(that is perfectly clean) into a clean well scalded glazed earthen crock, then stir into it, with a clean stirring stick, as much superfine flour as will make it about half thick, that is neither thick or thin, but between the two, stirring it effectually until there be no lumps left in it. If lumps are left you will readily perceive that the heart or inside of those lumps will not be scalded, and of course, when the yeast begins to work, those lumps will sour very soon, and of course sour the yeast; stir it then till all those lumps are broken, and mixed up, then cover it close for half an hour, to let the flour, stirred therein, be properly scalded, after which uncover and stir it frequently until it is a little colder than milk warm, (to be ascertained by holding your finger therein for ten minutes, but beware your finger is clean,) then add half a pint genuine good yeast, (be certain it is good, for you had better use none, than bad yeast) and stir it effectually until you are sure the yeast is perfectly incorporated with the ingredients in the pot; after which cover it, and set it in a moderately cool place in summer, until you perceive it begin to ferment, or work, then be careful to stir it two or three times at intervals of half an hour—then set it past to work—in the win-
ter, place it in a moderately warm part of the still house, and in summer, choose a spring house, almost up to the brim of the crock in water—avoiding extremes of heat or cold, which are equally prejudicial to the spirit of fermentation—of consequence, it should be placed in a moderately warm situation in the winter and moderate-
ately cool in the summer.
This yeast ought to be renewed every four or five days in the summer; and eight or ten in the winter but it is safer to renew it oftener, or at shorter intervals, than suffering it to stand longer. In twenty-four hours after it begins to work, it is fit for use.

Between a pint and half a pint of the foregoing stock yeast is sufficient to raise the yeast for the daily use of three hogsheads.

2. Mode of separating Beer from Yeast, and preserving the Yeast for a great length of time in any climate.

Mr. Felton Matthew, merchant, London, obtained a patent for the above mentioned object, which may be found in the Repertory of Arts, vol. v. p. 73. Mr. Matthew uses a press with a lever, the bottom made of stout deal, oak, or any other timber fit for the purpose, raised with strong feet a convenient height from the ground, so as to admit the beer to run off into whatever is prepared to receive it. Into the back of it is let a strong piece of timber, or any other fit material to secure one end of the lever, the top of which is secured by being well wedged up to a girder, or the joints at the top of the building. In this piece of timber is mortised one end of the lever, which is fastened into the mortise with an iron pin, or otherwise properly secured; the whole well secured with iron work. The yeast
is then put into bags made of sail cloth, or any other strong cloth or materials, and carefully tied or secured, then placed flat on the press; a board is then laid on it and the lever let down on it, and weights are hung at the other end of the lever, by hooks or otherwise, and weights are added as the beer runs from the bags, care being taken not to burst the bag nor to force the beer out too thick; which to prevent, the bag is placed in a trough of a proper size, with a false bottom, bored full of holes (the sides and ends being likewise bored full of holes) and blocks put above for the lever to act upon. When a sufficient weight has been added to force the beer out completely, which may be done by a screw press, if necessary, the yeast, which remains in the bag will crumble to pieces. It must then be thinly spread upon frames made with canvass, hair cloth, or any other thing which will permit the heat to pass freely through it, in a room, kiln or stove, or other place where a regular heat can be kept up to the temperature of from about eighty to ninety degrees; observing to break it fine as it dries, by passing a board or other fit thing lightly over it. When completely dry, put it into tight casks or bottles, so as to exclude the air or any damp, from it, and it will then keep a great length of time, and in any climate. When wanted for use, it may be dissolved in a small quantity of warm wort, or sugar and water of the temperature of eighty or ninety degrees, when it possesses the same quality as fresh liquid yeast.

The above directions are copied at full length for the
benefit of those who may wish to put up large quantities of yeast; some distillers being of opinion that this is the best mode of keeping a constant supply of sweet stock yeast. The principle being established, few distillers will be at a loss for a method of carrying it into operation. In the country there are few farmers without cheese presses which will answer the purpose perfectly well.

3. **Substance of the specification of a patent granted to Mr. Richard T. Blunt; for his new invented composition to be used instead of yeast.**

To make a yeast gallon of the above mentioned composition, containing eight beer quarts; boil in common water eight pounds of potatoes, as for eating; bruise them perfectly smooth, and mix with them whilst warm two ounces of honey, or any other sweet substance, and one quart (being one eighth part of a gallon of yeast) of common yeast.

**Remarks by H. H.**

The above may be used without using any yeast as follows. Prepare the potatoes as above, put a small handful of hops into three pints of water and boil it down to a quart, strain it and let it cool to 150 degrees, then add a pint of malt, stir it well, and mix with the potatoes when about milk warm; add a half pint of honey or mo-
lasses; cover and let it stand in a warm place; it will be fit for use in six or eight hours.

4. A substitute for brewers Yeast, patent!!

Take six pounds of malt, and three gallons of boiling water, mash them together, cover the mixture and let it stand three hours; then draw the liquor off, and put two pounds of brown sugar to each gallon of liquor, stir it well till the sugar is dissolved; then put it in a cask just large enough to contain it, and cover the bung-hole with brown paper; let it stand four days, kept to a blood warm heat. Prepare the same quantity of malt and boiling water as before, but without sugar, mix it all together and let it stand forty-eight hours, when it will be fit for use. This is called by the patentee, the fermentation.

To make seventy-six gallons of the substitute.

Put twenty-six ounces of hops to as many gallons of water; boil it full two hours so as to reduce the liquor to sixteen gallons. Take this and mash it with the malt when the liquor is at 190 degrees; it must now stand two hours and a half, and be strained; ten gallons of boiled water, at the same heat, is to be mashed with the malt, strained and cooled. Take the first liquor when blood warm, and put to it four quarts of the fermentation: mix it well, and let it stand ten hours. Take the remaining ten gallons of the liquor, and put it with the sixteen gallons of liquor, let it stand
six hours, and then it is fit for use, in the same manner and for the same purposes which brewers yeast is made use of.

The advantages attending this invention are, that the substitute for yeast will keep sweet and good longer than brewers yeast, may be used in all weathers and climates, and is the means of making bread more white and lighter than brewers yeast.

5. *For stock Yeast, another receipt.*

Take as many hops as may be held between the thumb and three fingers, put them into a quart of water and boil them well together, a few slices of apple or pumpkin put into it will be an advantage. Then pour the liquor off, or strain it through a coarse cloth, and add three spoonsful of molasses, and stir in as much wheat flour as will make it of the consistence of batter, cover it over and set it in a proper temperature and it will be fit for use in seven hours.

6. *Another patent Yeast for keeping.*

Half a quarter of hops put to one gallon of water, and boiled to a quart, when boiling hot strain it, and thicken it with rye flour, quite stiff, when sufficiently cool add a quart of good yeast, let it rise twenty-four
Of Yeast.

hours; then take fine boulited Indian meal and thicken it until thick enough to mould out upon a table; roll it, cut it in slices, dry it perfectly, then put it up for use. To be made in cool weather.

N. B. If good stock yeast be well strained and mixed with molasses in the proportion of one to three, it may be kept for a long time in well corked bottles.

7. To preserve a good stock of Yeast, for the summer season.

About the latter end of the month of April, take two or three gallons (or more if very extensively engaged in business) of good sweet yeast, that is, in a perfect state of fermentation; thicken it with coarse wheat middlings or chopt rye, adding at the same time about two gills of whiskey. Spread it out upon a clean board, and after it has dried in the sun a few hours, rub it through your hands so as to break up all the lumps: expose it daily to the sun and air until it becomes perfectly dry, taking care not to leave it out until the dew begins to fall; it is then to be put up in small paper bags, and kept in a dry place until wanted for use.

By a careful attention to these directions, the distiller may rely upon having a perfectly pure and sweet stock of yeast which will remain so for any length of time, if kept in a dry place. About two hours before you
wish to make use of dried yeast, take three or four gills, put in a proper vessel, and pour thereon a sufficient quantity of warm water to make it of the thickness of mush, stir it well, and in a short time it will be in a state of fermentation, fit to raise the necessary quantity of yeast for daily use.

A sufficient quantity of the above yeast should be made in the spring to last until fall, calculating upon the use of about one pint per week, as it will generally be found necessary to renew yeast once a week in warm weather. It would also be well enough to put away a small quantity in the fall for use during the winter, when a renewal every three or four weeks will be found of great advantage, and sometimes actually necessary.

8. Of Yeast for daily use.

A sufficient number of receipts being given to put the distiller in possession of a good stock of yeast, and to enable him to preserve it sweet and good, it now remains to apply it to daily use. For this purpose, care should be taken, that not only the water and the vessels to be used, are perfectly clean and sweet, but that the meal to be used should be entirely free from lumps, mustiness, or acidity; for, upon a proper attention to this part of the process depends in a great measure the success of the distiller.
9. For the Yeast necessary for eight hogsheads.

Have a wooden tub capable of holding six gallons, take a handful of hops, rub them between your hands so as to separate the leaves, into the tub, pour on them four gallons of boiling water, cover it with a cloth, let it stand a few minutes until the heat is about 155 degrees Farenheit, then stir in malt and rye meal mixed, in the proportion of one fourth of the former and three fourths of the latter, stir it until there are no lumps left, let it stand covered for about fifteen minutes, then uncover and stir frequently for half an hour. It is then to be mixed by small quantities with the stock yeast, in another vessel, taking care not to mix it too warm, nor so much at a time as to retard or stop the working of the stock yeast. It must be so managed, as that the whole shall be mixed in this way about an hour before cooling off, except about one gallon, which is to be reserved until you cool off. Then add to it about one pint (more or less, according to the weather,) of yeast, and set it away for stock the next day. It will be found in a fine state of fermentation. This is the best way to keep yeast from day to day, and with attention will be sweet until the stock degenerates.

According to these two last receipts, yeast was generally managed in the author's distillery.
To judge of the quality of Yeast, and to sweeten it when necessary.

Observe if it works quick, sharp and strong, and has increased considerably in bulk, at least one half more than before it commenced working; that it has a sweet taste and smell, with somewhat the appearance of a honey comb, constantly changing its place, and rolling like waves from the sides to the centre, colour bright and lively, and the head constantly rising, or rather, not having fallen from its greatest height; these appearances indicate good yeast. But on the contrary if it be dead or flat, works sluggishly, head considerably fallen, and has either sour taste or smell, it must be renewed, or if there be not sufficient time for this, before the yeast is wanted, it may be sweetened by simply scraping into it a small quantity of chalk.

This however is the last resource of business, and the good distiller should be careful not to be obliged to resort to it.

Account of a method of generating Yeast.

[Communicated by the Rev. Wm. Mason to the Society for the Encouragement of Arts, Manufactures and Commerce. A bounty of 200l. sterling was given to his servant for the discovery.]

This experiment was first made by impregnating wort with fixed air, according to the ingenious me
thod recommended by D. Henry, and succeeded very well. Another experiment was made without fixed air, which also succeeded;—a small quantity of yeast was made with no other ingredients than malt, water and heat. The original quantity made was increased in a few days, until it became sufficient to work a hogshead of small beer, which produced ten pounds of perfect yeast, and this being soon after put into a vat for a hogshead of ale, was augmented to forty-two pounds.

The discovery therefore is simply this: "That yeast is not (as has been thought) some peculiar and unknown substance, necessary to be added to wort in order to put it into a fermenting state; but that malt boiled in water will generate it (as the chemists say) per se, if the following circumstances be attended to:

1st. That the process be begun with a small quantity of the decoction.

2d. That it be kept in an equal degree of heat. And,

3d. That, when the fermentation is begun, it should be assisted and augmented with fresh decoctions of the same liquor."

For the proportions and method found to succeed by his servant, Dr. Mason gives this
RECIPE:

Procure three earthen or wooden vessels of different sizes and apertures, one capable of holding two quarts, the other three or four, and the third five or six: boil a quarter of a peck of malt for about eight or ten minutes in three pints of water; and when a quart is poured off from the grains, let it stand in a cool place until not quite cold, but retaining that degree of heat which brewers generally find to be proper when they begin to work their liquor. Then remove the vessel into some warm situation near the fire, where the thermometer stands between 70 and 80 degrees (Fahrenheit,) and there let it remain till the fermentation begins, which will be plainly perceived within thirty hours; add then two quarts more of a like decoction of malt, when cool, as the first was, and mix the whole in the larger sized vessel, and stir it well in, which must be repeated in the usual way, as it rises in a common vat, then add a still greater quantity of the same decoction, to be worked in the largest vessel, which will produce yeast enough for a brewing of forty gallons.

This has never failed, except when the failure was to be accounted for from an inequality of temperature of the air, where the experiments were made; therefore, in the hands of a good practical brewer, accommodated with a place where his little vat will stand in a constant degree of proper heat, it will generally succeed, especially in brewing seasons.
Dr. Mason adds, that the experimenter was of opinion, that a proper quantity of hops boiled in the liquor makes the fermentation proceed better, but as it may, and has actually succeeded without such addition, it had better be omitted where the yeast is wanted for bread, lest it make it bitter.

Dr. Mason defines yeast, used for the purpose of brewing malt liquor, or raising bread, to be a "viscid frothy substance which arises on the surface of a simple decoction of malt in water, when in a state of fermentation, and which substance, after it has been so generated, may, by additional quantities of the same liquor, gradually supplied, be increased ad infinitum."

For the purpose of keeping up an equable temperature around the vessels containing the yeast, Dr. Mason made use of a small box, about 12 or 14 inches square, open on one side, the open side being placed fronting a warm wall or stove, or fire-place. This heat, he says, should be rather below 80 deg. of Fahrenheit. In this box he made the following

Experiment 1. Three vessels were set at the same time in the warm box, containing a quart of liquor each, and of equal strength with respect to malt; one was a decoction without hops, another with hops, the other a pure infusion of malt; in about twenty-four hours the hopped decoction produced a fine head of yeast; the other decoction fermented as well, but was
twenty-four hours later; the simple infusion was near thirty-six hours later, and the yeast appeared dark and ill coloured, so that it was thought to be spoiled: its bad appearance however was only owing to its not having been boiled and cleared, for it made very light breakfast rolls.

This experiment, the Doctor concludes, proves that hops accelerate* the fermentation; it would seem also to prove, that neither hops or boiling were necessary to the process.

Experiment 2d. Four vessels from a common brewing of all were placed in a box of longer dimensions; one contained two quarts; a second, one quart; a third, a pint; a fourth, half a pint: they all shewed signs of fermentation the same time, viz. in about 24 hours; but that in the mug or pot holding a pint appeared the strongest, which was thought to be owing to the smaller diameter of the vessel, which was smaller in proportion to the half pint; but as it stood more centrally to the heat of the fire behind, I am persuaded the excess of fermentation proceeded from that cause. This proves, that the quantity with which the process is commenced, is not material.

Experiment 3d. Was instituted merely to find whether an addition of sugar would accelerate the fermentation; for which purpose, two quarts of hopped

* This is contrary to the general opinion, that hops retard and regulate the fermentation.
liquor were tried in separate vessels, a quart each, and the result was, that the decoction in which two large spoonsful of cane sugar were stirred in, did not ferment in the least, though continued in the warm box five days and nights; the other fermented in about thirty-six hours. The reason of this later fermentation than that of the others in the former experiment, was, that the liquor used was from a brewing of small beer. Hence we may conclude, that a decoction of the strength of ale, if not of strong beer, is the best to begin with.
CHAPTER XII.

Of Mashing.

A SUFFICIENT number of hogsheads being had in readiness, and a good stock of yeast prepared, agreeably to the directions in the preceding pages, the important operation of mashing next requires attention.

This process, upon the correct performance of which, the success of the distiller greatly depends, is by too many considered as a mere mechanical operation, and hence arises the very great difference of opinion among distillers, and the variety of results which are observed even in the same distillery. Why should there be this difference in a matter which it is in the power of every operator to reduce to a tolerable degree of certainty? Prejudice does much, but ignorance does more. Our distilleries were for a long time conducted by men ignorant of the principles of the art, and entirely unacquainted with the causes which produced the certain effects; a particular method was adopted which was transmitted from one to another without the least deviation. Heat, that all-powerful agent, upon the proper application of which success entirely depends, was scarcely attended to, or judged of by feeling with the fingers, than which, a more fallacious method could not be devised. Hence the various results, and consequent surprise of the ignorant operator.
Of Mashing.

To guard against this variety in the results, and render them as uniform as possible, particular attention should be paid to the precise quantity of ingredients employed, and the heat regulated by a thermometer, an instrument absolutely necessary in every distillery. And the young distiller should be careful to make notes of every part of the operations, and the results, by a comparison of which, he may be enabled to regulate his future operations with a greater degree of certainty.

The term mashing in its usual acceptation, may be applied to any mixture of meal and water, at any degree of heat, or the art of mixing. Among distillers however, it would be more properly defined to be that process by which meal or grain is prepared for vinous fermentation, by a skilful mixture of certain portions of meal and water at a particular degree of heat, which being continued, separates and dissolves the component particles of the grain, develops the saccharine matter, and prepares it for entering at once into the vinous fermentation.* Hence the very essence of the

* This ought to be considered as the first stage of the vinous fermentation, and the malt as the ferment which induces it. Hence it is, that when the malt is put in at the same time with the Indian corn, the sweetening and cracked appearance take place almost as soon as the hot water is put on them, and grain mashed in this manner, may be cooled off to 72 deg. or 75 deg. in summer, and proportionally low in winter; because of the strong disposition to vinous fermentation already imparted by the malt. Having thus ascertained the use and effect of the malt, we see the advantage of putting it in at the very beginning of the process, and we also see the reason why we have always been disappointed in expecting any benefit from adding it just before the time of cooling off.
process is, the proper application of heat, according to which will the process be more or less complete, as is abundantly shewn to every one who has paid due attention to it, by the quantity of saccharine or sweet matter which rises to the top of the mash, when the proper degree of heat has been applied.

This precise degree of heat can only be attained, with certainty at all times, by the use of the thermometer; but as this instrument cannot always be had, the operator must then judge of the mash from the appearance and taste.

When Indian corn (maize) is properly scalded, upon stirring it well, and letting it stand for a few minutes, it will be found cracked in several places, and have the appearance of water oozing from the cracks, the mashing oar moves freely; there will be no lumps, and upon withdrawing the mashing oar, but a small portion of the mash will adhere to it, and will appear transparent. If too highly scalded none of these appearances are perceptible; the mash is thick and lumpy, appears dead and heavy, and adheres very closely to the mashing oar, which it is difficult to move, and the taste is like well boiled mush.

When not sufficiently scalded, the appearance is very watery, or like cold water and meal mixed, and upon standing a few minutes the meal separates and sinks to the bottom of the cask, leaving the water clear, and with the taste of raw meal.
Of Mashing.

When rye is well scalded, the same appearances occur as in Indian corn well scalded; it is transparent, and but little adheres to the mashing oar; the colour is somewhat increased in brownness, and upon standing, a white cream rises to the top of the mash, which is perfectly sweet; this takes place within 20 or 30 minutes after the mash is made, and according to its quantity may the perfection of the process be judged of, and the produce pretty accurately estimated; this is a sure indication of a good mash, and appears with all kinds of grain.

If not sufficiently scalded the raw taste is apparent, and boiling water may be added to raise the temperature; but if too highly scalded, the mash is very lumpy, thick and clammy, adheres closely to the mashing oar, no sweetness is perceptible, the fermentation will be bad for want of a sufficiency of saccharine matter, and upon distillation, will be liable to adhere to the bottom and sides of the still, and burn. There is no remedy when grain is over scalded, therefore this should be most carefully guarded against; but when any kind of grain is not sufficiently scalded, hot water can be added, and sometimes produce the desired effect.

Another thing to be attended to is, always to use boiling water, the temperature of which being known, can be reduced to any desired degree by the addition of cold water; whereas, by taking water from the boiler, supposed to be of a proper heat, you will be
involved in uncertainty, and no two casks will be mashed at the same degree of heat, consequently will be wrong.

The mashing room should be kept as nearly as possible at one temperature, which may be easily done in winter; the best heat will be from 65° to 70°. The mashing floor should be perfectly solid, that when hogsheads begin to ferment, they should not be disturbed by persons walking through the house. For, although weak and languid fermentation may be assisted by briskly agitating the fluid, yet absolute rest is necessary to obtain the slow and regular vinous fermentation, which is most productive of spirit.

It is the practice of some distillers to cool off two hogsheads, with one already fermented and fit for the still; in which case no yeast is used.

By thus concentrating the grain of three hogsheads into two, there is a saving of room in the house, and of labour and fuel in distillation. But it is directly contrary to the experience of many good distillers, and to the theory of chemists, who say "that matter once fermented yields, by a second fermentation, acid alone."

Hence, where a complete vinous fermentation has taken place, a second fermentation of the same matter must produce vinegar.

Experiments in distilleries are generally made in so
Of Mashing.

careless a manner as not to be depended upon, but this mode being persevered in by some distillers renders it worthy of investigation.

The results of my experiments always were, that two casks fermented with a third, produced rather more spirit than two casks fermented in my usual way, but much less than three.

Hence there was always a loss, but not of the whole of the third cask.

I would strongly recommend the keeping all acidity from casks, previous to and during fermentation. But in very cold weather it may be sometimes adviseable, at cooling off, to add a few gallons of wash, in a high state of fermentation, to each cask.

The returns will be found to have lost much of their acidity by passing through the still, therefore are not liable to the above objections.*

* In opposition to this reasoning and theory may be mentioned, the mode of mashing adopted in Tennessee and Kentucky, to wit: of mash- ing with pot ale. It is not uncommon in some of the distilleries in those states to use dirty casks, into which the requisite quantity of pot ale in a boiling state is thrown, the corn meal is then added, and well stirred; in this state it is suffered to stand three, four or five days, when a small portion of rye meal and malt is added, and the whole is cooled off. No yeast is added, and the stuff is ready for the still in about four days more. It is somewhat singular, that any spirit should be extracted from the rye mashed in this way, the temperature probably not exceeding 125 deg.; yet, in many experiments, casks mashed in this manner, yielded as much as others where the rye was mashed separately in the usual way and added. We need not argue against facts, and the certainty that these
To mash forty-five pounds Corn, and forty-five Rye and Malt.

Put into a hogshead four gallons boiling and four gallons cold water, or in such proportion, according to the weather, that the heat may be about 110 deg.; let it stand a few minutes, then stir in forty-five pounds Indian meal, cover the hogshead, and let it stand from one and a half to two hours, according to the weather; then add twelve to sixteen gallons boiling water, stir it well, and add twelve gallons more of boiling water, so that the heat upon its being well mixed, may be from 155° to 160°; let it stand covered for 20 or 30 minutes, then add thirty-five pounds rye meal, and ten pounds of malt, stir it well until all the lumps be broken, cover it for 20 minutes, after which uncover and stir it frequently until it is fit to cool off, which will be in winter about three hours, and summer five or six.

It should be cooled off in winter with twenty-five gallons returns, and water sufficient to make it about 80° or 90°, in summer 75° if possible, and fill the cask within six inches of the top; add one or two quarts of yeast, cover it, and it will be fit for the still in 50 or 60 hours.

Things are so, only serve to shew us the folly of any one insisting upon his mode of mashing being decidedly superior to any other, when similar results are obtained by so many different processes. It is by collecting, comparing and analysing these facts, that we may hope to arrive at the great desideratum in mashing.
The following receipt is said to be the most approved Russian method.

Put ten gallons boiling water into the mash tub, add forty pounds corn, mash it well, pour on two gallons more boiling water and stir it, then put on twenty gallons more of boiling water; put in forty-five pounds rye meal, stir it well, and strew over the mash five pounds meal (or malt,) let it stand closely covered for six or seven hours, then cool it off with water down to 90 degrees; add one quart of yeast, cover the tub, and in about sixty hours it is fit for the still.

To mash two-thirds Corn and one-third Rye.

The process is the same as in mashing equal quantities of each article, except that a little more water will be necessary to soak the corn in the first instance, and always bearing it in mind that the greatest heat necessary in scalding corn, should rather be below than above 160° of Farenheit.

To mash Indian Corn alone.

This should be avoided if possible, the weight of corn being very great, and having a very small proportion of bran, it sinks to the bottom of the hogshead and is consequently difficult to be fermented. There-
fore it will be always to the advantage of the distiller to mix some other grain with it.

Process.

Put into a hogshead twelve gallons water of about 110 degrees, then add seventy or eighty pounds corn, stir it well and let it stand from one to two hours, then add twenty-four gallons boiling water, stir it well, cover it for thirty minutes, then add the malt and stir it frequently, until fit to cool off as above. It must be cooled off warmer than where there is a mixture of other grain, requires more yeast, and about twenty-five gallons of returns in each hogshead, except in very warm weather.

N. B. I have always considered the use of the returns as very important, and have observed that they cause an increase in the yield of about one-tenth. It should however be observed, that by persevering in constant use of returns, they become of little effect. They should therefore be occasionally omitted for a week, so that a fresh stock may be brought into use.

The following is the method of mashing Rye, pursued in some of the first Distilleries in Holland.

Put into a hogshead thirty gallons of water heated to 165 degrees, add to it twenty pounds of malt finely ground, stir it well, and let it stand fifteen minutes,