Agricultural Department.

Ashes for Wheat.

Ashes as a fertilizer are almost wholly neglected and allowed to go waste by our farmers. In many instances indeed they seem to be ignorant of their value, or if not ignorant too careless to take the necessary pains to secure and use them. During the winter, ashes can be collected in large quantities, and farmers should do this for the purpose of sowing them on wheat soil. In my experience with ashes I have found them of great value on different grains, but most valuable when used on wheat, and even five bushels per acre will push it forward two days ahead of that upon which none is applied. In some seasons, when hot and sultry weather prevails about the time wheat is ripening, a few days gained is worth half a crop of grain.

The ashes strengthen the wheat stem, giving it substance and solidity; and developes the berry quicker and better. Ashes are also a preventive against rust, and I have seen the wheat upon which ashes were sown free from rust while that upon which none had been sown was rusted close to the drill row. Save your ashes and try the experiment next season. You will find it to pay you well to collect all the ashes you can get. Farmers can afford to pay as high as 20 cts., per bushel for good unleached, hard wood ashes for farm use, not only to put on wheat but on corn, oats and clover as well. I believe they are the cheapest manure that the farmer can buy, as potash enters largely into all the grains and grasses that are raised. Twenty bushels can be sown to an acre with the very best results. Leached ashes are also good though a larger quantity should be used. All around us large quantities both of leached and unleached ashes go to waste every year. These should be returned to the soil. Now is a good time to collect them and I would advise all farmers to do so and apply them to their fields.

Grass for Horses.

Many persons think that horses that are kept in the stable all summer should not be allowed to eat grass. They think it will make the horse soft wishy-washy, and that it will throw him out of condition for hard work. This is particularly the case with some of the trainers of trotting and running horses. And horses that are kept up for farm and other work are refused grass because their drivers think they will not eat hay so well. This was formerly the case more than it is now. But these are all erroneous opinions and practices, and are giving way, gradually to a more reasonable and natural system of feeding.

Grass is the natural food for the horse. It is cooling and healthful food. It keeps the bowels open and sharpens the appetite. It promotes digestion, and removes fever from the system. Therefore, by all means, let the horse pick grass fifteen or twenty minutes daily. Where training for trotting or running, it will be attended with the highest benefit. The horse will lose none of his speed by such a course of treatment. Horses that are kept up the year round for farm work should certainly be allowed a nice nibble at grass every day. They work hard, and all they get for it is something to eat. Let them have then, what they all like so well.

Potatoes.

Some good may result from the potato fever. Those who pay fancy prices for new varieties will be likely to cultivate them well, and remember and record the methods they adopt, as well as the results. One thing seems to be settled already, viz: that one or two eyes in a hill will yield more potatoes to the acre, and those of more uniform size and quality, than whole potatoes or six or eight eyes in a hill. The hills with one or two eyes may be placed nearer together, and thus the number of hills increased and the land more fully occupied. This approaches the old Irish method of cultivating potatoes in beds worked fine by the spade, and the sets planted in squares of about one foot. At harvest time the whole bed was filled with tubers. Another thing also seems to be decided by recent experience. Those varieties that make their growth before the summer drought are more certain to give satisfactory results, and to escape the attacks of disease.

The Early Rose, which sold last spring for three dollars a pound, is now offered for seventy-five cents. The reports respecting the quantity and quality of this variety are as various as were the soils upon which it was planted.—*New England Farmer.*

Butter.

Butter of rich yellow color is sought in the market, and how to make yellow butter is a desirable art. Many dairymen change the natural color of their butter, especially in winter, by the use of various coloring substances, the most common and the best of which is the orange-carrot, grated fine, and its juice strained into the cream at the time of churning. This gives the butter a fine color, and a fresh, agreeable flavor, and is an improvement. A much better way, however, is to color and flavor it by the food given the cow, or by an infusion of Jersey blood into the herd. Indian or linseed meal, roots, especially potatoes, and fine English hay, will make butter of fine color and flavor. The color of the butter of cows fed on old pastures, covered with the succulent natural grasses, is good.

News Items.

Deer and bears are frequently killed within a few miles of Plymouth Rock.

Easthampton, Mass., now drives a brisk button and suspended trade with Japan.

A large colony of Swiss emigrants have lately settled in Grundy county, East Tennessee.

At Sedalia, Mo., on Tuesday, ground was broken for the Lexington, Sedalia and St. Louis Railroad.

Commodore Vanderbilt has purchased forty acres of land and a mansion at Carthage, on the Hudson for $40,000.

Three thousand five hundred Prussian peasants left Bremen for the United States on the 6th and 7th of April.

The Prince and Princess of Wales have an allowance of $250,000 a year, and as much more in income.

It is cheerful to note in all our Western exchanges predictions of large crops of cereals this season.

The expenses for music in nine prominent churches of San Francisco average $2,750 in gold.

Emigrants are flocking into Kansas in great numbers. Cattle dealers from Illinois are taking up extensive ranches.

A Massachusetts lad recently sold 201 muskrat skins of his own trapping, and with the avails thereof paid his last winter's tuition at school.

Walter Brown has just built in Boston the lightest wood wherry ever constructed. It is 30 feet long, 10½ inches wide, and it weighs only 193 pounds.

The Hon. J. R. Doolittle, late United States Senator from Wisconsin, and the Hon. Jesse O. Norton, late United States District Attorney, have formed a law partnership in Chicago.

During the past winter not a flake of snow fell in Portland, Oregon. Only three or four nights did ice form, and then only of the thickness of window glass. Sowing and planting were going on all winter.

Wm. B. Spooner has declined to resign the Presidency of the Massachusetts Temperance Alliance as requested, and the association, at a meeting yesterday, indefinitely postponed the matter.

Smuggling on the Canada frontier, it is reported, is at present carried on with great activity. The cause assigned is the experience of the newly appointed Custom House officers. Special agents and detectives have been sent to that region.

Edwin Booth's reading of Byron's "Manfred," at the Philharmonic concert, New York, Saturday night, was the absorbing attraction. After the performance the directors of the Philharmonic Society made Mr. Booth a handsome present.

Five hundred and thirty persons received the rite of confirmation Sunday afternoon in St. Paul's Roman Catholic Church, New York, at the hands of Archbishop McCloskey. The ceremony was witnessed by an immense concourse.

A Canadian despatch says the Dominion Government will propose the extinction of the bank currency at the rate of 20 per cent. per annum. The banks will be required to keep 20 per cent. in gold to redeem their notes, which latter will be legal-tender.

The Omaha *Herald* is informed that the Burlington and Missouri River Road will be completed to the Missouri River during the year 1869, and that it would be built to Lincoln, in Nebraska, via Plattsburg, during the present season; that it would at once be extended to Nebraska City. The question of building West or Southwest from this city had not been determined.

A board of engineers, consisting of General George B. McClellan, General Charles B. Stewart, and General Q. A. Gilmore, has been appointed by the Middlesex County Superior Court in Connecticut to approve of the plans and location of the Air-Line Railroad bridge across the Connecticut river at Middletown.

From Mexico.

Advices from Mexico state that the rebels in Sinaloa have been routed, and fled to the mountains.

The appointment of Skelton as American Consul at the city of Mexico is well received.

The papers say the Prussian Minister is a mere commercial agent. The State of Guanajuato is hostile, and defies the Ministry. The proposition to issue greenbacks meets great opposition.

The idea of establishing a protectorate by the United States, causes much excitement among the Mexicans.

Miscellaneous.

From the Scientific American.]

How Common Window Glass is Made.

A pane of glass is not a complicated structure. Were an inventor, however, called upon to devise a method of making window glass, having no previous acquaintance with the subject, the method in use would seem to be the very last he would be likely to hit upon. It is usual to speak of common window glass as being blown. To one unacquainted with the mode of its manufacture, the term blown conveys a very imperfect idea of it. It is true that blowing is a large and important part of the operation, but it would be impossible to produce a flat pane of glass by blowing alone.

There are three ways in which flat tables or plates of glass may be obtained, one of which does not involve blowing at all. Glass made by the latter process is called plate glass. The glass made by the two systems which require blowing are called respectively "crown glass" and "cylinder glass," terms derived from peculiarities in the methods of producing them. We shall first describe the method of producing crown glass.

The arrangement of the furnaces for manufacturing glass has already been described. The workman takes up on the end of his pipe a large mass of glass by successive operations exactly as described, except that for making crown glass he takes up a much larger weight. He also rolls it upon the "marver" in the same manner as he would for making bottles; but in the present operation greater care is required to prevent the occurrence of inequalities, as the mass of plastic glass is so much larger. Having formed the ball upon the marver until it assumes the shape of a pear, an assistant—generally a boy—meanwhile slightly distending it by blowing, it is next softened in a small furnace, and again rolled on the marver to correct any inequalities that may have formed during the latter heating, and at the same time to collect the greatest mass of glass at the extreme end technically called the "bullion." The bulk is now further extended by a blast from the lungs of the workman, it being meanwhile supported by resting the pipe upon a horizontal bar, called the "bullion bar," until it assumes nearly the form of a sphere. In some instances the "bullion bar" is dispensed with, other equivalent apparatus being substituted for it. Its use is to aid the workman in rotating the bulb, so as to keep it as nearly as may be to the globular shape.

It is next taken to the bottoming hole. This is a circular hole in a furnace, before which, at a short distance, is built up a screen of mason work, which extends far enough to protect the workman from the heat. His face is also protected by a mask, having apertures with glass plates to permit his seeing his work. The pipe with its expanded bulb is laid across a hook projecting from the screen of mason work. Here the bottom of the bulb (bullion) is exposed directly to a high heat, and the pipe being rapidly rotated by the workman, the centrifugal force thus generated soon reduces the bulb from the form of a globe to that of a prolate spheroid—that is, it spreads laterally until the side opposite the fire becomes nearly flat. An assistant now attaches to the centre of the side opposite the pipe an iron rod called a "pontil" or "punty," so that it shall stand as nearly as possible in the axis of rotation. The first workman then immediately detaches the pipe by touching the neck of hot glass with a cold iron wetted with water. The side to which the pipe has hitherto been attached is now presented to the furnace. Rotation being continued, the glass begins to expand, the hole left by the detachment of the pipe becoming larger and larger, until finally the whole bulb suddenly expands into a single flat table. Before this result is attained, however, it becomes necessary to remove the bulb to a large furnace called the "flashing furnace," which has an opening similar to the "bottoming hole," except that it is larger. The glass has now the form of a flat circular plate, but at the point where the punty is attached there will be left upon it a projection called the "bull's eye." In order that the form of the plate may not be altered, rotation is kept up until the glass is sufficiently cool to support itself. It is then taken upon a large iron fork by another assistant, and, the punty being cracked off, the plate is carried to the annealing furnace, where it remains twenty-four hours. After the annealing, the glass may be cut into proper sizes and packed.

The above outline gives but a faint idea of the skill required to produce crown glass. Necessarily a description of all the minor manipulations requiring the greatest dexterity have been omitted. Enough, however, has been said to give the reader correct ideas of the general principles of the method. Crown glass is not manufactured now in this country or in Europe as extensively as cylinder glass.

In the manufacture of cylinder glass the blowing extends only so far as to produce a cylinder open at both ends. In fact, the blowing is, during the entire process, accompanied by manipulations of a peculiar character; blowing alone would not produce the desired result. The furnace holes are somewhat elevated, and platforms extend out from the base of the furnace, one for each hole or pot, upon which the workmen stand. These platforms are of considerable length, and have pits of considerable depth dug between them to permit the workmen to swing the bulb during the process of elongation. The manipulations are the same as for crown glass up to the point where the globe is expanded, and have so far been already described. When the blast is first forced into the plastic glass, the expansion takes place in that portion of the pear-shaped mass called the neck. The workman now holds the ball over his head and the weight of the thick portion of the mass presses down the expanded portion until it assumes the shape of the top of a bottle, like the large ones used by druggists to contain their tinctures, etc. The expanded portion being now permitted to cool, which it does rapidly on account of its thinness, becomes rigid. The workman then commences a complex manipulation. He blows through the pipe at the same time he rotates it to keep up the cylindrical form of the expanding portion, and also swings the ball in one of the pits above described thus elongating the cylinder. The glass as it becomes thin cools off and becomes rigid and one of the most difficult parts of the operation consists in expanding the glass to the required size at precisely the time when it becomes so cool as to remain in the proper form. When the walls of the cylinder have become everywhere of uniform thickness, and the proper length has been attained, the end farthest from the pipe, being closed, has a hemispherical form. This end is now subjected to a quick heat at the mouth of the furnace, and burst open by a strong blast through the pipe; the pipe being now rotated, the part thus burst open is expanded by centrifugal force to the size of the cooler parts of the cylinder. The cylinder is now laid in a frame and the pipe detached. The end from which the pipe has been separated has now the form of the upper part of a druggist's bottle. This portion has, therefore, to be removed. To effect this, the workman takes from the surface, with small iron rods, a small wad of plastic glass, and separating the two rods, draws out the glass into a red-hot plastic cord, which he winds about the cylinder just where it begins to contract towards the neck. The cylinder being thus heated entirely about, cracks off in the direction of the heated line upon being touched with cold water. The cylinder has now to be opened. This is accomplished by placing a bar of hot iron longitudinally along the side of the cylinder, when sudden cooling cracks it from end to end. It is now passed to the annealing furnace and flattening kiln. The construction of this furnace is peculiar. It consists of a vault in which revolves an iron frame supporting platforms, called flattening stones. Openings are placed around this platform, at which workmen stand. A cylinder of glass is laid in it at the first opening, the cracked side upwards and allowed to heat until it becomes plastic. As soon as this takes place, the workman, by means of a winch, revolves the platform and puts in a second cylinder. The partial revolution brings the heated cylinder opposite the next opening, where a workman spreads it out with an instrument consisting of a block of wood upon an iron handle. By this time another cylinder is ready, and the platforms again revolve. The first cylinder—no longer a cylinder, but a plate—is now operated upon by a third workman, who smooths it out with a tool similar to the one above described. The glass is then passed through several chambers having gradually diminishing temperatures until it is sufficiently annealed. It is then cut into panes, and packed for sale.

No verbal description can give an idea of the facility with which these operations go forward, or the skill required to accomplish such results by the simple methods employed.

The labor is severe, and commands wages equal, if not superior, to any manual labor performed. Some of the cylinders blown are very large, being from four to five feet in length, and from twelve to fourteen inches in diameter. The process is one of the most interesting to witness in the whole range of mechanical operations, and will well repay some extra trouble and time to those who may never have seen it performed, should chance bring them in the vicinity of a glass manufactory.

WHITE HOUSE INTRIGUES.

Two Queer Stories from Radical Papers—The Way Appointments are Procured and Revoked.

[From the New York Evening Post.]

WASHINGTON, May 4.—In an uncommonly well-informed circle here stories are told which I fancy may interest you and your readers. The first relates to the President's choice of a Cabinet. It is asserted that the Cabinet which General Grant carried "all out of his own head," as the boys say, and the secret of which he carried so securely, to the great discomfit of the politicians, was quite a different Cabinet from the one which he afterwards produced to select. I am told that the original Cabinet consisted of the following gentlemen:

Secretary of State, Mr. Fessenden; Secretary of the Treasury, Mr. D. A. Wells; Secretary of the Interior, Mr. James. F. Wilson, of Iowa; Postmaster-General, Mr. Dennison; Attorney-General, Mr. White, of Boston.

The other two members were not named to me. It is further related that by some means Mr. Washburne became aware of this selection, which did not suit him; and that in the last days before the 4th of March he contrived to persuade General Grant to make certain changes which led to a general abandonment of the old "slate." It is said that Mr. Washburne, to accomplish his designs, brought to bear upon the President the pressure of such political friends as he could muster and take into his own confidence, and succeeded in his object after some difficulty. The other story concerns the mission to Austria, and runs thus: Mr. John Jay, it is said, went to President Grant, and asked with some positiveness for the mission to England. The President replied that he was sorry he could not oblige him; but he had sent in to the Senate Committee on Foreign Affairs the names of several gentlemen, and one of which he was willing to nominate; and the committee were able to agree unanimously on but one man, Mr. Motley, whom therefore he had nominated, or promised to nominate.

"But," said the President, "won't you take something else? Would not the mission to Austria suit you?" No; Mr. Jay would go to London or nowhere, he said, and returned to New York. There he told the tale to his friends, who reproached him for not accepting to Austria. "You want to go abroad," they said; "Vienna is a pleasant and important post; why not go?"

Mr. Jay changed his mind, and engaged three friends to go at once to the President to tell him so, and ask the appointment to Vienna. These gentlemen were, I am told, Mr. John A. Griswold, Mr. Isaac J. Bailey, and Mr. Jackson S. Schultz, all well known in your city and State.

These three accordingly hastened to Washington. When they got to the White House they were informed that the President was at dinner. Not to be put off, they demanded to know how long he had been eating. "Half an hour," was the reply. "Then take in our cards, and tell the President we have urgent business," they said. Presently a message came that Mr. Grant would see them if they would wait in the parlor. The President came in, and after some preliminary talk, they stated their object.

"I am sorry for Mr. Jay," replied the President; "but I made up my mind to offer the Austrian mission to Mr. William Cullen Bryant, and just before you came in I telegraphed him to that effect. You are too late."

At this, I am told, there was a brief silence among Mr. Jay's delegates; but presently they began to assure the President that Mr. Bryant would not take the place; he was not, they told Mr. Grant, disposed to accept office.

"But, urged the President, "you see it is to late, I have telegraphed to Mr. Bryant."

After some further conversation, intended to persuade the President that Mr. Bryant would refuse the place, it occurred to one of the gentlemen to ask if it was certain the despatch had gone. The President rang a bell and a clerk appeared, who, as luck would have it, held in his hand the despatch to Mr. Bryant, which he was just sending off when he was called.

Then Mr. Jay's friends renewed their arguments with the President, to induce him to withhold the despatch and appoint Mr. Jay instead of Mr. Bryant; and their representations were so urgent that at last Mr. Grant consented, tore up the despatch, and agreed to give Mr. Jay the Austrian mission. That is the way Mr. Jay came to go to Vienna; and the story ought to convince incredulous people that Washington correspondents are often well informed when they are not generally believed—for you may remember that several correspondents spoke of Mr. Jays refusal to go to Austria when he could not go to London; and later telegraphed that the Austrian mission had been offered to Mr. Bryant. X.

[*New York Correspondence of Cincinnati Commercial.*]

ALL HEART.

It is really refreshing in this day of fierce competition for office, when the struggling thousands remorselessly trample each other down, to meet with one kind, impulsive nature, full of milk as an Alderney cow, and impulsive as a boy. Such a nature is the venerable Jesse, "the flower"—I beg pardon, the father—of our cherished and beloved chief magistrate. This good old man has seen many years of troubled life, and, although winters of many years have silvered his venerable head, his heart is as youthful and fresh as in his early spring time, when he was a beau among the girls and an athlete among the men.

I have just heard an instance of this from the Professor, who is here studying music at the Fifth Avenue Opera House, and refecting his French accent by listening to the sweet voices of Tostee and Irma. The instance renews my admiration of the venerable Mr. Grant. He is such a dear old gentleman. It seems that during the summer that preceded the Presidential election, the old gentleman revisited some scenes of his youth that exist about Ravenna, Portage county, Ohio. When he was a sportive young man, he loved and courted a fascinating girl. But, alack and alas! the course of true love did not run smooth. In fact, it run over a dam, or several dams, and falling on the rocks below, split all to pieces. To come down from my Raymond cal comparison, the gay young Jesse, the flower, &c., was jilted.

He returned to find his former love an aged widow, with a family of children, one of these a girl—no, not exactly a girl, but a young widow, looking as much like her fascinating mother at the same age.

Is not this beautiful? Does it not read like a fairy tale? What a charming thing Offenbach could make of it. He would shift the scene to a later day, after the 4th of March, indeed, so as to bring in the Presidential mansion, with Gen. Dent, high custodian of the sacred basket and gaudiest of the boot-jack, and the smoking President. And the two would sing a comic song, with a lively chorus from the office-seekers, and then all would break into the cancan. But I digress.

The old gentleman saw his former love, and to conceal his tumultuous feelings, jested with her:

"Ain't you sorry," he said, "that you refused me; you might now be the mother of the General, and maybe the President?"

The old lady laughed, and merrily assented.

"Never mind," the old man cried: "I will take the same care of you as if you were my wife. Who's your Congressman?"

"General Garfield."

"Ah! that Rosecrans feller. Well, I'll take the patronage of this district in my own hands. I'll make your daughter postmistress of this town."

The good people took this as a merry jest from the kind-hearted old man, and thought no more of it. The election came off, and after the inauguration the citizens moved to turn out the Johnson postmaster, and put in a good Republican. The election was held, and the victorious candidate sent on his credentials to General Garfield. That excellent gentleman proposed to file the same, with an earnest recommendation. Before this could be written, he read with blank amazement, in the *Chronicle*, that the name of Mrs. —— had been sent in by the President. To catch a hack and hurry up to the White House was the work of a few minutes. General Garfield stands very high in the estimation of the administration, and was at once admitted.

"I came to inquire, Mr. President, upon whose recommendation you sent in Mrs. —— as Postmistress at Ravenna?"

"Upon the recommendation of my father," responded the President, "He knows the family very well."

"Does he know that this young woman is not only unqualified—that she is entirely incapable, through lack of education to carry on the office—but there is great indignation in Ravenna over her appointment?"

"I can't say, indeed," responded the President, "but I certainly don't wish to appoint such a person to office."

"Will you recall the nomination, then, Mr. President, and permit me to leave with you the papers of the successful candidate?"

"If you will have the confirmation delayed for a while, I will certainly send in the name of the gentleman you recommend."

General Garfield hastened to the Senate, saw the committee, and had the young widow superceded. But the venerable Jesse heard of this interference of the "Rosycranze man" in his bit of tender solicitude, and intervened. Not at all staggered by the fact that the daughter of his love could not read writing, he at once made arrangements with the defeated candidate in the election, to go into the office and do the duties thereof, at a reasonable compensation, while the fair widow enjoys the profits. With this understanding the daughter of the old love was confirmed.

Could anything be more tender, touching, and beautiful than this? The venerable Jesse is an oasis in a desert. He is the greenest thing to be found in the dry waters of politics. Let us be thankful, however, that he was not a Don Juan, and had few loves. D. P.

A man named Hennessy, in a state of intoxication, lay down, on the track of the Cross Cut railroad, near Corry, the other day, and was killed by a train of cars running over him. On Friday night, another man named Wilcox, did the same thing in the same condition, on the Atlantic and Great Western, near the same place, and was literally cut to pieces.

More Terrible than Elegant—Brigham Young's Description of Federal Officials.

[Corr. Cincinnati Commercial, May 4.]

Young expressed himself very frankly as well as forcibly concerning the United States Government, in his last address before a Mormon Conference recently held in Salt Lake City. He first said his speech for the benefit of the Territories, and for the benefit of those who may never have seen it, was prepared with great care. It was then delivered, and was taken down in shorthand by a reporter of the Deseret News. It is a very long speech, and I will only give you some of the points. He said he was not in the habit of speaking of the United States Government, in its