

## NEW METHOD OF MAKING GRAPE WINE.

The following is a short and quick method of making wine from grapes, given by Professor Wm. Hume, of Charleston, S. C., and taken by us from the *Rural Register*:—The grapes are collected, bruised and pressed. The obtained juice is strained, and allowed to flow into a cask or other convenient receptacle. To every gallon of this must one pint of deodorized alcohol of 80° be added. The cask is shaken or stirred to effect a mixture, and the bung is put in. The effect of this mixture is to coagulate, and to precipitate all the fecula contained in the must, so that, at the end of twenty-four or forty-eight hours, a thick sediment is formed at the bottom of the cask, and the juice brightens in color. At this period, I thought it prudent to filter the whole by piercing above the sediment, and allowing the clear portion to run first, and then the sediment. An upward cloth filter or a downward sand filter is necessary, as the fecula soon covers the cloth and renders it impervious. This filtration is practiced to prevent the putrefactive fermentation from proceeding in the fecula and imparting a bad flavor. Its presence is of no possible advantage to the wine, and its absence secures us against the possibility of future fermentation. Whatever ferment there may have been in the must is now removed. All the sugar has been retained to secure sufficient sweetness, and the added deodorized alcohol has communicated no flavor or odor, and supplies the place of that which would have been formed had two pounds of sugar been added to the must. The original flavor of the grape is preserved, and with such accuracy as to enable any one to detect the kind of grape that was used to prepare the must. This quantity of alcohol, which is ten per cent, is sufficient to preserve the must from any future change, and ranks it in strength to the weaker wines of France and Germany. The plan is so natural and simple that the wonder is that it has not long been put in practice. The nearest approach to the method is the practice common in Spain, Portugal and Madeira, of adding brandy to their wines, in order to strengthen them to suit the taste of the English and American market. A question of economy frequently arises on the introduction of a new manufacture. I am only anxious to point out those processes to which the grapes may be subjected, to produce a wholesome, agreeable and harmless beverage, which all may enjoy, at prices far below what is now paid for dangerous compounds, which may have been made in Europe, but are also largely made in these United States.

## A CAST IRON STREET RAILROAD.

On Monday, the 15th inst., a new railroad was opened to the public, running through Grand-street, in Williamsburgh, L. I., under a charter granted to Mr. Ira Buckman, and is, we believe, the only complete line of the kind ever laid. The rails are of cast iron, and laid directly on the ground, without sills or sleepers under them. There is a broad flange on the bottom of each rail, and the web between it and the top is deep and stiff. The top is not formed with a groove, like street rails of wrought iron, but with two flat faces—the one a little above the other, and a short shoulder between. Lugs are cast on the sides of the joints, and these are fished together by broad, thin wedges driven in horizontally. This mode of uniting the rails forms each side into one continuous rail from end to end. The track is very solid and smooth, and we see no reason why it should not be far more durable than those that are laid on wooden sleepers, which become completely rotten in about four years.

## OXYDES OF IRON.

Red oxyd is usually set down by chemists as peroxyd, while black oxyd alone is considered to be true magnetic oxyd, but which will be found far from being invariably the case. Some of the most energetic magnetic oxyd is as red as peroxyd, and is obtained from corroded cast iron. Protoxyd consists of one atom of oxygen to one of iron (Fe. O), though it has never been found isolated. Magnetic oxyd, as ordinarily found, consists of three atoms of iron to four of oxygen (Fe. 3.04). Peroxyd consists of two atoms of iron to three of oxygen (Fe. 2.03). The surface of cast iron laid in moist earth soon acquires a coating of oxyd, though not

with nearly so much rapidity as wrought iron placed in the same circumstances. The oxyd of cast iron soon becomes magnetic, while that of wrought iron usually remains in the state of inert peroxyd (ordinary rust). In the one case, we have an energetic body which neutralizes organic odors and rapidly absorbs sulphur; in the other, a comparatively inert one, which exercises but little (if any) influence on the same substances. Both oxydes are red in color. Magnetic oxyd of iron is a great absorbent of sulphur and a powerful disinfectant. This oxyd will absorb about from 40 to 50 per cent its weight of sulphur, and becomes quadrupled in bulk in so doing.

## PERILS OF A BALLOONIST.

The veteran and daring aeronaut, Professor John Wise, who frequently contributes scientific information to our columns, came very near losing his life in an ascent which he made at Petersburg, Va., on the 11th inst. When about one thousand feet above the earth, while in the act of descending, the gas rushed out of his balloon through a huge rent, and his descent became fearfully rapid. The Professor, seeing his danger, leaped up amidst the rigging, designing to escape the shock which threatened the car on reaching the ground. The precaution was good, but did not avert the whole danger. The car struck the ground with terrible force; the balloon, completely collapsed, fell, and the Professor was thrown violently backwards over the car, his back striking the rim and nearly knocking him senseless. A large number of persons who were following him, and saw him fall, were unable to find him until after a long search, the descent being made in a sort of glen, rankly overgrown with weeds, where he lay, hardly able to move. Such was the violence of the shock that his watch bounded out of his pocket and was thrown several yards distant.

We are glad to learn from the Petersburg *Express* that, though Mr. Wise was severely, he was not permanently injured.

## DEATH OF AN INVENTOR.

By a recent Bridgeport paper, we notice the death of Smith Beers, of Naugatuck, Conn. Mr. Beers was possessed of a remarkable inventive genius, and had perfected and patented several useful inventions. Among them was an ingenious machine for turning spokes, an odometer, for registering the number of miles run by a carriage, and a machine for pulling cotton stalks, &c. At the time of his last illness, his mind was actively employed in endeavoring to perfect a steam carriage, to be used upon highways. Like most true inventors, he was a quiet, unobtrusive, honest man and a useful citizen.

SIR HUMPHREY DAVY AT FAULT.—When it was first proposed to light London with gas, Sir Humphrey Davy gave his opinion against its practicability, solely on the ground of the impossibility of keeping the joints of the pipes from leaking. This great chemist was very deficient in mechanical talent, and was seldom able to make a tight joint for his pneumatic experiments; hence the cause of his opinion. Faraday, who became his assistant, being an excellent mechanic, soon showed him how easy it was to make tight joints for gas pipes.

A FAST SHIP.—The clipper ship *Lightning*, built by Donald McKay of Boston, for the Baine's line, running between Liverpool and Australia, has very fleet heels, and she has led every ship on that route. In 14 voyages out and back, their average time was but 77 days—the shortest 63½, and the longest 88 days. The American-built ship *Red Jacket*, on the same route, is also a very fast sailor. In 17 voyages, their average time was but 80 days.

DEATH OF A HERMIT.—A hermit named Daniel West died lately at McMinnville, Tenn., at the age of 78 years. He was, in many respects, a peculiar character. He had lived on a mountain for several years, in the inside of a large hollow poplar, in which he slept and cooked his meals. Near this tree he had a shed, which served as his workshop for manufacturing chairs, boxes and other articles of wood. He had been a soldier in his youth, and fought in the war of 1812.

## THE CASHMERE GOAT.

We find the following communication in the Galveston (Texas) *News*:—

MESSRS. EDITORS:—About twenty months ago, a few Cashmere goats were introduced into our State, mostly by the Sumner Cashmere Company, varying from one-half breeds to full bloods; and during the last Fall and winter, we had an additional number brought into the State, chiefly by the above company, and from Mr. Richard's flock at Atlanta, Ga. In all, I suppose, there has been introduced into our State something like two hundred head, principally bucks.

None of these have died from disease, so far as I have heard. Some have been lost from the want of proper care and attention.

I received from the Sumner Cashmere Company, at Hempstead, on the 4th of last December, twenty-eight head, and notwithstanding the severe winter, none have died from disease or from any other cause, so far as I can learn. They improved, while the common goat, sharing in the same kind of treatment, died in considerable numbers.

The Cashmere goat seems to be peculiarly adapted to our climate, and must soon become a valuable animal to raise in our State.

I wrote to a well-known gentleman in Athens, Ga., last June, a year ago to give me his opinion about their value, &c., to which he replied as follows: "I am much pleased with my Cashmere goats. They rarely stray off; are not liable to be killed by dogs; are very healthy, and I consider one pound of their fine hair worth twelve pounds of wool, and one goat worth twelve sheep."

This gentleman had tried them for several years, and was competent to speak on the subject.

In the "American Cyclopaedia," page 514, published by D. Appleton & Co., 1858, it is stated: "We learn that in Lyons, France, there are 4,000 looms at work, employing 12,000 persons in the manufacture of Cashmere goods."

I have been informed that an agent of a Paris house is offering from \$4 to \$8 per pound for half breed up to full blood hair of the Cashmere goats, raised on those grades here and in the rest of the United States.

The time is not far distant, in all probability, when this hair will be manufactured in our own country. By next season, I hope to be able to supply a number of grade bucks. A few may be obtained this Fall, by application to me at Austin, by mail or otherwise, by those who apply early.

JOHN R. MCCALL.

Austin City, Texas, August 22, 1860.

BITE OF A RATTLESNAKE CURED.—The Petersburg (Va.) *Express* publishes the following from a reliable correspondent:—"A carpenter, while engaged a few days ago, in pulling down an old house, and in removing some of the rotten timbers near the ground, was bitten by a rattlesnake. In a few moments his finger was swollen to four times its natural size, and red streaks commenced running up his hand and wrist. A deadly languor came over him and his vision grew dim, clearly indicating that the subtle poison that was coursing through his veins was rapidly approaching the citadel of life. But a remedy was tried which, to the surprise of all present, acted like a charm, the component parts of which were onion, tobacco and salt, of equal parts, made into a poultice and applied to the wound, and at the same time a cord was bound tightly around his wrist. In two hours afterwards, he had so far recovered as to be able to resume his work. I know an old negro who cured a boy that had been bitten by a mad dog by the same application.

EXPLOSION OF A DIAMOND MACHINE.—"It is generally known," says the Sacramento (Cal.) *Union*, "that a party of gentlemen have been experimenting for some months past in diamond-making, and for said purpose have caused to be put together some sort of machinery of some kind peculiar to the vocation, we know not what. At any rate, it is of iron, and is bolted and riveted together about as strong as mechanics can make such things. On Wednesday, about noon, as I. W. Underwood was experimenting with his pet, which is to make diamonds as cheap as pebbles, the thing blew up, and the experimenter barely escaped with his life."