On Cider and Perry Making.

Communicated by T. W. Booker, Esq., M. P. to the Journal of the Society of Arts.

At the recent Agricultural Meeting at Ledbury I made a few remarks on the production of Cider and Perry, which induced some of my constituents, there assembled, to seek a conversation with me afterwards on the subject, during which they requested me to "write another letter," with reference to the proper season for gathering the fruit and the mode of managing the fermentation of the liquor. If the remarks which I have to make shall awaken due attention on the part of the cider and perry producers of our country, I feel convinced of this, that, to use the words of one who wrote on the subject two hundred years ago, Dr. John Beale, a Fellow of the Royal Society, "these parts of England will be some hundreds of thousands of pounds sterling the better for it."

That the whole subject may be before us, I will beg you to copy the following, which is a reprint from the *Bath Chronicle*—a newspaper having extensive circulation in the Cider Counties of the West of England, the editor of which copied it from the *Hereford Journal*, and struck it off for gratuitous distribution, and to whose obliging courtesy I am indebted for the copy I send you:

"Cider.—T. W. Booker, Esq., M.P., recently addressed a letter to the *Hereford Journal*, stating that his relative, Mr. Blakemore, of the Leys, Herefordshire, had, sometime before, conversed with a German Baron, who has large estates on the banks of the Rhine, where hock and other celebrated wines are produced, and that the Baron said that many sorts of the Herefordsire apples were capable of producing as valuable and desirable a beverage as the hock grapes, if a different process of making the liquor were adopted. The result of the Baron's observations is contained in the following extracts from Mr. Booker's letter:—

"Our liquors,' said the Baron, 'after the fruit is pressed, are strained, so as to separate the course muss from the liquor, which is then put into large vessels, when shortly afterwards fermentation commences. This fermentation we watch with the utmost care and attention, considering that upon it everything depends connected with the future quality and richness and value of the wine; in the course of a few days, the finer muss that remains in the liquor after the straining above alluded to, drops to the bottom, and the liquor becomes perfectly clear and transparent, retaining all its original saccharine matter, with all its strength, richness, and flavor. At this critical period, upon which we consider the quality of our wines depend, we adopt the process of racking. This racking must be effected in such a manner as to prevent any part of the liquor coming into contact with the atmospheric air; should it do so, fresh fermentation, in all probability, will take place, and by the same means, the like causes repeated will operate and be followed by the same results—repeated fermentation—until the flavor and richness of the origina, liquor are destroyed, and the liquor, instead of becoming winel would become as worthless as your inferior cider.'"

"The reason for this Rhenish caution (writes Mr. Booker) in preventing the liquor from coming into contact with the atmospheric air during the process of racking, is this. The first fermentation is what is termed vinous fermentation, and results in the liquor subjected to it becoming wine, if repeated fermentations are allowed to follow, they are what are termed acetous fermentations, and they result in the liquor parting with its vinous and saccharine properties, and imbibing acid or acetous ones, and it is converted into vinegar. Now the atmosphere is the laboratory from which the liquor absorbs the chemical agent which produces these distinct and separate fermentations.

"And now practically to apply these observations. One fermentation is all that is wanted to convert the juice of the apple into wholesome cider.

"The plan to ensure this which I recommend is as follows:—First—Grind the apples in the cider-mill, and squeeze the juice from the pulp, as is done at present. Second—Run or pour the liquor, after being squeezed or strained, into a vat, capable of containing three or four or even more hogsheads. This vat must be placed in an elevated position, at least five or six feet above the floor, to admit the hogshead or cask, in which the liquor is to be ultimately secured, to be placed under it. At the bottom of the large vat let there be a hole of from one-and-a-half to two inches in diameter, for the purpose of a tube being passed through this hole into the hogshead or cask under it. This tube or pipe should be of a sufficient length to pass through the muss or sediment which deposits itself in the large vat, and to reach at least six inches above it into the clear liquor, and it should be of sufficient length to pass through the hogshead or cask placed below or under the vat, into which the liquor is to be passed, nearly to the bottom. While this process of fermentation is going on, the top of this tube should be corked or plugged up. When the liquor in the vat has dropped fine, the cork or plug being withdrawn, the process of racking commences and is accomplished, and the fine liquor will run from the large vat through the tube into the hogshead or cask placed under it, the liquor retaining all its original saccharine qualities.

"And now the work is done: and the result will be found to be a liquor wholesome and palatable, full of spirit, richness, and flavor, and of value proportioned to the descriptions or sorts of apples which are cultivated in our orchards. My own firm conviction is, that the difference in value, in the market, of all the cider produced in Herefordshire by these simple means, over and above that produced by our present careless and slovenly means, would amount to many tens of thousands of pounds a year, and would be so much clear gain and profit to all those who make cider, to say nothing of the health and pleasure of those who drink it."

Since I wrote the foregoing, I have been favoured by a highly-valued and intelligent friend of mine, resident in our county, with the following admirable "Treatise on Cider-making:" it was written many years ago for the Farmers' Club at Ross, and is so comprehensive, and full of the most practical information, and, moreover, gives it in so much better language than any I can use, that I feel I cannot do better than place it before the public.

"The production of good cider must depend upon the description of fruit of which it is made, the season, and state of the apples when they are crushed, and the management of the juice whilst it is fermenting. It will therefore be proper to consider the subject under these three heads separately.

The kind of Apple which makes the best Cider.

"The acid which gives the peculiar quick and sharp feeling upon the palate in good cider, having first been noticed in the apple, although it exists in many other fruits, has been termed malic acid. It may not be too much to say, that it is the due combination of this acid with saccharine matter, namely, the sugar of the apple, properly fermented, which is the object to be aimed at in the manufacture of cider. In the selection of the fruit will depend the proportion of malic acid contained in the liquor. The crab has a much greater quantity of this acid than the cultivated fruit: and, generally speaking, in proportion as we obtain sweetness by culture, we deprive the apple of its malic acid.

"Hence it follows that some delicious table fruits will not