


ogloen entrance of the transpobitation building.

## MASSEY'S ILLUSTRATED-ADVERTISEMENTS.

## New Massev-Harris Combined Hoe Drill AND BROADCAST SPRING TOOTH SEEDER.

positively the llchtest, the stroncest, and the best combined machine yet produced.


It represents the best features of the "Wisner," the " Goldfinder," and the "Superior," together with some valuable new features

## CONSOLIDATED IN ONE MACHINE.

The perfecting of this tool has taken two years of arduous labor on the part of our inventive staft.

## IT IS ANOTHER ILLUSTRATION

of the advantage of the organization of Massey-Harris Co., Lttl, for otherwise the construction of this admirable implement would have been impossible.

SOLSD ANGLE
STEEE

## FRAME


(Trus.ssed.)

It is but the work of a few moments to replace the hoes with spring teeth, or rice versa.

The machine can be instantly changed from "drill" to "broadcast," or vice verwa.

Hoes or Teeth can be instantly set zig-zag or straight, as needed.

The method of applying the pressure for regulating depth of sowing is simply perfection.

Reversing the pressure lever throws the machine out of gear and lifts the hoes for transportation.

The selfadjusting force feed run will sow all kinds of seed without "cracking;" and will sow accurately as to quantity, when the Index finger is set as desired.


NOTICE-The Pressure Device, the Hoe and Tooth Connections, Unlocking Device, Springs in connection with Feed Riun, etc., etc., are all fully protected by letters patent, and any attempted infringements will be vigoröusly prosecutod.

# 3tlastev's sillustrated - <br> (PUBILSEFPD MONTEILY., 

# A Journal of News and Literatore for Rural Homes 

## New Suries.]

TORONTO, CANADA, JANUARY, 1894

[Vol. 6, No. 1.

## THE ARGENTINE

Among the South America States the Argeneutine Republic is second only in extent to Brazil: a large portion of which is minlabitable for Europeans. It has a total area of $1,200,000$ square miles, about half of which is well adapted for grrain growing.
The Argentincans are fond of calling themselves the Yankees of South America and by their push and energy and enterprise (which so markedly distinguishes them from the rest of that continent) they are well entitled to that distinction. Their land laws are much the same as ours. Any man may acquire an estancia (literally, a cattle farm) by location upon the public lands, and the payment of a nominal price yer acre. 'The form of government is a Federal Republic, composed of 14 provinces, cach of which can make or remake its own constitution, providing there is no infringement of the National laws. 'I The rivers are open to vessels of all nations. There are no titles, no slavery. Freedom of the press is guaranteed. The establisherl form of religrion is the Roman Catholic, but there is perfect frecdom of worship.

Argentine possesses one strongly marked characteristic in common with the other countries of South Amorica-a fondness for revolutions. These are almost of annual occurrence, but are seldom of very great magnitude, and generally have been promptly suppressed. 'The
year tsens witnessed one of these, but it was of short duration. Business is but litile affected by these outbreaks, and the prosperity of the country has not been materially checked. Immigration continues to flow in.

Twenty-five lines of steamers comnect the Argentine lepublic with the markets of Burope and the United States, and from filty to sixty vessels are sailing back and forth each month. In whatiscalled the harbor of Buenos Ayres are dozen of steamships and scores of sailing vessels. The imports are over one hundred million dollars worth of manufactured merchandize every year-about one-third of which come from England. Notwithstanding the abundance of growing timber on the lower slopes of the Andes, it is found cheaper to inuport sawn lumber from Canadia. There are many million of feet of pine amnually shipped from the St. Lawrence. Canada has won, too, the market for harvesting machinery the Massey-Harris Co., Ittl., taking the lead over all its American and English competitors. Her trade in other lines is growingrapidly.
Burenos Ayres (good air) is situated on the Rio Plata, about one hundred miles from the sca. The river there is $2 s$ miles wide, and the water fresh. The approach to the city is vij dangerous for navisation, the mouth of the river being beset with mud banks and sind barsaccumulations that come down from the interior of the continent upon the swift waters. and are constantly changing.

There is no harbor at Buenos Ayres-not even an excruse for onc-and it seems to be beyond the power of human genius to grive vessels direct access to the city. The water is so shallow that they have to anchor seven, eight and ten miles out, and arclonded and unloaded by means of flat-hottomed lighters, which are towed back and forth.

Notwithstanding the commercial disadrantares, it is the most enterprising, prosperous and wealthy city in. South America-a regular Chicago-the only place on the whole continent where people seem to be in a hurry. It is all bustle and life, and so different from the other cities of South America. Elsewhere people always put off till to-morrow what they are not absolutely compelled to do to-day. lilsewhere mañana (many/ana) is king, and mañana means to-morrow. But in Buenos Ayres the idea scems to be that the liveliost turkey wats the nost grasshoppers, and cvery lody is trying to get as many as he can. Merchants do not shיt up shop to go to dinner, and the morning newspupers are not printed the day before.

There are more daily papers published in Buenos Ayres than in London or New York-twenty-three in all. Two are printed in Fing lish, one in Prench, one in German, one in Italian-the rest in Spanish. There are two illustrated weeklies and three monthly literary magrazines. The leading daily, La Nacion, has a circulation of thirty thousand. The telephone and eloctric light are extensively used.


CITY of butenos aymes.

> A GAUCHO OF ARGENTINA.

There are two telephone companies, and the number of instruments in use is larger in proportion to the population than in any other city in the world.
Buenos Ayres has its parks, boulevards and race-courses like other modern cities. Everybody keeps a carriage and nearly everybody rides. Nowhere are horses so cheap. A good pair of carriage horses can be had for about one hundred and fifty dollars. Saddle horses, equal to any in the world, can be purchased for thirty or forty follars each.
The two Argentine Universities, under the control of the goverument, are among the best on the continent-will hold their own against Harvard and Yale. The public school system is under a compulsory educrtion law, and includes all grades from the Kindergarten to the normal school. The Argentiniaus have made as rapid alvancement in the way of charity and philanthropy as in education, and one finds there many benevolent institutions.
The post-office handled $20,1900,001$ packages in 1880-pretty grood for a city of 434,000 inhabit:ants. Now its population is considerably over half a million, and about $\cdot 10,000,000$ pieces amnually pass through the office. There is a mail leaving for and arriving from Europe or the United States nearly every day.
There are two gas compranies, lighting somewhere about 30,000 houses and stores. The public buildings and parks are lit by electricity. The police are admirally organized. There are near fifty miles of paved strects. The sanitary condition of the city generally is good; there are over sixty miles of sewers-some of them large enough for a railway train to pass through. Notwithstanding the number of private carriages and licensed hacks, the five street railway companies, with there hundred miles of track, carry in the neighborhood of $2,500,000$ passengers monthly.
Surrounded by wide stretches of fertile lands, with water communication spreading over thousands of miles right up to the foot of the lofty Andes, the city of Buenos Ayres, now growing as fast as any city on this continent,
sumes its verdant aspect in winter. These pampas already produce wheat sufficient to be an important factor in the world's food supply. The area under cultivation has grown by letps and bounds. In 1 sist the exports were $2: 000$, , 100 o bushels. In 1893 they reached $38,011,000$ bushols. The expectation is that next year, 189, there will be at least $55,000,000$ bushels availaile for exports. About talbs. of seed are sown per acre, as agginst about 90 lbs. in Canala: The increase is about ten fold. Much higher tham in the United States; nearly as high as in Canada.
There is not another country with such brilliant possibilities before it-with such rich stores of latent wealth waiting to be developed. In its resources, as well as in the character of its people, it somewhat resembles the United States. There are found panpras like the prairies, rich and fertile in the lowlands, and forming fine cattle ranges and sheep pastures as they rise in mighty terraces from the Atlantic to the snow-clad Andes. In the foothills of the mountains are deposits of gold and silver, similar to those of British Columbia. In the north is a soil that will produce cotton, rice, and sugar ; then come the tobacco lands; then, as the temperature grows colder towards the south, are the wheat and corn lands. This vast area is furnished with natural highways more tempting to commerce-easier to navi-gate-than our St. Lawrence and the upper lakes. These mighty rivers, ruming through numberless lakes, are navigable slmost to their sources in the extensive forests on the slopes of the Andes.
About $100,000,010$ sheep-more than are owned by any country in the world-are grazing on the ranges, and producing $200,000,000$ pounds of wool for export.
Where rivers do not run, railways are being. built, and in a few years they will have a railway systom equal to any country. The immigration is large and steadily increasing; in 1887 it reached 188,000 . The greater portion of tho inmigrants are Italian, who have been very successful as agriculturists. The climate, so balmy and enjoyable, is too enervating for the
active, bustling energy of the Anglo-Saxon. Hence, the English speaking immigrants have not, as a rule, been successful. It is not an inviting country for people of northern climes.
The colonization plan is very popular, and thus far successful. Within the last five years, 1,126,000 acces of land have been taken up by colonies representing a population of 82,000 persons.
The Argentinians are beginning to ship large quantities of fresh beef to Furope in refrigerator ships, one or more leaving Buenos Ayres every week. They do not use ice, but have a cooling process similar to that adopted on transatlantic steamers. They cannot yet compete with us in quality-and probably never will-luut their cattle are much cheaper, and are being graded up by the introduction of improved stock from England. The cattle are sold by the head, prime steers bringing fourteen to fifteen dollars. Within a radius of fifty miles from Buenos Ayres are ranches larger than any on this continent, and cattle can be driven almost on the steamers, so the cost of transportation and shrinkage is merely nominal. The cost of transportation to England is often less than from Winnipeg to Quebec.
Sheep also are killed and frozen for exportation to Europe, one slaughter house at Campana, fifty miles from Buenos Ayres, shipping five hundred carcases daily. Live sheep in condition for killing are worth from three to four dollars each for the best quality.
The gaucho (gowcho) of South America are themost interesting characters on the continent, and would afford to the writers of tales of adventure as stirring and exciting material as the Crusader of the Middle Ages or the North American Indian. They are the descendants of Spaniards and Indian women. They are the most indolent and most active of human beings, for when they are not in the saddle, devouring space on the back of a tireless broncho, they are sleeping in apathetic indolence or gambling with their fellows, for they are invetcrate gamblers.
Half savage and half courtier, the gaucho is as polite as he is cruel, and will make a bow like a dancing master with the same nonchalance as he will murder a fellow being or slaughter a steer. He recognizes no law buthis own will and the unwritten code of the cattle range. Whoever offends him must fight or fly. He never shoots or strikes with his fist ; his only weapons are the short knife and the lasso.
He is peaceable when sober, when drunk he is a fiend incarnate. As brave as a lion, as active as a panther, with endurance equal to any test, faithful to his friends, he has exercised a powerful influence upon the Argentine Republic, and kept that nation back in civilization until his influcuce was overcome by immigration from Southern Europe. The gaucho has never taken any active part in politics, except as a soldicr, and as such he is without an equal in either civilized or savage firhting.
The gaucho always carries tobacco, cigarette paper, fint and steel. $H_{\theta}$ is an inveterate smoker, but confines himself to cigarettes which he rolls while at full gallop. He does everything on horseback, when he chooses-eats and sleeps, catches fish, carries water from the well in a pitcher on his head.

A gaucho child is put into the saddle at an early ago. When he is eight or ten years old
he can ride anything less than a tornado.
The animals the gaucho ride are splendid native stallions. lifty or sixty miles a day is a gentle jaunt, for a well-bred pampa horse will gallop from sunrise to sunset without throwing a Heck of foam.
The skill with which the gaucho handles the lasso is wonderful. While at full gallop he can throw a coil of raw-hide with as much accuracy as an expert ritleman can crack a glass ball, and will catch a running cow, sheep or hog, lassoing the horn or foot or head at will.
Tho language of the genuine gaucho is a mixture of Spanish and tho Guarani Indian tongue. His ordinary diet consists of ribs of beef roasted on a spit before the fire and eaten without salt or bread, while the ordinary drink is the Paraguyan tea, which is sucked through a tube. The gaucho lives like the Indian, gorges himself when he has lots of food, or goes for days without eating.
The day of the gaucho is passing. Immigration and civilization have driven him to the extreme frontier, where now he can only be found in his full glory. Like the No.th American Indian in many cases, he decays when domesticated, and a tame gaucho is always a drunkard, a loafer, and a thief. Civilization saps his vitality, quenches hisspirit, and lowers his standard of morals. Now, in the more settled portions of the country, the word gaucho has become a word of reproach, and is applied to cattle-stealer's.

## ${ }^{4}$ MR. PATTERSON'S TRIP.

Tric name of Patterson is a well-known one in many Canadian households. For years the Pattersons of Whitby and Richmond Hill were acknowledged to be among the best and most reliable manufacturers of agricultural implements in the country, and their reputation suffered nothing by being spread abroad; it was as honorable as it was extended. There were many brothers engaged in the business, sometimes together and sometimes scparated, but always known to be the makers of good, honest implements. Although always recognized as live and energetic business men, it was not until the removal of their factory to Woodstock in 1887 that their name became common property to every province in the Dominion,
It was at this time when the magnificent factory at Woodstock. which has since become the property of Massey-Harins Co., Ltd., was erected, that the younger nembers of the family became active in the business. Prominent among these was Mr, John D. Patterson, son of Peter Patterson, Ess. Brought up, as it were, in the lap of a great implement industry carried on by those who had justly earned an honorable title as wisc and sargacious: busiuess men and reputable manufacturers, it can be no wonder that early in life these same characteristics began to show themselves in the younger men, only to be brightened and heightened in later years.

When the amalgamation of the Patrenson Co. with the Massey-Harris Co., Ltd., took place in 1891, Mr. Patterson was elected a member of the Board of Directors of the new Company, and was given the management of the Woodstock factory. This position he occu-
pied until the dullness of trade rendered it expedient to close down that factory temporarily, and was thus free to undertake a trip to South Americal in the interests of this Company.
For some years a fairly considerable trade in implements liad been carried on by the two largest Canadian firms with the arable portions of South America, principally the Argentine and Chilian Republics, but no one had ever visited these countrics with the special purpose of looking into the conditions of soil and crops and the suitability of Canadian-made machines to do the work required of them. The rule in the export of implements is to give to each country the kind of machines that, the users ask for, and not to give them what you think they ought to have.
Considering all this, the Massmy-Harms Co., who have set themsclves to build up a National Canadian Industry that shall bo known wherever agricultural implements are used, cast about them for a man of business ability, and at the same time of sufficient technical knowledge of the materials and manufacture of machines, and their practical working in the field, as would guarantee satisfactory results from an extensive trip of this kind.
Such a one was found in Mr. Patterson, and accordingly he sailed from New York on Oct. 14thl last in the Lucania, of the Cunard line, and eleven days later left Liverpooi in the S.S. Sorata, bound for Buenos Ayres. This voyage would probably take twenty-five days. Herc is a short description of this trip in Mr. Mr. Patterson's own words:
" We first touched at Panillac, at the mouth of the Garrone, then over the Bay of Biscay, past Cape Ortegal, to Corunna, where Sir John Moore fell. Then on to Lisbon, where, during a short stay of two-and-a-half hours, we went ashore, and were delighted to feel the solid land under our feet, and to breathe the warm, baliny air of that delightful southern clime. In Lisbon are many quaint crooks of narrow streets leading to the beautiful public gardens on the hillside. Here one can walk muder the grateful shade of the palms completely arching the winding walks leading to thegardens above, and can see such rare roses and great masses of heliotrope and other
sweet-scented flowers that he has never seen before. Amid all these beautiful fragrant things hours could have been pleasantly spent where only minutes were available. After leaving Lisbon we passed Santa Cruz of the Canary group, where Nelson lost his arm, and then a few hours later Teneriffe rising to a snow cap 12,280 feet above the sea. St. Vincent was reached after dark, so we did not have the pleasure of hooking a shark or of seeing the diving boys, for which it is so famous."
On November 15th Rio de Janeiro was reached, but on account of the troubles there passengers were not allowed to land, though the mail was taken ashore. An illustration of the harbor of Rio appeared in the December number of this paper. About a week's sail would bring our voyager to Buenos Ayres.
During his absence Mr. Patterson will visit Uragruay, Paraguay, and Chili, besides the several smaller states that make up the Argentine Republic. He will also visit a number of the larger cities of these several republis.
In this number of the Illustrated we give a short description of The Argentine, with a view of the city and waterfront of Buenos Ayres. In future issues we purpose giving our readers further illustrations and information relative to the various cities and countries that Mr. Patterson may visit while away.

The Argentine poncho is a great institution, and if some of our prominent people would set the style by wearing one, it would be a comfort and a convenience. There never was a garment better adapted for out-of-door use, and particularly for those who are much in the saddle. It is a blanket of ordinary size, with a slit in the centre, through which the head goes. It rests upon the shoulders, and its follds hang down as far as the knee, allowing free use of the arms, but alwiys furnishing them and the rest of the body with protection. In summer it shields the wearer from the heat of the sun, wnile it is as warm as an ulster, and in rain it tales the place of an umbrella. The native is never without it. It stays by him like his shadow, and serves him as an overcoat by day and as a blanket by night. The genuine ponchos were made of the hair of the vicuña, an animal which is a sort of a cross between the camel and the antelope.


## Our World's Fair Views.

Spiciniov Engrated Fon Masseys Ihustruted from
 Masser.
'Tue World's Fair vicws we have to present this month are of great variety. Probably there was no point of view whence one could obtain a better general idea of the magnitude and beanty of the lay-out of the Exhibition grounds and buiddings than from the hailif-mile walk around the central roof of the Mimufacturers' Building. From the south-east corner an admirable view was obtained of the Administration Building and its surroundings. A picture from this standpoint appears on the front cover. The other engraving appearing on the cover shows a view of the Transportation Building, more particularly showing its beautiful entrance.


Spprinlly eugraved for Massog s Mustrated. Photo. by W. E. II. M.
SOENE ON TIIE CANAL LOOKING SOUTH-EASTWARD FROM NEAR TIE U.S. GOVERNMENT BUII.DING.



pleasing, particularly after being fatigued walking about the crowded buildings. Neither pains nor money were spared in making the Wooded Island a little paradise. Water fowl in variety had been imported, and its shores were lined with ducks and swans, and here and there were to be scen pelicans and other rare birds.
The Grand Basin, or by some termed "The Court of Honor," was undoubtedly the most magnificent piece of work from an architectural standpoint at the Exhibition, as this Court was surrounded by the finest of the buildings. Standing in front of the Administration Building, immediately before one was the great Macmonnies Fountain. In the Basin at the other end stood the Statue of the Republic, and beyond this, the Peristyle and the beautiful arch in the centre of it ; on the right hand, the Agricultural Building, and on the left hand the Manufacturers' Building. All this at night was illuminated with thousands of electric lamps and was transformed into a veritable fairyland. As one looks back upon the beauty of this scene it seems indeed a shame that all is so quickly to be destroyed and that all

In walking about the park and crossing the brilges one was constantly obtaining new points of view which were interesting and beautiful. Sereral of these views appear in this issue. The view looking in between some of the State buildings towards the Art Gallery was "snapped " while passing on the elevated electric road. Under the great dome of the Horticultural Building, palms, foreign trees, and choice plents had been assembled from all parts of the world. It was truly a marvellous collection. It is impossible to portray its beautics in a photograph, though the small section of the pyramid of plants under the dome will convey something of an idea of what was to be seen. To mamy the Horticultural Building was one of the most interesting at the Exhibition. It was beantifully located, and its shapely dome was in promineut view from various parts of the park. One of the canal views that we present in this issue shows the beaniy of the building as it appeared in the distance. Some of the detail work in the construction of the building was highly artistic and worthy of close study.
The views of the various buildings one could oitain while walking about Wooded Island in the midst of the lagoons, were exceedingly


Sprofally angraved for massiry a mustrated. Mhoto, by W. E. il. N.
under the great domis of tild horticultural palage.


Sipecially engraved for Masseys Illustriteml. I'hoto. by W. F. It. M.
fooking towaris the manupacturers building from wooded island.
was ever seen. Westward for uncounted leagues there stretched a wilderness, alinost unknown, and peopled only by tho wild Indians.
Seventy years later tho little fort on the frontier had been abandoned. In its stead there stands a splendid city, home of more tian fifteen hundred thousand souls, trade mistress of an empire more vast in extent than that which bowed in ancient days beneath the yoke of Rome.
Most wonderful of all was that city within a city which stood beside the inland sea-the marvellous White City-which arose from the shifting sands as if by the touch of some enchanted wand.
There the seven woaders of the world met to hold high carnival. Themetropolis of the great Northwest of our southern neirh bors hasachieved a great success. "To describe the superb splendor, the vastness and variety, the architectural and resthetic attractions, the overwhelming grandeur of this Exposition is impossible. All adjectives fail, and even superlatives are
this great work was done to last but so short a time.
To our own mind the Agricultural Building, in which appeared the exhibit of farm produce and agricultural implements, was the finest of all. The accompanying view shows a portion of the Grand Basin, with the Agricultural Building at the right, as seen from near the Transportation Building.

## 1823 and 1898.

"I respectully recommend that the post be abandoned, for the surrounding country is of such a character that it is impossible that it can ever support sufficient population to justify the expense necessary to maintain a fort at this point." Thus in substance wrote the officer in command of Fort Dearborn in 18\%3. And dreary enough was the situation of the forlorn little outpost of civilization from which he wrote. The rude stockade called by courtesy a fort, stood in a vast malarious swamp, through which a slugerish stream crawled slowly down to join the waters of a lake on which no sail


Sperially charaved for massey's mustrated. Photn, by W. E. II. M.



YIEW ON GRAND BASIN. AGRICIILTURAL MALACE ON THE RIGHT.
weak. 'Aloddin's lamp' may now be relegated to the oblivion into which themore gorgcous fincies retire when ond done by facts."
"Symmetry, in hage colmmnar and stathes que forms, here on every side saluted the beholder; and the colossal with the expuisitely delicate, of the original and the unicpue, with the refined and poctic left far in the distance any previous triumphs of hum:in genias. When, at nirht, the clectric lights illumined and gorified the massive structures and allegorical figures that surrounded and adormed the Court of Honor: when the golden statue of Tiberty, in lustrous robes, confronted the Armimistration Building, with its garlands of lightand coronal of glory; when the electric fountains shot rainbows skyward and all the unearthly beauty and radiancewasreflected and repented in the mirror of the layoon, it secmed reverent to ask whether the dream of Paradise were not a reality, and the 'White City' were not a forecast of the 'City of God.,'

Within its walls there were glaced the choicest fruits of forest, field and mine, the triumphs of science and of art, all that was best and highest in human achicvement, gathered trom cvery tribe and nation on the earth-the greatest exposition of the progress of our rice the world has ever seen.

And all these wonders have been wrought in and by a city that bat, seventy years ago lay all undreamed of.


The New Year.
Writ what gifte will will son make ancmests. Kiow Your, tor the one that liak fomit?
 sud hosawome murh for me own Suirit to strengrthen, some to feed, Il art tolighten, day to jllume, $W$ iste phaces to coax inte hloom?
We wese smy to bet fle old Sear go Acress the ohl word's outer rim? Welinew his waye hat we de net hinw
 liis muons flat, lis chted us. miles ant males. His smmmer wouls, with their coul, swed scents, Limb all of his pleasant handlistument: Thomgh le hourht us many a would :imd lam,

 Will the New lace ring us apanem? Mame A. Priscotr.


AN interview with Mr. Thomas Cochrane, a large rancher and mine owner of Alberta, brings ont the opinion that the "big ranch" in the North West has seen its best days. The opinion will not be unwelcome to the comntry as it is based on the govermment's policy to throw the land open for actual settlement.
'Tue Canadian apple supply in the Jondon market was uterly inadequate to meet the great Christmas demand. Competition was keen and prices went up). There are apples galore in Canara for the British markets and arrangements will doubtless be made to have an abundant supply at all selling points next year.

The disposition of the mineral exhibit sent by Ontario to the World's Jiair is interesting mamy of our institutions. It is understood that the larger part of it is to be placed in the Practical School of Science. Toronto, and that a smaller: collection will be given to the l'oronto School of Technology. A number of exhibits have been selected to be sent to the International Fair at Antwerp, and a great many exchanges of mineral samples have been made with scientific societies and private individuals.

Tue Fruit Growers' Association met at Peterboro' last month, and as usual able papers were read on the growth and care of fruit. Regarding what one variety of summer, of fall, and of winter apples had heen the most profitable during the past ten years it was reported that in
the Niagara district, where the crop hat been poor for the last few years, the Duchess of Oldenburg was the best summer, the Yellow Pippin, the best fall, and the Baldwin the best winter apple. The Northern Gpy received great praise as an all-round successid apple if properly treated, and a strong opinion was expressed that fewer varieties should be cultivated and more attention and care given to the kind adopted.

Tui: "Smithfield of Cariada," as the Fat Stock Show is called, was a decided success this year. It is estimated that the number of entries in every department exceeded that of last ycar by at least onc-third, and the quality was proportionately high. Some enthusiastic breeders hold that the show of sheep and swine was one of the finestever seen on the continent. In poultry the fanciers had all they could desire, and in this department the comparison with other shows was much to the credit of the one held last month. Cattle were more numerous, and the quality of more even excellence than formerly. The rule that bars auimals over three years old was found to work satisfactorily by encouraging the feeding of younger animals, and the discountenancing of the exhibition of sensationally heavy ones of rough quality. The encrgetic committee have shown commendable conterprise in the matter of arrangements, and have left nothing to be desired.

Nor for many years have the ranks of science sustained so severe a loss as that caused by the death of Professor. John Tyndall last month. He was a Nestor and an Agamemnon combined, and with Prof. Huxley, who still survives, helid a foremost place, for many years, in the highest circle of British scientists. The work he accomplished was enormous, and will endure. He was born in Ireland of humble origin but he lived to marry a deughter of Lord Clande Hamilton, a scion of the house of Alvercorn, one of the proudest and haughtiest in the Irish and British pecrages. He was an all round scholar and although practically self-taught wasmaster of $\begin{gathered}\text { greater elegance of diction and of a finer liter- }\end{gathered}$ ary culture than any of his greatcontemporaries in the world of science, such as Darwin, Huxley, Thompson, or many men whose brilliance at the universities boded brilliant achievements in after life. His success, so pronounced and fenuine, should be an incentive to every clever boy. The farm las been called the laboratory of the world. Traken intelligently it is so, and ought to send forth youths with ambition, talent and ability to capture earth's prizes from all comers. I'o all such aspirants Tyndall's career ought to fumish a stimulating example.

To the farmer the scasons of the year are of especial interest. He is very much the child of nature. How carcerly he looks out for the first signs of spring, and not less eagerly for first rays of summer sunshine; his eyes roam over the fields for the coming of the harvest, and the applearance of the winter still finds him scamning skics and the horizon for sirns of the seasons. Ind the New Year comes to him full of meaning. It is the dividing line of his winter. Fall work is over, the barns havo been made comfortable, his cattle and implements have been housed as well as possible, that is, if the farmer is a progressive, enlightened husbandinan, and he is maturing his plans for the year which has just dawned. If he be wise the pleasure of the scason will not swallow up all his time and thinking powers. The festivities which brighten many a home and foster good fellowship and sood feeling between friends andi neighbors, need not be impaired in the least by a careful survey of the past year and by attention to the plans for the future. Now is the time. when quict rest broods over the face of nature, to take stock and prepare for the busy activities of a few months hence.

In the month of November the lungs of two Canadian cattle, which, after having been examined by the government expert in England had been declared to be infected with pleuropneumonia, were received by the Department of Agriculture at Ottawa. These catile, it will be remembered, were slaughtered by order of the British Govermment inspectors out of the Canadian cattle shipped to England by steancrs Lake Winnipeg and Liurona this summer. Sir Charles Tupper used every effort to have it shown that the experts were at fault in pronouncing the cattle diseased with pleuro-pneumonia, and further examinations of the fungs which were made tencled to make it appear that the reports made after the first examınation of the lungs were at fault. It was arranged that the lungs should be sealed up and sent to Canadit for still further examination here. They reached Ottawa, as has been said, and were sent at once to Montreal, where Dr. Mc Eachran, Dominion Veterinary inspector, and Professor Adami, of McGill College, went immediately to work upon them. The reports of those two gentlemen were received at the Department of Agriculture the other day. they made their reports independently, but the results arrived at are practically the same. Both Dr. McEachran and Prof. Adami declare that Mr. Brown, the British Coverument expert, who declared so positively that the lums were affected with contagious pleuro-pnemmonia, made that leclaration upon wholly insufficient grounds. The lungs, by the time they came to Canada, were, of course, nut in the best possible condition for examination, but Dr. McEachran and Professor Adami, as the result of their work, are satisfied that the English experts entirely mistook the nature of such indications as they fourd. The lungs were not in a wholly healthy condition, but, according to Dr. Melbachran and I'rofessor Adami, they certainly showed no trace of contagious plemo-pneumonia infection. Mr. MicGachran says that the British Government experts simply made out a case to support, a foregone conclusion, and he quotes Mr. Brown's crinclusion that contagionspleuro-pnemmonia of the American type must be prevalent among Camadian cattle as bearing on its very face its own disproof. because if it were true, how could it be that the ravacres of contagious pleuropneumonia have not been evident in Canada? This seems fairly conclusive, and the reports should have a good cffect in Britain.

In his evidence before the Agricultural Commission of Great Britain, Lord Wiantago has given an interesting account of how he deals with his land and the tenants, which is worth record as exhibiting a side of English land administration that has been all too rare in other parts of the kingdom. He said that " he owned ahout 18,000 acres in lerkshire, and farmed 1. 127 acres, which he had taken by degrees as the tenants had given up. He never dispossessed a t-nant. The land in hand he charged at a rent reduced forty per cent, and had paid a prolit of some $£ 800$ a yoas, besides paying five per cent. on the temants' capital; but during the last two years there had been a loss. On his large farm in the down district be had had to make reductions of fifty per cent. The small farmers, who by themselves or their families do most of the work, had, he thought, stood the times best. He had a dozen competitors recently for a farm of about 120 acres. He had made permanent reductions in rent rather than temporary, in order to enable tenants to olbtain a reduction of their rates. He favorod small holdings, and had aided to start a company for splitting up an estate into small holdings, which, however, had not been financially successful. He suggested that several men might combine into a syndicate for taking bin farms. He had no leases in his Berkshire property, his tenants prefering ycarly agreemonts." Referring to his Nottingham estate, Lord Wantage showed that his net receipts had fallen from $£ 17,000$ a year in 1877 to $£ 12,000$ a vear at present ; while oxpenditure
on improvements had risen from $£ 1,000$ to $£ 8,000$. He also described the system on which he has worked the land thrown on his hands. He started on his.land in hand a system of profit-sharing in 1887 , about 100 mcn having a bonus divided amongst them, a bonus being paid only to men who have worked two years on the farm. One fourth of thenet profit was divided on the principle of ten shares to the manager, two to each foreman, one to each labourer, and a half share to a boy. The rent, interest, and expenses of the farm were all allowed for first, the profit being estimated on an average of years, not on each year. If there was no profit the men did not share in the loss. The bonus had ranged from 10 s. to 60 s . per man. He had a co-operative store in connection with the farm for butchery, grocery, and bakery, which was conducted on the liochdale system. With regard to wages, he paid the ordinary rate of the neighborhood, 10s. a week, but the yearly earnings averaged 11s, a week', Cottage rents were about 1s. id. a week." This is a very valualle object-lesson; but itlacks one clement; it docs not record what years there were losses, or what the losses were; without this item it may be thought that only a large capitalist can indulge in profit-sharing on a farm.

Do not grease chickens if it can be a voided, as too much grease is injurious, and never use coal oil. If the large lice are found use lard or sweet oil, the oil being preferred. 'Ten drops of oil of pennyroyal may be added to a large table:spoonful of the oil, and with the finger rub one or two drops only of the oil well into the down of the neck and licad of cach chick.

## Farmers' Institutes.

Famars will be interested in linowing who their instructors at the forthcoming meeting of the Institutes will be, and the dates and places of meeting during the month of Jamuary. By the courtesy of the Minister of Agriculture we are able to furnish a full list to our readers. It is herely given:-

## DIVISION I.-Halliam Remwir, d. Silliat, and

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Paryy Sound and $\Lambda$ lgoma are to
be arranged for at a later date.

dst.-Generil Lyon Freemantle abminted fovernor of Mialtia dicd at Kemsington.
2nd.-Mr. MareNamphton dected to the Ontario Lepis latume for Nosth brice, and Mr. Mar Gallum for batst opened by the Governor-General.
dith.-Prof. John Tyudall died. . . Mr. Roderick Me Lenman of Glen Inomald, (ilempares father of Mr,
Rederick Ma
 dirst clearames to diay amoming to $\$ 183.231$.
6th.-Lond Roberts has derlined the grownorslij, of


aith.-T, ehigh Valley liailway strike empod. . . Tota Fencralloss incurced he the emal mines strike ectimatedat
 $\mathbf{7 0 , 0 0 0}$ husiels of corin humed in the stratis of Mackinaw.
7hh.-Tolm Rain, Q.C. Toronto, died suddenIs. Isienh. Cal. Dawson retired from commanal of ilic kojai Gremadiors. . . . Mr. Rudohne Ladamme, (L.C., ExMinister of Justice, died at Montreal.
8th.--Siguror Crispi formed an Italian ministry. Storm of extrimpdinary sererity wad the briti
Serious illues of ar. Ghadone reported.
 milding of the Art Jnstitute. Chicairo, formally opened. innited to fifteen years petal servitude.
11th.-Wellaud canal closed for the suasom. . . . Sir John 'llompone and Sir Chardes Hiblert 'lupuer hamquetted ly the conservatives of halifas
12th.-The Governor- (imemp presented with antadress
 phated a treeon the lawn at samthill Patk, the residence of Sir Henry Hayler.


11.-Charles Lather was hamgeratir Brock ville samal.

Risht Ros, Sminel (irers, Jishop of Curk, chectai be jumbiate of all Imeland.
 sculptar (inasing to execute a lust of the late frince dex ander of batteriburg.



1sth.-l'remide Grecmway sold the Manitoma huildinp at the W"ork's Pair. • Jangeronsifnoment of Canadian apples to London, ling., speetily disposed of at food rices
 11th. . Ans. Brady, of Othawa, diedlo-diy julher one humdred and thind year.
Ridh.-I Hidy Aherdeen held her first "At Home" at Ridean H. IL. A tor of the Bamk of atonireal.
 thirly milliun fratuos. . . Mr. Thomas Corlmame, a hig mather and mine owner of dllerta, is of the opiniom that iher ranching lushess in the North-W West has seed its hest days.
? ?nol-In commedion wilh the Arilamont tragedry A. J. Momsen chancred at lidinhuseh with the murder of jieul Hambraturl, was diselarmed. . The Rierht Ilom binwinstanhone secretaty of stade for Wiar in the Cablinet of lurd Salishurs. died suddenly at Seven Oaks, Jent yesturday mornints.


 his cightiet li year.
 arrested for im, lis.onion in the barcelona dymanite ont
 department of the Prusitu army
26th.-Tlee Patrons of Industry of didingen and Temmes.
 lature at the next clection. . $f$ pambitios of war ma terian are heingr shiphed from the Italian atsenals to Masso
walt, on the lied sen.
ath.-Rer. T. W. Whafield apmointed chaplain in his

esth.-Vabllant: confessed haviner thrown the dymamite bunbin the French elianiler of depules.

 Johu, N. IS., comanitled sumeide.
:3oth.-Dukn and Duchess of Jork invited ly the Aus-
trabisian Iremier to vist the antiporlean colonices.


## Substitute for a Silo.

A Gebman farmer sives the following substitute for a silo: A box is built out of pine seantlings and 112 inch boards, with the top and front open, the whole divided into three equal compartments, each to hold an entireday's feed for all animals, space being calculated on the basis of two cubic feet for each cow. A threcinch layer of chopped hay and straw is now spread evenly on the thoor of the first compartment; then follows a thon laver of sliced mangolds which have previously been mixed with

stibetitite role a silo.
the daily allowance of oil meal and bran; then another layer of chopped hay and straw, treading (lown firm at it grows up) and setting in front boaids as needed. W'hen full a board covering is put on. On the sccond day the next compartment is similatly filled and on the third the last one. On the thind laty we commence ro feed from the foot comartment: this has now luecome the faghly heaved and has entered into a sweet fe frentation, giving an agreeable odor to the wole mixture, and the avidity with which it is echisumed !roves that it is relished.

## Box for Storing Bacon.

Le the smoke-house is very dark and close so that thies or bugs: will not be tempted or can get in, all that is necessary is to have the meat hanging on the pass ; but if not, even when the meat is banged there is danger of worms. How to make a box that will be bur-proof. rat-proof and at the same time cool may be learned from the following remaris:

hox For stoming bicon.
Make a frame of one inch thick, and two or three inch wide, plank with a close plank bottom; cover the whole box with wire rlorh, such as is used for screens. Let the wire cloth be on the outside, so that the meat will not touch it. The top maty be of plank and fit perfectly tirght, so that no insect can crecp umder. Ot course the box can be made of any size desired. It will be well to have the strips nailed quite closely together, say about one ard a half inches apart. When the meat is put in, lay sticks botween, so that the pieces will not touch. If the bos is made carefully, it is absolutely bug-pronf and rat-proof, affording ventilation at the same time, and so preventing molding.

## Shelter for the Hay Rack.

One of the most cumbersome implements on the farm is the hay rack or rigringr which takes up so much room that farmers leave it out of doors when notin use. A goorl hayrack is worth
at least ten dollars, and leavin $r$ it exposed to the weather throughout the ${ }^{\text {char }}$, renders it liable to give out in some vital part in fiveor six years, and the failure is apt to occur in a time of greatest need. A convenient place for the hayrack is in the barn loft. To hoist it near the roof two pullers are used at each end. The position is shown in the illustration. The rack


HAYRACK IN BARN.
is raised directly from the wagon by one matn, who pulls up each cond a few fect at a time and winding the lower end of the rope about a strong pin at a. It can be raised entirely out of the way of the throshing machine, or other farm implements, and when it is to be used one man can easily lower it upon the wagon.

## Weeding Chisels.

Foldownci illustration shows how a weeding chisel cam be inserted in a long hoe or fork himille, and it is then feasible to stand up while fighting the weeds, which often grow faster than one man can pull them by hand. Niarrow


WEEDNAC CHSLLS.
hand hoes, or the tomahawli or arrow head hoes may do good service, but they cumot compete w. tha long handed weeling chisel in the hands oi a vigorous ravdence. The chisel is especially alapted for the weeding of surar beets and other root crops in weely or dried-out soil.

## A Serviceable Wheelbarrow.

The following illustration contributed by $G$. W. Rice, of Iliinois, to the American Agriculturish, shows a strong, serviceable wheelb urow, suitable for farm work. It can be made of any size. The wheel is set into the box, as shown in the sketch, the axle being stapled direetly to the lower front edge of the box. A hood, made of boards with sheet iron top, is placed over the wheel inside the box. The whee 1

a seavicealie wimelabarow.
is two feet high. The legs are ten inches long elow the hox and form the frame of the box. The handles are two feet long, and the same buards may be made to project forward far enough to hold the axle of the wheel, ifone does not want the wheel to set into the box, this harrow is light and strong and will carry heavy loads of farm materials when it is not convenient to use a horse.

## A Convenient Barn.

In the accompanying illustrations are given the elevation and the interior arrangement of a farm barn that probably gives the most room for the money of any that could be devised. Its square construction and flat roof permits all the hay and fodder to be placed above the first Hoor, thas leaving this entire floor free for the

fig. 1. persiective view of barn. quarterintr of stock, while the cellar below can be utilized for the storing of roots, which should form no inconsiderablo part of the feed consumed by the stock, and for the storage of the manure, the root cellar being, of course, separated from the manure pit by a tight wall. A Ierspective view of the barn is shown in Fig. 1. Such a barn is excellently adapted for the keeping of sheep, three sides of it being devoted to the pens for these, while the feeding of all the sheep can be dono from the main floor; or, it can be very well made to serve the purpose of a dairy barn, with a silo in one corner, extending from a cemented floor in the cellar to the hay and fodder floor. When arranged for sheep, the pens can be advantageously arranged, as shown in Fig. 2, each pen having communication with the neighboring pen, and also with the feeding floor. An inside feeding rack may be used, into which hay and other fodder can he pitched directly from the feeding floor, and this, in some respeets, is the best plan to pursue,


FIG. 2. FLOOR PLAN FOR SHLLLD BARN.


FIG: 8. FLOOR PLAN FOR DARY HARN. for it permits a tight board fence between the reeding floor and the pens, to a height of three feet, or so, thus keeping the lambs from coming through from the pens to the feeding floor and soiliner the foor and hay. But if the flocks are fed directly from this floor, let a perpendicular opening be provided for each sheep to feed throush, rather than the long horizontal opening provided by the removal of one loard from the partition, which is so commonly seen, but which necessitaics the wearing of of all the wool above the shepp's necks, to the loss of the wool and to the sheep,s manifest disfigurement. These upright openings can be made by removing at least two boards from the partition and using slats, or roumds just far enough apart to admit a sheep's head and neck with the greatest comfort. If the barn is to be used for dairy jurposes, in interior arrangement, such as sren in Fig. 3, will be found convenient. In either case hay and fodder is placed in the second storey by driving the hay carts into the central feeding floor and raising their contents through a central "well," or large opening in the center story floor by means of a hay fork, this well being properly protected by a tight wall around it four feet or more in height. To make it impossible for children to fall through such an opening, even though protected by a high wall, the opening may be covered, when not in use, by a hinged grating.-American Agriculturist.

## EDITORIAL NOTES.

## LOOKING FORWARD.

IT is not a simple matter to transform a wild waste. inhabiterlonly by uncivilized Indians and wild animals, as our broad plains were but a fow years since, into a land of golden qrain and fields filled with countless Hocks and herds, and homes of plenty and comfort and the peace that comes with prosperity. Such a chancre brings with it times of trial. Such a time is now with us, but it is only a passing clonel. Our fertile lands and inexhaustible coal fields-our mourtain sides covered with valuable timber and seamed with minerals and metals-our health-giving climate-will be the homes of millions yet to be in the coming days.

Land and railways galore have unwittingly tended, in our case, to increase the hardships and drawbacks incident to the building up of a new country. Instead of bunching together, settlers have been tempted to scatter themselves far apart. 'The result is, lack of neighborly intercourse and mutual help in time of need, poor roads, schooling for children hard to get, and an absence of the enjoyment of civilized society. For we are sociable beings. Though we may scandalize our neighbors-make much of their little failings-mingling with them brightens our lives and heightens our enjoyment. This isolation is just now a disagreeable feature. It will work its own remedy in time. The families of the present settlers will have room to spread and take root around the ohl homestead, and in their comy homes replete with every comfort tell their children and their children's children of the hardships and toil of the lives of the carly settlers on the plains.

It cannot be denied that the holdings are generally too large for the capital that the majority of the settlers possess. It is a generally expressed opinion that to successfully carry on a mixed farming 320 acres are needed. That means a lurge outlay for fencing, implements, horses or oxen, and quite an amount of hired labor. It is questionable, hat one the means, if it would be wise to sink so much capital in a new country at the start. And many have not. And some have borrowed and lost all. The most prosperous countries in the world are where farms of say 100 acres or less are the rule. It is more profitable to raise forty bashels per acre off 20 acres than ten bushels per acre off so acres. And that is about the difference between well-tilled, well-fenced land, well and carefully harvested crops and poorly worken, poorly fenced fields, hurriedly and slovenly harvested. Many of our people are land poor, They are scattering their time, strength and energy over too large an acreage-the result is disappointment and discouragement. In the older countries of the Old World, the smaller the ? holdings the freater the yield per acre. Japan takes the lead, supporting $10.000,000$ population on an arca not so large as the Province of Ontario. Next comes Belgium, Holland, France and so on, as the farms get larger the yield per acre gets smaller.

Wheat has been grown far too exclusively. On many farms this winter the diet will be mainly bread and tea. 'This ought not to be. There is no reason why it should be. One reason given is that there are so many ummarried
men carrying on farmingr, and of course they cannot be expected to raise garclen truck and look after poultiry, etc. But there are many farmers with families who could carry themselves in comfort through times like these were they to spend a portion of their time now unprofitally spent on wheat growing in keeping a garden, raising poultry, having a fow sheep, milk cows. making butter, etc.

We wish we could buttonhole many of our farmer friends and not let them go till they were satisfied to put away this "only wheat growing", farl, and seck to make homes in the true sense of the worl, sumrounded with the comforts and conveniences which mark the older settlen districts of Ontario.
The outlook is bright. Even if wheat keeps down to its present low price it will be a blessing in discruise to our country in the years to come. 'The sooner our country is a country of homes and not merely a country of "wheat growers" the sooner will its natural wealth and resources be developed and utilized.

Profit by the past and let us have the same faith that as we believe the sumrise will come tomorrow so sure will our broad country become a land of milk and honey, a land of plenty and comfort and delight to teeming millions.
A. late despateh from Montrealsays:-Minerals are plentiful in the North-West, and this was verified this morning by the visit of a miner, Mr. A. A. McRae, from Edmonton. He is in the city at present and he carried with him several beautiful nuggets of fine gold, worth at least $\$ 500$, which he found in the Saskatchewan River, twelve miles above Edmonton. Nessrs. G. Baillie \& Sons, jewellers, of Fortifiration

Lane, melted these nuggets this morning, and they say that rarely in this city has so much been melted at once. It has a beautiful yellow color and not so brittle as some of the gold found in other parts of the world. It resembles very much our Nova Scotia grold, and it is 24 carats fine. better than that of the Mint, which is only o2 carats fine. Mining is carried on up the Saskatchewan River about forty miles, and a company will go sixty miles further. The Mackenzie and Peace civer's have not been explored for gold. The miners generally separate the gold from the sand and put into nuggets with quicksilver. Then it is submitted to the action of tire, and the quicksilver evaporates. Mr. McKile had about two pounds of it, which he found only after a few weoks' work. It is valued at about $8 \div 0$ an ounce. Silver is also found in the mountains. and coal is very cheap, costing on deliver! only $\$ 2.2$ a ton.
'Tus high compliment to Canada is taken from the Chicrugo Intrior :-:" We are not so anxions to amex Canada as we are to see some of her goorl ideas transplanterl to this side of the border. Throughout the whole extent of her vast western dominions you will not find an outlaw, or hear of a case of lynching. It is not because she has to deal with a class of frontiersmen so different from those of our own western states, but because she has laws and executes thein. You can go nowhere not even in the fastnesses of the Rockies or the isolation of the Selkirks, without finding the scarlet uniforms of her mounted police. You feel everywhere the presence of protecting law. You are made to realize that you are in a land of order, and that your person and property are under the care of the commonwealih. In :oo many of our own communities we are fast relapsing into that barbarism in which private reveng. becomes the miserable substitute for public justice. In so far as we do this we are centuries time hou: age."


Tue reproach under which the British farmer so long lies for his apathy to scientilic methods of farming and scientific facts bearing on his calling has lones been proverbial. 'The English mind is constitutionally ronservarise and the farmer has inherited his full share of the national sommodity. But that great eilucator, necessity. is begiming to complel the attention of the British tiller of the soil to the resources of modern prorress. Competition from abroad, hard times. high rents and bad harvests are bringing out the inherent enterprise of the leuton and the seythe is laid aside for the reaper at the hook was for the scytlic. Nay; more, it is not only on the larger farms in the hands of the squine or rich farmer, that signs of progress are to be foumd. The average leaseholder and his man Hodise. the small holder of a few acres. inderel all along the line the change is to he notel. 'The better class of farmers and the more intelligent land owners, who have come to the conclusion that if a man owns land he must attend to its management as owns land he must attend the mannacturer must attend to his business. are also showmg greater interest than ever in scientitic lursuits comuected with the soil and its products. A recent evidence of this fact, and one which will be heard of with interest all over the arricultum world, was furnished at Rothamsted, the famous residence of Sir John Bennet Laves and his colleague. Dr. Joseph Henry (iilbert. These two names are well-known in the seientilic world and chiefly for the attention which the, have devotud to the scienen of the farm during the long period of tifty years. It may sem strange that work such as theirs should not have had any public recognition until now. The fact that no public notice was sooner bestowed upon services which merited the highest public honor illustrates the want of organzation and live tonch among the farmers of Fingland. But inded, this is true to ? very considerable degree of our Cimadian far$\mathrm{n} . \Rightarrow a \therefore \quad$ Whatever be the fundamental rason. the farmer seems less desirous than the artizan ro combine with his fellows for the furtherance of common interest. But to come hack to the incident at hothamsted. On sir. Jolm's farm and at his own expense he and Dr: Gilbert devoted years of research and experiment, the resuli of which was beneficiallyshared in to some extent by the country at large. When scientifie ideas forced themselves on the farmers as a whole. the valuable chatacter of the work of these two deroted men dawned upon the leaders of arriculture and the feelings which were aroused made up in enthusiasm what had been lackiner in readiness. Tho upshot was a massive presentation which was a notable recornition of the services of both gentlemen. In an open maryuee facing Harpenden Gommon and overshadowed by two stately chms in full foliage there assembled some of the highest and most deeply interested representatives of the English farming interests. With Mr. Herbert Gardner. who ats terests. With Mr. Herbert Gardner. Who ats
Minister of Arricultme. repesenten the state. were the Duke of llevonshire, president of the Royal Anricultural Society ; and the Juke of Westminister, ex-president, both territorial marnates; Sir lacol Wilson, of the newer, and $M \mathrm{Mr}$ Albert Pell. of the older. type of practical high class farmers; Dr. Armstrong, of the Chemical Soriety: Mr. Ernest Clarke. soctetary of the Royal Agricultual soriety; Mr Chanles Whitehearh. Dr. .I. Augustus Faeleker. Dr. Bernard Dyer. Sir Johm Hooker, and mam.: other distingrashed men. Ladly Lawes was present to witness the honor to be paid to her husband and to Dr. Gilbert. Visitors who had arvived carly. had an opportunity of inspecting the fields on Sir John's estate, where the results of long years of chemical expreriments in supplying artificially to soils the aids needed to promote the healthy growth and full fruition of crops werc manifest. The crent of the day was the presentation of a strikingly apropriate memorial, consisting of a rough granite boulder eight tons in weinht, brought from Thorp in West morliund, and fixed in a base in front of the
laboratory of the two scientists who were honored. On the smooth part of the stone was the inscription :-"To commemorate the completion of lifty jears of continuous experiments (first of their find in Anriculture), conducted at Rothamsted by sir John Bemmet Lawes and Joseph Henry Gilbert, A.ID. 1sts:" Other wifts wore a portrait of Sir. John presented to himself and wife. and a piece of plate to Dr. (iillert, and numerous addresses to both from the leading agricultural societies of England and the two foremost amricultural associations of Prance. 'Though not directly represented, as France was by S. Johannet. who read, in French. the address from France, agricultural associations in the Cnited states, Russia, and other countries had sent felicitations on the event. The reply of Sir John and of Dr. Gilbert, telling of their difticulties in combating. prejudice, and establishing their facts. were of $a$ most interesting nature.

There are failures in all kincls of 'busimess. some men seem born to fail. At least there are some who never make a success of anything. Some men have started out under exceptionally favorable circumstances and have failed. while others apparently less gifted, and with less capital at their command, have stepped in and succecded. It is a noticeable thing in the business world, that almost invariably when a man fails, some one is ready to step in and take his place, in full contidence that he can make a success of the enterprise. Failure is sometimes the result of accident, or of a combination of circumstances over which one may have no control, such for instance as repeated losses by fire. Many failures, however, are avoidable. The individual has a good deal to do with the result. Generally speaking, incompetency and neglect are the principal causes of failure in ordinary commercial business. Lack of knowledre of the particular business embarked in, as well as lack of ability, generally lead to a large number of failures. Liaziness, lack of push, intemperance, gambing are simply different forms of neglect. But come how they may, failures are bound to occur, from one canse or another. while complete success is seldom attained in lonsiness. Statistics show that complete and continuous success in business is the orrat exception-failure eventhally is the rule.

Parmers also fail occasionally; but there are certainly fewer failures among them than there are among the general mercantile class. Farmers fail from the same reasons which cause failure among business men. Some are incommitent, and seem to be unable to acpuire sufficiont knowledge to mable them to direct their ellorts successfully: Others are neglectful. throngh lack of ambition, intemperance, etc. An intelligent person can tell at a glance almost, whether a farmer is prospering or otherwise. If things have a tidy appearance about the form. the implements put away carefully: when not in use, and the live stock looks thrifty. you can set it down that the farmer is prospering. I know a man who judges the farmer by his live stock. He says if he wishes to form an opinion as to the condition of a farmer. he always looks at his live stock. If the stock anpear thrifty and lealthy, well cared for and well fed, and are of a quiet and domesticateal disposition, you will alway's find the owner to be a prosperous man. On the other hand, if the stock are poor and serubby looking, of a wild disposition, and generally give evidence of rough treatment, you will find a man who is not making a success of farming. He may be making a living, and paying his way by hard work, but he is not a progressive agriculturalist, and is not getting ahead in the world very much, or iemproving his surroundings. The rule may not work in every case, bat it is no doubl true in the majority of cases.

Anorher friend judges the condition of a farmer by his implements. If the plow is left sticking in the ground where the last furrow was turned, or the harrow clogged up with weeds and grass at the end of the last trip across the field, or the binder out in the centre of the field where the last sheaf was cut, the conditions do not seem to indicate a prosperous state of things. Care of implements and tools, neatness about the farm. and live stock well cared for, are combinations which go with succeesful farming. Where these are lacking, there is sure to bea leakage somewhere, which is telling against the farmer. There is a loss in neglecting to take proper care of implements and tools, and there is a loss in neglecting the stock. In the latter care there is the loss of the greater profit which is obtained from a good class of stock, as compared with a poor class. Well bred and well cared for animals always return a better profit than roughly handled scrubs.

Farmeres sometimes fail in Manitoba. Capital is a fine thing in starting any business, and farming is not an exception to the general rule. If there is experience and intelligence behind the capital, the possession of a little of the needful is a great thing. But how often have we seen failures among men who started with capital, while others who had little more than a hopeful heart and willing hands, have quickly forged ahead to a position of comparative independence and comfort. Illustrations of this class have not been exceedinly rare in Manitoba, among the farmers, and the same thing has been noticed in mercantile lifo here and elsewhere.

While wheat is cheap in Manitoba, most other lines of produce are bringring good prices. Oats are bringing as high a price as can be obtained by the Ontario farmer. The wostern farmer receives more for his butter and egrs than his Ontario brocher, while the price of poultry here is couble its value in Ontario. Beef is not is high price, but other meats and live stock command high prices. Altogether, those farmers in Manitoba who have any quantity of general produce to sell, should not do so bidly, when they can buy most articles at current low values.

## Manitoba Hav Meadows.

The most remarkable hay meadows in Manitoba are along the shores of the Cypress river. The stream having issued from the ranges of hills to the south, Hows north some distance through :un excellent district where the land is rolling, then enters a Hat country that lies between the hills and the sandy ground near the Assiniboine. 'i'he wreater portion of the level district is composed of excellent farming lands and is just now dotted by thousands of stacks of ripe and well matured grain. Near the river the land is lower and scores of sections are or have been covered by an exceedingly heavy growth of grass. The number of staclis of hay that have been put up is prodigious, and should a live start this fall in the valley of the Cypress, there would be a conflagration such as was never before experienced in Manitoba. Ihe large drain constructed by the government, although only about four miles long, will shorten the course of the Cypress about twenty-five or thinty miles; the fall will be about forty feet, and it is possible when the water has enlarged and deepened the drain there will be important changes in thic great valley of grass. The Glenboro branch of the C.P.iz. crosses the level tract of country and the little town of Cypress River is the business centre of the district.-Pilot Mound sintinel.

## Broom Corn grown in Manitoba.

Last spring Hammill, Carroll \& Co., manufacturers of brooms, etc., Winnipeg, sent to Chicago for a limited quantity of broom corn seed for the purpose of testing it in Manitoba. The seed was distributed among two or three farmers near Winnipeg, and a short time since the first sample of the product was brought in. This was grown at Bird's Hill, a few miles east of Winnipeg, and the resulthas been very satisfactory. The Winnipeg firm pronounce it a first-class article of broom com, and they are quite delighted with the experiment. They will bring in a larger cuantity of sced for next season, and if the result is again favorable, they hope to induce farmers to go extensively into growing broom corn. Many tons of this product are anually consumed in Canada, though it has not heretofore been grown in this country. It is imported from Chicago, and is grown principally in the States of Illinois, Nelraska and Kansas. From the result of the experiment this year Hammill, Carrol \& Co. believe that Manitoba could grow broom corn to supply not only the local demand but also Eastern Canada. The imported product costs $\$ 7 \overline{0}$ to $\$ 100$ per ton, at which price it is a very profitable crop where it can be grown to advantage.-Commercial.

## DO YOU NEED REPAIRS ?

Massey-Harris Co. carry at all their warehouses a general assortment of repairs for the machines sold by A. Harris, Son \& Co., the Massey Manufacturing Co., the Patterson Bro. Co., Massey \& Co, Van Allen \& Agur and Sawyer \& Massey Co., but unless customers will make their wants known early in the season, and before repairs are actually required for use, disappointment and loss may occur in some instances.
The company is very ansious to meet all requirements, but their business is of such magnitude that unless repairs are ordered early extra expense for express charges and delays must necessarily occur. A little forethought on the part of customers would assist very materially in preventing disappointment and the expense of extra charges at the eleventh hour occasioned by neglect.
If you need repairs kindly take a memorandum of the same (and note the letter and number on the casting) and enquire at the company's nearesi agency for the piece or pieces, and if they are not in stock leave your order with the company's agent who will send it to head office, Winnipeg, and the goods will be sent forward so you will receive them in good time. A great many customers postpone this very important matter until the day the goods are actually required. This should not be so, and we trust that customers will do their part to assist in this matter by exercising a little forethought as before stated.

## NORTE-WEST FARM LANDS FOR SALE.

The following choice lands in various parts of Manitoba and the North-West Territories are offered for sale at most reasonable prices and on favorable terms.
Particulars may be had from, or offers of purchase made to the individuals as designated below.

| drscrimtion of Parcbls. |  |  |  | $\begin{gathered} \text { Man. } \\ \text { or } \\ \text { N.W.T. } \end{gathered}$ | Nearest <br> Town or Post Office. | name and addiress of parties TO APPLY TO. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Parts of | Sec. | $\text { T. } \mid \text { R. } \mid$ | $\left\lvert\, \begin{aligned} & \text { E. or } \\ & \text { w. } \end{aligned}\right.$ |  |  |  |
| N W $4 . .$. | 22 | 1728 | $\stackrel{\text { p.m. }}{\text { W }}$ | Man. | Fort Ellice | A. B. Harris, Birtle, Man. |
|  | 2 | 820 | W | Man. | Carrolton | J. Y. Bambridge, Souris, Man. |
| NW ${ }^{1}$ | 14 | 720 | W | Man. | Carrolton | J. Y. Bambridge, Souris, Man. |
| S W ${ }^{\frac{1}{2} \ldots . .}$ | 6 | 1317 | W | Man. | Aikenside | John Sproat, Rapid City, Man., or |
|  | 20 | 11.17 | W | Man. | Douglas | John Sproat, Rapid City, Man., or John Cleghorn, Douglas, Man. |
| S E $\frac{1}{4} \ldots$ | 31 | 69 | W | Man. | Beaconsfield ... | W. D. Staples, Treherne, Man. |
| E $\frac{1}{2}$ | 16 | 115 | W | Man. | Cartwright | Morris Watts, Cartwright, Man. |
| $\begin{aligned} & S W C \\ & W \frac{1}{S} S E+1 \end{aligned}$ | 23 | 125 | E | Man. | Cook's Creek | T. J. McBride, Winnipeg, Man. |
|  | 14 | 45 | E | Man. | St. Malo | T. J. McBride, Winnipeg, Man. |
| $\begin{aligned} & S W{ }^{\frac{1}{4}} \text { and } \\ & S \frac{1}{2} \mathrm{~N}^{2} \mathrm{~W} \end{aligned}$ | 17 | 95 | W | Man. | Elm Creek | T. J. McBride, Winnipeg, Man. |
| S W $\ddagger$. | 4 | 115 | W | Man. | Cartwright | Morris Watts, Cartwright, Man. |
| NE六.... | 12 | 1215 | W | Man. | Petrel | R. F. Hay, Carberry, Man. |
| S W $\frac{1}{4}$ | 22 | 1315 | W | Man. | Osprey | J. A. McGill, Neepawa, Man. |
| S $\frac{1}{2}$. | 24. | 610 | W | Man. | Beaconsfield ... | W. D. Staples, Treherne, Man. |
| S W 4 | 2 | 1530 | W | NWT | Moosomin | Colin McLean, Moosomin, N.W.T. |
| SE | 16 | 2214 | $\begin{gathered} W \\ \text { 2nd } \end{gathered}$ | NWT | Fort Qu'Appelle | J. MicNaughton, Qu'AppelleStation,N.W.T. |
| NW | 5 | 1414 |  | Man. | Osprey | J. A. McGill, Neepawa, Man. |
| N W | 20 | 514 |  | Man. | Grund | Jas. Luncan, Glenboro', Man. |
| E ${ }_{\text {¢ }} \ldots$ | 20 | 518 |  | Man. | Langvale | Jas. S. Reekie, Boissevain, Man. |
| S E $\frac{1}{6} \ldots .$. | 1 | 99 |  | Man. | Indian Ford | W. D. Starles, Treherne, Man. |
| S W $\frac{1}{4}$ | 31 | 88 |  | Man. | Indian Ford.... | W. D. Staples, Treherne, Man. |
| $\underset{\substack{\text { (with hause. } \\ \text { stable.) }}}{\mathrm{N}} \underset{\operatorname{Win}}{f}$ | 28 | 1425 |  | Man. | Luc | A. B. Harris, Birtle, Man. |
| NE $\frac{1}{4} \ldots$ (160 acres.) | 26 | $\|17\| 27 \mid$ | W | Man. |  | A. B. Harris, Birtle, Man. |
| NE $4 \ldots .$. | 15 | 48 | W |  |  | A. B. Gumn, Manitou. |
| S. W. $\frac{1}{4} .$. | 27 | 177 | W | N WT |  | R. S. Garrett. Grenfell, N.W.'T. |

Also wood lot No. $\tilde{5}$, known as the $\mathrm{N} . \frac{1}{2}$ of the $N$. 1 of legal sub-division 11 and 12 , in the
A. B. Gunn, Manitou. N.W. $\frac{1}{1}$ of Sec. 14, T. 5, R. 8, W.

These lands are nearly all most eligible and convenient to Church, Market, and School.


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## WINNIPEG, MAN.

[^1]I BSD FAIS.

- Yur are very hate this momingr, Mr. Baldwin," said at


 hatry much?
"Irincilnally. sir. in your stimation.":answered the derk wisw folly:
 and ser surye aud had no intention to ke severs, We are :all biahn to aceridents. How did yon pet the folly", "1 wa
 $\because$ " 11 ! "
 "Go to vor lesk, sir. and don t try that on arain,", exchaned lim merehnat, with an air of severity which was
 joyen line joke:


## 货ive Stock.

Growsit colts feed well on oats.
'Inorir hay with a little clover in it is the $₹$ feed for horses.

Excessisive fat on youns or hreeding stork ought to be avoided.

Ctieanliness is a virtue which ought to be prized by stock-raisers.

TIIE effect of feeding only cut hay enough to mix with the grain is excellent.

Faimeris as a rule feed too much hay to horses and not enough of grain.

A coot animal of good breeding brings more money than a better animal of inferior stock.

IT requires more skill to make a goorl pound of butter than to produce a good pound of heef.

Ir young immatured sires are used in hreeding, the stock will rapidly decrease into mere scrubs

Unemproyed horses should have some long hay to busy themselves with, given a little at a time and often.

To make a mutton cross, use a pure-bred male in all cases, and select the jest ewe lambs as breeders for the future floc $x$.

A thonougrimy docile animal, whether a colt, a calf or a lamb, saves much trouble in managing it, and is usually more valuable.

Dov'r stint four cows for room. In Eingland the rule is four cubic feet of space for ench 110 pounds of animal. Here fully as much or more is needed.

Tue Shropshire is a very hardy sheep, with rood thick fleece of saleible wool. They are well covered and would make a good cross on Merinocwes.

Tire farmer that raises plenty of live stock and then raises plenty of grain and grass to to feed it on untii it is ready to market, is the one that makes the most money.

The Shropshire Registry Association has outstripped every other sheep hreeders' Association in the number of imported and homebred sheep registered here in recent years.

The nearre you can get to full blood in breeding the more certain you are of securing good results. In this is found the advantage of breeding higher grade dams to full blooded sire.

Thorougil mastication is necessary in order that the best results bo obtained in feeding, and, in feeding whole grain, this is not always obtained. This is one of the advantages in grinding feed.

## The 据

## Farm Poultry Building.

Maxy farmers would prefer tastefully constructed buildings for poultry, lad they the ineans to afforl them. A neat structure oftentimes costs considerable money to make it what one desires it should be. $\Lambda$ farmer of my acuuaintance owns a very choice flock of Golden Wyandotes, amil last scason he ereeted $\Omega$ comfortable house for his flock at an expenditure of $\$ 250$. He had saved the money from the sitle of eggs and dressed poultry; being a truck farmer, he maketed his truck in his stand at the market, and always manage, to have his basket of eggs and dressed poultry ready each day he went to town. He said he found that his flock paid him a better percentage of profit than anything he had tried before, and he had enough pride to feel that a paying flock of hens descrved a good house, and he invested the earnings of one season in a properly equipped building.
The building illustrated (Fig. 1) is arranged to afford accomodation for from 250 to 300 hens.


FARM POULTRY BLILLINA:
The side exposure on the south is of sash, the rear being boarded around to shut off cold winds and rain. This building is raised about six inches from the ground by a stonc foundation. The roof is covered with gravel and tar paper. There are thirty-one pens, each ten by fifteen feet, with a hall five feet in width leading through the building. Each pen should properly accommodate from cight to twelve birds. This building is : 125 feet long, the main wing being 1.75 feet, ind the other wing 150 feet long, the liurger part being given up exclusively to layers, the other wing to sitting hens and incubators. A few of the pens are set apart for sick fowls, and others are kept for odd cockerels when they accumulate too rapidly for the capacity of the piens.


## RIT. 2. GROUND l'LAN.

The ground plan (Fig. 2j shows the lecation of the pens, and all the cloors, $d$, entering the building and those entering cich' pen. The door leading from the right wing enters a small room leading to the presege way or hall. Tuming to the left and walkiny eshort distance past several pens, one comes to the feel. cook and tinkering room, where are the heater, work bench, feed bins and closets. Here everything is made ready for cach meal. The room is thirty by thirty-five feet and ten feet hisgh. The cupola is simply an ornament on the corner over this room, and can be put on or omitted at the option of the builder. A tier of nests, $n$, is located in each pen, being fastencd toone another by hooks, allowing the brceder to unfasten them when it is desired to clean up and change them at any time. A board is placed at cach entrance, $e$, and is raised or lowered by pulleys and cord extending out into the hallway opposite each pen. This is a great convenience, as the fowls can be shat in easily without going into the pen to do so.

The food bins, f.l., the work bench, w.b, at the stove, $h$, user for heating the food and kce ing a proper temperature in the pipes, througr which hot air is continually passing, are in the storage room. The pipe heating is done only in extremo cold weather, when hens refuse to do anything but eat and sleep.

Goon feed is needed as much by hens as by any other animals.

Hews that have to work for a living can'tlay so many egrs as those that are well fed.

Asintics should not be roosted too high. They are better off bedded down with straw or leaves.

A scratcienct pen is almost a necessity nowadays. It should be under one roof with the roosting room.

Linsecd meal is excellent, for poultry when fed in limited yuantities. One gill of linseed to the quart of mash.

Botir old and young chickens and fowls should be supplied with charcoal. It is an excellent tonic and is cspecially good for turkeys.

Cabbage makes a valuable winter feed. Chop fine and mix with the morning mash. Also leep a head hung up for the fowls to peck at.

Iherre Brahmas are not gooil birds for an egg farm, but carly hatched pullets from carefully selected egrs strains will lay a good many egrs in winter.

Empty mail keegs make good and chen; nesting places. Leave both ends of kes in and cut out a good opening entrance in side about four inches from bottom.

Plymouril Rocks, Wyandottes, Langshans, and the early hatched hight Brahmas are speciilly recommenderl for cold climates. The smaller the coml) the better the guarantee for winter laying.

Fowes should not be lept in an artificially heated poultry-house becanse they go out into the rigorous out-door air and promptly catch colds which lead to croup. Make it as comfortable as possible with inside boarding and papering.

Andalustins, equal to the White Leghorn as layers, very hardy, nice table birds when young, and very breedy and delicate in app arance. Whey are one of the leading varieties of the Spanish group, and sometimes called the Blue Spanish.

The usual advice is to set turkey eggs under hens. Some say set the first six or seven laid by a turkey under a hen and she will hatch the rest of the batch herself, but turkeys reared by a hen are never so healthy or so thrifty as those reared by turkeys.

As important point in mating turkeys should not be overlooked. The cock and hen shonld be unrelated, or not very nearly related. Half brother and sister is too near. In the hands of an experienced breeder such mating will do. Turkey hens begin to lay about 20th March.


## Three Wishes.

Wtan You: haply New Year! Then Floy stole off with ber Chrishmas hook And Fred ran oni to play;
While liar, like a summer sunleam,
Went flitting hereand there, Lightempar many a burden, Brightening niany a care.

She washed the hreakfaet dishes, And swent the kitchen ther ; She plaved with the erying heby She dusted the partor knick dind put them all in place With a cheery song oll her lifis the while, Aud a smile on her rosy fate.

Ahapy New Y゙ cat, mamma!" From Floy and Frod int liay,
Then Floy stole ofl with her bouk to read Then Floy stole ofl with her And Fred wenti ont to plas: But Fiay like a ray of sum (IVhicl! is leeter yet), set ripht about Bringing her wish to pass!
cross of self-denial as we might or should have been? Would it not have been just as well to wait a little longer for that new luggy or that new carpet? 'It will not do to discount good seasons and large harvests. Eternal vigilance in small economies, and persistent application, are the only roads to success for those who were not born with the golden spoon.
The old Romans worshiped Janus, not only as the god of the year, but of the day. One of his titles was "Father of the Morning." It is well to look after the days and "pay no moment save on purchase of its worth." But perhaps the retrospect is satisfactory. The mortgage has been reduced. The collector is not an object of fear. The house is in good order. The name is good for thrift and forehandedness, and the banlt cashier looks at it approvingly over his spectacles.
Are there no other directions in which to look? Man does not live by bread alone. Has "the bump" of acyuisitiveness been subordinated to that of conscientiousnes? Has tho "Golden Rule" been the practical creed? Has not only honesty, but have kindness and generosity entered into the year's efforts and industries? Has sympathy softened the burdens others have borne? Have the real essential manhood and womanhood grown and strengthened so that
they stand better braced and more symmetrical than at the year's beginning? Rowland Hill said that "he did not think much of a man's goodness unless his dog and his cat found it out."

Into the future no look can extend very far ; we camnot forecast its experiences. We can only build upon the average stability of nature and go forward to meet what comes. It will not bo all sunshine, neither will it be all rain. In the main, it will not be so very different from other years. Seed time and harvest, sum mer and winter, day aul night, will not cease. As the bells "ring out the old, ring in the new," let us meet it squarely ; waste no time in vain regret or repining ; put in more work nnd less money. Let us start clean with our fellows, and let all the old spites and grudges go. We want no such weights as we "run the race set before us" for another year. Let the backward look into experience moderate the forward look of expectation. Let us lay in an ample stock of good humor to lubricate the friction of daily life, and that will help amazingly over the worst spots.
And let us not forget, as we look backward and forward, like Paul when he met the escort of sympathizing friends on the Appian road, to thanki God and talie courage.-Country Grentleman..

The Janus View.
The name of the month which heads the year's calendar is an inhoritance from mythology. Janus was one of the oldest of the Latin deities, whose worship was a prominent feature in the religions system of the early Romans. He was symbolized as a two-faced deity, looking forward and backward, holding in one hand a key and in the other a sceptre. In the arrangement of the order of worship by Numa Pompilius, his place of worship was the sacred passageway near the Forum, connecting the Quirinal with the Palatine.
Not all that pertained to false worship was cssentially false. There are many lints and suggestions in the fabrications and fancies of mythology which m:cy be the echo or traditions of truth implanted on heart and conscience before the long and devious wanderings of humanity began.
There are many striking illustrations of this, and we are met, with one case in point as we stand on the New Year's threshold. There is a suggestiveness in that two-faced god-whose name is perpetuated in the first month of the year-with his one face turned back upon the past, while the other was leent towards the future.
"Tis greatly wise to talls with our past hours." Experience is onr best schoolinaster, if we have enourh candor and humility to submit to such an instructor. Humannature is quite too prone to self-1lattery. Errors and failures are often glossed over and generously credited to circumstances, while self washes its hands of responsibility. But New Year is a good time for inventory. Why not take a clear, thorough, backward look? And take it, all along the linc. Have we rum on full time and with full power? Havo wo filled out our sphere of opportunity? Have we been as prudent and wise and economical and as industrious as we might have been? Have we been as willing to bear the



|  |  |  |
| :---: | :---: | :---: |

A match scratcher like the one illustrated, dan easily be made. An empty ribbon block is the foundation of the drum ; circular pieces of sandpaper are glued on to the ends, and satin ibbon the exact width of the block is sewed

mound; over this tinsel is crossed, like the corls on a drum, and bands of velvet sewed about the plge. It is hung up by baby ribbon with a picot edge. Be sure that a gift of this sort defigned for a friend's room harmonizes with its furnishings.

## A Useful Box.

A box for holding jewelry or buttons of my sort made like a child's sled, forms an httractive and useful ornament for the aressing table. The box itself is only one of

the ordinary boxes used by druggists; a piece of water color paper is cut to represent a sled, making it a trifle larger than the cover of the hox, to which it is firmly glued. Paint this as shown in the sletch, or cover it with birch bark.

## Mounting Cattle Horns.

Every one is familiar with the mounted deers' heads and their branching antlers, that form a distinguishing feature in the adornment fof rooms in certain houses, but deers' heads fand antlers are not sufficiently common to be

vithin the reach of any except the few, $A$ very pleasing substitute, however, can bo found in the horns of cattle, particularly of oxen: which can be mounted in various ways, to serve as both ornament and convenience. A base of
wood is needed, and on this should be screwed a piece of board cut so that it will just fit in to the base of the horn to be mounted, the horn being secured to this by round-headed brads, and at any angle desired, since the base of the horn can be trimmed to fit any position. A pair can be mounted together, or a single horn, and the shape and covering of the base can be arranged to suit any tasto. A covering of plush affords an effective background for a highly polished horn. They can be used as a rest for hats or for other articles.

## A Physician's Dial.

A cirarming little contrivance for a physician's office is a dial, which can be made of one of the small wooden plates used by grocers.


Use a tumbler or small saucer to outline a true circle, the center of which must be painted white against a black or very dark backiground, in order to throw the dial and lettering into greater prominence. Sprays of feathery grasses may be painted on in natural colors. Make the hands of white celluloid or thin white wood, and fasten them on with wire, so that they will move easily. Suspend by loops and ends of picot-edged ribbon.-American Agriculturist.

## A Pretty Matchbox.

Here is a matchbox for dressing table or loureau, being much prettier than it is possible to make it appear in the cut. The foundation is a cream white heavy card, beveled and gilded at the edges. These cards can be purchased at

any art material shop, in various colors, sizes and shapes. Six inches is a suitable size,
A small box made of caxds and covered with silk and embroidered or painted is made and glued upon the card. A narrow ribbon on the inside, connecting lid and box, holds the cover. Inside the cover is traced with gold and sepia the words, "In ne you'll always find a match." Pretty bits of silk that one may have may be utilized. Some of the bits of brocade may have parts worked out in long and short stitch, making it appear as if all was worked in embroidery. If the cards are not available, cover heavy cardboard with velvet. Paste a bit of sandpaper on the base in front of the box.

Takd only clean eggs to market. In order to do this have only clean nests.

## Do You Know

That a warm knife will cut bar soap without crumbling it?
That fine copper wire is much better and more secure than any cord to hang pictures with?

That strong vinegar can be usel in place of cream of tartar with equally good results?
That a couple of plump apples placed in the box with cake will keep it moist a long time?
'That if a thread be pulled out of each side of a lamp-wick, the latter will never stick in the burner?
That lamb skins, tanned, make excellent sleigh robes? Ot rourse, they should be colored.
That plaster of paris, wet a little at a time in cold water, is the best thing to mend holes in walls?
That one of the simplest and best remedies for piles is one cupful of honey, two tablespoonfuls of sulphur and two of black pepper, mixed, and taken a tablespoonful st a dose, three times daily in bad cases?

That a simple and effectual cough remedy is made of one ounce of glyccrine, one teasyoonful of soda and one cupful of water?

That beans will shell, and the skins slip off apples very easily if they are first dipped for two or three minutes into boiling water?

That you can make your own varnish cheaper than you can buy it, by taking of resin, one pound, and boiled oil, one pound? Meit, add two pounds of turpentine; mix well.
That any vegetable or fruit that can be canned, may be evaporated equally well. and saved for years without danger of spoiling?
That a mirror, narrow and as long as the mantel, placed back of it is a great improvement.
That plain molding covered with sand-paper and gilded, makes pretty picture frames?
That cigar boxes of equal size, fitted into a frame and finished with half a silk spool to pull them out by, are very handy to hold spices?

That yeast that has begun to sour may be sweetened by addiner two teaspoonfuls of sugar to each cupful? In the morning it will be as good as new.

## An Old Friend.

In a series of interviews with the members of the last Congress, 31 out of 483 remarked that they were readers of The Youtli's Companion. For definitsand trustworthy information on the questions of the day it is really unique, while the high character of its stories, the wide fields covered by its special articles, and its contributions from the most famons wilters in Europe and America, are well hnown.
Its programme for next jear seems brighter than ever. Some of the important stories are: "The Deserter" by Harold Frederic ; a Tale of the Great Mutiny in India, by Sara Jeanette Duncan; several Romances of the Sea, by W. Clark Russell; Tales of the War, and of the Frontier in Farly Days. Henry M. Stanley contributes two thrilling narratives from Darkest Africa, and Archibald Forbes writes of his "Closest Call." Naval Battles are described by Admirals, and Military Life by Generals. Then there are articles on Choosing in Occupation, lhoys Who Should Not Go to College, Physical Training, Recreations of all kinds, and many other practival subjects.
Another pleasant featme is the charming picture of a young lady of colonial times, "Sweet Charity," reproduced in colors from a painting by ferris, which is sent to all subscribers who send their $\$ 1.75$ for a now subscription or a renewal.

## ECONOMV IN THE HOUSLEHOLD.

To those who are passesised of a little mechanical ingenuity and arfistle good taste, the knack of making something out of nothing comes hy nature; hut for those of our readers whose clevernese dues not rum the this direction, we publisiti




How to Mame an Amm-Cham ora or 'Tomato cass.
Nail the cans tugether for the lassamed mek, make the stet of the hux there canle, in, anrl put some hight ribhun hows at ine corluers wherever needed.


Invert at old silk hat: cout ullt is drer at the hottont markentie tamp out of ant old for a ltandle; print the hat will askustem paint.and put on an ordinary tent te whlich you may procure at any jumk shol.


How to Make a Sumer Cotragedot or a Packixi Box.
Takealare meking box, cut out some devers and windows, paint it in hrizrle colors, phace it arefuly on the veskiswe during the fright of the seavon, aul bel it is swoll as presilde.

## TWISTERS EOR THE TONOCDE.


Read the following aboud. rynatine the surter ones quickly hath a dozen thes in succe-ine:
six thick thistle sticks
Flesh of freshly fried ifiner tiol.
The sat ceach and it sufficeth ets
Aigh roller, hew rolkr. rower.
 silky suakes.
silky sulake for the sea: swim, swam swim; swan swam back itrain, well swum swith.
It is as shatu!, Sulu; there are the sume, sam. 'Tis all a sham. Sam, and a shame it is tosthen sio, siath.



 sok lobeck Susu.
Robort Rawher folled rotud a woud woll romed; a romad woll Roburt kewlyy folted romed; where rolled the round roll Rophert kindreverthed ratual.




 $\because$ That is, says Hoblo, "lle wurec for Hollos johs:" ami Sinchlosisolhes.
Shums Shemithsawa =hrickius semester. Didsamury

 smbuy shoemith san?


 bialwe:
hou sumf shop sumf, I sumfi hox smifl.

## FAKE HIPNOTISM.

Hewe is one of Dr. Valentiness storims to illustrate the druhtrul character of alldeed hinnusic exhithitions. A Rusian hyputizer had an cesedernty traturd suljenct


 "don't let ne drown. Jinn!y,", "Hely! Re seccanea, "Eraryone for hibuself." Heturned Jmme. "the revil take the hindmost," and contine to strike out visor-
 chuge to it with the deveration of death. Them the inkercsting st ruparle was interruthed by yigorons blows of a

"You Yount semudrel!'" excliained a sturdy workingman, whimed tole this subyert's father, "is this whit. I edurated yon for"? Is this working at jour trade as a decent "apmenter?
hime from the room, without heisurine liy the em aud led


Br mot havine ming money, oue saves thomands a year in these unselfled tinites.
Though novelts is premeatly at auree of pleasime, yet what is new oftem mests "prosition merely becealuse it is new.
Wright. - "Those ate prefty trourl-fonking qatent beather Nows you hawe cul." "a Giancr.-"Ther were all right

ANI WOMAN CAN EXTENO THIN LINT.
Hitipuins are very valuable. They cost outr a trithussum, to he sure, bit they are worth a good deal whely you don thainent to lave one.
Here are a fuy wes for ehme:
They are untivaled when it coines to undoing tanged They are

They are invaluable when you lose the key of your desk
or trumk. With a little ine einuits, plenty of natiene te and persistent scratching withone of then, the lock will sinale back in sheer desjeration.
They are rety handy 10 pin veils.
Thicy hive thion kimwntokeep detached ruffles in platere They can be ueed as hatpins in ap pucto.
They ate sturetion to anty shoe or shluve buttoner ever in vented.
"It is a wise man whokenmeth hisown councel." " Y"e; mut a wieer sue who can sellit like al lawyer.
Prector:-"Well, it's only a step from the sublime to the ridiculpus." Lemos.-" $\Delta t h$, if it were ouly a step bieck ay:in."
Fiss.-- Yout think, I supmese, herame a story is oh it
 callese il is guod il matitive old."
Beatrice-", I hear that Mr. Shapley is sulferius from
 material atecesaly for bratif fever.'
If every uan were as goxl as the womam who bres him
 doubtedly tes sery much improved
Hardly any moner in "iredation in Ameria ?", said

Beagar-" Kind quoteman, pray give mo a trite, so

sile-" "No. I duit urefer men whn are known lo be
 s.cud theic money as frecly as men who wat to be kitown as tich."
"And your reallv romsider it grod luck to tind a bursenshoc, then?" "Certanly. Theyre worth two cent. at
 tiunes."
"Dam fohsit yoh morat precen's durin' Dems ints hours,'
 at onte.,"

* And so gruy son has finishen his college course? Did he sraduate with hanars y" "oh, res; hat he tells nis. that some of the uther fellows carried them off. Rascally, Wisist't it?'
Chapmic.-"I say, Miss Highsil, don't you think my, mareits mante a larride mistake in calling me Gawper", Mis Mirhsiti, -"Dear me ves.
Harry St. Ledrer.-" My dar, won't rou sew on chis
 may posibly do it for som, hut inase hem in mind you mitatichat tye writer, Hol isewhis machitic.
Ste.-"Sometimes you apmear really manly aud sometime yountre alsolutey cheminate. Sow do youracement fur it ", He.-"I suphese it is hureditary, Fiat my athcestors were males and inc other hadf femates."
She.-"It can hardly he questoned fhat crecr woman is mowe or less of a mindi-cader." Ah-" Do you think you litile particular as to the charater of my reading."

She.-" Why do you always have that doe followiug rit about the streets?" He. - I don't. I'Ma following lut part of the thme."
"Mr. Editor, Y am told you called me a swinder iu and cent iswe of your paper?" "גio, sir, we only"pint th rery litest news."
Now that Prof. Garner hats come back from Africa witu the apeand gorilla lauguage fully leathed, there may some possibility of understaudiug dudes.
 are they?" "No, but tice prisoner's noney is."
Jackson (in a restaurant). "This chicken of mine wit I'm cating was kept to loug hefore it was killed."
"Have the wew, neighthors called yet?" "No: they liy "They can overice all of ouranains wilhout coming over"
"How many storiss hats this buitding?" asker th stranger. "siveral thousand,"' was the reply. "What where am I?" "In the fiction denartinent of the publim lintury."
"How would you like to le thrashed as I aun?" cond phaned the wheat to the com. "I would an soond de rather He thrashed than have my ears pulled," iulswer the com.
"Ferc is a request for your autograph, sir," said hi private secmenty to Mr. Shortribs, president of the Chiese tyceun. "Vicy well," repliced the aniable man. "Writ one imel mail it.
A.- "I canunt understand why you shed tears at th theater hast nifylu. It wals one of hee nowst wretched i: formames I cier siw." B.-" 'Ies, but I was foul enout to paty for my ticlset.;

- But why are you so bitter amanst the jolice?" ask the cather. "It's just this," sald Mra owsiede "As sum
an 1 have taturta a girl how to le a grod cook one of the comes along :und miaries her."
"You no spilk Inclis', don't you?" asked the visitor one of the foreign Fillages in the: Midway llaisanere.
 id!" fiercely retorted the villager.
"Don't you think there is always sone (pulf) risk in ri ing (purf) in a sumking car?" "I do, sir. There is " teilng (phew) when the man siltine next to yom may lies a cigaithe." (Noves there seas formard.)


## MANーMAN-MAN.



Exasperated Hecbayd-Mary, if you don't stop that - hild s howling I'l so ctizy !


The: Siste Mis /listeming to a phonograjh )-(Oh, ho ho! haw, h:iw, haw
Bricianner-What's so awfully fumb?
The same Mav-Haw, haw, haw There's a baby cry lug and yelling at the top of its voice, as natural as life.

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[^0]:     it cuitrawd on vent untre llia handle.
    Itamony is all rish in the pares hat the bather amb his
    
    He-" Yes, I dislike locr. She called mo al hix dunce: She.-" Jhamb! You're mot larre, are yon, Charley?"
    
    

[^1]:    MORE EXOTING.
    
    
     with his gun thrown owe his shoulder, ready for instan Wive in coses of sut attrack.
    "What did they have fo cary erme for?" asked Rohan: with intromet.
    
    
     wim in extrene prib of their lives comb phevent them
    
     jove the miviluece of worshintus on sumber a divilewe
    
    
     way."

