# Scientific American.

THE ADVOCATE OF INDUSTRY, AND JOURNAL OF SCIENTIFIC, MECHANICAL AND OTHER IMPROVEMENTS.

Vol. 3.

New York, April 1 1848.

No. 28.

THE

#### SCIENTIFIC AMERICAN:

PUBLISHED WEEKLY At 128 Fulton Street, New York (Sun Building,) and 13 Court Street, Boston, Mass. By Munn & Company. The Principal Office being at New York.

TERMS-\$2 a year-\$1 in advance, and the remainder in 6 months. See advertisement on last page.

# Poetrn.

#### THE COTTAGE EMIGRANT'S FARE WELL.

BY AGNES STRICKLAND. In a lone mossy dingle, By green trees o'erhung, Their wild song of sorrow Three Highland maids sung-Who were doomed, with their people In exile to roam O'er the stormy Atlantic To seek for a home.

For the hearths of their fathers, By Want's chilling hand Had been sternly extinguished That morn in the land: And they came, for the last time, All weeping, to bring, The cool gushing waters From that pleasant spring.

It was piteous to see How their sweet eyes grew dim, With their fast flowing tears, As they hung o'er its brim. And looked their farewell To that beautiful spot, Endeared by those ties Which could ne'er be forgot.

And oft from their vessels, Replenished in vain. They restored the pure stream To the fountain again; As fondly they lingered, And loth, to depart, They sobbed forth their grief In the anguish of heart.

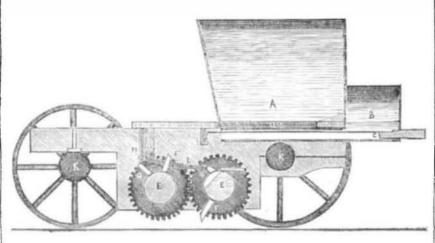
- "Dear fountain of our native glen! Far hence we're doomed to go; And soon for other urns than ours Thy crystal streams will flow.
- "Thy snowy lillies still will bloom On this delightful spot. Sweet fountain of our native glen! Though we behold them not.
- " And thou wilt from thy sparkling cell, Still softly murmur on. When those who lov'd thy voice to hear, To other lands are gone.
- "Dear fountain of our native glen? Beloved by us in vain, That pleasant sound shall never glad. Our pensive ears again.
- "Dear fountain of our native glen? Which we no more must view, With breaking hearts thy children pour Their long-their last adieu."

## I See a Man.

I do not see his shabby dress, I see him in his manliness; I see his axe; I see his spade; I see a man that God has made; If such a man before you stand, Give him your neart-give him your hand, And praise your Maker for such men; They make this old earth young again.

#### PRATT'S

# IMPROVED GRAIN AND SEED PLANTER.



This engraving is a longitudinal section view of a machine invented by Mr. Reuben Pratt, of Riverhead, Long Island, N. Y. It is intended for manuring land and planting seed at one operation. There are two cog wheels connected with the two displayed in the engraving which are not seen, but their absence is not of much importance as the principle is exhibited. There is one thing that will readily strike the mind, viz. that if a wagon could be projected that would make the proper deposit for the seed, and by a mechanical arrangement deposit the manure first and the seed on the top of it, and then cover all up regularly and quickly, that a very important object would be gained. This machine is intended to accomplish this purpose and on light soils and level lands Mr. Pratt, who intends to apply for a patent, will warranta perfect operation.

DESCRIPTION .- A, is the box for holding the poudrette or whatever fine fertilizer it may be. B, is the grain box. The order of these two boxes, however, may be inverted. It is just as easy to place A below B to answer the same purpose, if required. C, is a slide board to drive out and deposit the grain, and D, the same for the upper box. H L, is a crank or eccentric connection for opening and closing the openings of the boxes A and B. This crank is as broad nearly as the bottom of the wagon and is operated by cams G G, on the cog wheels E E These cams as the wheels revolve catch hold of the crank at proper places and by slipping and catching it will be observed from their shape that a traverse motion will be given to feeders D and C, opening and closing the orifices of these boxes at the time required—the upper one opening a

Receipt for making New York Milk.

"Take two pounds of lime; two and a quarter pounds of chalk, one and three quarter pounds starch, 20 quarts of rain water, and to every quart of the solution add two tablespoonsful of the droopings from a cow, so as to give it the right color. Shake it about ten minutes, then settle it with a soft brickbat then strain it through a pair of window shutters-and you will have the pure Orange coun-

## Geological Researches.

Dr. Lillewalch of Stockholm, having caused searches to be made in the marshes of Scania, has discovered the skeletons of men and animals in a remarkable state of preservation. Near them he also found arms, instruments for sport and fishing, and utensils of different descriptions, all of which are in stone, showing that the use of metals was unknown when they were made. They belong to those primitive people of whom traces re-

second before the lower, and then both are closed again. F F, are two scoops, the one on the front axle to make the opening for the hill, and the one on the second to cover it up. These scoops as well as the cams are fixed on the axles E E, and the cog wheels work into one another, so that the scoops can be placed at the exact distance on the axles to insure correct operation, and the cams also to work the crank. This any person will understand and see can be done. K K, are the axles of the wagon wheels.

OPERATION.—Suppose the wagon to be moving. The scoop F, has already made the bed for depositing the seed and is going round again. G, has already operated on the notch of the crank and the manure and seed box have been opened by that operation, for I, a catch, connects them both together. F, the scoop, now upon the second axle, as it is moving in a contrary direction from the motion of the first wheel, is about covering up the seed, while G, on the same axle, is closing the openings of the boxes and thus a continual revolution of manure and planting is kept up as the wagon moves along. It can be made to plant in drills or hills as the case may be, and with a boy to guide the wagon and paying a little attention to the manure box not a few number of acres can be planted in a day. The operation of the feed boards C D, like those of slide valves, will always insure correct operation. They must work or the wagon must stop, or something give way, and on this, the feeding part, the whole success of power planting depends-there must be no chance work about the depositing of the seed and manure, and Mr. Pratt intends that there shall be none.

main in the traditions of the North, but whose race is now extinct.

Those who discover evidences of the Celts of Ireland or Wales, having discovered America before Columbus, be it remembered have only the claims of the same arms as found in Sweden, being found in Florida.

## Origin of Stays.

Stays were first invented by a brutal butcher of the thirteenth century, as a punishment for his wife. She was very loquacious, and finding nothing would cure her, he put a pair of stays on her, in order to take away her breath, and so prevent her, as he thought, inflicted by other husbands, till at last there was scarcely a wife in all London who was not condemned to wear stays. The punishment became so universal at last, that the ladies in their defence made a fashion of it, and so it has continued to the present day.

#### RAIL ROAD NEWS.

#### Providence Railroad.

On the Providence Railroad the cars commenced their regular trips between Pawtucket and Boston on the 16th inst., making use of the new branch road to the former place The cars will leave Pawtucket at 8, A. M., and Bostonat 3.30, P. M. This new arrangement, says a correspondent, has been brough t about mainly by the exertions of W. Raymond Lee, Esq., the efficient superintendant of the Boston and Providence Railroad.

#### Great Western Railroad.

A vigorous effort is about to be made by our friends in Canada to gather up the amount of stock yet required for the completion of this road which is to unite Michigan with Lower New York, by a few hours ride. Eight hundred and seventy-five thousand pounds, are yet wanting to complete the sum requisite to build the road.

#### Ohio and Baltimore Railroad.

It appears from an article in the Baltimore Patriot that it is at least a settled point that the railroad is to strike the Ohio river at Wheeling. The Patriot says in the article in question:

The directors of the Baltimore and Ohio Railroad, with great unanimity, advised the acceptance of the law for making the road to Wheeling, and the stockholders, in general meeting, by a great majority of votes, decided to accept it, and did accept it.

The Maryland Legislature, by the action to which we have referred above, have approved of this decision of the board and stockholders and, by retaining in office, the directors on the part of the State, have confirmed their particular course in this matter.

# Mississippi and Ohio Raliroad.

The great Railroad which is to link St. Louis and Cincinnati together is a grand project. We understand that the route through the State of Indiana, by Vincennes, is preferred to the central route through Indianapolis, because it is 75 miles shorter. The Indianians are determined to prosecute the work with the same vigor that they have pushed the bill through the Assembly.

## Iowa Raliroad,

Measures are being taken to connect Dubuque, Cedar Rapids, Iowa city and Keokuck by railroad, and also for a line from Davenport to Council Bluffs, Mo Johnson County, Iowa through which these lines pass, will ship this year 800,000 pounds of pork and 75,000 bushels of wheat.

# Railroad Signals of Danger.

Detonating balls as well as red lights are used in cases when trains are detained on the English Railways. Under the wheels of any approaching engine the balls explode with an exceeding loud report.

## Railroad Iron.

A lot of English Rails has been sent back from this City to Liverpool, because no sale could be effected on account of their inferiority to those now made in America. The rails made at the Trenton, N. J., Iron Co., are worth \$8 per ton more than English rails. There is no use of exporting a poor article, it is sure to find its level and its character.

## Telegraph Improvement.

The transmission of despatches between New York and Washington has been greatly expedited by the insulation of the second or independant wire being completed so perfect ly that the fluid can pass from one extremity from talking. This cruel punishment was to the other, and of course obviates the necessity that formerly existed for all messages being re-written by the operators at the Philadelphia office. This is an improvement that will be appreciated by all who have dealings with the lightning lines, as a medium of communication with their correspondents.