

Science.

In a late No. we called attention to Mr. Dawson's "Scientific Contributions towards the improvement of Agriculture in N. Scotia,"—and we would again commend the work to the attentive perusal of Agriculturists, and indeed of all our readers. We have pleasure in transferring to our columns, the following notice from *Haszard's (P. E. Island) Gazette*, which by the way, we are happy to see taking a fresh start, and in somewhat of a new dress.—*Halifax C. Times*.

"The Institutions of the Academy at Pictou, as well as that of King's College in Windsor, have been productive of the happiest effects in the neighbouring Province, while they have produced men whose fame and reputation are not confined within the narrow boundaries of their own province, and while such men as the work, the title of which is prefixed to this article, have been enabled to become the instructors of their countrymen, hundreds of others have derived from the same sources the means of benefiting by those instructions: throughout the whole Province of Nova Scotia there are to be found numbers of well educated men in every class of life, with the exception, perhaps, of the mere labourer, who have derived their knowledge from one or other of these seminaries, or from those of more recent origin. Among those whose names have conferred honor on the place of their education, stands Mr. J. W. Dawson. A native of the town of Pictou, he was a pupil of the late Rev. Dr. McCulloch—one of these literary pioneers, who having spent a life of hardship, toil and privation in the service of learning, was removed just when the value of his services had begun to be appreciated. It was natural that in the midst of coal mines and iron, sandstone, lime and other mineralogical productions, the bent of Mr. Dawson's mind should be inclined to the study of Geology and its kindred and congenial sciences. These were pursued with that ardour which is ever the concomitant of genius, and which, when under due regulation never fails to lead to success. Mr. Dawson achieved a reputation in his native Province, and obtained the important and highly responsible post of Superintendent of Education. Of the manner in which he has performed the duties of his office, we shall hereafter have occasion to speak. It would seem that while so engaged his attention was directed to the state of agriculture in Nova Scotia, and by a mind like his—travelling into every part of the Province—it could scarcely be overlooked, and hence the present work.

England, its Leaders, and its Advancement in Art and Science.

England is a young country, not an old country, as some mistakingly assert. The energy in it at this moment is enormous: we are but commencing to move, and have a mighty future in store. Statesmen, as it seems to us, are beginning to have glimpses of their real duty, the welfare and advancement of the people committed to their charge. The time is coming when leaders will have to be leaders and the world will not be governed or trampled by shams. The recognition of the importance of the fine arts and practical science in the late speech from the Throne is a promising sign of the times, and the proposed Industrial and Artistic University will be looked forward to hopefully. The application of art to the manufactures of the country, and the general advancement and elevation of the industrial, is no longer a matter of preference or otherwise, but one vital necessity. If we stand still, other countries will not, and we shall be passed in the race. The mind must be set to work to aid the hand. As the Duke of Newcastle truly said at the late meeting of the Sheffield School of Design—"These are days in which education is no longer one of the luxuries of life: it has become one of its greatest necessities, for all classes and for all grades of society. It has become the daily bread of us all."—*The Builder*.

An Immense Job.

A few years ago, remarks the Albany Knickerbocker, the Dutch who conquered Holland, resolved that they would add to the quantity of fertile ground in the kingdom, by pumping out Harlem Lake; a lake seventy miles long and twenty broad, which gave it an area equal to Lake Champlain.

To carry out the undertaking, three immense engines were constructed in the fall of 1847, although the pump did not commence

till the spring of 1848. Late accounts say the job is nearly completed, the greater part of bottom being exposed.

To lower the lake one inch, four million tons of water had to be lifted. In three years, the lake was lowered seven feet three inches; in December, last year, it was lowered nine feet and a half, and now it is nearly dry. It is believed that no less than seven hundred million tons of water have been lifted by the engines since they commenced operations. This is equal to a mass of solid rock, a little more than three square miles, and one hundred feet high, that is, allowing fifteen cubic feet for a ton. We can easily see what an immense amount of labor the engines performed, and what power there is in coal, applied in a state of combustion to water, for the purpose of raising water. Each engine was three hundred and fifty horse-power; and so economical were their working qualities, that two and a quarter pounds of Welsh coal per hour was all the fuel used for each horse power of an engine. The Dutch engineers were nearly unanimous for the old-fashioned windmill, which had been so often employed for the same purpose: but it was ascertained by two English engineers that the engines could be built and do the work for one-half the amount of windmills; this has been completely fulfilled.—*London Times*.

Steam Fire Engine.

A fine engine, worked by steam, was recently tried in Cincinnati. The *Western Christian Advocate* says—"Nineteen minutes after the fire was built the attachments were all made, and the apparatus, lifting through two suction, threw two handsome streams of water through inch nozzles. A vulcanized hose was afterward attached, and a fine stream of steam—which is very effective in checking a fire was thrown, for some time, without in the least exhausting the supply. A committee of ten reported in high terms of praise as to the invaluable character of the engine."

The Farm.

From the New England Farmer.

THE FARMER.

O, noble is the farmer's lot.—
That man of giant frame;
His big heart knows no sordid spot—
No vices dim his fame.

His brow, it wears no bloody bays,
Nor springs his fame from Death;
But quickening Nature bears his praise
Upon her balmy breath.

His hand, it is an honest hand,
And brown it is with toil;
Then let the farmer take his stand,
The sovereign of the soil.

The forests bow to meet their lord—
The waving fields rejoice;
By countless herds he is adored—
The ruler of their choice.

Then let the farmer take his stand,
The sovereign of the soil,
And every lip in every land
Shall bless the farmer's toil.

Lime Water for Hens.

ACCIDENTAL DISCOVERY.—During the last season, Mr. Joseph Wilcox, of this town, having occasion to administer lime water to a sick horse, inadvertently left a pail of the preparation in his barn, which remained there for some months, serving as a favourite drink for his hens. He soon afterwards found that the laying of his hens was apparently increased to a considerable extent. Being convinced of the importance of the (to him) new discovery, he has during the present season, kept his hens constantly supplied with lime water, placed in troughs within their convenient access, and the result was an increase in eggs of nearly four-fold as compared with previous experience.

He is willing to share the benefit of the experiment with his neighbors if they choose to try it; and hence his publication. The newness of the discovery (though it may not now be new to all) is claimed only as applicable to the mode of imparting the lime in this case—its use in another form for the same purpose having been previously understood by many.—*Wayne Sentinel*.

Those who wish their cows to give large messes of milk in the winter season, should

give them warm drink. The extra trouble will be more than repaid by the increased quantity of milk.

DOMESTIC RECEIPTS.

Wife's Department.

APPLE CUSTARD.—To make the cheapest and best every day farmer's apple custard, take sweet apples that will cook, (such as every farmer ought to have through the summer, fall, winter, and spring,) pare, cut, and stew them; when well done, stir till the pieces are broken; when cool, thin with milk to a proper consistency, and bake with one crust, like a pumpkin pie. Eggs may be prepared and added with the milk if handy, though it will do without. No sweetening is necessary. It may be seasoned with any kind of spice to suit taste—the less the better.—*Ohio Cultivator*.

BUCKWHEAT CAKES.—The griddle on which cakes are baked should never be touched with grease: Firstly, because it imparts a rancid taste to the cakes. Secondly, if a cooking stove be used it fills the kitchen, if not the whole house, with the smell of burnt grease—to say nothing of the parade and boasting to one's neighbors by betraying what we are to have for breakfast. Wash the griddle with hot soap suds, scour with dry sand, and when heated for use, rub it well with a spoonful of fine salt and a coarse cloth; it will then be ready to receive the cakes. After each cake is removed, the salt-rubbing must be repeated. If the first did not succeed, try it again, and you will ever after follow the advice of an old housekeeper.

I have somewhere met with an old legend, that a robin, hovering about the cross, bore off a thorn from our dear Saviour's crown, and dyed his bosom with the blood; and from that time robins have been the friends of man.

Sweet robin I have heard them say
That thou wert there upon the day
The Christ was crowned in cruel scorn,
And bore away one bleeding thorn;
That so the blush upon thy breast
In shameful sorrow was impressed;
And thence thy genial sympathy
With our redeemed humanity.

Sweet robin would that I might be
Bathed in my Saviour's blood like thee;
Bear in my breast whate'er the loss,
The bleeding blazon of the cross;
Live ever, with thy loving mind,
In fellowship with human kind;
And take my pattern still from thee,
In gentleness and constancy.

Banner of the Cross.

The Shetland Pony.

These curious little animals attract so much attention wherever they appear, especially among youths, that they generally form a part of all the menageries that travel through the country. No wonder that they are great favorites with the girls and boys; for their small size, beautiful shape, and gentle, playful disposition, seem to fit them exactly to be playmates for young people, and the little horses are always ready to join in their pleasure excursions and frolics.

Egypt was the original country of horses; but as they are now found in all parts of the world, they differ greatly, each kind of horse being adapted to the climate and productions of the country he inhabits. The Shetland pony is just the animal required in Scotland, the Shetland Islands, from which its name is derived, and Canada.—Its diminutive size suits the scanty vegetation of these countries, which would not support large animals; but if they were as feeble as they are small, they would be of little service. They, however, possess immense strength in proportion to their size, and are so tough and healthy that they can live among the mountains through the long winters, and survive to a great age, even fifty or sixty years.

In Scotland they are called Shetties, and as they have to take care of themselves, they run almost wild upon the mountains, and will climb up steep places, standing with ease on the very edge of the most frightful precipices. On the Sabbath, they are always wanted to carry the families to Church, and they must be caught on Saturday. The rogues know how to make this a difficult task. It is a pleasing sight, on Sunday morning, to see one or two women

mounted upon one of these ponies, covering him so completely with their large dresses, that nothing can be seen of the poor pony but his droll, little head.

A middling sized man must ride with his knees raised to the animals shoulders, to prevent his feet from touching the ground. It is surprising to see with what speed they will carry a heavy man over broken and zigzag roads in their native mountains.

A gentleman, some time ago, was presented with one of these handsome little animals, which was no less docile than elegant, and measured only seven hands, or twenty-eight inches in height. He was anxious to convey his present home as speedily as possible, being at a considerable distance, was at a loss how to do most easily.—The friend said, "Can you not carry him in your chaise?" He made the experiment and Shetty was lifted into it covered up with the apron, and some bits of bread given him to keep him quiet. He lay peacefully till he reached his destination, thus exhibiting the novel spectacle of a horse riding in a gig.

A gentleman had a white pony, which became extremely attached to a little white dog that lived with him in the stable; and whenever the horse was taken out, the dog always run by his side. One day when the groom took out the pony for exercise, and accompanied as usual, by his canine friend, they met a large dog, which attacked the diminutive cur, upon which the horse reared, and to the astonishment of the bystanders, so effectually fought his friends battle with his fore feet, that the aggressor found it for his interest to scamper off at full speed, and never again ventured to assail the small dog.

A little girl, the daughter of a gentleman in Warwickshire, (England,) playing on the banks of a canal which runs through his grounds, had the misfortune to fall in, and would in all probability, have been drowned, had not a little pony, which had long been kept in the family, plunged into the stream and brought the child safely ashore, without the slightest injury.

A farmer in Canada had a large number of ponies, and among them a very handsome and playful one, which was a great favorite with a little boy about ten years of age, the only child of the farmer. One day the boy was sent several miles on an errand for some money, with a warning to return home before night as the country was infested with robbers. His visit was so delightful that he forgot the command of his parents, and did not mount his pony to return before it was quite dark. His road lay through a thick forest, and it was not long before a highway man attacked and dragged him from his horse, which ran swiftly homeward. Meantime, his terrified parents sat trembling by their fire-side, awaiting their boy's return. They were just preparing to go in search of him, when they heard the clattering of hoofs and soon after a loud kicking and pawing at the door. On opening it, they saw the pony in a state of great excitement, with his saddle a bridle dangling about him. He ran from them a short distance, then frisked about, and seizing the father's coat in his teeth, pulled him along. The agonized parents followed the animal who ran ahead, constantly turning back and neighing to urge them onward. After travelling many miles through the woods, they came to the place where the boy had been robbed, and found him tied to a tree, stripped of his money, clothes, and half dead with fear and cold. He was placed on the pony's back, who proudly bore him home, and was ever after treated as a true friend by the boy whose life he had saved.

HOLLOW HORN.—This troublesome and not unfrequently fatal disease, may be prevented simply by putting a table-spoonful of spirits of turpentine in the cavity or hollow behind the horns, during the severe weather of winter and spring. Liberal feeding and good protection, however, will, as a general thing obviate the necessity of the foregoing application. It is rarely the case, indeed that cows which are well kept and comfortably lodged become subjects of this disease.—[*Woburn Journal*.]

CLOVERING.—Never spare the seed when you sow clover. Four quarts are not enough to the acre; put on not less than six; and be not frightened if you scatter a peck! The great superiority of thickly sown clover fields over others for feed and manure, is too manifest to need demonstration.