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#### THE **SCIENTIFIC AMERICAN:**

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# Poetry.

### SPRING IS BEARING BACK HER RO.

SES. Spring is bearing back her roses, From the golden Indian Land, And her footprints on the sand, Peering through the huddled grasses, Glows the violet fresh and fair; And the bounding breeze invites me In its frolic mirth to share. Stern old winter hence was driven, Full eight shining weeks ago; And like the snow-drift in the valleys, Do the fringed lilies glow, All above me, o'er the branches, Runs the friendly budding vine; Just above me 'mid the messes,

In a slender golden line, And a robin perched upon it,

- Hails me with a gladsome song, And the heart's remembered voices,
- Back upon my fancy throng, Just below me in the hollow,

Bursts the blue-birds note of joy; And her breast is like the morning

On the glorious summer sky, And my heart hath heard the music

Of the far Ideal Land; As beneath the curving branches,

On the starry turf I stand. CORSETS.

When I was down in Boston town, A month ago or more, I saw a very sing'lar thing I never saw before

'Twas hanging in a window case, Upon a string a-straddle-

Looked something like an hour-glass, And something like a saddle.

I asked of several citizens, Who chanc'd to be at hand, "What was it ?" but their gibberish

I could'nt understand.

One fellow called it a "restraint, On certain parties placed, Like a decree in chancery, To stay the tenant's waste !"

Another-just the queerest chap Of any in the swarm-

Said " twas'nt glass of fashion, but It was the mould of form."

Another said " twas a machine A lady used to rig her-To bring her form and life into The very smallest figure."

At last a little girl came out, And-think of my amaze!

She asked me "if I would'nt please To buy a pair of stays?"

Of course I'd heard of "stays" before, But, strike me deaf and dumb? If ever I until that hour,

Suspected "them was um !"

I knew that lunatics must have Straight jackets put about 'em-But women in their wits should make A shift to do-without 'em

# New Pork, June 17, 1848.



# **ELECTRO MAGNETIC ORE SEPARATOR.---Figure 1.**



This is a machine invented by Ransom Cook, Esq. late Superintendent of the Clinton County State Prison in this State, and employed for the separation of the magnetic ore at the mines in that place. The principle of this invention consists in charging successively by a battery different rows of magnets on a revolving cylinder, so that the magnets will lift magnetic ore from an endless web as it passes under thecylinder; and when the ore is lifted up a short distance the electric connection is broken with the magnets, and the ore then drops from them into a trough and is discharged into a proper receptacle.

Figure 1 is a ground plan of the machine. A A, is the frame. B, is a pulley by which the cam shaft C, is revolved. This shaft by the cam C, shakes the hopper F, soas tospread the ore evenly across the web H. This is done by having a hook rod that catches the upper edge of C, and is made, from the shape of the cam, to traverse across the web and spread the

Figure 2.

the receiving trough.



This is a side view of the machine. As the same letters indicate like parts on all the figures, we will only refer to those particularly necessary. K, is the hook shaft or bar that is made to shake the hopper F, as already described. H, is the endless web or apron carrying the ore forward to the magnets on the cylinder D. The magnetic cylinder revolves to meet the ore as it comes forward on the web, not in a contrary direction, as might be inferred. T T, are the magnets. M, represents the wires from the battery. The large cylinder is revolved by a broad band from the other side passing over a large pulley on the

Thirteen children came near being poisoned to death in Cincinnatti, Ohio, recently by a woman who gave them essence of hemlock, which she mistook for liquorice.

It has been found that kiln drying does not destroy the germinating qualities of grain.

shaft of D, the magnet eylinder. E, represents the copper wires that are wound around the magnets and shews the manner in which they are formed on the outside of the axle, to dip into the charged mercury troughs and be charged, and as they rise out of the troughs, the electric current is broken and the magnets discharged. This is a particular partof wood, it is non-conducting, and to keep the nation. wires from the axle of the cylinder, it (the axle) is boxed up with wood and the wires turned up on the outside of it.

ore equally on the web-a very beautiful ar-

rangement indeed for this purpose. D, is the

revolving magnet cylinder driven by band and

pulleys ON P. L, is the trough into which the

ore is discharged from the cylinder. X X, are

mercury troughs, the onecharged with the po-

sitive and the other with the negative from

the battery by the wires M M, the one charg-

ing one mercury trough and the other that on

the opposite side. The magnets are fixed on

the revolving cylinder and wound round with

copper wire, the one positive and the other

negative. These wires are carried from one

magnet to another across the row and brought

out at the axle of the cylinder to form a cir-

to lift the ore from the dross, and deposit it in

# (For Fig. 3, see page 308.)

Recent experiments prove that if fish get beyond a certain depth in the sea they die from the pressure of the water, beyond a certain amount of which they cannot support.

consumption-it is the child of civilization. | fruit.

# No. 39.

RAIL ROAD NEWS. Cheshire Railroad.

Col. Alvah Crocker, of Fitchburg, President of the Vermont and Massachusetts railroad, was one of the early projectors of the Fitchburg Railroad. In Boston he made great exertions, but it was with extreme difficulty that he succeeded in raising \$90,000. He then visited some of the towns now on the line of the Cheshire railroad, and spent three months travelling from farm house to farm house, urging the people to take stock in the Fitchburg Railroad. After talking two or three hours, he would occasionally prevail on a farmer to take one share. Many of the subscribers to the stock regarded their act more in the light of a charitable donation than anything else.

The Cheshire Railroad extends from the Vermont and Massachusetts Railroad at Ashburnham, to the Connecticut river at Bellows Falls, where it connects with the Rutland Railroad, and also with the Sullivan Railroad, which will connect with the Vermont Central Railroad. The Cheshire Railroad, fifty miles in length, when completed will cost about \$3,000,000. It has been substantially constructed, and may be regarded as one of the most stupendous railroad projects in this country. The difficulties which have been overcome by the cutting down of trees and the filling up of valleys, cannot be described.

Connexion of the Providence and Stonington Railroads.

A large party of gentlemen from Boston and other quarters were invited on Monday week to be present at the ceremony of opening the new branch railroad which forms a junction between the Boston and Providence cular fan row of the points of the wires, so and Stoningtion Rail Roads, by passing that as the cylinder revolves, and these wires through the city of Stonington, and furnishes dip into the charged mercury troughs, the rows a convenient station in a central part of that of magnets are charged and broken alternately city.

#### Northern Railroad.

The fare on the northern railroad, is reduced to \$3.25 from West Lebanon (on the river) to Boston, and \$1.75 to Concord.

## Anthracite Ashes.

Anthracite Coal Ashes, we understand, were applied on some land in New Jersey, last spring, at the rate of fifty bushels per acre, and notwithstanding the very unprecedented drought, they were the means of doubling the crop of grass. As there are more or less hard cinders in these ashes, after spreading them on grass lands, it would be as well to pass a roller over the meadow, in order to sink the cinders in the ground, out of the way of the edge of the scythe. Anthracite ashes can be had in the city for the mere cost of gathering, and in some instances the carts will deliver them on the docks gratis.-We hope to see them no longer wasted in the streets.

It would be easy to sift them and keep out all the large pieces

Mr. Palmer, late of Indiana, who has explored the country north of the Columbia river, says that Vancouver's Island is as large as Great Britain, and contains all the natural the invention. As the cylinder is made of sources to make it the seat of empire of a great

> There are twenty flouring mills in Rochester, with an aggregate of 103 stones. It is calculated that these mills consume 3,000,000 bushels of wheat per annum, and turn out 600.000 barrels of flour.

A blight called the Cochineal blight, has attacked some of the very finest pine apple plantations in the Bahamas, and is very like-Animals in their wild state never have the ly to injure the greater part of the crop of