

AGRICULTURAL.

A MODEL INSTITUTE.

We attended the Farmers' Institute, at Walker, Linn county, and saw what we had lived in hope of observing sometime in the next century—if spared that long. The meeting was in the house of God. A minister of the gospel opened the meeting with prayer and praise. The young girls and young men in the neighborhood came in and played and sang for us. John Wilson, a neighborhood farmer, presided with such grace and tact that we were continually reminded of Blaine, in the House of Representatives of the nation. The order was perfect throughout and every farmer was invited, coaxed, or questioned into debate.

The locality is advanced in many specialties. People came from a distance of twenty miles and from all directions. Breeders of different kinds of stock, improvers in various directions, experimenters in all departments of the farm, associate and private creamery men and home dairymen, all were there discussing in turn the different ways of managing the product of the cow.

The people did not need urging to milk, the question was—"what cow?" They did not question the wisdom of cutting the corn for fodder, but compared methods. They did not inquire about the profits of improved stock, but about the best with which to improve.

The address of welcome surpassed some at the annual Breeders' meeting. Local essays by men of whom the State has heard little or nothing, were worth room in the literary and scientific magazines.

Farmers were there with accurate accounts of what they had been doing. Mr. Hoyle, of Springville, sold 1,920 pounds of butter from eight high grade Jersey cows at 23 cents per pound, an average of \$55.20 per cow. Capt. B. T. Buckley, of Rowley, was there with results. He sold from 14 cows, and seven two-year-old grade Short horns 8,293 pounds of butter at 22½ cents per pound. Rating the seven two-year-olds as four cows we find the Captain had an average of \$67.00 per cow. He sold his calves for \$14.00 each, giving him \$81.00 from each cow, not estimating skim milk fed to the hogs. These are samples of what is being done by the people of that neighborhood.

One of the most beautiful features of the Institute was that every farmer brought his wife, and during the two days five different ladies read papers on the different features of home life, nice, matronly women, that a boy would ask a piece of bread and butter with preserves on, from, or that a man is proud of as a mother, wife or daughter. All our women are not the short-haired variety, that walk and talk like a man and set masculine.

Those people need no more visiting, brethren. They can take care of themselves. The Institute association has graduates already. Other localities may send there for help. So grows the farmers' movement for self improvement!

ORCHARD NOTES.

Trees when received in a dry condition should be covered with moist soil, and if the weather is wet the buried trees should be protected with hay or straw to shed the rain, since too much moisture is injurious. When the trees have become swollen to their former size, plant them at once, keeping their roots from the air as much as possible. A tree well planted is half grown.

An excellent wash to make the bark of fruit trees smooth, and valuable also for destroying the eggs of borers and other insects, is made by taking a one pound can of concentrated lye (caustic soda) and dissolving it in one gallon of water. Use with a mop or brush, taking care that it does not get into the eyes of the operator, as it is very corrosive. It causes a glossy bark and when applied in proper season will destroy young borers and also multitudes of root-lice.

The early apples, peaches and the like should always be planted near the dwelling, and the plot made a run for poultry, or the trees protected and the ground used for a run for hogs or sheep. The advantages are: easy access to the fruit, the consumption at once of all fallen fruit and larvae of the codlin moth which would escape and attack the winter fruit if planted near by. By the plan we advise, the early fruit attracts the moths which can be destroyed, and the later fruit will be safer from attack.

In planting the peach, quince or apple, see that no borers are present. Take a dull knife and scrape the bark at the root carefully to see if any discolored spot appears, if so, search for a borer beneath and remove it. The writer set 2000 peach trees five years ago and took as many as seven borers from a tree, but few having none. The work was so thoroughly done and no orchards being near to furnish mature insects to impregnate them, that there has not been a single borer found, or that can now be found in the entire 2000 trees.

Extensive trials have taught the writer that on dry soils, deep planting of apples and peaches is most successful. Seven years ago some large trees were planted a foot deeper than they grew in the nursery. The year after planting was dry; not a tree suffered from drouth, nor was loosened by storms. They have remained very erect and grow very rapidly. In wet places deep planting is disastrous. In such situations, if planted at all, it should be on ridges, and planted shallow at that. Peaches are best when put moderately deep, with the soil ridged up to them by shallow ploughing afterwards. The trees need sufficient soil on the roots to keep them firm during high winds. The quince roots in a shallow soil and deep planting or deep culture is not to be desired. A moist soil for them, however, is very essential.

The examination of students who wish to enter the Royal Conservatory of Music at Leipzig is announced to take place April 24 at the institution of world wide fame. Every branch of instrumental music and composition is taught by famous masters.

The first of the three elections in England, towards which so much attention in the political world is directed, has been decided. In the Barnsley Division of Yorkshire Lord Compton, the Gladstonian candidate, was elected by a majority of 2,451 votes over Mr. Wentworth, the Conservative representative. In the last election in 1886 Mr. Kenny, Liberal, had a majority of 2,508, so that in the present election there is a falling off in the Gladstonian majority of 57 votes; but the total number of votes polled was increased from 8,342 to 10,013, showing the intense keenness with which the battle was fought.

Unwelcome Visitors.

It is a terrible thing to face and to fight a wild beast or a quick darting serpent, but it is a far more severe strain upon the nerves when one is compelled to remain inactive in the power of the enemy, and trust to good-fortune for deliverance. A prospector, camping in the mountains, was waked from a sound sleep one night by the consciousness of something unusual in his shanty.

I was not long left in doubt as to the character of the visitors. A hiss or two warned me, and as soon as my eyes got used to the semi-darkness, for the fire had burned down to a bed of coals, I could make out a dozen wriggling objects between the fire and me, and knew they were snakes.

They had crept out of the rocks behind me, attracted by the light and warmth, and every one must have run over my body.

About the time I got it through my head what was going on, a brand fell down and made a little blaze, and by this increased light I counted eleven old rattlers between me and the fire. A few were coiled up, and apparently taking solid comfort, but others were running about in a frisky way, and now and then coiling around each other.

I was covered entirely, except my head, and I'd have covered that up, too, if I had dared to move as much as a finger. There was only one way to get out of the shanty, and so long as the snakes held that, I must remain quiet. I shut my eyes, and tried to keep my mind on something else, but in five minutes I was sweating like a trotting horse, and it required all my nerve to keep from springing up.

I could stand the situation better with my eyes open, and pretty soon I was considerably encouraged by seeing most of the snakes curl up close to the fire and go to sleep, and for the next two hours not a snake moved.

It was fully two hours before daylight came. The fire had by this time died almost out, and the snakes had begun to grow uneasy. One after another uncoiled himself and crept lazily about, but not one made the least move to retreat over my body, or go out by the front way.

I was now suffering a thousand torments from having lain so long in one position, but I dared not move. The sweat trickled into my eyes, and I hardly dared to wink. It had been daylight three quarters of an hour when I felt that I had got to make a move, even if it was into the jaws of death.

I had just drawn a full breath to get ready for the move, when every snake suddenly slipped out by the front way, and whisked out of sight.

You may believe I wasn't long getting hold of my gun, and as soon as I could get the numbness out of my legs, I advanced to rekindle the fire. Then I saw the snakes congregated around and darting their fangs into a big toad thirty or forty feet away. It was, no doubt, his hopping by the doorway which drew them out.

Burdette on Boy's Stories.

Those who are familiar with the writings of Robert J. Burdette know that he says many earnest words in a jesting way. We have seen nothing better from his pen of late than a playful but very serious complaint against the sensational style of stories that are occasionally admitted to our best children's periodicals. On the whole, these periodicals are edited with praiseworthy care, but they do make a slip now and then that makes this rebuke from the gentle humorist by no means inappropriate.

No, oh, no; we are not going to pitch into the five-cent blood and thunder novelette, not right directly at any rate. We were just looking over a story in the late number of a most excellent and highly respectable juvenile magazine; a good magazine, that doubtless views with alarm as do all the rest of us, the poisonous literature of the news-stand. This story is about a boy fifteen years old, who, while standing alone on his father's engine on a lonely siding, saw a runaway train of cars, started by the wind, sweep past him down the grade. Unusual thing—the lightning express nearly due; the train despatcher always manages to have a lightning express about due when anything of this kind happens. There is "no telegraph wire either;" this is also unusual; a road without a wire is apt to run lightning express and limited trains every fifteen minutes. The boy thinks quickly; boys of fifteen are always quick thinkers; he runs his engine out on the main line, setting the switches for himself, for his father had gone to supper, miles away in the country, presumably, as it is quite customary for railway engineers to take all their meals on distant ranches, leaving their engines in charge of children. The runaway cars "are miles away," and he has "less than an hour" to catch them. He caught the runaways, which were flying like wind; he slowed up "with excellent judgment"—we should think so—crept along the side of the flying engine, got out on the pilot, lifted the "coupling bar with one hand," and reached over as he "made the coupling and dropped the pin with the other;" had a struggle with the flying cars, but at last checked them; got them started back, he made thirty-five miles an hour, and the "lightning" in sight making sixty—on a road without a wire—he had ten miles to run in this shape, but he made it, got the siding, time to turn the switch, and the "lightning" thundered by. Then "the boy fainted dead away." No wonder; it was enough to make a man faint to read it; it was high time somebody fainted. We haven't the least objection to fiction; we rather like it, but even fiction for boys should have some sense in it. Not much, perhaps, but just some.

At the funeral of the Crown-Prince of Austria the Crown-Princess wore the same mourning dress worn by the Empress Maria Theresa at the burial of her husband, Francis of Lorraine. According to the usual custom, the heart of Rudolph was placed in a silver urn and buried away from his body.

Gas that can be used for fuel, at so cheap a rate as ten cents per thousand cubic feet, is a desideratum devoutly to be wished for. That, however, is to be the good fortune of our friends at Windsor. At a meeting of the Town Council on Wednesday the representatives of three companies attended who were prepared to supply the natural gas discovered in the neighbourhood at that price, and it was determined to have pipes laid through-out the city at the earliest possible date. If illuminating gas can be supplied at a proportionately cheap rate, Windsor will have exceptional advantages.

Grandmother.

Safe from the tempests of hopes and fears, In the sheltered calm of her forefere years; O'er her silvered head the seasons pass Light as the zephyrs that sway the grass.

Though life for her holds nothing more Than the passing hence to the farther shore.

Yet the patient hands and ready will With love's sweet missions are busied still.

The maxims taught in childhood's school, In feeble age are her guide and rule; And idle fingers, to fold or twirl, Was thought a disgrace when she was a girl.

When the woods awake at the touch of spring, When the lilacs bloom and the robins sing, And between the orchard trees a-row The blossoms fall like the falling snow,—

Bright through the gathered mist of years A fairer scene to her sight appears; And the robins sing and the lilacs blow, In the happy springs of the Long Ago.

With eyes grown dim with the mists of age, Serene she ponders the sacred page; Conning the precepts, day by day, That guide to the straight and narrow way.

Knowing the promise of God is sure, And that His mercies for aye endure,— Life's labor ended, its duties done, Tranquil she waits to be summoned home.

The Cruse That Faleth Not.

Is thy cruse of comfort wasting? rise and share with another.

And through all the years of famine it shall serve thee and thy brother.

Loves divine will fill thy storehouse, or thy handful still renew; Scanty fare for one will often make a royal feast for two

For the heart grows rich in giving: all its wealth is living grain; Seeds, which mildew in the garner, scattered, fill with gold the plain.

Is thy burden hard and heavy? do thy steps drag wearily? Help to bear thy brother's burden; God will bear both it and thee.

Numb and weary on the mountains, wouldst thou sleep amidst the snow? Chafe that frozen form beside thee, and together both shall glow.

Art thou stricken in life's battle? Many wounded round thee moan; Lavish on their wounds thy balsams, and that balm shall heal thine own.

Is the heart a well left empty? None but God its void can fill; Nothing but a ceaseless Fountain can its ceaseless longings still.

Is the heart a living power? Self-entwined, its strength sinks low; It can only live in loving, and by serving love will glow.

—Elizabeth Rundle Charles.

The Music of the Spheres.

Long ere earth from chaos merging, Glowed beneath the new formed sun, With it's oceans gently surging, With it's softly dashing fountains; And it's darkly towering mountains; Long ere this was the strain begun, When the Deity was building His bright universe, and gilding Boundless space with melted light. Through the vast expanse he sprinkled Powdered stars that reily twinkled In the vast and dusky night. Then a voice rang out through space, And the bright orbs fell in place, To the sky's four corners hurled; Here they rose, and there they sank, Star on star and world on world, In a wild unbroken rank, As they clove the ether clear, Rose sad music on the ear; Low and terrible at first, Soon in thundering peal it burst; Then grew faint, and gently sighing Rose and fell yet never dying. Over Time unto the gate Where Destruction sits with fate, We hear it not, nor can we see Thy dim arkana, Mystery; But there are strange things hid ajar Beyond the track of yon red star.

MADeline MARSTON.

A Prize Essay.

Mr. G. T. Angell says: I hereby offer to college and university students in the United States and territories a prize of one hundred dollars for the best essay on The Effect of Humane Education on the Prevention of Crime. The essays must be sent in an outer envelope inclosing an inner sealed one containing the name and post office address of the writer. These will not be opened until the committee to whom they are referred have decided to which the \$100 belongs. All that do not draw the prize will be returned if writer so request and inclose return stamps. The writer of the successful essay, if it is deemed worthy of publication by the committee, will receive \$100 and the essay will be widely published with the name of the writer. All essays must be received at No. 19 Milk street, Boston, Mass., on or before March 15, 1889.

A Remarkable Engineering Feat.

One of the most remarkable engineering feats appears to have been achieved in China, in the face of extraordinary physical difficulties—namely, the successful stretching of a steel wire cable of seven strands across the river Lunnan, this feat having been accomplished by the Danish engineer Dslinde, assisted only by unskilled native labor. The cable extends between two points at a distance of 4,700 feet apart, the height of the first support being about 470 feet above the present level of the river and the second about 740 feet. The cable in question is said to be the longest in the world, with a single exception—namely the cable across the Kistnah, measuring some 5,070 feet. There are also two cables across the Ganges, of 2,900 and 2,830 feet, respectively.

Mistress—"Marie, I saw you kissing a young man at the kitchen door this morning. I want you to understand that I will not stand that sort of thing at all." Marie—"Pardon me, madam. I did not know the young man was a friend of yours. It shall not occur again."

In the Grand Plaza of Mexico.

Here stood Montezuma's mighty temple to the Sun. Much allowance must be made of course, for the vivid imaginations of the Spanish historians in the romantic days of the discovery and conquest of the New World; but even to this day, and right here on and about the great Plaza you see unimpeachable testimony to this heathen temple's storied splendor.

The grand Plaza is still, as it was when Cortez first entered it as the invited guest of the great Indian city, the heart of Mexico. The palace built, or rather begun, by Cortez, stands on the eastern side of the great square. This palace is the largest in the world. It is not the finest palace in the world, but it is the broadest; covering more acres of ground than any other palace or public building of any sort that I have seen in all my travels. It is a low and ugly edifice, and is built for the most part out of the stones of the overthrown temple to the Sun.

Every Monday morning all Mexico, or at least all the idle and curious and pleasure-seeking portion of Mexico, and that is a large portion of the citizens, comes to this Plaza to hear the band play and see the troops deploy before the palace. The president and his officers, all in brilliant uniforms, sit or stand on the upper balcony of the palace, and review the troops. There are always many ladies with the president and his officers,—many of them American ladies,—and there is often much cheering and patriotic enthusiasm. The music is very good, as in all Latin lands.

The Mexican soldier, as seen here at these costume parades, is a queer, pitiful little fellow, and he is still more queer and pitiful as you see him out of the city marching up and down the country.

It is the policy of Mexico to keep her soldiers constantly moving about. And as the Mexican soldier nearly always has his wife and children with him, he cuts a queer figure when marching up and down the country from town to town. At such times he is always barefooted; and at best he has, as a rule, only wooden sandals to wear. When marching in the country he generally has his pantaloons rolled up and tied in a bundle along with his blanket and provisions. His bundle the wife generally has on her head, as she trots along at his side.

The poor little brown soldier, his naked skin glistening like polished copper in the sun, nearly always has a child in his arms. Their affection for their little brown children is beautiful, indeed. I have often seen a barefooted soldier struggling along with a whole little family,—except the wife,—in his arms or on his back. As night approaches and the troops are nearing the place to camp, the women go on before with their burdens on their heads and their babies on their backs, and make fires and prepare the scanty meal; while the poor little brown soldiers trim up their irregular lines a bit, and enter camp with a show of discipline under the sharp orders of the handsome officers.

When the bands play in the grand Plaza and the troops deploy, and the glistening brass cannon rumble and trundle over the big cobble-stones, you see thousands of women and children on the edge of the square watching it all with intense delight. For to many of them this is their first glimpse of the great palace, and the president of Mexico.

After an hour of rather awkward parade over the ugly cobble-stones, and under the eye of the president, one regiment after another is permitted to melt away, and drop out in a "go as you please" march again for the country.

Ah, then you should see the wives, and babies who have been noting the brave soldiers all this time! They struggle forward, they clasp husband, father by the neck, hand, anywhere that they can get hold of him. They praise his beauty and his soldierly bearing, they insist on carrying his gun, they kiss him over and over again; and he is glad; he is very glad. He sheds tears of joy as he trudges on toward one of the seven gates of the city.

Now and then he stops, catches up a half-naked child, presses it to his heart, kisses it over and over again; and only sets its little naked brown feet again on the ground in order to take up another one of his miserable little children, and embrace it also.

All these soldiers are very, very small men. I have often seen them fairly stagger under the weight of their big ugly muskets as they panted and perspired under a hot day's march in the country. At such times the little children lie thick along the line of march under cactus plants and in the shadow of stone walls nearly dead from exhaustion, waiting for the poor, tired father to come back from the end of the day's march, and take the little starved things to his heart.

The one special object of interest here by this storied Plaza of Mexico City, after the palace, is the cathedral. It stands on the north side of the square facing the sun, as did the great heathen temple from the ruins of which it was built. This is the richest place of worship in the world, that is to say, it has more gold and silver in and about its altars and sacred places than any other like place now to be found on earth, if we are to believe our eyes.

And yet you hear it whispered that the great silver rails around the altars here, as well as at the other rich church a league distant, are no longer solid silver; that the lofty golden candlesticks are no longer solid gold. But of this no one can say certainly, except perhaps, the few great dignitaries at the head of the Catholic Church in Mexico.

The music is fine here, certainly the finest of its kind in America. But the place is dirty and damp and gloomy from one end of the year to the other. A dozen or more deformed and repulsive creatures creep about the doors over the dirty stones, and implore you as you pass in to buy lottery tickets which they crumple in their dirty hands. Priests in sandals are very plentiful and very dirty. You are not asked for any money, but there are plenty of little boxes tacked up here and there for the reception of whatever you may please to bestow.

There are many rare and costly pictures here in this glorious old cathedral; and yet the real pictures of Mexico, the pretty ones, the pathetic ones, the pictures that make you put your handkerchief to your eyes a dozen times a day are the people themselves. How loving they are! How true they are to one another in all their misery, all their abject ignorance and most piteous poverty! There is a little flower garden and some great trees in the centre of the grand Plaza, and here late in the afternoon the band plays, and the fashionable people congregate.

You should see the little brown gardeners

in broad hats and narrow white breech cloth sat work in the flower-garden here in the grand Plaza of Mexico City! You should see him mow the lawn. And how does he do it? Why, in the first place he squats flat down on his naked heels, and then he hitches himself along as fast as he cuts away the grass, without rising up or even lifting his head from his work. And what does he mow with? Why, a little piece of glass or rather of obsidian, the same as he used when Cortez came.

In digging up the stump of a Eucalyptus-tree here last winter the gardener came to a stone which proved to be a huge and hideous idol. The government claims all such discoveries, and in excavating this idol for the fine museum in the palace, two others were found. They weigh, perhaps, a ton each, and had long ago been tumbled down here, no doubt by the Spaniards when they destroyed the temple to the Sun. It is said that many rare and curious things, as well as much gold and silver, are still buried here on the site of the pagan temple but only the impoverished government can make excavations.

I have now described the eastern and the northern sides of the great square, the palace and the cathedral, the other two sides are made up entirely of broad porches. These porches reach out from fashionable stores and fine shops of all sorts, and are turned into little booths or bazaars by day and on till midnight. But, curious to tell, at and from the moment of midnight the porches belong to the people till sunrise!

A little before midnight these pretty little shops that blaze and brighten all day and till late at night begin to melt away. The Arab, the Turk the Frenchman, the German, all sorts of store keepers fold up their tents, and suddenly start out, as the little half-nude and helpless children of the sun steal in and lie down to rest on the hard stones of this half mile of porches.

Till three in the morning as the sudden sun comes pouring over the low palace like a silver sea, and flooding their faces! They spring to their feet on the instant; they gather about the laughing water as they plunge their arms or their heads into flowing pools.

All the street cars, more than a dozen lines of them, start from the grand Plaza here, and never stop their gallop till they come to a station.

There is one very new and yet very solemn-looking and curious street car starts here. It has a huge, black cross over its one broad, black platform, and is called "the car of the dead." The once long and dreary processions of priests for the dead are allowed no longer here. You go to your grave by street car in Mexico City now. This car starts every hour, and from the number of those who go out, but come not back, by this car, you would say that Mexico is a sickly city. But it is not so sickly as it seems. For in the first place all the dead, as a rule, are buried from this presence of the cathedral; and in the second place there are almost always two coffins to one corpse. One of these coffins holds the dead, the other holds flowers which are to be emptied upon the dead when in the grave.

How this seems to soften the whole fact of the funeral! One coffin holds beautiful sweet flowers; one—and you can't guess which one—holds the dead.

The poor people here,—and they are, at least, nine-tenths,—take all their dead to the grave on their backs. But they also always have the two coffins, and they also always come by way of the cathedral when on their way to the grave. There is a whole street close by the cathedral with nothing but coffins in it; but they are not all of them black and sombre. Some are a bright red, some are brilliant with painted roses, some are curiously marked by queer figure paintings, and look like Egyptian work.

The poor never bury the coffin with the dead, it is always brought back, along with the narrow little box that was filled with roses. There are professional carriers for these occasions called "cargadero." They sit around the grand Plaza in dozens with little ropes in a girdle at the side. They always go in a trot, as if the dead had whispered, "Hurry up! I want to get out of this and rest in my bed of roses."

JOAQUIN MILLER.

As to Breathing.

The following heretofore unheard-of information in regard to the breath and breathing was made public in Kentucky recently by a schoolboy of twelve years, who wrote an essay on the subject.

We breathe with our lungs, our lights, our kidneys and our livers. If it wasn't for our breath we would die when we slept. Our breath keeps the life a-going through the nose when we are asleep.

Boys who stay in a room all day should not breathe. They should wait until they get out in the fresh air. Boys in a room make bad air called carbonic oxide. Carbonic oxide is as poison as mad dogs. A lot of soldiers were once in a black hole in Calcutta and carbonic oxide got in there and killed them.

Girls sometimes ruin the breath with corsets that squeeze the diagram. A big diagram is the best for the right kind of breathing.

Dry goods merchant—You have called in response to our advertisement for a floor walker? Well, sir, what are your qualifications for the position? Applicant—I am the father of three pairs of twins.

The estimated cost of building the necessary dams, stocks and improving the navigation of the Red river so as to allow of the passage of boats drawing seven feet from Lake Winnipeg to Winnipeg is \$225,000. Deep water navigation ends at Selkirk, beyond which railways are necessary to bring lumber, firewood, etc., from the lake and its tributary rivers to the east, up to the city. Winnipeg contends that railway charges over this short distance do not admit of sufficiently cheap carriage of lumber, firewood and ties, to develop the timber resources of the lake.

Canada is materially richer in territory and mineral wealth than anybody thought she was since Ogilvie's expedition seems to have pretty conclusively demonstrated that the Yukon river crosses into Alaska about ninety miles further north than the former maps have shown it to do, and that, therefore, all this region with the rich gold mines it contains, belongs to Canada, and not to the United States. This is good news, indeed, and we suppose Brother Jonathan will have no objections to pay for the treasure he has already allowed to be taken from our mines. What with gold mines and fisheries we will soon be coming to believe that our half is the richer half of the continent.