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## Bitassey-斯arris flltustrated

## A Journal of News and Literature for Rural Homes.

New Series, Vot. III., No. 2.1 MARCH-APRIL, 1899. [Whote Scries, Vor. Xvil., No. 2.


MHMMERS OF TIIF FMPIRE: FI.OWYR SFI.I,IRS IS SOTTH AFRICA,

STRONGEST ad BEST CUETVATOR IS THE MASSEXMARRIS

The Variety of Work wich can be done with it is astonishing.

StEEL
The Yovable


 fordifferent kita of Cutivating. This is, most haddy contrivance.

The Frames of the Secions are made of Solid Angle Steel, while the Teeth, which ate adjustable, are of Spring Steel.

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The points of the Teeth ate


# Massey-Harris Illustrated 

A Journal of News and Literature for Rural Homes.
New Series, Vol III., No. 2.] MARCH-APRJL, 1899. [Whele Series, Vol. XVII., No. 2.


" $P^{n}$
OOR" FRANCE in very deed!
In the midst of a coudition of pulitical unerst that restelered not improliable at any moinent an up-
heaval as vast as that of 71 , death without a momeluts wanugg strikes Jown the President, the holder of the only wffico in the republics goverament


MAAPRA'S WREKTY. TEE BODY OF PREEIDENT FAUBE LYING IN BTATE IN TKE ELYSEE PALACE.


MARARA'S WEEXIY.
m. LOUBET, THE NEW PRESIDENT OF FRANCE, LEAVING VERSAILLES.
which possesses any degreo of permanence It was a splendid opportunity for the agitator of monarchical or other
anti-republic proclivities to strike a blow for revolution. It was also a glorious opportunity for the true patriots to sink


all personal differences and present a solid, united front to the forecs so insidiously working for the destruction of France. And the patriot rose to the occasion, tho National Assemily electing as President Fauro's successor a man who was known to be free from any
body of Ptesident Fauro lying in state in the Elysio Patace.

Our neighbours generally do things on a lacko scale. The recent fire in the Brookiyn Navy Yard, New Yonk, was not an exception to the rule, the damage exceeding a milion dollars. Leslie's


THE RECENT ATTEMPT OF TIIE FILIPPINOS TO BURN HANILLA. UNITED STATES SOLDIERS FORCING A PASSAGE THROVGII TIIE RIOTOUS CROWD FOR TILE PIRE ENGINES USED BY TUE NATIVES.
sympathy with tho various political parties who are responsible for the turbulent stato that has oxisted for some time in Paris.

Our first illustration represents the

Weeklypoints out:-"It is a remarkablo coincidence the. on the anniversary of the destruction of the battle-ship Mraine the building at the Brooklyn Navy Yard in which were stored all the plans and
the model from which sho was constructed should be destroyed by a fite of mysterious origin. The loss, as menasured in dollas, approximates $\$ 1,000,000$, wheh mates it a costly celebration of

testers whticy. OFNFRAZ EMIL AOUSNALIO, TIIE LEADER OE THE FILIPIJNOS.

Maine Day The building was known as a machine shop, and held a collection of most raluable tools. It was erected in 1870 and will be rebuilt at once

Interest continues centered in the
aftermath of the Spanish-American war. It was oate time the custom of Americans to sueer at the use of the expression, "the burdens of Empire," which they" regarded, or pretended to regard, as merely a colloquial phaso used to gloss over some act of aggeession on the part of Eugland. They are tast learning, however, that tho burdens of empare are a reahty-a panifulientity. The task of whippug Spam was easy compared whth that of bruging the native races they have "fieed" to a just apprectation of tho bencfits of American aule.

In Manilla tho fun has been fast and furious. 'lito Fslypinos claim they have been struggling for nearly 800 years, not merely that the rule of snother foreigner should be subsituted for that of the detested Spaniard. but to securecompleto independence. Through their leader, Aguinaldo, they maintam they now possess all the economy for indopendent self-government. Aguinaldo has been "elected" piesident of the republic, and a" national", councal chosen. There is ecrtainly a stiong suggestiveness of political acumen in the manner in which Agninaldo and his immediate associates have constructed therr semblance of a representative government out of such unpromising material. But whatever of aptitude for self-government does exist is confined to the frw and that they are not capable-if willing-of resthaining the barbarous proclivities of the masses has been abundantly exemplified in the methorls that have been adopted against the American forces. The attempt last month of the Filippinos to burn Manilla illustrates most forcibly how lacking in conception of their duty as Anglo-Saxons the Americans would be did they leave the islands they have wrested from Spain to the tender mercies of the nativo " government."

Two typical scenes in the other recently acquined American "colony" provide our illustrations for pape 42.

With the exception of Mr. Gladstone, it is aoubtiul it of recent years the illness of ainy man has proved such a matter of world-wide concern as the sickness of Rudyard Kipling, the uncrowned poct laureate of the Anglo. Saxon race; and it would be difficult to imagine a more sorrowful picture than that presented by the heroic wife of tho famous author, watching almost without hope at the bedsidn of her husband. in whom the spark of life was almost quenched. the while two of her three little children lay at death's door elsewhere; and when the crisis was passed which caused her to hopo at last that her husband would be restored to her, the turning point also came in the sickness of the hittle ones, and in one case it turned-to death.

Our illustration on page 41 aftords us an metesting glimpso of a phase of life in Demmark.

In Denmark the dairy industry occupies a leading place. Cental daries receive the daily mulk supply from tho farms within a celtain a aditus. The full milk cans ane deposited along the road, and tho cart of tho cential dairy makes its rounds twice a day, depositing tho empty cons and taking up tho full ones. The milk is conveyed to the central dairy to bo mado into butter or checse. At the end of tho month the dary farmer
oven tho laying in of peat for winter fuel. They navgato then scows cleverly enough, wear a distinct costume, and cover their faces with black cloth masks. The general opmion is that this is dono to protect then faces against the mpalpablo sand and salt-water spiay; but others pretend that it is the remnant of a custom of fomer days, mstituted at the dictation of the hilsbands, who forbade thear wives to show ther faces to strangers. The younger generation will probably nbandon it, but it is still the ruling custom. Among our allustrations


## testit's wetxtr <br> tile filiplino congress in session-aguinaldo seated at the centre of the desk, in the distance.

receives his share of tho profits, !ess working expenses, accoraing to the quality and quantity of milk he has furnished. Tho Island of Fand, on the west coast of Jutland, is a pieasant summer resort, with good sea-bathing, and can bo easily and comfortably reached by the fine Tegner-Price stcamers on the Harwich-Esbjerf Route. During tho creater part of the year it is populated by the gentler sex, most of tho male inhabitants being far away on tho high seas or fishing in tho Artic Circle. All the work is thereforo done by women;
wo five a view of the central dairy of a district. They aro built after a aniform plan. Steam is used to drivo the machinery, and telephonic wires communicate with overy farm in its radius. All milking and tending cattle is done by women. The cattle are so docile that on being released from the tethers they ome of their own accord and wait for their turn at the farm-yard. Another characteristic picture is that of a little girl leading a number of cows to pasture. Sho carries a mallet to drive in tho stakes on to which tho tethers aro


A TYPICAL DRAY IN SANTIAGO.


A HAPPY yOUNG BANTIAGO INSURGENT, HOMEWARD BOUND, AFTZR THE SURRENDER.

titule's witrar.
the critical hour of rudyard kipling's illness, when life was supported ny the use of oxyaen.


## RUDYARD RIPLNO.

fastened. The crops of barley or oats aro gathered from tho smatl pratches of land, which ase tilled by the women, who cary on a liravo strugglo against the driftites sithds and fiereo winds

Our two following illustrations present
intrcaluco modern and molo convenient contrivances. When the Sphnish conquerors took possession, they found no beast of burden as thoy had found the llama in Peru. It was thatall, muscular Indian of those mountailous regions


SCENES IS DEXBSARE.
a remarkable contrast in methois of inountain travel.
Tho primitive means of transport on tho high tablelands and mombarinous districts of Central America will exist till a railway rumning north and sonth, midway between tho two oceans, will
who was the beast of burden then. And so ho is to-day. $A$ leather thong, with a pad over his forchead, kecps tho load of from six to nine stono in its place. A callous growth out tho forchead and the disappcaranco of the hair aro tho result. For passenger travel a kind of sentry-
box, sometimes m:alo of wickerwork, sometimes of rough hoarcls, with a seat imsulo and a sort of thateh overhead, is used. Water and povisions ate carried by another Indian in the "lacaste," a soit of cieel.

The eyele theory is aecenmin stamg conroboration theod days particularly in the matter of disasters :it sea. Commencing with the ill-fated bouryolme thene has heen in the last few months almost a continuous second of Athantic liners

nivgrayto tondon mims.
צOUSTAIS TRAVEI,-IS QUATEMALA, CENTRAY, ASERICA.

The excursion train on the White Pass and lukon ranway-the first crer run so near the Aretir Cirele-took the men, women and childern of Skagway for a trip, just a little more thana month after the commencement of the line.
missing or wreckel. The Mohegan, the Bulgaria. the Castillian, and the Iabrador have fared the worst. The I'avonia staycd away so long that all hope was civen up of ever secing her again; the burden of ice with which the Germanic


IN TIE KLONDVKE.
was coated when slio entered New York harbor, was such that the ocean going palace sank at her moorings without a monent's warning. Our final illustration depicts a thnilling moment in the experience of a lifeboat crew who had
just taken oif the last survivors on a vessel waecked of tho coast of Ireland. When about 100 yards from the sinking hull the life-boat was completely overturned and it was several mements before she righted herself.



An Epitome of Expert Opinion and Interesting Facts Gathered from Authoritative Sources.

## General Notes.

Creameries in Canada number 509 this year, agatinst 170 in '91 andonly 16 in ' 81.

The Putse of Animats. The heart of an adult horse beats 30 to 40 times a minute. of an ox 15 to 50 , of 1 pig 20 to 80 , and of a sheep 70 to 80 times.
be fequent stirring, but staaw or chaff may be used. Crops well mulched ane ahost fice fiom weeds.

## ${ }^{*}{ }^{*}$ *

Green Bone for Hens.-It is a fact that can be poved fiom the experience of the most pominent poultiymen in the comitrs, that green ent bone is the createst ege poducing food in the world. It is a frod that cannot be omitted from the


HOLNTS IS TIE LEEE FOHY. (See page *s.)

1. Forchailanil Face. 2. Muzsle 3. Votrin 4. Fyed. Ears C. Poll. 7 Jawe \& Throat.


 *0 Bush of Tail. 31. Heart GIrth. 3z. 1'In loned.

Color is Not a Factor. -The fact that a hoy may be white, black or red does not operate for or against him in the general market Some buyers prefer white hogs. but this feeling is not pronounced and no premium is paid for white porkers.

Hulching in Gardens.-In small pardens mulching after transplanting is often profitable. The best mulch is two or three inches of soil kept loose and mellow
diet to have the best results obtained both in breeding and cef production. While the most prominent poultry inen know this to be a fact there are thousands upon thousands of our readers who aro still ignorant on the subject. If they would get one of the cheap bone mills. prind the fresh preca hones that arenow wasted, and feed this feesh bone meal to their poultry in moderatequaintities, all such persons would be convinced of the truth of our statement.

Vaccine Treatment for Blackleg.-Duing the vear entine June 30, 1898, blackles fitceino was distributed freely by the United Stites burean of animalimdustry, the demand having greatly increased. Mote thinn 350,000 doses hatve been distributed and tho losses from blackles have been sedued fiom an average of 20 to 20 per cent. to less than 1 per cent.

Why Lime is Valuable as a Fertilizer. In soils deficient in lime appleations of hate wo hecessaty to supply phant food.

The indinect value of lime is perhaps more important than its dincet action. It unlocks the unavailable potish, phosphoric acid and nitrogen of the soil. It also exerts a decided influence on the mechamical condations of soils. Compact soils are made light and loose soils are made mote compact. It also furnishes conditions in the soil favorable to the activity of micro-organisms, which convert the nithogen of organic matter into nutatess, and thus makes it available as plant food. On soils that are som, lime is valuable in neutalazing the acidity.

## POINTS IN THE BEEF FORM.

ACORRESPONDENT in a recent isste of The Breeders' Gazette, semats that mobably ninctenths of famers do not know what constitutes a perfect beef animal, and the technical latwentor nsed in cstimating the merits of such an amimales gencailly a dewd letter to them. Ife suggests that a full and platin explamation of the vatious points involved in determining the beef value of an animal would be appeciated by many of tho Gusette's scades. Our contemporary has acted upon its correspondent's sug. mestion, athl we thke advantage thereof for the benefit of our own readers who will fith it the accompanying di,ugram and explamation of points in the beef form much that is alike intelesting and pofitable. The writer of the atticle, C . F. Cultiss, of the Iowa Expetiment Station, says:
"It is not easy to furnish a clear description of the pats refened to or expham the terms used except by the aid of a liviug animal for demonstiation; but the arcompanying diagram, which has been pepared at my request and witich repesents a typical beef animal, will bo of much assistance in a stuidy of the subipiet.
"The location of the crops is indicated by No. 1.5. They Jic on either side of the sjunal column, just back of the top of the shoullers. They should be full, so that the back and shoulder will be evenly joined at this point ; the front ribs shoult also be well sprung in the rerion indicated by No. 12 below tho crols in order that there may bo no marked depression belind the shoulders and that the heart cirth measured mound parts 12. 14 and 81 may bo full. The location of the twist is at the back part of the thigh, at about tho point indicated by No. 2t. The desirablo conformation here is a thick, full
thigh as siewed from the sear, of good width and mominence, givmg a symmetrical quarter. The daily breeds ane always very deficient in twast. being thin and what is temmed 'cat-hammed.' This conformation affords ample 100 m for thedevelopment of a pood udder.
"The term 'fole flank' is not used in this dingram. but it is requesented by tho part just back of the ellow jomt whinch is located at the upper line of No. 28. It also extends back for some distanice to about the point indicated by No. 31 . The top and bottom lines as well as tho side lines shonld be nearly, parallel in a model beef animal. In icality, however, this is seklom attained m the lower line. Fullness at both front and hind flanks and at heart gith (31) will jnsme a good lower line, and fulluess and evenness of neck, crops, back, loin and rump will give a sood upper line; this is what is meant by good top and bottom lines. Fullness and eremess of the parts at 9 . 12, 13 and 19 will five a good side line."

Apropos of beef cattle the last Report of the Superintendent of Fammers' Iastitute of Ontario, contains a bricf but terse maper on breeding and feding by W. C. McGiegor, of Ilbury in which the writer gives some useful, practical hints. The article is well worth tho attention of our 1 eaders. Mr. McGregor says in conclusion: "At present prices of animal food proilucts the cost of production I estunate at three cents per pound livo weight."

The preceding sentence is where the writer shows his complete grasp of the necessities of successful farmug. "'ro suecced in this, as in any other dopartment of farm work, it is necessary that there be a liking for it and a determination to do all things connected with it in a thorough manner, giving attention to every detail."

## BIRDS IN RELATION TO AGRICULTURE.

Nor fors utt friminus.
AN AUTHORITATIVE M,EA HUR THE MUCIt MALIGNED " IIEN ItAWK."

(®)NE of the most uscful contributions to agricultual literatue that wo havo scen for a long tume ts the story of Birds in reletion to Agriculture as told by the well-known ornithologist, C. W. Nash, in an exhaustivo and freely illustrated aticlu covering over thite fages of tho Repot of the Supelintendent of Famners' lnstitutes.
The Ontario Government very wisely dectded to aepublish the article in pamphlet form. The result is most satistactory from every point of view. Not only is there in compact form a wealth of information pertainimp to the subject on which Mr. Nash has written, but the reproductions oi the drawings arospiendid sperimens of theni tof photoeagraving. adding not a little in the eycs of many to thoattractiveness alike of the book and tho topic. Speaking of birds of prey, Mr. Nash says, " these may boroughly divided into two classes, the first feeding by day and the other by night."
A strong plea is made for greater discrimination on the part of the faumer between the Sharp Skinued Hawh, Cooper's Hawk Gooso Hawk, Dack Hawk and Pigeon Hawk, which occasionally mako raids upon the poultry yards, and should therefore be shot whenever the opportunity is given; and the Marsh Hawk, Red-tailed Hawk, Red-shouldered Hawk. Broad-winged Hawk, Iough-lecged Hawk and tho Sparrow Hawk, "every one of which spends the greater part of its time and devotes its energics to work the destruction of animals and insects which are known to be amongst the createst pests the farmer has to contend with."

faon a ofawimo of C. w. wasn. ROUGII LEOGED NATKK.
"Fer: the sako of brevity tho Red. tailed Hawk, Red-shouldened Hawk, and Broad-winged Hawk may be consdered together. These three common species are ustally known as Hen Hawks' Why, however. :t would be difficult to say: Theyareall fairly lange, slow, heave flying binds, whose foot consists principally of mice, squincels, toads, froes and shakes; very rarely do they ever thke a bird of any kind. In fact it would be extiemely difficult for them to do so, unless the bird was very young, or injuacd sentously:
"I havo specially omittod from this group, to which it leally belougs, the Rough-legged Hawk. This is done purposely. because the great valuo of the species to the famer should be particularly pointed out, the bird having been most unjustly persectted. It is the largest of the Camalian hawks, and one that deserves the greatest consideration and protection from every man having an interest in agricultuee. It can bo safcly said that this so-called 'Hen-Hawk' has never killed a head of poultry at any time nor do they ever kill birds of any kind,"
In support of his claim that the indiscrimate slaughter of all hawks wathm range will prova disastrousto the farmen, Xir. Nash pouts out that "the attention of the Department of Agriculture at Washington wassome time ago called to the fact that mice and other ilestructive rodents were largely increasing throughout the United Stites anl it was sug. gested that the constant destruction of tho hawks and ow Is was the reason of it. In consequence of this the Department nlaced the matter in the hands of Dr. Merrian and Dr. Fisher, two of the
leading ornithologists of Ameica, with instructions to prepase a yeport on the subject. This they havo done and the result of their investigation which I shall give at the eud of this chapter shows conclusively that all the lawks which I have efenced to as heing bencficial to agriculture ane of the greatest possible value in ridding us of enormous numbers of destructive animals; and that they are practically innocent of the commonly urged charge against them. of poultry killing."
The following are the stomach tests to which Mr. Nash asks all reasomable farmers and others to pin their faith:

Red-tailed IIatck. 502 stomachs examined:

54 contrined poultry or game birds; 51 , other bitds; 109 mice and other animals; 37, reptiles, etc. - 47 , insects; 9 . crawfish, etc. ; 2 offal; and 39 were empty.

Red-shouldered Iawk. 220 stomachs were examined:

3 contained poultry; 12, other birds; 142, mico and other mammals; 59, reptiles, etc.; 109. insects; T. crawfish; 2 , offal ; 3. fish ; and 11 were empty.
Broad-avinged Hauck. 65 stomachs examined:
2 contained small birds; 28, mico and other raammals; 24, reptiles, etc.; 32 insects, etc. ; 1 crawfish; and 7 were empty.


SHARP SKINSED HAWK.
Rough-legged Hatck. 19 stomachs examined.
45 contained mice and other mammals; 1, lizards; 1 insects; and 4 were empty.
Sparrow Hatck. 320 stomachs examined:

1 contained a quail; 33 , other birds; 101, mice and other mammals : 12 , reptiles, etc. ; 2 H , insects, etc. ; and 2 weie empty.

Mfarsh Ifawk. 124 stomachs examined: 7 contained poultry or gamo birds; 31. other birds; 79, mice and other manmals ; 9. reptiles, ete ; 14 insects ; and 8 were empty.

fnoto fhow a onawina ir C. w. kasm.
SPARROW HAWK.
Thus it can be seen that of the 49 stomachs of the Rough-legged Hawk examined by Dr. Fisher and the 32 examined by me, in 1895, not one contained a trace of any domestic fowl and nearly everyone contained mice. Yet many people persist in calling this bird the "Big Hen Hawk" and in treating it as an enemy, when both, by law and public opinion it should be protected by every possible means. The statement as to all the other species that I have referred to as beneficial is equally corroborated by my own experience and shows how well entitled these birds are to consideration at our hands instead of the persecution they usually meet."

Owis have been subjected to similar tests; and of those birds Mr. Nash says:
"The above examinations of the stomach of our resident species show most positively that. with the exception of the Great-horned Owl, the whole family are of the greatest value to the farmer. My own experience, both in Manitoba and Ontario, corroborates this, and is perhaps a little moro favorable to the owls. for (always excepting the Great-horned Owl) I have never found a trace of a fame bird or domestic fowl in any of them."

## ...AT THE... Edintapos Desk

 $F$ courso wo livo in the most favored land on the fice of tho earth. Climatically, as in other respects, we are perfect. Kipling was guilty of unconsionable tibel when he referred to Canada as "Our Lady of the Snows." All these things are well established facts (see daily press of any date); but blizzards and other tangible ovidence of atmospheric hilarity on the eve of April tonch us in a tender spot. Being far removed from the region of party politics, wo don't know whether the Government or the Opposition is to blame for the over-supply of winter misery. Whether it is the aftermath of the National Policy or the first effects of the Preferential Tariff, we cannot say; but it is likely to engender a feeling of coldness in both parties. If tho fatmers of the nearest township to where this journa' is published will only olganizo a bee to hasten tho departure of this largesized remnant of an overgrown winter, they will receive tho heartfelt thanks of the undersigned-and a year's subscription to the Illustrated free.Tiwe suiden death of Hon. John F. Wood, who was found dead in his bed at the Queen's Hotel, Toronto, to which he hal retired apparently in good health, nttracts attention to tho great number of well-known men who of recent years have been stricken down with such startling suddenness. It is not only public men, however, who have met death when least expected. Even thoso who are not in tho habit of reading the obituary columns cannot fail to notice the large number of instances recorded in the press
overy week of death from "heart failure" of persons proviously supposed to be in sound health. In the majority of cases tho vietims are men not more than middlo aged, who might have been expected to live twenty years, at least. A careful comparison of tho nowspapers of Canada and the United States with those of Britain certainly suggests that in the former countries sudden deaths are far more frequent than in the latter. It would not be difficult to find a reason for this. In Canada, and still more in the United States, men keep going at high pressure for many hours out of the twenty-four. That they accomplish moro in the month than their more phlegmatic and comfort-loving kinsmen across the seas is doubtful. The whole day during business howirs is given to business, and business only. A break in the middle of tho day for the digestion of a leisurely consumed meal and a quict hour's reading or chat is almost unknown among the business men of Canada. A hastily swallowed unmasticated lunch consumes about fifteen minutes of the dinner " hour," the remainder of which is spent in discussing or pondering over some more or less absorbing matter of business. It is the same when evening comes, Business worries, instead of being left in the office, in the store, or in the factory, engage attention which ought to be dovoted to some healthful recreation, mental and physical. The blood which should be aiding the digestive apparatus to perform its functions, is called upon to feed tho still busy brain; and thus kept at high pressure, the whole system is subjected to a strain, the limit of which is soon reached; and lifo gues out like a puff of smoke.

Man sometimes forgives, God oiten forgives, but Ne,ure never forgives, a viola-
tion of her laws. This ancient adage is exemplifien with painful accuracy theso days when the tendency is to bestow less fare upon the systematically arranged mechanism of the human body than upon that of hast yeas's bicycle.

Tite movement for placing agriculture in a recognized position among the arts and sciences at seats of leaming is making rapid stides in different parts of the world Fiom exchanges now to hand wo learn that:
"The Senate of Dublin University have agreed to add a diploma in agriculture to the various degiees which they confer. the preliminary examination is to embrace a more limited range of subjects than the usual matriculation examinatiun, cunsisting of English, mathematics, and natuat phalusuphy. Durmg his cours ${ }^{2}$, however the agicultural student will be examined in book-keeping, mathematics, natural pholosophy, chemistry, botans, zoology, land surveymg. physiolugs , geolugs, vetermais hygrene, economie science as appled to agiculture, horticulture, and totestry:"
"Tue Diapers' Company, of London, Fisg., have offered to make a contribution of 5800 a year for ten years towards the development of facilities for agricultural educition at an important seat of learning. The only condition the company make in comection with their offer is that the Board of Agriculture shall give the scheme the benefit of its suppoit."
This is a splendid example for the drygoods men of Toronto and Montical to follow cither as an united body or as individuals.

Of course the governments of Canada, Federal and Provincial, aro all alive to the importance of extending the sphers of educational effort in regard t. matters agricultural. Speaking in the carly days of Maich, the Hon.G. W. Ross, Minister of Education in the Ontario Government, thok an advanced position on tho desinability of including in tho public school currlculum many stubects, a knowledgo of which would be of considerablo practical use to the farmer. We firmly believe that the Provincial Government is hopestly desirous of making our public
school system a moro useful thaining govand than ithers been m tho past for the embijo agnculturst. The difficuities that face a govern nent tryang to add so materially to the usefulness of the countiy's educational machnery are not merely thoso of a tochnical charac-ter-the seog ganization of the system and the provision of the necess.ry cumpment for carrying out the seform. The greatest impedunent to successful iesults for a long time to come is the apathy of thoso in whoso interests tho reform is mstrthted. In fact it is a more active impeling force than apathy, it is positive distrust.

It is a panfulieflection thatm Canada which is and must fur all tume be esentially an agricultural countis, the chadren of farmers only too ficuluently mbite at an early age, not a love for the land and a deterpianation to become successful famers, but a thorough distasto fur the sucativa of thenf fathers and a desto to abandon all personal comection with tho farm ; to wheh they give effect at the very fust opportumity. With the eye turned twwaris " somethug in the city" they pursue their studies meritoniously at sehool. In many cases tho school is folluwed by a conase at the university. still with the samo object in view; and fimally the ranks of lawyers, doctors, bank clerks, office assistants and other city wonkers, already overcrowded, receivo another influx of new-comers, whoso arrival simply makes a tivelihood more precarious than ever in those spheres.

They havo in fact deprived tho country of a certain amunt of wealth, and m nine cascs out of ten they are the first to suffer a direct and seious loss. They have spent seceraly cas m the aggregate, amil sume money, apon cyuppug thenselves edacationally; there facultes have been develuped, and with the knowledgo they have aequated they now devoto their encrgies to making a hining (!) out of pursuits which camnot bo called muluctiso except in so far as they and in the distribution of the output ol productive latior, or help to mantan that state of security for the natoon and for
the individual whenely protuctive labor can be carried on to the best advantage. Thus the merchant and the canier do not add ono dollas to the wealth of tho country as producers. It is true without them the producer would bo unable to obtain the full benefits of his labor; but without the producer the merchant and the carricr could not exist.

The producer is also dependent upon the lawyer and the doctor for cettain benefits; without them he would often suffer considerably in body and estato; but without the producer the professional man would be in a holo indeed.

Ir is almost too old and too simple a truth to bo repeated that on the direct producens primarily depends the welfare of the nation. The greater the producing power in operation, the greater the prosperity of the community as a whole; consequently a decrease in the producing power in operation results in diminished prosperity for the community; and it is the tendency of to-day to decrease tho posperity of the community that wo are fighting when we protest against " education" being taken to signify preparation for every sphere of lifo but farming. It is to check that tendency that the governments of different countries aro placing" Agriculture" among the higher branches of study in the public educational institutions. The action of the Drapers' Company, of London, is but a recognition by that body of astute merchants that the interests of the farmer are the interests of all.

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We have, on more than one occasion, dealt with tho causes which mako tor dislike of the farm in the minds of the young people of Canada; bricfly, they are the narrow limits. educationally and socially, within which the farmers as a whole have sought to confine their vocation. A generation of physical and mental strength has been lost to the land, and its potential wealth to the country, having been squandered in $n$ vain effort to procure individual riches in town or city. It is no small task at this lato hour to repopularizo agriculture. Tho hope lics in the men of the future who aro
infants to day. The intelligent tarmer who has noted the trend of migration during tho last twenty years, and who has the wellat of has postenty at hoart, will readuly grasp at the opportumties which no now offered, and which will inciease each year, of developing in his boys a taste for the study of tho various subjects, a proper knowledgo of which will notonly add materially to the success of the farmer, but place his calling on a social and intellectual level with those which have hitherto monopolized the term,"Iearned professions."

Notmina has struck us moreírcibly as illustrating the happs-go-lucky character of many farmers than the pamphlet on "Birds in Relation to Agriculture," pablished by the Ontano Government, and from which we make copious extracts elsewhere. The hawk is generally supposed to bo in the samo category as the fox so far as tho poultry yard is concerned, and the farmer decms it his bounden duty to kill every hawk on sight. But there are hawks and hawks; and the writer of "Birds in Relation to Agriculture" most conclusively proves that the Rough-legged hawk, which has been regarded by the farmer as his paticular enemy, is, in fact. one of tho best friends he has. This much hbelled bird not only does not carry off all tho young chicks he can, but satisfics the longings of hunger by relieving the farmer of such undesirable live stock as mice, zats and other rodents.

We do not desire to appear hypercritical of our good friends. the farmers, who undoubtedly lead their brethren of other countries in many respects, but apparently it cannot be demed that the Canadian farmer is, in too many cases, woefully lacking in knowledge of matters on which ho ought to be an authority. Alt the various natural physical features of the locality in which ho has lived for quarter or half a century should bo known to him; its gcological formation, its botanical characteristics, the species of wild birds and other animals that abound. Tho potentiality of such knowledgo in adding to the profit of farming
is considerablo, and tho acquitement of it does not, or should not, mean a special cousse of study after atrival at man's estate.

The aequirement of knowledge of such subjects should commenco at early childhood; as soon as a boy is ablo to tako an intelligent intetest in tho thimgs.that grow and the things that livo; and wo neveryet met $n$ boy of seven who add not evinco an interest of somo sort-not aiways a kindly one, it is true-in birds and birds' nests; in npplo trees, and tho stones with which to bring down the fruit.

ONe of the many great advantages life in the countiy possesses, and of the attractions it offers to children, is the opportunity it affords for the collection of specimens of all sorts. When properly directed, children find their most enjoyablo recreation in such work. Supplemented as theso opportunities will be in future by theoretical instruction in the public schools, the young boy on the firm to-day should never know that fecling of being mentally cribbed, cabined and confined, which has robbed tho lind of so many good masters in tho last quarter of a century: provided always, of course, that father-fiarmer proves a ready seconder of the efforts of tho Educational Department and of his young hopeful's ambition.

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In furtherance of our desire to encourago wherever we can an active interest among the young folks in the natural conditions of their country, wo intend publishing some interesting articles upon tle formation of home museums, which will contain useful and practical information on the stuffing of birids and other smallanimals, the collection of geological and botanical specimens, and on kinilred matters. Before the end of the year wo expect sufficient progress will have been mado by our young friends to justify us asking them to submit specimens of their work, illustrations of which we slall bo pleased to publish, at the samo time awarding a substantial prize to those who, according to expert opinion, shall have sent the most perfect specimens.

Ir seems to us that tho simplest way for the Americans to dispose of the Filip. pinos who won't bo "freed" as Uncle S.m interpets tho tcrm, and who will fight in a mamer ho cannot misumderstand, would be for Genelal Otis to declare a cessation of hostilities and invito all the insugents to a big ferd, at which the piece de resistance shonid bo tho camned stuff on which tho Ametican soldiers lived-and died-in Cuba. American bullets may fail to subdue Aguinallo's warriors, but American beef would ensuro ther destruction in short order.

Tire Czar of Russia's peaco manifesto was "favorably received" by the different governments of Europe, evidence of whose good faith is to bo found, we sugpose, in at determination to increase therr military or naval equepment.

In England, the idea of a "peaco conference" has entered the popular mind, and the "peace crusade" has assumed imposing proportions-nearly every day witnessing a public meeting in some part of the country, and presided over by some man prominent in the annals of his district, if not of tho country at large. And yet, " 1899 will bo unique in British naval records, for not only will the personnel reach 110,610 men-twice as many as ten years ago-but no fewer than fifty warslips of different types will enter the navy ready to hoist tho pemmant for action:-that is, 1899 will see the stupendous number of ninety-eight British warships under way; representing an outlay of $8175,000,000$." Unfitendly critics see, or claim to see, the rankcst kind of hypocrisy in John Bull's protestations of peace, accompanied by such preparations for war; but others recognize the sublime wislom of being prepared to enforce peace on those who might otherwiso feel disposed to take libertics.


## AT DENTONIA.

## VIEW and plans of the main bhrn.

4IIE necessarily cursory description of any particular department which alone was possible in our last issue, when we wele presenting
the progressive farmer desirous of profiting by Mr. Masscy's experience, unless supplemented by details of a practical and technical character. In this issue


VIEW OF SAIN BARN (EAST AND SOUTH ELEVATION).
Dentonia Park, as a whole, to our read- we shall confine ourselves entirely to ers, would not bo of much assistance to the main barn, which, we think all far-

plan $\mathrm{N}^{\text {a }}$. 1.-cross segtion of barn from east to west, showing position ON HILL SIDE.


DLAN No. 2.-BASEMENT PLAN, SHOWING PIG PEN, CATTLE STALLS, AND SIIEER PEN EXTENSION.
mers will admit, should always bo an object of first consideration.

By the aid of the very complete plans furnished by Messrs. G, M. Mitler Co.,

Architects, wo hopo to place the many advantages of the Dentoma barn clealy. before our readers.

Tho sectional view shows the four

E.
plan no. 8.-dairy floor, showing dairy, stable ploor and extensions. (I, ength of Cow Stalle Floor, 83 ft.; Engline Roon, Dalry, and Dairy Extension.

P. an $\mathrm{N}^{0 .} 4$ - - MORSE STABle aNd COACII holse yloor.
(Length of Maln Floor, 115 ft ; total length of South Wing, ko ft.)
storied building built into the side of a hill. Amongst other adventages of such a location are moderation in temperature, and tho fact that each storey possesses an entrance on the level.

The plan No. 2 on page 56 shows the arrangement of the basement containing pig pens and cattle stalls, together with a single storey extension towards the east devoted to sheep. The
main entranco to the basement is from the east side, and the driveway is of ample width to admit backing in a horso and cart. The liquid from the various stables drains to the cess pit at the south of the barn yard, whence it is pumped to a sprinkler cart used for distributing it on the lands, thus ensuring cleanliness with the minimum of waste.

We referred in our previous article to
W.


PLAN NO. 5.-BARN FLOOR.
tho air ducts. The revolving funnels which can le seen on the roof in the furst illustatation provile tho necess.uy current, and a well arranged system of pipes conducts a constant supply of freshair to all the animals on each floor. The points of diffusion which are near the mangers ate shown at " $O$ " on tho phanc. 2. The foul air is carried off by means of the clutes which areatso used for convesing fred from tho fourth storey to the different floors below.
The mixing or cooking roon for the aninals on tho basement is conveniently situated to the north of the stables, and is provided with a capacious boiler or cooker. "P." The well in tho room adjoining provides an ampite supply of splendid water pumped by windmill to a $5,000 \mathrm{gal}$, tank in the top of the building, from which all tho stalls in the building aro supplied. Tho feeding racks and troughs, " $F$," in the sheep pens are ingeniously devised. The rack or manger extends along one sido of the pen and the clover heads and other drlicato morsels, which tho mutton-makers would otherwise seatter to waste, are caught in tho trough beneath which extends several inclies beyond the angle of the rack.

Plan No. 3 conveys a very clear iden of tho arramgement of the various departments on this floor. The lonse boxes are shown at "L," tho calf boxes at "K." At " U " is the mouth of tho chute from which ground feed is received from floor above, whilo " 1 " is
tho chato through which ensilago and chop mako their descent. Tho convenient situation of tho dairy and its accessolies is apparent. " $N$ " shows tho location of the steam turbino cream separator.
Our fourth plan takes us to the horse suablo and coach house floor. At " $\mathrm{H}_{1}$ " near tho north partition of tho horse stablo aro tho feed chutes supplying this floor from above. Through " $R$ " cleancd oats aro supplied from a 19,000 bushel bin abovo; tho water trough is situated nt "G." "D" and " $E$ " on tho west wall of carriage room, represent tho air ducts from the revolving funnels already referred to. "D" supplying the dairy floor and " $E$ " tho basement. There is a similar one not shown for the horse stable.

The feed bin marked " $S$ " is supplied direct from the power grinder on the barn floor.

The barn proper (plan No. 5) is fitted with special hay caniers admitting of storafe of hay and straw in every corner to tho very roof.
" $\boldsymbol{A} \boldsymbol{d}$ " are the large chutes for conveying hay and straw to the horse stable. They stop at the ceiling of that floor. They are connected with the cupola on the peak of the roof where they emit the foul air from below.
" IB D" and "C C" are similar chutes doing similar service for the basement and dairy stable floors respectively.


## IN THE HOUR OF REJOICING.

$\mathbb{I}$T was Christmas night in Arleigh. and the ohl Manor Houso was ablazo with lightes, for Syuiro MoreIand was kecping Christmas according to tho best tratitions of his ancicat home.

Withont, the biting wind was whirling the snow flakes into dufts agamst the corner-stoncs, and the darksomo landscape was fast becoming obliterated by the whiteniar wintry sheet. "An old-fashioned Christmas truly," the grood follis were saying as they made merry in the comfort of their hoines.

Within the oak-lomaned hall all was life and gaiety. Tho yule $\log$ blazed on the great hearth, and the merry, gladsome louse party, bightened by its cheery glow, had seated themeelves around attentively, for the old squire was deep in tho recital of the Christmas vagaries of the long-suffering fammy ghost.
Suddenly, as tho story-teller was leadiug up to tine crecpy, hair-raising denouement. and the fire-lit, excited faces of his hearers proclaimed the intensity of their harrowet feelings, his narration was arrestel by an weird, whcanny wail. which came faintly fiom tho darkiness withont.
The startled women gave vent to a chorus of frightencel shricks, and tho little children buried terrified faces in their mother's skirts. Holding up his hand to enjoin silence, the squtire shambled noisclessly to the casement, and as. obedient to his wish, they listened, tho strains of an old-time carol, played on a violin, camo strangely through the window.
The squire's chucklo was contagions, and in a moment tho lanehing crowd had gathered round him and were peering into the eloom.
". Tis blind Beppo, the wandering Italian,"he explained, and lockoning to tho lad who accompanied litm, he conminded the shivering pair to approach.
"Come inside, my friend," he ceich, cherrily: "you shall play to us in cosier surroundines than the pitiless suow."

And gently grasping his arm, ho led the fecble old man to thin fire. As tho genial warmth relaxed his benumbed fingers ho stretched forth his hand for his instrument.
"Thank you, sir." ho mumbled through his strasching beard; "you are very cood. I will mako musicfor you-I will show sou that old Nicolini has not forgotten how to play!n
"So you shall!" exclaimed tho squire. impulsively. "But to-night you shan! peitoran on a fitale such as you have never before handled! Dora, my chald. hand me Uncle Golfrey's imati. 'Thete. old virtueno." he contmued, as hedeposited the teasure in the wanderer's hands, "make us your music out of that."

The ,ged musician ran his fingers lov: ingly over the precious instrument,and even as he did so he stated ats if in appparent wonderment. With shaking hand he drew the bow slowly across the strings, prodacing a sustained mellow chord, whach ended abruptly as it dropped from his fingers. The wondering listeners who had gathered round expec-tantly-for the repatation of this wandering musician had become a bye-word for miles round-stared with open-eyed astonishment as they saw him press tho fildle reverently to fis lips and fondle it like a child, the whilst he uttered mandlin confilences to it in his native tongue.

The little lad-the companion of tho old man-picked up the bow, and replaced it in his hand.
"What ails thee, grandfather?" he questioned, solicitously.
"Sir." quavered tho old Italian, disjointedly. his sighteless eyes staring round the room as if in muie entreaty; "to whom did gou say the fildle belonged?"
"To my daughter," repliei tho squire. surprised at tho guestion. "It was begueathed to her by my wife's brotherber unclo Godfrey. But why do you ask?"

The ohd man did not reply. Fio seemed dazed and incapable, and his mind seemed to be wandering. Mechanisally his fingers wandered caressingly over tho instrument in his trembling hands and his troubled face told of some disturbing recollection.
"Come. Beppo," urged his host." pull yourself tozether! Woare waiting for your inusic"

Tho blind fidaler obeliently raised the instrument to his chin; and, even as the first notes of a plaintive melody burst from the glorious masterpiece, and tho delighted audience listened rapturously to his inspired music, tho darkness that enshrouded his blindid eyes was dispelled as if by a miracle.

No longer was ho in a stranee. English homestead playing for his daily bread, but back once more in his old home.

In all sunny Italy thero mas no happicr man than Beppo Nicolini, tho professor of music.

Though poor in this world's poods, ho accounted himself rich indeed, for he was the fortmate possessor of two treasures.
One the love of a dutiful and bean-tcousdaughter-priceless ; and the other. his precions Amati-the envy of all his aquaintances.

His wifehad died in the bequeathing of the child to him, asse he vorshipped her with a lovo that passed all understand-ing-indefinable. As she had blossomed into lovely womanhood slie had leerome the sumshine of his existence. He lived but for her.

When the duties of tuition wete over for the day, the matid would bing lere footstool to her father's knee, and ho would play, as the humor took him, music that transformed th; shabby surroundings of his scantily-funished apartment into a veritable palace, and banished from the troubled exind the vexations and cares of poverty tike the touch of a f.tiry wand.
Then, one summer's dag, ea ne the English "milor" to blast then littlo Elysitm for ever.

He had introduced himself t? the maestro: at the caburet, and, having expessed a wisk to hear his musir, the flattered performer had invated him to his home.

It was small wonder then that gay Godfrey Wihlibore cume again and again. Fis engagng manners and captivatit gaddressdisan med suspicion, and tho blind, trustful father. believing ho camo to listen to the music, welcomed him nightly as a son.

So the dream progiessel for maybe a month, with never a clond in the brightness of his little heaven; and then-

One eveninf, when he veturned from the orchestra, he was surprisid to find his chuld not at home to welcome him.

Thinkines she had but slipped out on some necessary eriand, he sat down to his frugal supper. That aftenoon tho director, in spite of his failing eyesight. hail offered him the coveted post of first violin, and he had hurried home from the theatre, bursting with supressed excitement, eager te tell his littleTessa tho jouful news. Ife was disappointed that slie was not there; but, as the thoucht of her childish happiuess when at last he should tell her struck him, a smile of aleasure illmminel his face.

Still she did not return.
Impatient at her protracted absence. he strode to tho cabinet where he kipt his beloved fildle, intending to divo avay his restlessness with his music ; but eren as he throw open the door ho stagaered back, and clutched at the tablo for styphort.

The faddlo was not there.
Rubbing his cyes in incredulous amazement ho stared again, and then
within the cabinet, in the place whero tho precious Ciemonn ustally reposed, he perceivd a slip of paper. Seizing it the held it up to the light. and as the hideous truth burst on has bowidered brain the paper flutteled from his nerveless fingers, and ho fell forward to the floor in an apoplectic fit.
She had gone away with Goditey Wildbore, the English adventurer, ant had taken the fidile with lies.

Six months later the stiscken father was discharged fiom the hospital, bent and old befose his time, with locks as White as drisen snow, and hopelessly blind. The blow had paralysed his nerves. But though all his sufferings and anguish the one thought had dominated his mind that site would return to him.

For a timo he eked ant a miscrable existence by playing in the sticets of the city. Then, one mght, when the retmned home, he had found her waiting for him. She had come back, as he knew she wouki.

Mepentant, disillusioned, ami brokenhearted, she had becged his forgivencss. and he-what could ho do?-lad taken the soiled dove back to his heart.
Two months later the close-drawn blinds told that the all-wise mercifnl Father had taken loome another erring mother; and the feeble wail of an infant was head through the rooms that were once binght with langliter.
As the lad crew up the determination took hold of tho old man that ho world scek his father and fosce from him reparation by an acknowledement of his offsping; and with this idea, and the thought that he should zerlaim his beloved fiddle, he had journeyed to England.
For nearly three years he had pursued a fruitless scarch, wander ing roturd the country under the guidance of his faithfill, sumy-eyed companion, in a vain endeayor to track the destroyer of his life. Infirm and well-nich sjent, it was but his indomitable resolution that kept himalive; and now at last, on this wild Cliristmas night-here. in the house of this stranger-his quest had ended, for Gotfrey Wildhore had gone to the great Beyond, and he had found his beloved Amati.
Outside, the Christmas beils were rine inf "peace on earth"; but within, the listeners sat entranced-enraptured by the wonder of that inusic.

And then. sudidenty, tho music ccased. and the bow stayed mute on tho quivering string.

Bravo. Beppo! Why !-Good Hearens! What's the matter? Herel Jack. Tom!-the old man's dead !"

Woman's Life.

## ENCYCLOPGEDIA OF FACTS AND FIGURES.



Parrots cost only 1.1 c . each to th:o dealers in South America.

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The avenage height of the homan race is. for men, 5 ft . 6 in., fot women, 5 ft. 2 in.

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It is estimated that of the whole popitlation of the flobe, about 99,000 die every day.

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There are about cleven million Jews in the world, hali of them under lkussall jurisdiction.

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Is 1398 there were fifty-thee Saturdays. a fact of interest to those haviug to juy weekly wages.!
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Tur oflest national fian in the world is that of Denmarh. which has been in use since the year l2to.

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Ture Japanese adilress their Ietters the reverse of what wo do, writing the country first, the state or province aext, then the city, the street and number, and the name l.sst of all.

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It may not be generally known that the original wea of the Chinamans's pro tail was that it formed a convemient hamile by which, one ding: he would be Ifted up to Paradise. This curious belief is still to bo found amortg the natives.

Shat.t,fet Promife in the Wort.d.The inhabitants of tho Andaman Islands am said to bo the smallest race of peonle in the world. The average height of a full-grown Andaman is less than 4 ft ., and : 0 anthropological experts who recently visited them found but fow that weighed over 75 lb .


Every Day Sambath Somewhere.By diffeacnt mations every day in the week is set apazt for public worshipSunday by the Christians, Monday by the Giecks. Tuesilay by the Persians, Weduesday hy the Assyrians. Thursday by the Egsptians. Fidlay by the Turks. and Satuilay by the Jews.

## ***

False Teeti Mabe of Paper.-Dentists in Genmany are using false teeth made of paper, instead of porcelain or mineral composition These paper teeth are said to be very satisfactory, as they do not break or ehip, ate not sensitive to leat or cold ot to the action of the moistue of the mouth, and are very cheap

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Late Mouns and Olid Age.-A German doctor, who has been collecting information about the habits of loug-lived persons, finds that the majority of those who athained old age indulged in late hours. Eight out of ten persons over cighty nerer went to bed till well into the small hours, and did not get upagain till late in the day.

Is the reign of Filwadi IIt., there wero at Bristol. Encland. three biothers, who were eminent clothicrs and woolent weavers, and whose family mame was Blanket. They were the tirst persons who manufactured that comfortable matarial which has ever since been calledby their name, and which was then used for peasants' clothing.

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A CLEVER Workinan in a cutlery factory in Sheffield, England, has recently made a dozen pair of shears, each so minute that they altopether weigh !ess than half a grain. That is about the weight of a postago stamp. Each pair was periect and would cut if sufficiently delicato material could be found. Lying on a piece of whito paper, they scemed no larger than fleas.


EDITED AAD SELECTED EY MAS JOHN HOLMES.
Currespondence in inrted on all matters pertainmg
 of domestic bice. ar ar interest to sumen weier
 thiodepmathient.

## One Sad Day.

One sud lay when the sun'zeshld ermen Jeweltedthodescilate, dreainy wezt.
1 came with a hurdea and latilt down
Under tho tilies mah lezuce to rest;
And necplus: : leat it and went mas way
Whatho twillkht whisperlug: "Goat kuons
One sucet diny-It mas long ago,
diul thorny the pathis ins fey $i$ hase presed
Shace whll tears and heace I lafdit lon-
Sout of my sout aud hice of uy trmst

There cones with a wors frum the enniots weat
The zane atweet ofecthat I hearithat din-
The in inght whigicring: "God knows inst:"

## FOR PLEASURE AND PROFIT.

## Now Canvas Work.

$T$IIIS new work is done on doublethread cancas, and tapestry wools are the best to use on it. Intg needles with blunt points and large eyes


Eig. 1.
should bo uscal, and the canvas chosen not be of too fine a quality. Drapsing wool in and out of canvas which is too fine for it does not by any means improve tt. The work done in this particular stitch - sometimes called Roumnnianstitch isextiemely effective, as it has a very laised appearance.
The colors uscel in Fig. 1 ase three shades of peacock blue used altermately, and in betwees eath row is a ling of silk back-


Fio. 2. stitching, which Fives a very pacty appearance to the lines, and marks them off. Of course, any colors can be selected, and lines in different colors are often very effective; the stitching be-


Fic. 3. tween must be dono in accordance with vour colors. Very often black is $0 \times-$ tremely effoctive, and throws up tho coloring.
In Fig. 2 you seo how the stitch is worked. Bring out your the cad on the left seven holes away from the other side of the line. You must always have an uneven number, so that the centiostitch can be taken in a middle hole. Look at Fig. 2 carefully. and you will sce the first part of the stitch. Draw it though, and then put your needle in as seen in Fig. 3.

Fig. 4 shows you the way the backstitch is done all along the line.

This work is good for cushions, mats, footstools, etc.


Fic. 1

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## THE DOIAAN OF THE DRESSMAKER.

ITHINK it is hardly necessary to remind our reaters that the Home Dressmaker is a gieat favorite here; for that most estimable member of our sex I havegencrally had some sugestion in this page. There are occasions, howeser, when the most steadfast do-all-the-sewing-at-home housewifomay conscientiously fall back upon outsido "professtonal" help. In most Canadian zillages or towns there is to be found a small working tailor who will economically construct a smart gown if given a good design. It is to such a man you can with safety- to your purpose, and your appearance later-entiust the creation of thocoat and skitt depicted in our illustration.

The skirt is cut in three breadehs. From the seam of tho fiont ono start straps of hight cloth, brought dagonally across the font to thohem, where they are neatened off by smart butcons. The coat has a simplo enough foundation being cut like any ordmary single-ureasted specimen, though the cloth strappugs delude tho eye and give an air of complacation to the making. From umier thofionts of the lowest strapping come tabs of the light cloth, which fasten over alternately to either front, tho jacket being invisibly secuacd by hooks and eves down the front edige under the straps. In bluo and mastic clotiss thas costume should bo very smart wear, or in brown and putty equally so.

## Do You Envy this Lady?

An Afghan beauty has blue-black hair plastered stiff with gums, and either worn in various forms on the head or plaited in long braids down tho back.

Tho margins of the ears aro pierced and decolatell with row of smadl silver rimgs, while large rings hang from tho lobes. The neck and breast are tattooed with little figures of stars and flowers, and the lustous black eyes are enhanced by coating the lads with black antimony. The cheeks are rouged and dotted with hittlo round moles of gold and sitver titisel, fastened on with gum. A loose muslin or silk jacket of yellow, blue, or red hangs below the waist, and wido thousers of silk or other coloured materials complete the indoor costume. On going out, the lady wears lescings of cotton cloth, gartered at the knee. shoes of red or yellow leather, and a boorkaposh or cloak. Some ladies wear horsehair veils. and others fasten vinaigrettes to their forcheads which contain attar of roses or other scents.
'Tis Never Quite the Same Again.
An humble cottage 'neath the bill.
Where ehitdren laugh and rompat will-
With marents' tender love abd care.
How could their lises be etse than falr?
oh, let thembextad today
For swift the years will juas anay,
Abd when they're women temm, and 1men.
Twill never be the same 2bain.

Topether all their tat: are donc.
Theirinteresteareallasonc:
The selfame bourd tlics gather round,
And at ono alter all are found;
Tho same dear sonf, the eame dear prayer, The same old Bible all may share. Hut when they leave the home-oli! then, 'Tis never gulte the saine agata.

Ah, well ! perhap 'tis better so. That deeper meanings we may know; Thero is no lose, no ming, That mavy not bring its own sweet gain And tat the blexced land above. There'll be apain one home, one love. Then one In licart nud one in namo, At last 'twill be the same.

Mrs, Frank A, Mrect:

## CHIT-CHAT.

## The Value of Exerclse.

$\mathbb{T}^{11}$HE woman dors not exist who las not some wish, howevet.small, to appear to her lest advantage in the eyes of the work, hnowing so well that "a good aphearause is a far letter of recommendation" All eamot jressess icgular featues amd umivallen complextons, but every gul may obtan a fiesh, clear skin without the use of deleterious cosmetics by takang exercose. Kegular watks, sharp, and not too tong to be fatigning, we the best producers of rosy cheeks known When it is amembesed that the pink tint so much allmued is caused by good cureulation of the blood, it stands to teason that this cinculation must bo encomraged, and that any heabh exencise, whether it bo walking, cyelatg, ol horse-rideng, bings about the desited result.

## Giris Shunned by Men.

These are many gits whonic shumned by men. and for the most part the fault lies with themselves.
The gitl who never exercises herself to be agrecable, muless she can have evengthug het own way, is one of them, for there is not a man alive who will give way in everythng to a ginl.
The finl who scolds is another type; she may be peifectly food-tempered, but she has contracted the scolding habint, and so she is left alone to scold at lier pleasure.
Then there is the pull with the haughty mannes and cold stare No man dares to make love to her, becauso there is nothing whatever tolove in her. So the ginl scowls at what she considers their bad taste, utterly ignormg the fact that her own foolish conduct is the sole canse of their neglect.
Another girl without a lover is tho panfully shy maden She likes to see men at a distance. but the moment they draw neat she dives them hack with embarrassment They retne simply out of pity, secing her distress and awhisard bashfulness.

Last on the list comes the girl who always has something smart to say nbout everyone she sees, ridiculing people in order to bo considered ciever, hattle hnowing how men intensely dislike to hear her pulling everybody's character to pieces for their amusement.

## The Secret of Pretty Hands.

The woman who would have metty hands should follow these disections:Wash them in wam water with pure suap, and oceasionally a litrle oatmeal. Dry them very thotoughly. After tho niphat washing rub pue cold cream tuto them, and don loose, fingerless whate kid gloves. Never ro into the stheet withont gloves. Wear ploves wheh fit easily. 'l'ight ones dastore the hands. T'wice a week manicuat the nats as follows Sonk them in soapy wam water, scrul with a nallurush, and clean with an orangewood stick. Piess back the shim at the sides and lase with the stick. With very sharp, cuved mancure scissons cut off any hang-mails or diy shin. Clip the nails into an oval shape. File them smooth with sind-paper If they ate melmed to be bittle, sub a little salye on them. Wash again, powder. and polish wath chamois, and wasl: once more to remove any traces of the povider. Every day the mails should bo rubbed with lemon juice, which discourages the growth of the skia at the base.

## ** <br> Wooing in Lapland.

When the young Laplander is in lown with a ginl, he nud she rum a race; he os heavily handicapped so that she may wim if sho chooses, nad if she outrums him he camnot propose again. Of course, she suffers herself to be overtaken if she cares for him; but the consent of her parents must be obtaited before she can be married. The law of the land is very stract on this point, and in olden times the man was subject to capital punishment if he married without the consent of the gul's parents. After the Laplander has chosen a bude he sends her a pesent of a cirdle, a ring, and a quantity of brandy; he goes as far as the door of her hut, but temains outsude until invited to enter, when a bumper of brandy is offered to the girl's father; if ho drinks it it is a sign he consents to tho masrage, and tho young lover then momises to give the girl some clothes, and pass a sum of money down on the spot. 'This, of course, is a 1 emnant of marriage by purehase, which, in mimitive times. succecdel marriago by capture. Banns ate published once in Lapland, and the marriage ceremony is very short. Tho bride wears her hajr looso and bas a gold band round her head. Her presents and her dowry are generally reindeer; and sho and her bridegroom remain with her parents a year after marriage.

## HOUSEHOLD HINTS.

To wash Soiled Wicker Chairs use staong brine.
After the Water has been Strained from Boiled Potatoes they ate much mproved by lemg well shahen. 'I'hes gives them a white and floury appearance.
To Preserve Ferns or Grass in the:r matmal colons phace them between sheets of blutting-imper, and leave them under a heavy weight for for ty-cight hours.
To Remove Smoke Stains from a whtewashed or painted ceilung wash with water in which a handfut of soda has been dissolved. The dust should be finst wiped off with a soft cloth.
Another Recipe for Cleaning Copper is to wet a coarse cloth in hot water, soap it well, and apply to the copper. Then spainkle powdered borax over at, and polish with a dyy cloth.
To Preserve and Soften Boots and Shocs casten oil should be rubbed on to the leather about once a month. If done at night the shoes can be polished in the usual way the next monning.

To Clean Varnished Paint.-Take a small quantity of tea-leaves, pour hot vater over them, let them steep for half an hou, then drain through a fime seive, and use the liquor for cleaning the paint. It should be rubbed on with a soft rag.

Cheap Thimbles Should Never be Used, for they ane often made of lead or brass, and their use is very hikely to result in senious inflammation and swelling if there is even a slight scratch on tho finger. Silver or steel thimbles are the safest to use.

Tu Remove Coffee or Milk Stains from silk, woollen, or other fabucs. paint over with glycerine, and then wash with a clean linen rag dipped in lukewarm rain water until clean Afterwards press on the wrong side with a warm iron as long as it seems damp. Delicate colours are unaffected by this ticatment.

New Stockings and Socks should always be washed before bemg worn, as the "ashing shrinks the threads and makes the socks wear as long again, besides preventing the feet being injured by the coloring When worn before washing they stretch out of shape. nud can never be restored to the original form.
The Best Way to Remove Varnish is with strons aminonia. which should be applsed with a small brush, so as to get it into all the crevices of tho wood. Let it soak in for some time until the paint and varmsh are removable. Sometimes it is necessary to repeat tho application more than once. The loosened paint and varnish may be scraped off with some sharp steel tool.

SIMPLE RECIPES FOR TASTY DISHES.
Flaked Hominy Pudding. - Requised: 3 tablespoonfuls of thaked hominy, 1 pint of milt, 2 tablespoonfuls of castor sugar.

Method. - Mix tho hominy witha hittlo cold malk, boil tho amamder and stir in tho hominy, and cook thll it thickens; add the sugar, aud pour into a gicased pe-dsh; bako fur half an hour. One or two eges may bo added of a richer padding is acquited.

Mackerel Fillets with Caper Sauce.-Method.-Fillet the mackerel, cut the fillets in halves ant place them on a buttered baking-tin, cover with buttered paper, and bako them for about half an houn Dish them in two sows. Make some caper sauce by adding three tablespoonfuls of choppen capers and a desentsjoonful of vinegar to a phat of melted butter; pour this over the fish, and serve very hot.

Fish Pie.-Required: Any cold fish, 2 ozs. of butter, two teaspoonfuls of athchovy sauce, cayeme pepper, mashed potatocs.

Method.-Flake the fish, scason with anchovy and cayemne. Put it into a well-buttered piedish, put some butter sverit, and cover with a thick layer of mashed potatses; bake for about 15 minutes.

Lemon Pudding.-Required: 6 ozs. of bread-crumbs. 1 pint of milk, 1 oz. of butter, 3 ozs. of sugar, 2 eges, 1 lemon.

Method.-Boil the milk, stir in the butter, and pour it over the bieadcrumbs; add the sugar and grated lemon-rind, beat the egess and add them. Put the mixture in a buttered piedish. bordered with pastry, and bake for thiecquarters of an hour.

Onion Soup.-Required: onions, 1 oz . of butter, a dessertrspoonfal of rice-flour, $i$ tenspoonful of powdered sugar, thickening of butter and flous, 1 quait of water.
Method.-Cut the onions sinall, fry them in the butter, mis the wice flotur with the water. add the onions, pepper, sait and sugar, simmer till tender. Thicken with butter and flour. Rab soup through a sleve. Spanish onions are best for this soup.
Lobster Patties.-Required: Minced lobster, white sauce, a little anchovy essence, lemon juice, and cayenne.
Method.-Line the patty-pans with puff paste, and filleach with flour ; cover with: paste, brush with egf, and bako a nice light color. Mince the lobster, mix it with a little white sauce (bechamel), and the other ingredients. Stir over the fire for five minutes, remove the lids from the patty-pans, take out the flour, fill with the mixture; replace the covers.

"I love Goul und littice chidiren."-.Jiav l'ut.

## Dlck's Surprise.

Drek was a gieat "bird dog." Mo was naturally of a good disposition, but - Evil commanications corrupt good mamers," and following tho lead of a ne ighton's cross dow, Diek fell muto ono bad habit. At sight of a wandesmg pussy, he would ty after it with such an uphoar that the froblened creature would shoot up into the nearest thee, with her tail like a teather boa. It was with unch missiving, therefore, that I one day accepted the gift of a pretty, half grown blue and-white cat.
Cutter had been arsed ma shed behind agroceny, and had seen no dog save an old toothless cur, with whom sho hat been on the most familiar terms.
In fact, Cutter's gieat characteristic was tastfuluess. It seemed as if sho knew nothing of bad treatment, and so knew nothng of fear. Accordingly, when lhek found her on a chair in tho house, and stated for her with a terrifying bark, whe simply kepi on washing her face. Hestopned evidently puzzled. and obeyed nt once when I ordeced him out.
But ofter came the surprise. Dick Went to slecpon a lage rugin the sittingroom, after cuiting lumself up so that there was a little vacant circle between his body and has legs. The cat, who had been playing at my fect, grew tired, and looked about for a sleepma-place.
Suddenly she spied Dick, and her indecision vanshed. With the greatest deliberation shecurled herself up in the ciscle of his legs, and went to slecp. I sat looking at the pretty picture, more interested in the outcome of the scene tham in my book.
Presently Dick awoke. Me raised his head lazily, and was about to drop it ughin, when he caught sight of the cat.
I sliall neyer forget the comical look that came into his eyes. No human combtemance ever expessed utter astonishment mone plainly than Dick's. For several moments he gazed at the eat, as if donbting the evidences of his senses, too much bewildered to bark. Then ho slowly reached over and nipped the cat's car.

Cutter gavo he head a little shake, as if to dislodge a ily, nua siept on. Then

Dick, who seemed to bo experimenting. Have the ear a hader mp. Thas tmo Cutter started out of her sleep, mased her head, compnehembed the earese of her tionlde, promptly claned the dog's nose with one little paw, and sthaghtway resumed her sleep.

For thenext five minutes Dick's faco was a stuly, as he lay looking at her.

Then, evidently giving up tho puzzle, he lay lown agan and slept too.

Aftel that there was not the least fear that Dick would hut Cutter. Not that Dhek seemed to develop any decided affection for her, buther beifect asswance in clmbing over him, slecping on him, or phaying with his tail, seemed to "stump" him, as our boss sum, and he submitted to hel fiendly familaritues with a very fimny ar of wonder and per plexity, but always wathouz demur.

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Eliza W. Durbin.
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Tagged In the Wrong Place.
Sometinse more than good intentions goes to the successful handing of a bicycle. At a paity near Liverpool, England, to which many guests rode on thenr wheels, the hostess mado claborato atsangements for tho caro of their machines, and a sy stem of ticketing, similar to that in use at hotel cloak-1 coms, was adopted, each cychst being provided with a check ticket.

The housekeeper was intlusted with the care of the bicycles and the issue of the tickets, and as they anived the machines werecarefully stoned and labelled. so that there would be no difficulty when they wero requixed agam.

But the housckeper was not a cyclist. and did not understand the mysteries of the pueumatic tre. She pimned the tickets on the front tires of the machines where they could be best seen. taking pood care that the pins were stuck well into the tires-and the cyclists, one and all, walked home.

## Deserved Rebuke.

A Stony is told of tho way in which a Massachusetts clergyman, long ago dead. once reploved a young man in woids both apt and stinging.
The young, man with a heartlessness which nothing could excuse, whispered to a friend a comment on a poor cripple who was near him in a ciowd.
"You'll find his case in the Bible," ho whispered, none too softly. "In the twenty-sixth chapter of Proverbs, it says. The legs of the lamo are not cqual.'"

The clergyman heari, and pending
the gaze of o pair of piercing black eyes upon the whispeter, he said elcarly, "You would do well to zemember the last clauge of that same verse, volugg man ; it reads, 'So is a parable in the month ol fools.'"

## Young Shafter's Lesson.

The Clevelani Lealer gives the recipo by which Geneal Shafter learned selfehance, saying that the story is told in the officer's own words:

Once, when I was a boy at school, our teacher called up the class in mental arthmetic, and begat puttmpquestions. begiminf with the pum! at the head. 1 stool somewhere near tho middle, and next below me wats a boy who was thee years older, amt considerably ahead of me in our various studres.
" How many ate thirteen and ninerudeight?" asked the teacher.

One after another the bojs and girls huessed and faited; meantime I thought it out. 'Pho question had just got to me, when I heand the big boy, who stood next, whispering, apparently to himself:
"'rwenty-nine, twen-ty-rume, twenty-nine."
"Well, Wilhe," said the teacher. "let us see if youknow. Comenow be mompt." 1 cocked my head on one side. and said tammphantly, "Iwenty-mine!"
"Next! How many are thinteen and nino and eight?"
"Thirty,"said the big bov below.
That was just what I had firured it to he, myself; and I made up my mind then and there. to depend on my own judgment for the inture. Ever since when I havo - anything to do, and I havo figused out what $\bar{I}$ thought to be tho best way of doing it. I havo gone nhead, semembering wien people criticised, or tried to throw ine off tho track. how that big boy mado a fool of mo in the mental alithmetic class.

## Without Doubt.

A bight gul in one of the N.ow York puble schools apphed to her teacher for leave to lee absent half a day, on the blea that her mother had veceived a telegram which stated that company was on the way.
"It's my father's half-sister and hor three boys," sand the pupil anxiously, "and mother says she doesn't seo how she can do without me, those boys always act so."
'Ihe teacher refered her to the printed


HtUstayto tonoon mews.
A GIEEAT TEMきTRIIUN.
"Catel me, Meselcurs, If non cats" Master Nixtilrrel shoutct:
"Juant tway. Slrs. that's vour plan, butie jecred sud touted.

Till noor Fido, Mough, and Spot, Tireve of futles seratelituk.
Fomed that Master Ayuirrei was not Wurth alac palits of atchling.
list of reasons which justify absence, and askel if her case came under any of them.
"I think it might come under this head," said the ginl, pointine as she spoke to the words, "Domestic affliction."

## Was He Homestck ?

A fourtecn-year-old hoy, whose devotion to his widowed mother is a pretty thing to see, was sent to a peparatory school in a town which is nearly twentyfour hous journey from his home.

He arrived in the lato afteinoon. Eally the next monning ho wate the following letter. whech has mother receved as quickly as the mail could deliver it into her fiands:
" Dear Ma : I'm not a bit homesirk, but I should thank you maght writo to a fellow once in .while!
"Your affectionate Tos!."

## Ride On! RIde On!

A cyctist who stopped at a villago inn boasted ahout his abhties as a rider to such an extent, thitt the landlod ver tused to make a wager with him.
"I.ook hese mister", sand the innkeper, "you can't ride ap and down this road till the church elock strikes four"

Done!" said the cychst. "It's just 810 now "; and the next minute he was speeding down the road.

After about an hour's riding the cyclist shonted to ono of the bystanders, of

Whom many had assembled: "I say, has the chumeh clock struck four yet?"
" No. you idiot," was tho blunt reply. "Why, our church clock never strikes at all!"

## Another Little Whistle, Please.

"Gsonoe, George, mind; your hat will be blown off if you lean so far out of the window !" exclammed a fond father to his little son who was naveling with him in a zailway carriage.

Quickly smatching the hat from the head of the sefractory youngster, papa hid it behind his back.
"There, now, the hat has gone!" he cried, pretemding to be angry

And George minediatly set up a howl.
After a time the father immarked :-
$\because$ Come, be quict; if I whistle your hat will come lsack agam.' Then he whistled and replaced the lat on the boy's, head. "Thete, te's back again, you see."

Afterwards, while papa was talkiag to mamma, a small shrill voice was heard saying;-
" Papa, papa, I've thrown my hat out of the window! Whistle again, will jou?"

## ALL KINDS OF yOUNG FOLES.



Mns. Foga: "Yon havebeen a naughty bos, and I shall have to tell your father." Jomsny : " H'm! Juse like a woman! Can't keep a seciet."

Teacher: "Did any of you ever sco an elephant's skin?"
Bright Bor " Please. sit, I have."
Teacuer: " Where wasit, my boy?"
Butaits Boy " On tho elephant "sir."
"On Georgic! Who opened tho canary's cage?"

- I did. As you told mo a littlo bird was a-whispermg to $y$ on when I was naughty, I knevit must bo hum as thero was no other hittle bind about. So $X$ opened the cage, and the cat's eaten him. That's wot he's got for splitting on me!"

Docron: "Well, my fine littlo fellow, you have got quito well again. I was sure that the pills I left for you would cure you. How did you take them-in water or in calse?" "Oh, I used them in my pop-gun."

Boy: "Pleasogivemefive-cents-worth of castoroil, and give me shoutmensure, too."
CuEMistr "Short measure? Why?"
Bos: "Cos I've got to take it myself."

Jonnxy: "My father's a policeman; what aloes your father do?"
Jissiy: "What ma tells him."
Tracher: " What happens when a man's temperature gocs down as far asit can go?"

Smart, Scholar: "He has cold feet, ma'am."

Dashaway: "You said your sister wilh be down in a munte, Willie. That's good nows. I dudu't know but what she wanted to bo excused, as she did the other day:"

Whitus: " Not this time. I played a trick on her."

Dasitaway: "What did you do?"
Wifitie (trio umphautly): "I said you wore, another fellow."


## In a Lion's Den.

As owner of menageries I have made it my business to qualify for almost any vacancy that might occur among my pelformers, and eventually I essayed the sole of hon-tamer under the tutelage of the celebraterl Franconelli. Strange to say, he, though featless among wild beasts, was the most arrant coward before threatening man.

I first entered a lion's eage with him at Vincennes, Indiana. In the den was Kichard IlI., a large and fierce African lion. This was at an afternoon performance and not a vely perilous venture for the brute was afraid of its trainer, and noticed my pesence only by a long growl.

Emboldened by the plaudits of the audence. I iesolved to enter the cage alone at the eveming performance, and Franconelli assented to my proposition.

When, amid an outburst of music, I swung open the grated iron door and entered, the fierce Numidian seemed to pay me not the slightest attention; but foitunately for me, a blazing furnace containing red-hot rods had been placed under the cage!
The lion scemed to notice my presence even less than at the afternoon performance, and growled only when 1 patted its huge head. But when I began back. ing towaid the exit, the great brute almost imperceptibly began to raise its body fiom the floor, and the next moment huled itself full upon me.
Down I went and must have been killed hat not my men with the red-hot itons forced the savage beast to the farther end of the cage, while I emerged with a tattered tinsel jacket, two severely lacerated shoulders and shaken nerves. Though the occurence was valuable to, me in an advertnzing way, I never again' ventured into a lion's den.
The next day Franconelli entered the cage of Richard III. as if nothing unusual had occured. He was a remarkable man, who habitaally entered the dens of strange lions without a moment of preparatory aquaintance, but he was attacked by a caged beast at last.
Our canvas was then stretched in the rity of Havana, prior to our departure for the United States. Everybody was well, money had been made, and the menagerie seemed likely to return home in good condition. But a day or two before our departure Richand III. appeared to bein an angry mood. This worried me so much that I urged Franconelli to "dope"-that is, drug-the fierce beast before each performance, he only lauglied and said he feared no lion in captivity.
On the last morning in Hayana the

Numidian was so "ugly " that I besought Frauconelli not to enter the creature's den that day; but he insisted on carrymg out his contiact. Then I cndeavored to " dope " the lion, but he refused to eat the drugged meat.
It was with dread impending evil that I saw the fearless Frenchman appear in the ring, and bow with courtly grace to the large afternoon audience. Bravely he swung open the door and entered the cage, to to giected with an awful coar by Richard III., who at once arose and lashed his sides with his tail.
I instantly moved to the edge of the platform, beneath which 1 had concealed a rifle.
Fianconelli, calm ns a summer's morn, advancel. The great hon wrathfully backed to the farther end of the cage. and my employees mepared to control him with red-hot arons.

The intrepid traner kept his eyes steadly upon Richard III., and omitted his ustal graceful salute to the audience preparatory to leaving the cage. Then ho stealthily began his retieat backward. He had made but two steps when the huge, tawny brute sprang upon him, knocked him to the floor, and buried ts cruel faugs in his throat. While the attendants pressed the red-hot inolls ineffectually to the lion's head and sides, I raised my riffe to my shoulder, took hasty aim at the heart of Richard III., and fica.

The grent brute rolled over on the floor. When woopened the door of the cage Richard IYI. was dead, but alas! so was poor Franconelit !

The audience was wild with excitement, and shouted vociferously. Had they been Americans a panic would doubtless have ensucd; but to the Span-ish-Cuban crowd the tragedy was simply a magnificent performance. Sadly we buricd the brave Franconelli in the suburbs of Havana, and wath sone hean ts left the Pearl of the Antilles.-Das Rice in the Youth's Companion.

## Curlosities of Our Calendar.

There are somo curious facts about our calendar. No century can begin on Wednesday, Friday, or Sunday. The saine calendars can be used every twenty years. October always begins on the same day of tho week as Jannary, April as July September as December. February, March, and November begin on the same days. May, June and August always begin on different days from each other and every other month in the year. The fi.st and last days of the year are always the same. These rules do not apply to leap-year, when comparison is made between days before and after February $29 t h$.

## DISCUSSION ON IMPORTANT TOPICS <br> OF MUTUAL INTEREST.



T HE question of the utility of a bicycle on the farm is bocoming more prominont every day.
It is but natural that a certainmmount of prejudice should dwell in your mind. You have been so accustomed to using you: horses for any little journeys that require to be made that mounting a bicycle yourself, or sending your hired man to town on a wheel seems rather stiange, to say the least of it.
But there may be reason in the suggestion.
One often requires to send to town at some nexpected hour of the day.
Tu take one of the horses off the farm for this purpose means the loss of the horse's services ior that time.

If the journey is to be mado at the close of the day, the horso will perhaps bo tired with its day's work. It won't add to the lite of your beast to give it this extra labor.


Then, too, your horse may be a littlo balky, and you do not feel comfortable in entrusting it to the care of the hoy.

You can entrust a good bicyclo to tho care of your little fellow without any fears as to his safety and welfa:c.
Last summer I dropped in to see an
acquaintance onwing a splendid farm on tho outskirts of ono of our lagest cities. At the dimer table the conversation turned on bicycles. I asked him what he thought of the usefulness of the wheel on the farm. He replied:
" I'll tell you. Johnny here worried the life out of me for some montlis to get him a wheel. He said he could do this and that for me, and save time here and there, and so on. Of comse 1 didn't believe there was much in what the boy

said. I pinned my faith to the good old horse to do my work for me. But the lad's a hard-vorking little fellow, and I thought I'd reward him. So I bought a wheel for lim. There it is, out on the porch ; dyo see it?
"Well, sir, that wheel has saved more time on this farm than you would imagine. I'll give you a few instures' One day last year wo were harvesting. and had pretty well got it all in when I noticed that the twino was nearly ran out. I kept putting off semding for more, hoping that it would finish out tho crop, and not wanting to havo to carry a lot over to next season. When we had but a few hundred sheaves to bind, however, I began to see that it wouldn't last out. The horses wero all busy, and for a whito I didn't know what to do, till suddenly I
thought of the bicycle. I hustled the boy off to the village, and we had the twine back hene at the farm in a very short time, which suved the stopping of the binder, and enabled us to get tho crop in that aftemoon.
" Another time, I remember, someone driving past mentioned that the eattlo had got out away up at the other end of the lot. Now, instead of having to go and get one of the horses away from other work, one of us just jumped on to tho whee, and was up there and back again in half an hour.
"Then in caso of sickness with tho wifo here, or any of tho youngsters, it comes in very handy. I can well you.
"Ot course the roads out here ano pretty rough at some seascns of the year, and

you've got to have a pretty good wheel to stand the strain caused by ruts and stones, and I'vo seen some of them folks that have been riding out here on poor machines come to grief pretty often. But I determined thatil would get a good one while I was at it, and I believe it's paid me in the emh.
"My opinion is, the wheel's going to be a big factor in farm work before long."
The name "Massey-Hirris" is the standard for excellence both in farm implements and bicycles. The Massex--Harrys Bicycie is now giving perfect satisfaction on many farms in Canada, and is renowned for its strength and wearing qualities.
In the factory in Tononto where the machines are made, a most excellent

plant has been established. This commises the most up-to-date automatic machinery for making perfectly duphcated parts.

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The price of the Massey-Mambis is reasonable. You can buy a cheaper wheel than the Masser-Harris, the same way that you can buy a cheap horse that will go to pieces in a few months. But you can't buy a stronger wheel than the Masser-Harmis, or one that will cive you more satisfaction.

No wise farmer ever bought an inferior horse who could afford a better one, and the farmer who appreciates the value of his money will buy a wheel that will last many years.

Have a look at the Massex-Harris. The agent will show you it.


## ANIMAL

## A Horse that cen Read and Write.

11N the stable adjoining a handseme sesdence at Montrose, Ohio, on the side of the Orange Nountan, is a horso who reads, writes, spells and does sums in anithmetie, answers questions amd jerforms other feats which it had never before been considered possible to teach an anmmal. This horse is Jmm Key, the hanlsomo bay offspring of an Arabian mare and a Kentucky thoroughbred.

How the animal was educated to its high grade of poficiency is described by "Dr." William Key, the veuerable colored man who has conducted the intelligent creature's elucation for seven years. "Di." Key was the slave of John W. Key, of Bedford counts, 'Tem. before the wan, and like most slaves, took his master's name. His title he gamed by his supremacy in voodoo rates among the negrocs of his native state, and by the manufacture athe saic of lmiment and medicines. From childhood, the old negro declares, he has prosessed a peenliar and inexpheable power over anmmals, and by tho exercise of this power, with the assistance of unlumited sugar and vatience, Jim Key was educated to perform many tricks, to boom the sale of limment. "Dr." Key, who in his slavery days had the advantage of a gool cducation, makes no secret of the manaer in which Jim Key has been taupht. Sugar, kindness and patience, with a liberal allowance of apples, are the methods, he declares, by which any horse of usual intellifence may be trained to perform remarkable feats.

Onc of Jim Key's most remarkable performances is the writing of his own name upon a blackboand covered with chalk and using a damp sponge as a pencil. The result can hardly be called a marvel in chirography, but is readable.
"It done took me a jear to teach him dat trick," says his trainer. "Like all the other tricks, I did it with sugar. I wrote the letters on the blackboard with water and then covered the lines with sugar. To lick off the sugar the horso mored his head over the shape of tho letters. After practicing several months he got the motion and then I left off tho sugar. A few jears ago I was training Jim in Chattanooga, fiving frec exhibitions in the strect. After the exhibition 7 would sell liniment to the crowd. Ono day a circus man camo to me. 'I hear

## STORIES.

you've got a horse that can do anything.' says he. 'Dat's right, sar,' says 1. 'Jim can do almost anythong.' 'I'll give yon $\$ 10,005$ for hom if ho can pick a silver dollar out of the bottom of a bucket of water without drmking any of the water.' Well, sir, I'd never thought of that trick, and the ciacus man went nway on the next train. I lawd awaki mglits thmking how I was going to teach Jim how to take out that dollar without drinking tho water. Finally I got an idea. I pot anew pail and a silverdollar. The dollar I covered with sugar and dropped into the empty pail. Jim licked all the sugar off the dollar and brought it to me in his teetis to putsome more sugar on it. It only took a few days to teach him that he'd get sugar when ho brought me the dollar. Then I berian to cover tho dollar with water, and he picked out the dollar just the same. Jum knows the letters of the alphabet just as good as anybody" contunad the doctor. "The first thing I taught him, when he was a year old, was to bring me a handkerchief, in which a lump of sugar was wrapped. When he did it right I gavo him the sugar. Then I put tin cards in a rack and printed letters on them. I covered letter ' A' with sugar and made the horso bring mo that letter. All the time I repeated ' $A, A, A$ ' and in about two montlis he'd get ' $A$ ' without sugar. It was easier to teach him the other letters. which I did in the same way. When I tell Jim to get a letter, a namo or a figuro or number, I look at that card and think hard."

Jim Key also has tho services of a groom who happens to bo a col ase gradthate and speaks six Jangrages When the horse neels the services of his valet ho rings a bell, the same as a man of wealth rould summon a servant.


## Styx a Battery Dog.

Ho was a fox-terrier in the days when fox-terriers wero not so common as now, and he made his appearence in the battery ono morning just as we wero " hitching up" at daylight to resume themarch interruptel by n night's rest in the vicinity of a small town in Louisiana. He attracted my attention by running up and placing at my fect a small stick and then backing off a little way with every musclo of his body on the stretch, asking me as pleadingly as if he spoke, to throw
it that ho might have the exquisite pleaswo of catching it, to bo biought back again and thown.
The eaptain of a battery has at such a time something else to do than to thow stuhs for a dog to fetch, and when Styx s.w me mount my horse he abindoned meand stat ted of to a sergeant who treated him with even greater contempt. Nothug abushed, he picked up the stick and stat ted with the column, which was now moving along the load and into "hich the battery hauled from the roadside with the accompaniments of claskmg trace-clains and rumbling wheels.
Styx maintaincal his position somewhere between the gun carrages all day, refusing to bo allured by the dashing cavalry or the sober infantry, as now and then changes occured in the colum, and late in the aftemoon, when we halted for the night, he reported himself at my paiticular fire as of ho were on dity as in orderly. He asked not for food or caresses, but puttimg down a stick at my fect, ceelared in lus fox-terree language that if I would please throw that for ham just once he would consider all obligathons discharged in full, and I threw it, he bronght it back before it had fairls touched ground and worried rae for more of it.

The next day wo wete in action. Tho enemy had made a gallant stand en ther retreat at a narrow pass, where it was most diflicult for us to advance, and here the genius of Styx came into great play.
"Who "No. 5" man, as ho is called, rans between the limber and the gun when the battery is in action, carrying tho missile, or cartridge, from tho aramunition chest to the "No. 2" man, who places it in the gun, when the "No. 1" scnds it home with tho ran,mer. Styx had joined himself to one of the gun detachments, and was acting as a "No. 5" man. Receiving the cartridge from "No. 6." who took it fiom the chist. he rushed like lightning to the gun and delivered his burden to the expectant artilleryman. He was in his element now. The thunder of the guns could hardly drourn his sloricks of joy as he rushed back from having delivered one charge to get an-other-this was something like! Why hadn't we played this game beiore? Now he saw what a battery was for.
That day garo Styx ia reputation through our whole corps. Thecommanding general heard of him and requested me to bring him to headquarters. An admiring circlo of officers sat about him one evening and discussel whether or no dors could be used generally in the artillery.
Threo daysafter came the catastrophe. Wo were drawn up in line of battle to await developements, and for a long time nothing developed. Finally a distant
battery began to give us its attention. Now and then a shell exploded in fiont or over our heads. Styx was sitting with cager eyes, in the midst of his favorito detachinent. Suddenly an atmost spent, six-found solud shot fiom the enemy stauck in front of us, and rolled, as it seemed, slowly into the battery: "More fun!" sand Styx to hunself, and junped for it. For the first tume he had miscalculated. But then his experience with artillery had been of alse briefest. The moving mass of is on whets seemed as harmless as a rabber ball, crushed the life out of the active litele volunteer.

We all mourned him, and the gencral said, when I told him about it, "Well, you know, war can't be carricd on without some loss."

## The World's Distribution of Horses.

From census enumerations and official aud reliable estimates, it appears there nie some $75,000,000$ horses in the world. Our figures subjoined are the best obtainable, and white not yet complete, as nothing is available covering some rather prominent countries, such as Chun, Brazil and Mexico, yer the aflord a fan approximation of tho totals by countries. In connection with this table it is interesting to note that the estimated number of mules and asses in the wornd is $9,000,000$ head, of which North A merica is credited with 2,810,000; South Amerien 1,240,000; Europe, 3,200,000; other continents scattcring.

## HORSES IN THE WOHZD.

[In millions and tenthe.]


Last fall, a farmer in (no: we won't give the townshify who wished to make an entry at an agricultural cxhlbition, wrote thus to the secretary: "Please put me dorn on your list of eattle for a calf,"

## The Canadian Bank of Commerce. <br> PAID-UP

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If you have tried all other remedies without success, and are at all skeptical as to the merits of Japanese Catarrh cure, enclose five cents in stamps, and we will mail you free a trial quantity sufficient for nearly two weeks' treatment. Price, 50 cents, or six for $\$ 2.50$, will guarantee to cure or money refunded. By all druggists, or by mail post-paic Address, the Griffiths \& Macpherson Co., Sampl -pt,, 121 Church Street, Toronto.


A FORCIBLE SUBSTITUTE.
Kilmartin: "Did, yes sell Maroney th' dog he wor afther wantin'?'
Kilimify: "Oi did not: Th' chump hod th' narrve t' offer me a mai ly quarther fer his chice!" Kilmartin: "Thin yez didn't let him hov th' pick?"
Killilify: "Oi did not; Oi let him hov th" shovel. Oi hod no pick in me hands!"'
Begifar (to lady who is a long time getting a copper out of her purse): "Hurry up, ma'am, I've lost several customers while you've been fooling
over them pemnies."

WHY SHE WOOULDN'T BE INSURED.
Sue had concluded to take out a life insurance policy, and appeared before the examining physician.
"What's your name?" he asked, in his crisp, hasiness way, and she looked indignant as she answered,
"Age?"
"I didn't come here to answer impertinent questions, sir. I came to be insured!'
"Hut we must know your age in order to fix the rate."
"What rate?"
"The amount you must pay annually for being in ured."
" Thirty-three, then," she snapped.
"You must be accurate, or it will invalidate the policy."
"Forty ; but I must say that I never heard such impuderice."
"Weight ?"
"I don't know. Neither does anyone else. Just as though that would make any difference."
"Married or single?"
"Single, thank Heaven! Not but what I've had plenty of chan-
"Of course. Any insanity in your family?"
"Sir!" and she tried her best to congeal him with a look.
"I think that you don't want to he insured."
"And you guessed it right the first time. I don't propose to be a family encyclopadia for you or any other gossip-monger," and she founced out with a vigour that made the doctor think she was a pretty good subject after all.

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*_{*}^{*}
$$

Miss Passay: "I dread to think of my fortieth birthday."
Miss Pert: "Why? Did something unpleasant happen then?"

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Mr. Binks (after an absence): "And so you shot a burglar while here and unprotected! You are a clever little womath. What became of hin?
Mrs. Binks: "The other burglar carried him off."

ETHEL: "Who is that man you just bowed to?"
'PENELOPE: "That was Dobson, the great composer."

ETHEL: "A composer, did youfactures soothing syrup."
Mrs. Qrickleigit-"The first man who ever proposed to me said that if I would not marry him he would blow his brains out."
Miss Wonder: "Good gracions! He must have been crazv. Why didn't you have him put under restraint"

Mrs. QUickeencin : "I did. I married him."

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## Unknown Animal.

In 1812 General William Ashey, the head of the Rocky Mountains Fur Company, travelledup the Platre Valley with a lag party of men, all of whon were suffenge for want of food. Before they beached the Buffalo country tho Indians had drwen off the herds, and General Ashley's men were reduced to an allowance of half a pint of flour a day. This served to keep them alive.

If it happened that a luck or poose was ktlled, it was shared as fairly as possible, but still the men were in a sad plight. Finally one of our parte. Jim Beckwomrth, came on a lucky find of deer and game, and the next day lie was even moresuccessfutma way surprising to himself. He had climbed a treo to get a fairer view, and he says:
"I nerceived some large dark colored animal grazing on the side of a hill, about a mile anda half distant. I was determined to have a shot athim Meat was in demand, and the fellow, wellstored, was worth a thousand ducks
"I apmoached cautiously within rifteshot, scruthmang him very closely, and still unable to make out what he was. Taking food aim, I mulled tho tringer; the rifto cracked, and I mado a rapid retreat toward the camp. After ruming about two hundred yards. and hearing no movement behind me, I looked round and saw, to my great joy that the animal had fallen.
"Continuing, my course to camp, I met tho General, who saw blood on my hands from a previous encounter, and asked me:
"' ELave you shot anything, Jim?'
"' Yes, sir.'
". What have you shot?'
"'Two deer, ind something clse,' I answered.
"' And what is the something else?'
"' I don't know, sir.'
"'What did ho look like? Had ho horns?'
"I saw no horns, sir.'
". What color was the animal?
"' You can see him, genemal, sad I, ' by clmbing yonder tice.'
"He ascended the tree accordingly, and took a look through a speglass.
". A buftalo, by heavens! ${ }^{5}$ he ciied.
" He camo nimbly down, and gave ordets for us to take a couple of horses, fo and diess the bufalo and bring him to camp.
" Whis was the first and last buffalo I had ever seen, though I had travelled hundrens of miles in tho buffalo connty ; and I had actullly been so excited as not to notice his horns. The seneral had many a hearty langh at me over those homs. Ihadignored them at rifferange, and he had seen them plainly when he was nearly two mules away."

## ** <br> Justice in Abyssinia.

A zecent visitor to Addis-Abebn gives a picture of Menclik in his judicial capacits.

Tho court is held in an open square under tho blue sky, his inajesty bemg enthitoned on a dais, with the Affa Negus (voice of the King by his side as Iord Chief Justice.
The prisoner-accused in this instance of murder-wais biought before tho throne, bound to a couplo of warders, and his featurers clearly expressed his knowledge of the fate avaiting hum.
"Why did you commit murder?" askcd tho king.
"I only meant to steal," replies tho criminal.
"Mad you no other motive?"
"Nio! I am a beggar. The messenfer had dollers, and I cut his girdto to get them."
"Good. Yoll are sentenced to death. Havoyou any request to make?"
The noor wretch pleads for mercy, but in vain.

Then the executioner leads his victim to tho market-place, whero ho is strung up on a tree, the whole affair lasting just twenty minutes.-Chronicle.

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One of the most curious clocks in the world is that which Amos Lane, of Amidee, Nevada, U.S. A.. constructed some time ago. 'The machinery, which is nothing but a face, hands and lever, is comected with a geyser, which shoots out an immense column of hot water
cvery thirty-eight seconds. This spouting never varies to the tenth of a second, and, therefore, a clock properly attached to it cannot fail to keep correct time. Every time the water spouts up it strikes the lever, and moves the hands forward thirty-eight seconds.

## A DIP IN SEASON.

A certain amount of trouble is involved in the operation of dipping, and no man can afford to risk failure for the sake of a few cents saving on every hundred sheep. A dip should be easy of application, cheap, and absolutely reliable, and should not stain the fleece, or check the flock, but be entirely beneficial to both. The best Dips are cheap enough and are not open to the serious drawbacks of the old time remedies.
Most dips do not comply with these simple requirements. Lime and Sulphur as a dip is generaly denounced, as it ruins the fleece; Tobacco stains it, and requires heating to be effective. Carbolic, and other fluids are only tempor-
arily effective, and usually very unpleasant in use. Kerosine Emulsion is very risky, and often peels the wool. None of these can truthfully be called perfect preparations. All hot dips are objectionable and liable to chill the sheep. Undoubtedly a first-class manufactured Dip can alone be relied upon, and of these Cooper Dip has stood alone for half a century as the leading Dip of the world, because it is free from all the objections mentioned. It is a Powder soluble in cold water and ready for use in five minutes. Its use on over 100 millions annually is conclusive proof of its value. Its proprietors are exclusively Sheep Dip makers.


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    No, 'tle our happy faculty,
    Oh women, far and wilde, To turin a cot or patace
    Into something cise liealde; Whero brolhers, sons, and husbandstired With willing footateps come: A place of test, wher los caboundsA perfect klugdota-liome.

