years, and imagines the Sheep, with whom he feeds off the Grass, and perhaps to whom he hauls a few Turnips in the Winter, to leave sufficient Manure for the renewal of the Pasture and the growth of Apples,—unless, indeed, he wants a Crop of Potatoes, and has no better place than his Orchards to grow them,—in which case, he puts no more Dung for them than he would in any Field, and calls it dressing his Orchards! In his preparation, too, for Potatoes, he ploughs, instead of digging with a skilful hand, and

thus promiscuously tears away the Root and Fibres of the Trees, which may not inaptly be compared to mutilating the Mouth of an Animal that is put up to fatten,—a proposal to do which, the most ignorant Person on Earth would naturally term madness and folly.

Ploughing, and under-cropping Orchards, can be considered in no other light than a paltry system (arising out of ignorance of the mischief effected,) of digging at the least Expence, and obtaining a Payment for the Labor and Manure from an under-Crop, instead of generously awaiting for the Trees to make a return for them, and which they would do, by amply overloading the groaning Vessels with rich, stout, mellow Wine, under the following Management:—

Let the Orchards be manured *every Year*, directly after the Fruit is got in and the

Grass fed off, with from One to Two Hundred Seams of Dung mixed with a Quarter or Half a Ton of Salt Ashes per Acre.

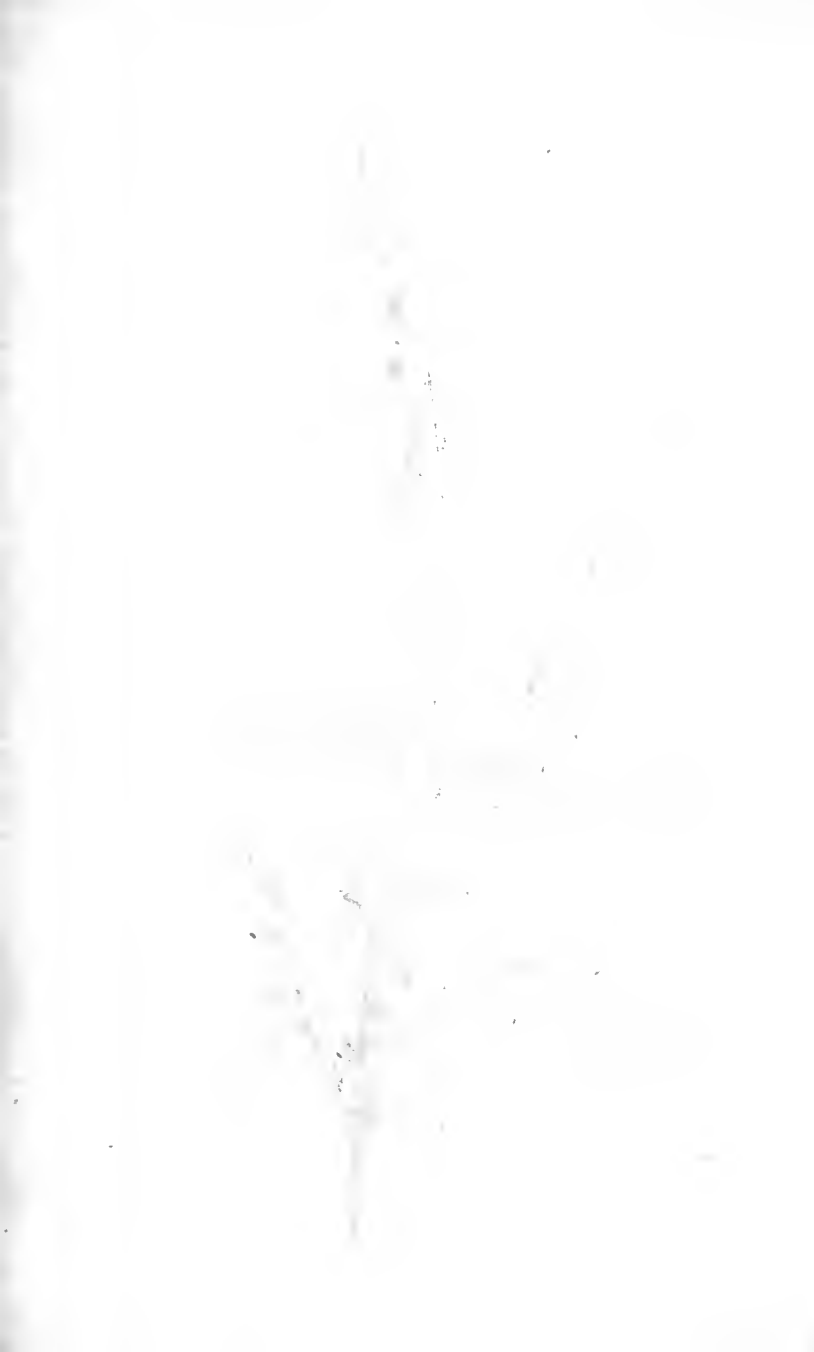
Let the Roots be dug round every Spring, so as to give fresh room to the Fibres, and to admit the Air, which is requisite to assist the decomposition of decaying Animal and Vegetable Matter in the Earth, and which, until in a state of solution, (dissolved,) cannot be absorbed by the fibrous Roots.

Let the Branches be pruned Annually, by a proper and skilful Person, so that bearing Wood may always be left in suffi-

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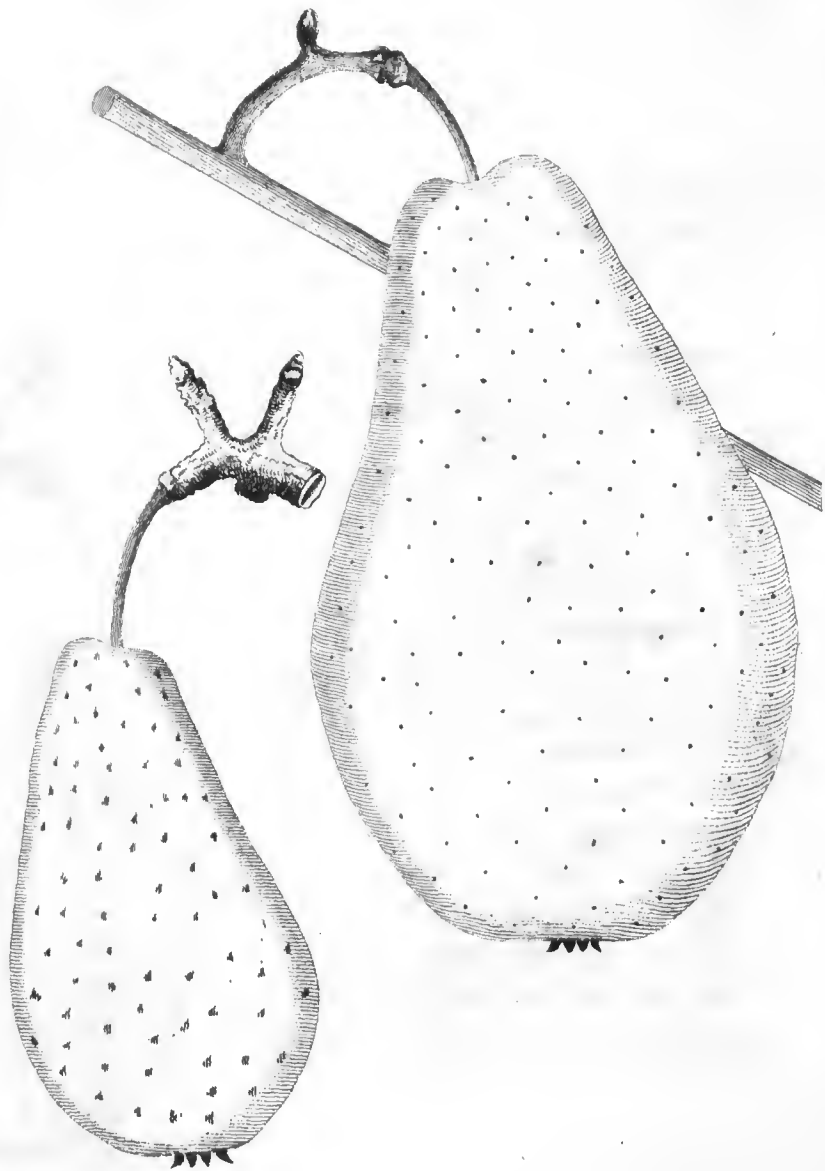
*a.* A Branch supposed to have done bearing, and which is to be cut out at *b*. This is to be succeeded by *c*,— which, when also done with, is to be removed at *d*,— *e* then takes its place, and when wanted to be pruned, is to be taken off at *f*, leaving *g* to succeed.











cient Quantity, and a due succession of Shoots insured; (the best time is in April or May,) at the same time taking care to remove all dead and superabundant Branches, and to carefully cut out the cankered Parts; this will, at the same time that it efficiently admits the Light and Air, prevent the absorption of Sap by unproductive Parts, and leave the juicy circulation more abundant for the perfection of a Crop of full, noble-sized Fruit, far exceeding any produced even in the luckiest of "Lucky Years."

As a specimen of what is effected for Fruit by judicious Pruning, a Sketch of Two Pears, grown on the same Tree, the same Season, is here exhibited,—the small one was grown on a Branch pruned with Spurs, according to the old System,—and the other fine Specimen resulted from the Branch itself, on which no Spur was suffered.

To keep the Bark of the Trees clean, and free from Insects, the following Wash should be used, as recommended by Mr. FORSYTH:—Take

*Fresh Cow Dung, a little Lime, and  
Wood Ashes,—  
Mix these with Urine and Soapsuds,  
for use.*

Wash the Trees with this Mixture, made about the consistence of Plasterer's White Wash, and lay it on in the same manner, in the Months of February and March; and, in the course of the following Summer, a fine new Bark will be observed.—If this be again repeated in the Autumn, it will destroy the Eggs deposited by various Insects, and further improve the Bark.

The same Mixture, made thicker, should be put over those Parts from whence the cankered Wood or superabundant

Branches are removed. as it will be found to heal the Wound, and renew the Bark.

Let not the Farmer think this useless trouble, but rather turn his mind to a full belief in a beneficial result, which will enable him to look forward to meeting with pleasure the demands of his Landlord.

Having shewn how to produce good Crops of excellent Fruit,—it now becomes necessary to advise as to the best Method of making the Apples into rich, stout, mellow Wine,—and which may be effected by a strict observance of the following Rules:—

Let the Fruit be selected,—ripe and perfect, and laid together in Heaps, not more than Eighteen Inches deep, till mellow,—*not rotten!*

In this mellow state let the Apples be ground.

**Hair-Cloth** is better than **Reed** for wrapping round the ground **Pomacee**, when placed in the **Press**,—as not being so subject to the attacks of parasitic **Fungi**, the **Pollen** from which we vulgarly call “**Mold**,” or “**Must**.”

Let all the **Utensils** and **Casks** be perfectly dry, sweet, and clean.

Put the **Juice**, as it comes from the **Press**, into large open **Tubs**, and let it remain therein till the **Head** rises, which skim carefully off;—and then put the **Cider** into **Casks**, observing not to fill them more than **Three-Fourths** full.—Dissolve **One Ounce** of the best **Isinglass** in some **Cider**, and mix it with that in each **Hogs-head**, stirring it well up.—Bung the **Casks** close, and let a **Spile** be put in the **Head** of each, and a little of the **Liquor** drawn therefrom daily into a clean thin **Wine**

Glass, that it may be known when the Cider is bright, which, as soon as it is observed to be, let it be racked,—and not before; unless, indeed, it should, from atmospheric or other causes, get into a state of fermentation,—in which case it should be instantly racked, and the racking continued till the fermentation ceases.

For, let it be remembered always, that, in proportion as the vinous fermentation is carried on, the Spirit is elicited, and the Sweetness subsides into the new product of Wine. It is of the greatest importance, therefore, that the vinous fermentation does not proceed beyond its due limits;—and, that it may be stopped at the proper time, it is necessary to watch the Must, or new-made Cider, by Day and Night, through the whole of the period,—because, soon after the termination of the vinous fermen-

tation, the acetous fermentation, or formation of Vinegar begins. But, from a variety of causes, it may happen that the vinous fermentation will go on too slowly,—very much to the deterioration of the Cider; in such cases, it will be advantageous to remove the fermenting Liquor to a warmer Cellar, where the temperature of the Air may be raised to 55 Degrees of FAHRENHEIT'S Thermometer, if so great a degree of Heat be wanted. An increase of Heat always promotes and accelerates the vinous fermentation, and much vigilance is required, at such times, to regulate the fermentation so excited, for fear of converting the Cider into Vinegar.—The first symptoms of which have been frequently observed within a few Hours after the close of the vinous Process thus artificially excited. As Heat promotes, so, on the contrary, Cold will restrain the activity of fermentation,—and, on the skill and address with



which these Agents are applied, the Perfection and Preservation of the Cider will depend.

The best Cider is always produced when the vinous fermentation has been fully completed. This may be known by the Bubbles ceasing to rise, and to increase the Head or Scum, which has been gradually formed on the Surface of the Liquor, and this critical moment for the first racking, should never be lost.

If the fermentation be carried on in Casks instead of open Vessels, greater vigilance must be used, because what is going on is out of sight,—and care must be taken that the Cider be racked the very moment the slightest degree of hissing is perceptible;—and, as Acids are formed by the absorption of that part of the atmospheric Air which is the acidifying principle, by

Chemists termed *Oxygen*, it is expedient that the Cider be kept as much as possible from its influence, and therefore it has been recommended in the process of racking, to use a small Cock, that affords only a thin quiet Stream, and that the Vessel into which the Liquor runs should be as near the Stream as possible,—because, in employing a large Cock, the Cider rushes out with so much violence, as to incorporate a vast Quantity of Air, which, consequently, aids its progress in becoming Vinegar. There is little more to add on these matters, except to recommend a Straw Mat as a covering for the Tubs, when Tubs are used to receive the Must, during the period of the vinous fermentation,—and to state, by way of example of the caution required in racking,—that at Dijon, in the management of that delicate Wine Burgundy, the French Factors contrive to rack their Wines without exposing them to the Air

at all! This may be easily effected, by the Casks to be racked being placed on a high Stilling, so that the receiving Cask may stand under the Cock of the other,—to the Cock should be fastened a small Hose, long enough to reach from it to the Bottom of the Cask into which the Cider is to be racked, and into which, by these means, it will run with perfect facility and quietude. When the Cask that is racked from requires stooping, the Hose may be removed, and the remains of the Cider drawn off into Cans, previous to its transit into that already drawn off;—this is particularly necessary, as constant examination of the Liquor, at this period of the racking, is especially required, to prevent any of the Lees, or Dregs, being mixed with the bright Cider. A Siphon should never be used for the purpose of racking, as it is almost invariably sure to produce Foulness in the Liquor to be racked, by the agitation unavoidable in introducing it into the Cask.

That the necessity of racking, the moment the Lees, or Dregs, are deposited, may be fully understood and appreciated, it is proper to observe, that as soon as this takes place, they assume a Flavor of their own, proportionably vicious and bad tasted, instanced in the tartaric deposition of Port Wine, as the Liquor becomes mellow and bright; and should these Lees, in Cider, be suffered to mix again with the bright Liquor, it will become so affected as never to be perfectly recoverable;—hence, in racking, not the smallest Quantity of that which is not bright should be allowed to pass into the Cask with that which is, or the racking must be repeated,—a circumstance always to be avoided, if possible, as being destructive of Color, Flavor, and Body.—So far is it untrue that frequent rackings make mellow Cider.

To effect a perfect Brightness, use the Isinglass as before directed,—and let it be

repeated, if necessary, remembering always to rack off within Four or Five Days after fining; then bung the Casks close, and let them be placed in a Cellar of even temperature, not exceeding 48 Degrees of FAHRENHEIT'S Thermometer, where the Cider may remain for use to any age.

By such treatment, Cider will retain its genuine relish, and be classed, as it deserves, under the denomination of Wine, possessing Strength that will keep for Years,—that will invigorate the Farmer and his People during the toils of labor,—and cheer the hearts of himself and Friends to kindly merriment in the hours of relaxation.

As bad Seasons, however, will occur, and frequently, in spite of every care, the Farmer will be compelled to use a mixture of different Fruit, in various stages of ripen-

ing, to compose the Pomace,—the Cider resulting therefrom will be of inferior Quality, and be found cloudy and turbid, —and ill-disposed, under every care, to assume the requisite brightness. Frequent observations of this Liquor will be necessary,—and, although the poverty of the Cider, under such circumstances, can ill bear the exhaustion of frequent rackings, yet its disposition to ferment may be so constant, that necessity will enforce the repetition of racking,—and no better course can be adopted. In this desperate case, much advantage will be derived from the observance of the Rules and Management herein laid down,—as many Improvements in the Treatment of Orchards, the Fruit, Pomace, and the Must, have been suggested,—and, consequently, a more generous Liquor will be obtained, than can be had (unless by chance,) amidst the mistakes and errors of the present usage.

Not having resided long enough in the County of Devon to become acquainted with the different Apples that are cultivated, —and having noticed the same Fruits to have different names in different districts, I shall not attempt to describe or enumerate the various sorts, but recommend the Farmers to be careful in observing the Orchards in their respective neighbourhoods, and to select for their own, those Apple Trees, which experience has shewn to be best suited to their particular situation and soil.



It is hoped, the foregoing Observations, which are purposely condensed to make them more generally useful, may prove acceptable to those who possess Orchards, —and the observance of the System laid

down, be the means of produeing much Satisfaction and Profit,—and of speedily annihilating the Expression, as well as the Liquor, which is now too frequently met with—

“ Good Working-Man’s Cider ! ”

*J. H.*









