lights of science applied to the cultivation of the soils. The tour of Sir Authur Young, to the continent in 1788-9, for the purpose of looking into the countries there under the best system of farming, produced the first decided advances in England to her present agricultural maturity and the perfection to which the art has been brought in Scotland, is ascribed chiefly to the endowment of an agricultural Board, through the influence and exertions of Sir John Sinclair.

"Agricultural societies are now to be regarded as experiments: they are the peculiar privileges of modern times. Before they were formed, in New England and New York, 10 bushels of rye, 20 of corn, 200 of potatoes, and one ton of hay, was the average crops. Since premiums were offered, claims have been presented for having raised from 40 to 60 bushels of rye, from 115 to 122 of corn, from 400 to 500 of potatoes, and from 3 to 4 tons of hay. Massachusetts gives a bounty equal to the cost of manufacture upon the growth of silk, and upon manufacturing beets into sugar. After experiencing the benefits of a former appropriation she has voted to continue it. Maine, Vermont, Connecticut, New Jersey and Pennsylvania, have also granted a bounty upon the growth of silk. Ought not an agricultural survey to follow the geological reconnoisance now in progress, which will develope the intimate relation between the minerals that the earth covers and the true method of cultivating its surface?"

"The endowment of agricultural schools and the circulation of agricultural journals is rendered the more necessary from a consideration of the peculiar habits and modes of thinking prevalent among our farmers. As a class of people they have little intercourse with each other; they do not preserve the results of their experiments in books, like mechanics and manufacturers; they have rarely held conventions to concentrate into a focus the lights of the day, to be thence imparted through the press to the remotest ends of the republic."—*American Farmer.*

From last Times.

SCIENCE.

IMPORTANT.---Among the great *desiderata* of the present hour, there is nothing, perhaps, to which the attention of Science is more indefatigably given, than to that important one with reference to Steam Power, and what emphatically we would call the "Grand climax of this Agent"---to wit---"*the greatest power with the least feed or fuel.*" We have been particularly induced to these remarks by an interesting fact of which we have just been informed;---that a gentleman and fellow townsman of this our little metropolis, in the early part of last winter, had the honor of submitting a proposal to the Patent Office, in London, for the above object, which was highly approved of by the talented heads of that institution, and by them looked upon as by far the most feasible of any suggestion submitted for their consideration from any quarter. But we are sorry to say that difficulties were immediately thrown in the way of a Patent right, upon the ground that inventions are not transferable, but must remain "in silentio," until secured by patent to the inventor only---therefore, as in the case in question, the inventor, Dr. F. W. Morris, had not acted in accordance with this principle, but under a mistaken idea having communicated his secret to another, this individual could not become a Patentee for a discovery not his own, whilst at the same time the Dr. it would seem, must forego his right.

EXPLANATION.—The remarkable difference observable in the radiating and reflecting, as well as absorbing powers of different bodies and surfaces, with respect to Caloric, induced Dr. M. to suppose that by arresting the vast quantity of this matter that now radiates from the entire surface of the Steam Boiler, by opposing to it a contiguous bright and reflecting surface, placed every where around the boiler at the distance of a few inches, or in other words---a range of parallel reflecting mirrors, with surfaces elevated upon Catoptric principles at proper incident angles---that in this way all the radiant heat, or at least the greater part of it that is now lost by the present arrangement, would then be returned upon the boiler, and be reabsorbed, whilst the check thus extensively put upon such an immense escape of Caloric from the surface of the boiler, would enable the water within this vessel to *retain* its full temperature, and also *attain* that temperature with an infinitely smaller supply of fuel in the furnace than has hitherto been found sufficient for that purpose, although the exact ratio of this diminution could not be ascertained but by direct experiment upon a scale of ample magnitude. The method of surrounding the Boilers, we understand, would be by frame work of iron, or other material, and not unlike hotbed sashes, each pane of which would be a mirror, and each mirror on its outer surface either inlaid with or protected by some non-conducting composition—the whole forming an outer casing to the boiler, and communicating with the furnances by induction and eduction valves, so as to compensate for the alternate expansion and condensation of atmosphere, that must necessarily take place in the intervening space of the boiler and the outer casement, as the fire is elevated or depressed. It is Doctor Morris's opinion also, although he does not consider it of the first importance in the present improved material of British engines,—that this outer case, if made of sufficient strength, would be a shield from the inner boiler in case of explosion, as the steam would instantly be directed by the valves into the flues, and so escape by the chimney, whilst at the same time the increased expansion of power allowed by the outer casing whilst directly weakening the impetus, would the better enable it to sustain the blow.

A PEPTICIAN.

Halifax, October, 26, 1839.

THOUGHTS OF YOUTH.

BY AMELIA.

Oh my thoughts are away where my infancy flew,
Near the green mossy banks where the buttercups grew,
Where the bright silver fountain eternally played,
First laughing in sunshine, then singing in shade.
There oft in my childhood I've wandered in play,
Flinging up the cool drops in a shower of spray,
Till my small naked feet were all bathed in bright dew,
As I played on the banks where the buttercups grew.

How softly that green bank sloped down from the hill,
To the spot where the fountain grew suddenly still!
How cool was the shadow the long branches gave,
As they hung from the willow and dipp'd in the wave!
And then each pale lily that slept on the stream
Rose and fell with the wave as if stirred by a dream,
While my home mid the vine-leaves rose soft on my view,
As I played on the bank where the buttercups grew.

The beautiful things, how I watched them unfold,
Till they lifted their delicate vases of gold,
Oh, never a spot since those days have I seen,
With leaves of such freshness, and flowers of such sheen.
How glad was my spirit! for then there was nought
To burthen its wing, save some beautiful thought
Breaking up from its depths with each wild wind that blew
O'er the green mossy bank where the buttercups grew.

The paths I have trod I would quickly retrace,
Could I win back the gladness that looked from my face,
As I cooled my warm lip in the fountain I love
With a spirit as pure as the wings of a dove,
Could I wander again where my forehead was starr'd
With the beauty that dwelt in my bosom unmarr'd;
And calm as a child in the starlight and dew,
Fall asleep on the bank where the buttercups grew.

BONES IN THE DESERT.

The accustomed route (M. Dumas says) is marked by a white line of bleached bones extending to the horizon. This extraordinary circumstance, it may well be supposed aroused all my attention. I called to Bechara, who, however did not wait for my question, for he at once read my desire in my obvious astonishment. "The dromedary," said he, coming to my side, and commencing his story, without preface, "is not so troublesome and importunate as a horse. He continues his course without stopping, without eating, without drinking; nothing about him betrays sickness, hunger or exhaustion. The Arab who can hear from such a distance the roar of a lion, the neigh of a horse, or the noise of men, hears nothing from his *haghin* but its quickened or lengthened respiration, it never utters a complaint or a groan. But when nature is vanquished by suffering—when privations have exhausted its strength—when life is ebbing—the dromedary kneels down, stretches out its neck, and closes its eyes. Its master then knows that all is over. He dismounts and without an attempt to make it rise—for he knows the honesty of its nature, and never suspects it of deception or laziness—he removes the saddle, places it on the back of another dromedary, and departs, abandoning the one that is no longer able to accompany him. When night approaches, the jackals and hyenas, attracted by the scent, come up and attack the poor animal till nothing is left but the skeleton. We are now on the highway from Cairo and Mecca; twice a year the caravans go and return by this route; and these bones are so numerous and so constantly replenished, that the tempests of the desert can never entirely disperse them. These bones which without a guide, would lead you to the oases, the wells, and fountains, where the Arab finds shade and water, and would end by conducting you to the tomb of the prophet—these are the bones of dromedaries which died in the desert. If you look, you will see some bones smaller in size and of a different conformation. These, too, are the wrecks of wearied bodies, that have found repose before they reached the goal. They are the bones of believers who desire to obey the Prophet's command, that all the faithful shall once in their lives perform this holy journey, and who, having been too long deterred from undertaking it by cares or pleasures, commence their pilgrimage so late on earth, that they are obliged to finish it in heaven. Add to these some stupid Turk or bloated eunuch, who, sleeping when he ought to have had his eyes open, has fallen and broken his neck; give the plague its share, which often decimates a caravan, and the simoom which often destroys one, and you will readily see that these funeral guide posts are planted with sufficient frequency, to preserve the road in good order, and to point out to the children the route pursued by their fathers.—*Quinze Jours au Sinai, by M. Dumas.*

THE TALKING CANARY.—Alas, poor Dickey! The talking canary has ceased to exist. This wonderful cantator, the boast of his owners, the pride of his species, and the admiration of every beholder, is dead. His career, though brief, was a brilliant one. He made his *debut* in the metropolis last season, and immediately got to the top of the tree in his profession, and he was universally admitted to be the canary of most astonishing genius that had ever appeared in public. But his faculties were overstrained, and with a shattered constitution he was brought to Brighton. The refreshing breezes from the sea and the sight of the place of his birth revived him for a time, and during one brief fortnight he delighted numerous audiences by the display of his vocal powers; but alas! Nature was exhausted, and "sweet pretty Dick" fell seriously ill. The bier fanciers said it was the pip, but Dickey knew better than any of them all the fatal signs of his disorder; he was fast sinking into a deep decline. He no longer carolled in merry lays, as had been his wont: but his voice grew feebler, and when excited by the presence of beauty he would exclaim, "Sweet pretty Dick!" but then falling back into his former state of stupor, ejaculated "poor Dickey!" and called upon "Mary, the beautiful maid he adored." On Saturday he sipped his water once, and tried to peck a piece of lettuce; but the effort was too much. He gave one hop to his perch, and fluttered for an instant, and gasping fell to the ground. Alas, poor Dickey!—We knew him, kind public; a fellow of infinite song, of most excellent fancy; he hath hopped upon our finger a thousand times. * * * * Where be your chirps now? Your gambols? Your songs? Alas poor Dickey!

DRAINING OF LAND BY STEAM POWER.—The drainage of land by steam power has been extensively adopted in the fens of Lincolnshire, Cambridgeshire, and Bedfordshire, and with immense advantage. A steam engine of 10 horse power has been found sufficient to drain a district comprising 1,000 acres of land, and the water can always be kept down to any given distance below the plants. If rain fall in excess, the water is thrown off by the engine; if the weather is dry, the sluices can be opened, and water let in from the river. The engines are required to work four months of the twelve, at intervals varying with the season, where the districts are large; the expense of drainage by steam power is about 2s. 6d. per acre. The first cost of the work varies with the different nature of the substrata, but generally it amounts to 20s. per acre for the machinery and buildings.

A French Chemist has discovered a mode of making tallow candles to resemble wax candles, both in colour and in burning. The process employed to convert tallow into white wax is very ingenious. It consists of various operations of boiling, purifying and pressing A hydraulic press, wrought by a steam engine is used. While the pressure is applied a dark yellow oil is squeezed from the tallow. The expulsion of oil leaves the substance of tallow hard and white like wax. So close is the resemblance which these compressed tallow candles have to wax candles, that no person, without a close examination, could discover the difference, while they are only half price.

COUNTERFEITERS GETTING CHANGE.—The Galena Gazette states that two counterfeiters lately purchased tracts of land in Iowa Territory, and paid for them in counterfeit money—when they came to take possession, they were *shot* by the original proprietors.

FOUL (FOWL) OUTRAGE.—Capt. Goodman, living east of Rochester heard a noise in his yard, and sent out his man to ascertain the cause. On going to the hen roost, the man was attacked by two villians, one of whom gave him a blow with a club which broke his under jaw. It was found that about 70 weight of chickens had been killed, and tied together preparatory to a hasty removal.

From the opening of canal navigation to October 1st. there had arrived at the Hudson from Lake Erie 514,544 barrels flour being 165,154 less than in 1838. Yet, there is this year, in Michigan alone, a surplus of some 200,000 barrels over the quantity raised last year.

Use hard soap to wash your clothes, and soft to wash your floors. Soft soap is so slippery that it wastes a good deal in washing clothes.

It is easy to have a supply of horse-radish all winter. Have a quantity grated while the root is in perfection, put it in bottles, fill it with vinegar, and keep it corked tight.