ci-dessous.

L'Institut a microfilmé le meilleur exemplaire qu'il

lui a été possible de se procurer. Les détails de cet

bibliographique, qui peuvent modifier une image

exemplaire qui sont peut être uniques du point de vue

reproduite, ou qui peuvent exiger une modification

dans la méthode normale de filmage sont indiqués

The institute has attempted to obtain the best original copy available for filming. Features of this copy which may be bibliographically unique, which may alter any of the images in the reproduction, or which may significantly change the usual method of filming, are checked below.

\square			overs, de co	/ puleur								[Colou Pages								
			naged) endo	/ mmag	jée							Pages damaged/ Pages endommagées										
	Covers restored and/or laminated/ Couverturs restaurée et/ou pelliculée											Pages restored and/or laminated/ Pages restaurões et/ou pelliculões										
	Cover title missing/ Le titre de couverture manque											Pages discoloured, stained or foxed/ Pages décolorées, tachetées ou piquées										
	Coloured maps/ Cartes géographiques en couleur											Pages détachées										
	Coloured ink (i.e. other than blue or black)/ Encre de couleur (i.e. autre que bleve ou noire)											Showthrough/ Transparence										
	Coloured plates and/or illustrations/ Planches et/ou illustrations en couleur											Quality of print varies/ Qualité inégale de l'impression										
\checkmark	Bound with other material/ Relié avec d'autres documents											Continuous pagination/ Pagination continue										
\square	Tight binding may cause shadows or distortion along interior margin/ La reliure serve peut causer de l'ombre ou de la											Comµrend un (des) index										
 1				, de la ed dui					-									from:/ ovient				
		n the emitt	text. ed fro	When m film	ever p ning/	ossibi	e, ine	se ha	re			Ľ		Title p Page d				ison				
	lors d mais, pas ét	'une i lorsq	restau ue cel	ration	appar	Aisser	it dan	s le te	xte,			Ľ		Captic Titre c				vraisor	'n			
												Ľ		Wasth Généri		pério	dique	s) de l	n tivra	ison		
	Additional comments:/ Commentaires supplémentaires:																					
Ce do	tem is cumer									r essous												
10X	· ··· ·		r	14X				18X				22X	_			26X				30 X		
													1									
		12X				16X				207.				24X				28X				32X



A Journal of News and Literature for Rural Homes.

New Series, Vol. IV., No. 2 | MARCH-APRIL, 1900. [Whole Series, Vol. XVIII., No. 2.



ZOOLOGICAL STUDIES-THE SECRETARY BIRD.

SUBSCRIPTION PRICE (500 PER ANNUM.



Massey-Harris Illustrated

A Journal of News and Literature for Rural Homes.

New Series, Vol. IV., No. 2.] MARCH APRIL, 1900. [Whole Series, Vol. XVIII., No. 2.



ITII the attention of well nigh the whole universe focussed on the battle fields of South

days deal with war scenes and matters pertaining thereto. In our initial illustration is depicted



[///ini. London Afered. FREEMEN FOR THE PRONT CONFERRING THE PREEDON OF THE CITY OF LONDON ON THE CITY INFERIAL VOLUNTEERS AT GUILDHALL LUNDON

Africal the major part of the illustra- a remarkable scene the freedom of the bons produced by special artists these. City which is the capital of the Empire

MASSEY-INARRIS ILLUSTRATED.

being conferred on the City of London Imperial Volunteers This is the high est honor an old country city can bestow upon man or woman. This war has, in all parts of the Lampire, given the he to the old snext that the Volunteers were merely play soldiers and Saturday afternoon holiday pnenickers. We believe we are justified in saying that every volunteer corps of white men within the Empire has contributed its quota of men at the front Our own countiymen have done well in this regard, and since our last ussue a long lust of 'Canadians killel and wounded has behind the Naval Battery. The muddies had brought a suckeng-pgi m a barrel and placed nt behind the battery. A shell burst under the barrel, throwing it high in the air, and the pg was blown out lie came to the ground squealing terribly, and was so badly inpured that he had to be killed." Of the fatality following the same gentleman writes: "The shell came through the Royal Hotel when correspondents and officers were at dinner. It entered by the root and passed out by the front door, where it burst, taking off the legs of Dr Stark, the naturalist, who ded two



EMBARGATION AT RALIFAT, NOVA SCOTIA, OF THE SECOND CANADIAN CONTINGENT.

filled many a home with sorrow and has told the tale of gallant deeds done on behalf of the Empire.

Our second illustration depicts the departure of the second contingent from Halifax.

Two incidents relating to the longmaintained seige of Ladysmith furnish our two succeeding illustrations, both the product of the penci of Mr. Geo. Lynch, the special artist of the *llustratad London Vecss.* In his letter descriptive of the first incident, Mr. Lynch says: "A couple of days ago a shell thrown by Long Ton, the Boer 94 pounder on Peworth's Hull, burst just hours later. Three others were wounded."

That a war correspondent's life is not the one A comparative safety that many people imagine, is further demon strated in our illustration on page 54 in which another correspondent of the London Nerosis seen in decidedly uncomfortable proximity to a bursting shell.

The maintenarice of communication between the forces at the front and the base of operations is the all-important factor in war to day, and the part played by the field telegraph in this connection will be apparent to the most casual observer.

On page 55 are a series of interesting illustrations, shewing how the field telegraph is "laid." be the capture of Johannesburg, the mining metropolis of the Transvaal, on fortifying which Kruger's Government



[Illus. London News. AT LADYSMITH - NOW LONG TON'S SHELL DISTURBED THE MIDDLES' SUCKINO-PIG.

While British victories have followed have spent fabulous sums. Our illuseach other of late in quick succession, trations on page 56 are painfully sug-



Rius. London Neur.] BURSTING OF THE SHELL THAT PASSED THROUGH THE ROTAL HOTEL, LADYSMITH, AND KILLED DR. STARK.

and Bloemfontein is already ours, the gestive of the loss of life that will be hardest task of General Roberts will catailed before our forces place the Union Jack over the fort which is thus described by a multary correspondent

"The fort is rectangular in shape with two bastons at opposing corners. On each bastion is mounted a 23 centimetre quick firing gun, with two flanking Maxims for entitled fire. On the sale looking toward Barnato Fark are fourt small quick firing guns. On the sale towards Johannesburg is the entrance which traverses the rampart at an angle of 45 degrees. Right and left of this, within the court, are stables. Under the bastion on the right are barracks and a magazane, the corresponding The scene to which we turn on page 57 is one well calculated to fill every true eitigen of the American Republic with shame. The Republicans of Kentucky failed to carry the elections, and some loyal member of that party sought to prevent the installation of the successful Demortatic Governor, Senator Wilham Godel, by the simple means of taking the latter's life. The dastardly act was perpentrated in the State House, ground, Frankfort, Kentucky, on Jan. yoth.

In striking contrast were the closing scenes in the life of John Ruskin whose



CORRESPONDENTS UNDER FIRE THE RNRMY'S SHRAPNEL BURSTING OVER ME NEWISON ("DAILY CHRONICLE"), MELTON FRIOR ("ILLUSTRATED LONDON NEWS"), AND SERVANT, WHEN CROSSING A DRIFT AT LADISMITH.

position beneath the other bastion being occupied by officers' rooms and another magazine. Whether these elaborate preparations for the destruction of Johannesburg have been made in vain is at present a nice speculative point. It may be that when our forces appear before the Gold Reef City, Johannesburg of the "inneities will be no more."

We close our pictorial references to the Transval with an illustration of the method in which the Boer slaughters his cattle for food. He does not use the pole axe, but has them driven in by the herdsman. He then selects the animal he wants and shoots it point blank with his rifle. portrait furnishes our next illustration and who passed peacefully away in a little English village at the ripe old age of eighty-one.

The fear expressed a few years ago that the Bubonic plague might spread beyond Asia has been verified and it has made its appearance in Honolulu, Hawaiian Islands. In our illustration an interesting acene is depicted; the free brigade disinfecting the Chinese and native quarters. *Harper's Weekly* says: The drastic measures taken to stamp out the bubonic plague in Honolulu have turnished some picturesque spectacles. The local fire department has been called out to destroy infected tenements in the Asiatie and native Hawaian quarters, and to confine the flautes to the condemned buildings. Meanwhile the whole infected quarter lence that heroic measures are justified. Out of twenty-two cases in Honolulu, up to January 9, there had not been a single recovery. All these victims,



THE WAR : FIELD TELEORAPET. [/Uus. London New. 1 Fizing the Wire. 2. Paying Out the Wire. 3. Establishing Communications. 4 Running Out a Wire S. Wagon Ready to Fay Out.

is surrounded by an armed cordon of troops, and no one is permitted to enter or leave the quarter withou. a pass. The plague has shown such great viruwith one exception, were Chinese or natives, and the exception was a halfbreed girl who lived on the edge of Chunatown. The Asiatic and Hawaiian



[Illus. London News.

THE INTERIOR OF THE JOHANNESBURG FORT, SHOWING THE 23-CENTIMETRE QUICE-FIRING GUN IN BASTION COMMANDING THE PRETORIA ROAD.

quarters have long been notorious for their unsanitary state, and as the bubonic plague is essentially a filth disease, it has found in that densely populated district the very conditions favorable to its spread. The Hawaiaans,

with the East-Indians, are extremely suspicions of any foreign inspection of their homes, and they are very cunning in evading the vigilance of health officers. In these examinations of Hawaiian homes several bad cases of



Illus. London News.

FLAN OF FORTRESS ON HOSPITAL HILL, JOHANNESBURG.

MASSEY-HARRIS ILLUSTRATED.

leprosy were discovered, the ratives United States, and then only after ten having a horror of Molokai Island, to days' systematic quarantine. Thus



BOER METHOD OF KILLING CATTLE FOR FOOD.

Illus. London News.

which the law provides that all lepers must be sent. The furniture of many of the infected houses was burned, but

the personal effects were removcd to the two large camps near the town after they had been fumigated. In the observation camps. as they are called. barracks have been built by the government, and the hundreds of people removed will be cared for until all danger of infection is past. The plague has killed business in Honolulu, as no vessel can come up to the wharves, and all freight must be fumigated, and then be transported on.



far the plague has not made its appearance on any of the big sugar-plantations, and it is hoped that the

small army of Chinese and Jap-anese laborers may be saved from infection. Should the disease reach the island of Maui it would have a serious effect on the output of Hawaiian sugar.

The second

We hark back to matters military to pay tribute to John Francis Dunne, the proud possessor of the bugle of which we present an illustration sufficiently large to allow the inscription to be read.

When a portion of the British forces at Colenso

lighters. Many willing competed services of the low at last able to cross the Tuggia River in prohibits their departure, except to the

face of a most deadly fire, one of the



Harber's Weekly.

FIGHTING THE BUDONIC PLAGUE IN THE CHINESE AND NATIVE QUARTERS, HONOLULU, U.I. first to rush forward, although the soldiers tried to restrain him, was Dunne,

would send him back to the front. On March 5th the young hero was taken to

a bugler, fifteen years old, in the Roval Dublin Fusiliers.

Three Boers bit the dust as a result of the attention they received at the hands of the boy bugler, who, however, was severely wounded. and, what troubled him more, lost his bugle. He was sent home to England and while in the hospital was visited by the Princess Beatrice and other mem bers of the Roval family who asked him what he would like the Oueen to do for him. His reply was that he hoped Her Majesty



REGLE PRESENTED TO RUGLAR DUNNE BY HER MAILSTY THE OCCESS.

Osborne to the Queen. The Illus. trated London Newsthus describes the incident.

"A boy of fifteen, dressed in khaki, he was ushcred by Sir John Mc-Neil into a small room. where sat Her Majesty near a table. He stood and bowed a little n ervously; then the Oucen told him to step forward. asked him about his wound and whether he liked the army-which he said he did -and finally presented him with a bugle to take the place of that which he lost at the

MASSEY-HARRIS ILLUSTRATED.



{//orper's Wickly. THE SROOTING OF STATE SENATOR WILLIAM GORBEL, IN THE STATE HOUSE GROUND, TUESDAY, JANUARY 30.

Tugela River. The new instrument is silver-mounted; it has a green bugle-

cord, the green dear to a boy whose father was born in County Tipperary; and a silver plate attached to it bears the inscription: 'Presented to Bugler John FrancisDunne, st Battalion Royal Dublin Fusiliers, by Queen Victoria, to replace the bugle lost by him on the field of battle at Colenso, on the 15th December, 1899, when he was wounded." "

It is interesting to note that the soldier spirit is in youngDunne's blood, his father being also a member



[Pholo : Barrand. JORN RUSKIN. Born February 8th, 1819 ; Died January 19, 1900.

of one of the Irish regiments now at the front. It highly amused the lad's

royal visitors when referring to the medal he was to receive he said : " You know it is to have three bars; myfather has only two." On St. Patrick's day the troops paraded and Dunne was carried through the town on the shoulders of two burly soldiers and received an enthusiastic ovation all along the route.

đ

24

「大き」につき

We have received some interesting photographs from Mr. J. D. Pattersonol peace ful scenes in South Africa, which will appear in our next issue.

A HONEYMOON EPISODE.

H, Ralph, all the afternoon? One whole afternoon all alone without a soul in this place to talk to-_,,

"Can't you read, dear? "

"Yes, and make my eyes and head ache. It's perfectly provoking of your brother to go and get sick just while we're on our honeymoon. He should have more consideration. Ralph. there's the carriage; you'll make the horses hurry, dear, won't you ? Oh ----- " and the poor little bride was alone, with the prospect of a lonely afternoon to herself, which prospect, in a large hotel in a city where one doesn't know a soul. and when one is a bride on one's honeymoon, is not an enviable one, as any unbiased person will admit. The bride of three weeks sat down in a hopeless sort of way on the veranda overlooking the hotel grounds She wearily turned over the list of guests, which an attentive waiter had put in her hand, without the least sign of interest in its contents. Suddenly an exclamation escaped her.

"Mr. and Mrs Clifford Dunnels!" she said, half aloud, "Mrs, Dunnels! So that is the reason of his silence, and here I've been tormenting myself about him-picturing his grief at my fickleness, his anger, his despair-only to find him married, in the same hotel in which I am spending my honeymoon. Oh, Cliff, what a goose I've been to spoil my new happiness by worrying over you ! I might have known that the affection of light grey eyes and fair hair wouldn't stand the test of a two years' absence from the beloved object, any more than-than a schoolgirl of seventeen knows when she is really in love. What fun it will be to meet him ! Some confusion on both sides-mutual congratulations- ' Allow me to present my wife '-' Mr Dunnels, my husband 'perfectly glorious! Oh, I can see it all'' And leaning back in her chair, Edith shut her eyes as if to enjoy the scene in her mind's eye. When she opened them again, the look of amused enjoyment gave place to one of surprise, for a few paces away from her, leisurely smoking a cigar, stood unmistakably the man of her thoughts. She started

Turning at the sound, the object of her gaze beheld the girl whom of all persons on earth he was least anxious to see. Edith stepped towards him with outstretched hands.

"Why, Clifford Dunnels!" Miss Noble!"

While on her face was a look of pleasure, and a gleam of mischief too, on his was expressed amazement mingled with embarrassment. Her quick eye and ear took in the situation at once.

"I've one on you, dear old.chum ! " was her mental ejaculation. "I know your little secret, and mine is safe-until Ralph comes back." Mr. Dunnels. hastily throwing away his cigar, took her proffered hand, while the embarrassment deepened on his face as she gave his hand a soft pressure, and said, with a well-feigned little accent of tenderness, "Oh, Cliff, I cannot tell you how glad I am to see you ! "

"Why, Edith, who in the world would have thought of seeing you here!" he managed to exclaim.

"Ditto, sir; I'm overcome with astonishment. But I'm perfectly delighted to see you, too. I'm all alone this afternoon. My guardian angel" ("if he wants to think I mean my chaperon it's not my fault," she whispered to her conscience) "had to go and see a sick brother, and I didn't know what I could do to pass the time. But now that fate has so kindly sent you in my way, you must-you positively must-amuse me. And to think I haven't seen you for three whole years ! I've so much to tell you and ask you that it will take hours. And these beautiful grounds have just the loveliest places, where wc can be all to ourselves. Do you see that large linden? Let's go there."

Dunnels helplessly followed the pretty tyrant, with a remorseful thought of his bride left alone upstairs with a blinding headache. He turned to his companion with an excuse at the end of his tongue, but now she was tripping ahead with the airy grace of a nymph, and crying gaily, "Hurry, Cliff! Do come and look ! Here are some of the dearest little ducks. See, aren't they cunning?"

Her clear silver laugh rang, out with the musical ring he remembered so well, when the girl before him was a buduing woman of seventeen, and he a slender

youth of twenty, her devoted slave, The excuse died on his lips, and he joined in her laugh, as the mother duck, with angry, startled quacks, led her seminary of downy duckings away to the pond, gleaming silver blue through the trees.

"Edith, you are as much a child as ever. I thought three years would surely make a young lady of vou."

"'Never I shall never be anything but a child, I fear. But come, sit down by me here; " and then, as he sat down on the rustic bench beside her, "Doesn't it seem like old times to be together once more? Now I am prepared to hear all the news. Pray tell me, sir, what have you been doing for the past three years—since I bade you a tearful farewell?"

With genuine interest she followed the recital of his varied experiencesbattles hardly won, obstacles overcome with difficulty, and ultimate success; while Dunnels forgot time, place, circumstances, everything in the pleasure of answering her eager questions, and in asking news of old scenes and mutual friends. She told him the history of her life during his three years' absence, carefully omitting all that might lead him to suspect a change in her circumstances. As often as he attempted to lead up to the fact of his marriage, with her quick woman's intuition of what was coming, she interrupted him with another question. Never had she been so gay, so animated; and it was without effort, too, for she really de-'ghted in living over the past in company with her handsome old playmate.

For some time their talk was merely such as might have passed between any two old friends, and they both enjoyed it thoroughly; but Edith did not intend to let her old sweetheart off without some punishment. Seeing hiscareful avoidance of tender topics, she interrupted hum in a description of life in South Africa and said, with a sudden change of tone:

"Yes, Cliff, you men have much thebest of it in a case of this kind." What kind he was left to infer. "When you are compelled to leave the girl you like, though it may be a wrench at first, you have so much to do and to think about, your lives are so full, that you have but hitle time to grieve; while we poor women have to stay at home with no absorbing work to bury courselves and "Yarns, I'll wager," he interrupted, laughingly, " for they're the only thing I ever heard of your spinning."

She joined in his laugh, but added severely :

"Your levity is unseemly, sit, when it spoils such a fine comparison. But, seriously, I do wonder sometimes, "she went on, getting pathetic, "how I have stood the last three years—without you, I mean. But I don't believe you have cared one bit, Cdiff !"

And she shot a challenge from her blue eyes into his grey ones.

" Edith ! "

He was about to add a hasty remonstrance when the realisation of his position came to him, and he remained silent.

"You say 'Edith' just as you used to say it when I tommented you so when we were-children. I never used to like my name until you told me you thought it pretty. Then, whenever you would say it, I used to think it was the very prettiest name in the world."

She said all this with a little droop of her head, which struck a chill to Clifford Dunnels' heart. The conversation was plainly becoming dangerous. What should he do? Edith evidently believed in the reality of his attachment for her, and meant to resume their relations at the point where they had been broken off when he went to South Africa to seek the fortune which was to win the favour of her guardian. A year's absence had calmed his youthful ardour, and six months' companionship with the pretty daughter of his employer had given rise to another attachment, which he realised was the grand passion of his manhood, and not the impulsive affection of youth. There has been no correspondence between himself and Edith, according to the mandate of her guardian. It would have been an easy matter to write her the news of his marriage, but to tell it to her with her eyes looking into his was a task before which he quailed. If she still loved him how could he bear to see her radiant face overclouded by the story of his faithlessness?

He stole a look at her, and his heart failed him. She was sitting on a limb of the linden, now, her hands at her side lightly touching the tree, and one little arched foot idly drawing figures on the ground, while a smile curved her rosy, wilful mouth. She wore a dark blue skirt, and a blue and white shirt waist, with high white collar and a black satin tie; this, with a blue walking hat and natty leather belt, completed a rather masculine costume, which suited to perfection the trim, slender figure. The sunlight glittered through the branches, and gleamed upon her bronze-coloured hair, which waved in a wealth of ripples about her small, well-shaped head. Clifford felt the old witchery coming over him, when suddenly he seemed to see the picture of a dear form, tall and willowy; one who, womanly in everything, never affected the mannish mode of dressing, but preferred soft, clinzing stuffs and dainty laces; one who was the light and happiness of his life. In place of the imperious dark blue eyes he seemed to see a pair of warm brown ones, whose every glance told of a tender, affectionate nature, Then he said with a good deal of emphasis .

"I think it is one of the sweetest names in the world."

"One of the sweetest? You used to say it was the very sweetest. Now, Cliff, I believe some one has wheedled you into saying her name is the sweetest. Villain, speak! with mock tragedy.

He felt that his opportunity had come.

"Well, you see, after the senior partner came out to Johannesburg I used to go to his house a good deal, and heyou see, had a daughter, and ----"

"I thought so! What was her name, please?"

" Dorothy."

"So! And you consider that old-fashioned name prettier than Edith? I don't admire your taste, sir! Do you remember the verses you scribbled on my autograph fan?" and she looked archly at him.

His golden opportunity for confession was lost, and he looked down at her in a disheartened sort of way, as he answered with an increasing amount of abstraction:

"No, I fancy I've forgotten them by this time."

Her eyes glanced up at him with a world of reproach in their blue depths, which had a very disconcerting effect upon him.

"Have you really, Cliff? And they were so pretty."

He felt compunction seize him.

"Oh, yes, I do remember them now!" he interrupted. "Don't they go something like this? ---

"She who comes to me and pleadeth, In the lovely name of Rdith. Shall not fail of what is wanted Edith means "the blessed"-therefore All that she may wish or care for Will, when best for her, be granted."

"There, I knew you couldn't have forgotten them. Aren't they pretty? I'm so glàd my name means 'the blessed'; and really "-her face lighted up-" it seems to fit my case, now, at any rate, for I have always wished to travel, and here I am an this beautiful place, with the one I care for most on earth I"

Here eyes glowed, and Dunnels, not dreaming that she might refer to any one but himself, was stricken with horror at havung allowed her to make such a confession. He nerved himself with an effort, but Edith, pitying his confusion, and feeling that she had gone so far that explanations must inevitably follow unless she made a diversion, rose hurriedly and said :

"Listen, Cliff! Don't you hear the dinner gong?"

Cliff did not, nor did she, but without waiting for his answer she hurried towards the hotel. Dunnels, cursing his evil genius, followed her. She had used this ruse as a means of escape, and felt rather conscience-stricken for the trick : but in a moment all qualms vanished. for in a carriage just entering the courtyard she perceived her husband: At the same moment Dunnels, glancing towards the veranda, saw his wife seated at one end, alone. She looked in calm surprise at him and the girl at his side. Edith, noting the look, smiled to herself; and turning quickly to Dunnels, said, with a meaning glance towards the veranda:

"You'd better hurry, Cliff ; your wife is waiting for you 1"

He started with amazement.

"You knew, then?"

"Yes. Wasn't I clever to mislead you so?" Then, alter another glance at Mrs. Dunnels: "Really, Cliff, I must admire your taste. She is as sweet as-candy. I'm awfully glad for your sake, old chum; let ine congratulate you." With a world of relief: on his face, Dunnels warmly grasped the hand she held out, but flushed hotly at her next words.

"I'm very pleased and all that, you know, but I think you might have let me know before. How long since?" with another interrogatory glance.

He stammered :

"Not very long-a few weeks-we're on our honeymoon now----"

"Why, how odd!" she exclaimed, in mock surprise. "Two bridegrooms in the same hotel! Do you see that tall, handsome man just getting out of that carriage? Well, he's on his honeymoon, too."

"Very odd?" Clifford began, when a look at her roguish face stopped him, and he finished by saying "Why, Edith, you little hypocrite! I really believe you are-you must be---"

A wave of crimson swept over her face, and she hastened towards the man who had just alighted from the carriage; but as Dunnels stood staring alter her, with perplexity written on every line of his face, she threw a charming look over her shoulder at him.

"You're right, I am," she said.

SCIENTIFIC AND INDUSTRIAL JOTTINGS.

It is said that the skin of an elephant usually takes about five years to tan.

•**

IN Tokyo, Japan, the local street railway company has decided to lay down 200 miles of electric railway. The entire system is to be completed, says a New York paper, in six years.

٠.

ARTIFICIAL incubation of eggs was practised by the ancient Egyptians of the time of the Pharaohs, before that of Aristotle, and even now ovens for the purpose are found in Egypt.

۰.

COCOANUT netting with meshes 1 ½ inches wide is sold in Dresden for snow screins. They are 13 feet by five feet, and when lashed to posts, for example old sleepers, make a good snow-lence for railways.

RATS are believed to propagate the plague, and Dr. Apery, of Constantinople, proposes to kill them in ships by carbonic acid gas, which, being heavier than air, would sink to the bottom of the hold and stiffe them.

**÷

A GIGANTIC TUNNEL—A French engineer, Jean Berlier, has worked out in detail the plan for a railroad tunnel under the Straits of Gibraltar. He would have it run from a point in Spain near Gibralta to Tangier in Morocco, the total length, including approaches, being ag miles, of which zo miles would loe under the sea. The estimated cost is about \$25,00,000 It is estimated that 18,000,000 tons of coal are imported into London every year, of which amount 7,288,000 tons come by sea.

PROFESSOR ROWLAND, of Baltimore, thinks be has proved by experiment that the magnetism of the earth, and probably other celestial bodies, is developed by their rapid rotation, and the faster they revolve the stronger their magnetism.

٠.

FLOWERS NEEDED FOR PERFUMERY. —Vast quantities of flowers are gathered for perfumery purposes. It is estimated that each year 1,860 tons of orange flowers are used, besides 9:00 tons of roses, 150 tons each of violets and jasmine, 75 tons of tuberoses, 30 tons of cassie, and 15 tons of jonguils.

٠.

LAST year 908 locomotives were built at the Baldwin works in Philadelphia. This is a record. In 1898 the number of engines turned out was 752; in 1897, 501; in 1895, 401. It is stated that the dearth of steel, owing to the extremely large demand, lessend the output very materially. 358 ergines were exported.

CENTEMARY OF ELECTRICITY.— "Electricity as we know it" is just foo years old. In 1799 the Italian scientist Volta gave definite form to the method of producing the current; and it is from his name that we have the term "volt meter" to describe the instrument which measures the force of the current, and "volt" as the unit of that measurement.



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

General Notes.

England's Wheat Yield in 1899 was 32.8 bushels per acre.

Sheaf Oatu for Horses.—The favorite food in Scotland, where horses are at only moderate work, is cut sheaf oats.

Grapes can be Pruned any time during winter. If the wood is wanted for propagation, it should be cut just before the severe frosts arrive.

•**

Grinding Oata.— In European countries crushed and ground oats are much used. Where hores are include to cat rapidly, grinding assists in the utilization of the food.

Of all the Leguminous Crops red clover is of the greatest value in accumulating mitrogen in the surface soil. Whenever this can be raised it should be depended upon in a rotation as a chief mitrogen gatherer.

Kinds of Feed and Abortion.-Abortion may result from a large number of causes, such as injury, infection and the like. It is contagious and no remedy is known. Feeds lacking in honemaking material seem to have a tendency to produce this disease. Other things being equal, cows fed bran, clover, peas, etc., seem to be less affected than those guven carboar erous foods.

٠*.

When Line is Needed.—Line may prove to be a wonderfully good thing for some soils. If the land is acid, line is always beneficial. Buy it when it is cheapest. The amount to apply will depend allogether upon the character of the soil. We have seen used all the way from 1,500 to 6,500 Bis to the acre. Stone line may be used by placing it in piles containing about one-half bushed each and covering this with soil and allowing the line to stake. Best Color for Horses.—Brown, bay and black are usually considered the favorite colors for horses.

٠.

Milling in South America.—Argentina has 532 flour mills and finds a market for much of the surplus product in Brazil.

Chilean Wheat.—The annual crop is about 30,000,000 bushels, besides 10,-000,000 bushels other cereals. Moderate quantities are exported to Europe.

Excellent Yield of Oats. —The Mantoba 1899 crop, according to official estimates, showed an average of nearly thirty-nine bushels per acre. The area, 575,000 acres, yielded 22,318,000 bushels.

Preserving Manures.— The loss of annmonia in the barn or manure pit may be prevented by the application of dry soil, road dust or land plaster. About a pound per day sprinkled about the stall is sufficient.

A thorough knowledge of all the great principles that underlie agricultural success should form the foundation of farm education. The laws of heredity, the results of crossing various breeds of stock, the rules governing plant life, should all be studied and mastered so far as possible by the farmer who would succeed.

.*.

Plowing and Culturating throughly will cause a wonderful improvement in almost any orchard. Cow peas sown broadcast and allowed to die down and be plowed under the next spring are valuable. When the peas in the orchard are full grown the hogs may be turned in and allowed to feed them down. They will get an abundance of food which costs almost nothing. Systematic Feeding is very important. Give the animals their rations at the same time each day.

•*•

Cherry Trees have many advantages over apples and pears in that rabbits soldom bother them and they are not as often affected by borers. The frait comes at a time when there is but little other on the market and is consequently unusually profitable. A Colt can be raised nearly as cheaply as a steer, or for from \$30 to \$42. At 4 years old a colt is worth more than a four-year-old steer. This, of course, means good animals.

٠.

Bran in large quantities, and even when mixed with other feed, is not considered a very desirable food for pigs. It is too bulky, and contains too much fibrous material.

Storing Ice.

ERHAPS there is no building the cost of which can be so well

adapted to the farmer's means as the ice-house. For a few dollars invested in cheap lumber, says a writer in Country Gentleman, and two or three days' work, he can have an ice-house that will answer his purpose nearly as well as a more expensive one, or he can hire a carpenter to build the house, use good material, paint and shingle it at a cost of from \$50 to \$100; but one will keep ice about as well as the other. The first ice-house I built was a cheap one. It was twelve by fourteen feet. I think, but large enough for our purpose. A few old boards I had on hand, some two by four scantling for the frame, and a few nails, were all the material used. and a day's work for myself and hired man built it.

Sawdust was obtained at a sawmill near by, and the ice from the mill-pond, costing nothing except our own work. For several years we were supplied with ice with little or no outlay in cash. The old ice-house was not very ornamental to the place, and we tore it down and erected a more costly building; but the old building kept the ice nearly as well as the new, and I mention it to show the small cost for which ice may be put up, so that no farmer who has the time to attend to it need be without ice Five to ten loads of ice are gener-ally sufficient for both dairy and family use, and two or three loads of sawdust will pack it.

If anyone wishes to invest about \$50 in an ice-house eight by twelve feetwhich holds about twenty tons—it can be built as follows: Use two by six studding and cut them about ten feet long. On the outside use good, planed siding and paint it. The inside of the studing can be boarded up with rough, cheap lumber. When boards up fill in the place between the boards with sawdust well tramped down. On a building of this kind I would shingle the roof and put a ventilator in it. I would also put a good wall under the building, and level the bottom by filling in with small stone.

A location should be chosen with good drainage to carry off the water from the melting ice, for the water should not be allowed to settle and stand under the building. When filling the house with ice, flax straw is about the best material to put in the botton, but only a few farmers will have it, and most must use other straw or sawdust. Sawdust alone on the bottom does not make a complete drainage; so it is a good plan first to put some coarser material on the bottom and spread a few inches of sawdust over it. Large blocks of ice squarely cut, of uniform size, pack and keep the best, and there will be less waste from melting if ice can be obtained from fifteen to twenty inches thick. After putting in a layer, go over it and fill the crevices with broken ice, then level the surface with an adz before putting in the next laver. Leave a space of a foot or more around the outside of the ice to be filled with sawdust; then cover the top with about eighteen inches of sawdust. Close the door and open the ventilator in the roof and there is no reason why the ice should not keep well.

If several farmers in a neighborhood will combine in purchasing an ice plow, the cost to each would be but small, and with it the labor of cutting ice is nuch less. With suitable ice tongs the ice is quickly loaded from a chute laid from the pond to the loading place. I ŧ

E

いたいに、「たい」

like to draw the ice on sleighs, and with a man to help me load and pack the ice, a day's work will put in all that I need, and then half a day's work puts in the sawdust. There are many luxtices and conveniences possible to the farmer with a supply of ice for family use. During the hot weather nome can make ice retrain as cheaply as the famuer, for he has all the materials, if he has ice and an inexpensive freezer. A refrigerator placed in the pantry is a great convenience for the housekeeper for preserving meat, fruit, etc., in summer. Passing over many other uses for ice, I will only say that one accustomed to having a supply of ice does not want to do without it.

Why Plenty of Humus is Needed.

NOW can one expect his soil to yield larger crops each year if he does not replace the plant food taken off by the previous year's crop? When a forest, where the leaves, weeds, twigs, etc., have decayed for centuries, is cleared away we say the soil is in its virgin state. Let us see what some of the advantages would be if occasionally we should supply humus by plowing under a heavy crop of field peas, soy beans, red clover, or alfalfa, I mention these leguminous plants, for while they supply the much needed humus they also gather from the atmosphere one of the most costly fertilizers, nitrogen, when bought as a commercial fertilizer.

Humus aids in many ways to increase the yield of farm crops, among them may be mentioned the resting of the soil by returning to it all that was taken from it and sometimes more, producing a better medium for bacteria to live in. Bacteria are useful in aiding to tear down the soil particles and liberate potash and phosphoric acid, two of the elements essential to plant growth. Decaying vegetable matter in the soil tends to loosen it, allowing plenty of air to circulate and prevents sourness. Plant roots need air as well as water, and both of these are supplied more bountifully in loose than in compact or baked soils. The water will percolate down, surrounding soil particles, and what is not used finds its way down through small openings that were made by the decay of roots from previous crops, and is deposited in a subterranean reservoir where it awaits the dry season.

When drouths prevail the water trapped by the loses unfrace is pumped up by capillary attraction to within reach of the roots, but here stops, the capillary tubes being too large in the surface soil to carry it further and surface evaporation is prevented. Thus the plants may be kept fresh, green and growing throughout a severe drouth. Often the failure of a crop can be traced to the lack of sufficient moisture. Decaying vegetable matter—or humus—aids in theretention of a portion of ach shower, allowing less to escape overland by ditch, creek and river.

In the spring crops are backward in starting, and the soil stays cold. Now, if there was an abundance of humus in the soil this would be different. This substance gives to the soil a dark color, and the greater the amount of humus the darker the color. Our muck beds contain more humus than any other soil. and such soils come nearest the virgin state, although they are usually more or less deficient in the mineral elements necessary to plant growth. Dark substances absorb more heat than those of lighter color, so the more humus the more heat absorbed, if properly drained, and the soil will be warmed earlier in the spring. Seeds require warmth in order to germinate, therefore, for early seedbeds provide abundant humus Ĭf we observe nature and follow her plans, we will supply plenty of humus for our soils, not only to furnish plant food, but also to improve the mechanical con ditions necessary to the welfare of our crops -M. J. PERSING, in American Agriculturist.

Utilizing a Muck Swamp.

Y advice to one owning a muck swamp which he wishes to use for fertilizing purposes would be first to send a fair average sample to his Experiment Station for analysis and advice. If the report is encouraging, the next step would be to drain off as much water as possible. Muck swamps are generally drowned in water.

It is not advisable to cart green muck very far. If instead of carting from our five-acre muck swamp so many green loads to the barn to compost with manure, we had spread it on the field where the compost was subsequently applied, and had carted up the manure and sprinkled it on top of the muck, much labor would have been saved and just as much ripening would have been given to all the material by its exposure lying upon the field as it could get in the compost. In another case where we composted green muck drawn from the swamp and manure drawn from the stable on the field midway between the two points and near where it was to be applied later, it is doubtful if the trouble of piling and turning paid. It were better, as in the previous case, to have spread both together on the land as carted, and to have left the decomposition to be carried on by the weather.

It is doubtful if it will pay the dairy farmer to dump muck upon the upland to be partially dried and pulverized that Le may afterward cart it half a mile to compost with manure. It may be a profitable practice for greenhouse work, and, perhaps, for the truck grower, but other methods are better for the dairyman. But when good swamp muck ean be so dried on the upland that a forty or fifty-bushel load is not too heavy for the team, any farmer can well afford to haul it two or three miles, and perhaps further, to be used when further dried as an absorbent in the stable to take up liquid manure.

If the farmer wishes to increase the bulk of his manure pile, as he certainly should, let him use plenty of absorbents and keep the manure away from detrimental action of the weather. Add light composting materials that will rot, as much as he wishes, but do not let him cart very much dirt into the barnyard.—E. C. BIRGE.

WINDMILLS, ANCIENT AND MODERN.

BY HENRY YEIGH, BRANTFORD.

T is not necessary to say much about the ancient wooden windmills which, doubtless, served their purpose in the past, and attract us to-day chiefly by their quaintness and jietur-

esqueness, and serve to show, by comparison, the progress made by inventive minds in the evolution of the Twentieth Century Galvanized Steel Wind Mill.

American inventors are entitled to most of the credit for the great improvements wrought in the design and construction of windmills, notably in the introduction of steel wheels and vanes and steel derricks or towers to carry the mills at a proper elevation. It is, however, a pleasure for Canadians to know

that some of the best models in the market are the product of Canadian thought and enterprise, being new in design, and not copies of American or other mills. One of these Canadian

mills has been granted a patent in the United States.

The up-to-date Steel Wind Mill combines lightness with strength, and the thin steel fans offer slight resistance to

the wind, and because of their curved shape have the effect of a number of sails and increase the power produced very materially. In addition, the steel parts, when properly galvanized, will withstand the effects of exposure to the air and elements much longer than wood. In consequence, the wooden wheel is being left behind in the race, and probably over ninety-five per cent. of the mills now sold are steel mills. It is impossible to get enough power from a wooden

geared power mill with its narrow fans to satisfy the user, but the present steel geared or power windmill is growing rapidly in favor and is pronounced by many men as the ideal



OLD STYLE WINDMILL.

farmers' power, for with it he can usually pump the water for house, garden, or lawn, and for his stock, and also eut all his feed, chop all the grain required, pulp his roots, saw his wood or run other light machinery.

The above illustration shows the fine new barn of Mr. II. W. Yorke, Dorchester township, on which is placed a modern 14-ft, steel windmill, which gives Mr. Yorke sufficient power for his purposes.

The geared or power mills run from twelve feet to sixteen feet in diameter, but the thirteen and four-

teen foot wheels are the favorites, probably cover ing seventy five per cent of the total safes in Canada in Mantoba where the cold is intense, it is almost in possible, or at least, extremely difficult, to use engines in writer, but this difficulty has no effect on a windmill.

This illustration shows one method used in Manitoba and the North-West Territories for a power windmail outfit with a work-room in the base of the derrick, where there is not a suitable barn on which to place the mind

The other class of windmills in common use are for pumping water only, and range from eight to sixteen fect in duameter. The eight, mine and ten foot mills being used chiefly by farmers and others requiring an ordinary supply of water, while the larger sizes are used by market gardeners and for railroads, or where large quantities of water to be numbed.

or where the wells are very deep or the water must be elevated a considerable height.

Pumping windmills can be, and are, used for many purposes by farmers for supplying water for the honse, graden, lawn and for the stock, by market gardeners, residents of villages or towns where there is no other water system, by sojourners at their summer homes by river and lake, and by every class who want water pumped easily and cheaply. The outfit here shown is the property of the Hon. J. M. Gibson, erected at his summer house at Burlington Beach.

One of the essential features of a good wind multi outfit is that it should be thoroughly galvanized, not only the wheel and vane, but when placed on a steel tower this, too, should be galvanized, so that exposure to the elements will not rust or quickly destroy. It is very poor economy to purchase painted mills or towers, as can be easily seen by inspecting the paunted mults purchased a few years



WINDMILL OUTFIT OF MR. W. GOODRIDGE, OAK BANK, MAN.

ago, and which are usually badly rusted.

In concluding this article, I desire to call attention to a few special features regarding steel windmills.

First. Their Cheapness.—The interest on an average pumping outfit, allowing ten per cent. for interest and deterioration, will not exceed three cents per day, and the average fanner who pays his hired man to pump the water must puseveral times that sum. On an outfit for both pumping water and giving

MASSEY-HARRIS ILLUSTRATED.

power, the cost is but a trifle more, and in most cases the saving on doing his own grinding and cutting feed will pay for the whole outfit in a few years. Then again, windmills are greater labor savers than any other class of machines on the farm, working as they do often might and day all the year Second Ther Sim-

Second Ther Simplicity — They are easily managed, and do not require a man to fire or to watch and drive the horses. With a wind they can bestarted in a moment and no time be lost in getting ready to work.

Third. Their Effecliveness.—In an average wind there is no



age wind there is no on the property of non J M GIBSON, DURLINGTON BEACH, ONT. difficulty in doing the work on even a very large farm and for a heavy stock. Experience shows that



there is sufficient wind, but, of course, some common sense is needed in using the good winds and having a reserve supply of water or feed ready for calm days. In a strong wind great power can be obtained, Recent enquiry from a number of reliable m.n. in Ontario who have been using wind p ower for several years brought a unanimous reply that they were well satisfied, and would not exchange for other power.



BARNS AND WINDNILL OF MR. H. W. YORKE, DORCHESTER, ONT.

190						900
SUN	Non	TUE	WED	THU	111	SAT.
			-	1	2	3
4	5	B	Z	8	õ	in
îı	5 12	1.8	u	15	16	17
10	19	20	57	200	2.9	21
10	10	20	64	60	20	A
20	26	24	120	29	00	SI DI

1900 APRILS 1900											
Sox	Now	TUE	WED	THU	Tki	SAT					
- 15	2 9 16 23 30	17.	18	19	20	127					

Kiss Her Every Day.

[Published in Woman's Life]



MASSEY-HARRIS ILLUSTRATED.



, 71 ...at the... Editor's Desk

BI-MONTHILY journal, while it may serve a very useful purpose in some respects, is not generally supposed to be in the van in advocating reforms, but we can justly claim to have been some months ahead of our more frequently appearing contemporaries and of our parliamentary representative in directing attention to the necessity of a certain line of policy being adopted in regard to three questions of considerable importance to the framing community

For over two years we have been endexvoring to rouse our readers to the importance of placing cold storage in the same category as road-repairing and transportation. Our contention has always been, that the future prosperity of the Canadian farmers depends as much upon having cold-storage facilities close at hand as upon being in proximity to a milroad. And the provision of such facilities should be as incumbent upon the community, be it township, country or province, as the maintenance of proper roads.

It is no use trying to supply the trans-atlantic demand for fruit and dairy produce, if the process of deterioration is allowed to commence before such perishable goods reach the point of export, which is incuritable when they are not placed in the cold chamber within a few hours of being gathered or manufactured.

That the views we have so persistently advocated are not beyond the reach of practical politics is evidenced by the fact that the question has at last been brought up in the Ontario Legislature, the Hon. John Dryden having introduced a bill to "provide for the incorporation of cooperative coil-storage associations." He explained that the bill was intended for the rural portions of the province to encourage individuals. At present manufacturers of butter and cheese enjoyed the statutory facilities intended by this bill, The Government considered that those who desired to crect cold storage buildings were Further, the Government deserving. intended to grant up to one-fifth of the cost of crecting such buildings, provided the fifth did not exceed the sum of \$600. The building would be inspected by an officer of the department. who would assure hunself as to the matter of couloment.

Premier Ross added that the Government intended further aid to cold storage by authorizing the municipalities to issue debentures for the establishment of cold-storage stations. One municipality, or combined municipalities, would be authorized to crect cold storage buildings either within their own boundaries or at some other convenient point. The Government, by this second bill, would also grant out of the consolidated revenue one-fifth of the cost, but not more than the sum of \$500 in any case. Between the two bills he considered that admirable cold storage facilities would be provided, or, at all events, a stimulus would be given to these enterprises among individuals and municipalities.

٠.

It is with intense satisfaction that we view this action of the Provincial Government, fraught, as it will inevitably be, with the most beneficial results for the Ontario farmer.

.*.

ALOXGSIDT the cold-storage question we have ranged the necessity of securing for the farmer's family more of the comforts and conveniences accompanying life in the town and city, and the lack of which has been the great cause of the migration from the country of those who possessed all the qualifications physically and mentally for the

development of the agricultural possibilities of Canada, but who could not stand the lack of variety attaching to the social side of farm life. To remove some of the disadverntages of living a considerable distance from town, we have urged at different times the establishment of travelling libraries and of free postal delivery in rural districts.

THE question of travelling libraries was dealt with and approved of at the last annual meeting of the Labrarians' Association, and both this and free postal delivery have found champions in two of the leading Toronto dailies. We are encouraged to believe that here again we have been the pioneer journalistic advocates of reforms which will be embodied in the statute book at a not very distant date.

Considering the identity of interests, which obtains between the farmers of Canada and the institution by which the MASSRY-HARRIS ILLESTRATID is published, it is only right that the columms of the latter should be devoted to advocating the claims of the farmers on every occasion; and that we have not been dereliet in our duty is, we think, abundantly evidenced by the fact that, for some time we fought singlehanded the cause of reforms, the merits of which are now acknowledged by other observers of public necessitues in the press and in parliament.

•**

IN the death of John Ruskin, whose portrait appears elsewhere in this issue, there has passed away another of the few really grand old wen of the age Ruskin has been described as "a painter who dipped his brush in ink; a writer who dipped his pen in a coior box; whose prose was poetry and whose poetry was prose," and, it may be added, that all his work, whether as writer or painter, was characterized by a passionate leve of nature. Equally strong was his low of humanity. Illis benefactions exhausted an inherited fortune of SI.-000 000 and but for the watchfulness of friends, of the revenue derived from his works, amounting to nearly \$15,000, he would not have had enough for his own comforts. The object of his life was to raise the mass of mankind to a higher level of moral perception by leading them to a keener appreciation of the beauties of nature. Art was his medium, and art which did not tend in this direction was to him a thing to be visited with censure the most scathing. His influence, not only in his own country, but wherever the Anelo-Saxon tongue is spoken, and in other lands as well, has permeated the lives of thousands to whom he was mercly a name, it was an influence of the kind that dies not with the man who wielded it, but re-appears in the works of successive generations who know not the source of the inspiration which operates within them and develops their best efforts.

٠.

OFTEN have we entered our protest against a vigorous nation like ours receiving all from the motherland in the matter of military and naval defence and contributing practically nothing. We in Canada were proud of our heritage of Empire, and while in the realms of peace we had contributed to the strength thereof, we had never struck a blow in its defence on the field of battle except in days of another generation. when Canadian hearths and homes were threatened. While the Empire was at peace or engaged only in local wars which did not unduly tax the resources of the headquarters. Canada kept on the even tenor of its purely colonial way. offering homes and opportunities to the surplus nonulation of the older countries, its people putting forth all their energies to the development of their country's possibilities. But as soon as the erv of danger was hearddanger to British freedom and British supremacy in a far-off portion of the Empire, and which, if not averted, would shake the Empire to its very foundations-from the farm and the factory, from the workshop and the office, from the Universities and other halls of learning, came forth Canada's sons asking to be allowed to stand shoulder to shoulder with the regulars of Britain and with their brother volunteers of the Australias in upholding the common cause of all on the battle fields And while to-day of South Africa. many Canadian hearts are torn with grief, and sorrow fills many a Canadian home, the nation is richer and stronger; its character is tinged with a deeper hue and its life will be fuller and nobler by the death roll of Paardeberg, for that list of dead is the blood-written charter of Canada's admittance to the ranks of nations who recognize that their responsibility for the maintenance of freedom and justice extends beyond their own immediate borders.

EUROPEANS have been wont to sneer at the folly of the British Government in not adopting conscription or enforced service in the army. That is the system in vogue in other European countries, and to its existence the United States and Canada owe tens of thousands of their sturdy farmers of different nationalities who left their native lands to avoid the risk of being called upon to serve.

So much for conscription.

When things looked ugly for England in the Transvaal, and foreign intervention seemed possible, a call went up for Over two thousand Canavolunteers. dians were at the scene of hostilities as soon as they could be transported there. Thousands were ready to follow if only given the opportunity. The same thing occurred in Australia and New Zealand, in Cape Colony and Natal; whole regiments of volunteers and militia offered themselves in England; and there are

۱

included in the British forces in South Africa to-day over thirty thousand men who thus sought permission and were proud to be accepted to fight for their Sovereign, and of the whole army of over 110,000 under Lord Roberts, not a single man need have served Her Majesty to the day of his death if he had not wished and volunteered to do so in the first place.

This is under the system that foreign critics describe as a dismal failure.

 ${\rm A}^{\rm T}$ the request of President Kruger, President McKinley offered his services as mediator to the English Government with a view to bringing about peace. Kruger made a similar request to the governments of all the leading nations, who politely but firmly declined to interfere in a matter in which England had stated she would not tolerate interference.

Of such is the statesmanship of United States Presidents. ن ^{بو}ر ب

Two years ago all Europe was ready to interfere between United States and Spain, with a view to saving the latter from the full effects of her inevitable defeat. A hint that England's navy would be at the disposal of the United States in the event of the latter being menaced by other powers, kept the rest of Europe quiet, and the Republic was allowed to crush Spain and reap the fruits of her victories.

Of such is the gratitude of the United States. ***

 ${
m WE}$ like individuality and character in a climate no less than in a human being. Insipidity in either is an offence against nature, but Canada's climate as we know it in these days of March, possesses an individuality that is a crime against nature, humanity, and everything that lives and tries to live, except the coal dealer.

TOLI, GATES are to be a thing of the past in Ontario, and the heart of the ever watchful gate-keeper is heavy, but he sorrows alone, for to the farmer and the rest of the community, the government action is adopting a provincial policy for the maintenance of good roads means more money and more comfort.

•*•

WE are not jealous and we wear the Shamrock to-day (17th) for the first time and with a sense of satisfaction, but we hope Her Majesty will not stop short at Ould Ireland. Canada's boys did their best and Lord Roberts says they avenged Majuba Hill. If the venerable sovereign whose birthday Canada always keeps as its high feast day, would only announce that she was going to wear the maple leaf on May 24th next, in honor of the poor fellows who did what they could for her at Paardeberg, she would sound a chord that would vibrate and vibrate again from the Atlantic to the Pacific.

T appears that Canada's action in sending troops to South Africa is causing much displeasure to certain United States' politicians and others who see in it a violation of the Monroe doctrine It is rather comical to hear our friends talk about laying down a law for a whole continent when they cannot enforce such fundamental laws as "thou shalt not kill " in a number of their own states Kentucky is to the fore this time in this regard. A very bitter election for governor culminated in the assassination of the successful candidate and the continuance in office of his opponent by the very simple expedient of putting under arrest those officers and representatives who opposed his will. If McKinley instead of making himself the laughing stock of Europe, by offering to act as peace-maker between England and the Transvaal Republic, had turned his attention a hitle nearer home and quelled the anarchy in Kentucky, he would have stood a better chance of going down to posterity as a statesman, whereas, he looms large as a humbug of almost as pronounced a type as Faul Kruger.

THE Westminster, one of the leading weeklies of Canada, pours some hot shot into Kipling in a recent issue and bewails the prostitution of genus in one so highly dowered, evidenced in "The Absent Minded Beggar," and other poems dealing with the characteristics of the British soldier. Our esteemed contemporary appears to forget that the Poet of Things as They Are may perhaps serve as useful a purpose as the Poet of Things as They Should Be. Surely no unbiased critic will deny the deep love of his fellow creatures which underlies Kipling's most "meaningless jingle," and not even Tennyson or Wordsworth, the Westminster's standards of genius exalted, ever displayed a more sublimely spiritual touch than did Kipling when, in the hour of its glorying in imperial power evidenced at the Jubilee, he gave to the Empire that hymn of national heartsearching, "Lest We Forget." There are some instances where the flavor of Kipling verse cannot by any means be termed delicate, but that he is merely a passing star in the constellation of poetic genius whom a future generation will not hear of, we do not for one moment believe. Robert Burns is more widely read and is a far more popular idol to-day than he was a hundred years ago, and yet the most glaring vulgarity that Kipling has perpetrated is refinement itself compared with some of the verses of the great Scotch poet.



AT DENTONIA PARK FARM.

In the Dairy.

N our November-December issue we referred to the arrangements Mr

W. E. H. Massey, the proprietor of Dentonia Park Farm, was making for the installation of the necessary plant for modifying milk, or, in other words, in treating cow's milk so that it be absolutely pure milk, and the use, in ease of infants and invalids, of modified milk, there will be a great saving of human life and a decrease in contagious diseases.

During the past ten years sanitary science has made progress in regulating



NOTTLE CLEANSING ROOM.

This illustration shows the RediteCiberry Room, which is fatted with all the requests Steam Apparatics what User Tray and whole A car of Architecholdter, patially removed from the sterihorr, will be observed in the engraving. The Boot is of asphale.

comes identical with human milk. With this most interesting phase of modern dairying as practised at Dentonia Park we shall deal at length in a future issue.

The object of Mr. Massey's darying operations is to demonstrate to his countrymen that by the general use of some of the more important supplies for human life. But it is noticeable that very little improvement has been made in the production of milk. Milk, as usually sold to-day, is about as suitable a vehicle for the transmission of disease as it was before science revealed the dancers that may lurk in it. Science

A PARTY AND A PART

MASSEY-HARRIS ILLUSTRATED.

In the dairy has stopped at cheapening and improving the manufacture of butter and cheese. It has not been, with rare exceptions, extended to improving the milk production either of the farm or for the cities. But the general samitary



MILE FILTER THROUGH WHICH THE MILE PASSES INTO THE LABORATORY.

condition of barns, milk houses, and the transportation of milk are still practically unregulated.

Wholesome milk is produced only under certain known conditions. It must be obtained from healthy cows. which are kept in healthy barns, fed upon healthy foods, and given pure water. It must be drawn from clean cows, by clean men, with clean hands, into clean pails, in a clean atmosphere. It must be handled in a scientific manner, filled into sterile vessels, transported quickly, and used while fresh. These are some of the conditions which must surround the production of good and safe milk. It is therefore certain that the ordinary milk of commerce is not a safe milk to use, as few of these requirements are employed; and it is quite certain that a cheap milk cannot be a perfect one,

The infectionsness of milk is well known. Typhoid fever and other diseases are frequently carried from milk to man, and it is now alleged ...berculosis also is thought to be frequently carried from milk to man. An unhealthy cow, an unclean bara, a carcless attendant, an affected well, and other causes too many to enumerate, are the means by which some of the most dangerous discases are communicated, Every known practical means of climinating these dangers is made available in the Dentonia methods.

We have in previous articles referred to the natural advantages possessed by Dentonia Park Farm, situated, as it is, on the highlands just north-east of Toronto-one of the lealthest spots in Ontario, and where there is an abundant supply of pure spring water on every hand, and the rolling and shady pasture lands are ideal.

The prize-winning herds of Jerseys and Ayrshires, already described in these pages, are scientifically fed and cared for by expert herdsmen. No animal is received until tuberculin tested, and the whole herd is inspected



MEN'S CLOTHES STERILIZER-BATHROONS ADJOIN THIS WASHROOM.

and certified to twice every month by William Mole, M.R.C.V.S. These certificates are available for the inspection of visiting physicians. Sick animals are removed to an isolation barn previded for the purpose.

The barns and buildings are thoroughly ventilated by an improved system. Manure is removed twice daily 300 feet from the barns by an overhead intelligent, thoroughly instructed, and are clean in person and habits, are under the constant supervision of Dr. C. H. Britton, of East Toronto, who certifies



DENTONIA MILK-LABORATORY. Showing the Solid Porcelain Receiving Vists, Cooler and Aerator, Turbine Gream Separator Bottle Faller, Bottle Car, etc.

trolley system. Liquid manures are conveyed from the stables by iron pipes with leaded joints. to their health periodically. (These certificates also are open to the inspection of visiting physicians.) Sanitary milk pails, which are of a special design,

The milkers and dairymen, who are

are sterilized, as well as all other dairy apparatus, before being used. The milkers have clean hands and wear special sterilized clothing while milking, and the cows are groomed and cleaned twice daily before this operation.

The milk-room, separated by anterooms and airy passages from the main building, is practically clean in a bacteriological sense of the word. Side walls are covered with tile and the floor with asphalt. The air entering the milk-room is filtered through gauze, and in summer time is washed with spray, an electrical-driven exhaust fan changing the air every few minutes. The milkers are not allowed to enter the milk-room, but pour the milk into a filter, whence it passes through the wall to the solid white porcelain receiving vats inside the milk room.

As the milk falls from the porcelain receiving vat over the large tinnedcopper tubular cooler it is acartact. This cooler issupplied with water forced to it by a duplex steam pump through an iced coil and reduces the temperature to any desired point withma^o of freezing.

The Dentonia Spring Water Trout Ponds give an abundant supply of clean ice for summer use in cooling, packing, etc. There are three ice houses on the farm.

The bottles, as received back from the customers, are sterilized just inside the receiving door. They then pass to the bottle room, are thoroughly washed in three changes of water, and again sterilized, the bottle room being specially equipped with slate tubs, steam apparatus, etc., for this work. They then pass to the milk-room, where they are filled and sealed, wheree they go to the shipping room to be packed in ice boxes when shipped by express, or direct to the wagons for delivery to city customers.

The aim at Dentonia is not to make dirty milk palatable, or to kill the germs in it by pasteurization or sterilization, but the whole effort is devoted to keeping the dirt out. The Dentonia Dairy is not a commercial enterprise in the ordinary sense, although Mr. Massey intends to demonstrate that scientific dairying is not only a blessing to the community but profitable to the owner, and Dentonia does not seek to compete against existing dairies. It is only possible to supply a somewhat limited custom for table milk and cream in the eastern half of Toronto. Mr. Massey will be gratified if his enterprise serves as an illustration of the fact that the people of Ontario's capital really want and are willing to pay for good, clean milk.

The business of the Dentonia Dairy will chiefly be to care for the babies and invalids.

The Dairy Cow.

ER head is long and slender, with her face Stamped with the tenderness of motherhood.

The eye is kind and gentle with wide space Above, for honest brains—the wide mouth should Be set with firm, strong teeth, and powerful jaw

To run her millstones, and her ear should be Lined with soft, colden velvet without flaw.

A long, thin neck-for you will never see

A steer's neck steer the way to butter fat; Don't mind if hip and shoulder bones stand out On which you may with safety hang your hat.

A wide, deep chest shows that the heart is stout ;

You want a sloping back, a rib well sprung, A stomach, like a barrel, deep and wide,

With great capacity for food and lung. An udder squaring low on every side,

A zig-zag milk vein larger than your wrist Runs far up to her heart and then turns in,

A well-shaped teat quite filling out your fist. Her hind legs well apart-a soft loose skin,

Yellow as gold, with soft and oily touch, Fine, silky hair, a long and slender tail,

Active and full of nervous life-now such Is Mrs. Dairy Cow, queen of the pail.

-Selected.

ł

t

A Great Tribute to Canadian Valor.

Lord Roberts' Message from Paardeberg, February 27th, 1900.

"At 3 a.m. to-day a most dashing advance was made by the Canadian Regiment and some Engineers, supported by the 1st Gordon Highlanders and 2nd Shropshires, resulting in our gaining a point some 600 yards nearer the enemy and within about 80 yards of his trenches. where our men entrenched themselves and maintained their position till morning, a gallant deed worthy of our colonial comrades, and which, I am glad to say. was attended by comparatively slight loss. This apparently clinched matters, for at daylight to-day a letter signed by Gen. Cronic, in which he stated that he surrendered unconditionally, was brought to our outposts under a flag of truce."

Massey-Harris Works the Scene of Remarkable Manifestations of Enthusiasm.

THE receipt of the news that Ladysmith was relieved created no

greater enthusiasm anywhere than at the works of the Massey Harris Co, Toronto It may be that the imperialism of the Massey Harris employees takes a deeper personal tinge than that of the average loyal British subject owing to the fact that the institution they are associated with is the Empire's arsenal for the great weapons of peace. The Toronto Star of Mar. 1st referred to the day's jubilations thus :

"The news of the relief of Ladysmith at the Massey-Harris Works provoked unrestrained enthusansm. In the maan machine shop some two hundred men left their benches, cheering lustily, and lawing gathered into a group, sang "God Save the Queen' with great fervor. Later on, the employes, of their own accord, took up a collection and sent the following cablegram to Lord Lansdowne. Secretary of State for War:

"Hearty congratulations on relief of Ladysmith from two thousand loyal Massey-Ilarris employees. (Signed), YOUR OLD FRIENDS."

In the afternoon the following reply was received :

"Thanks for congratulations, Glad you still remember me. (Signed), LANSDOWNE."

"They remember will great pleasure Lord and Lady Lausdowne's visit to the works in May, 1837, and the deep interest he and his noble lady took in inspecting every department, and his kind words on that occasion. So urgent was the request for the balance of the day.



CORPORAL FREDERICK W. COOMBS.

in which to celebrate Buller's great victory, that Supt. Love granted them leave of absence for the afternoon for the purpose.

"One of the men went home and returned with his bagpipes, and, headed by him, and to the martial strains of

> the instrument, several hundred men marched in the street, near the factory. They then enhasted the co-operation of the president of the company, Mr. W. E. H. Massey, who led the enthusiastic celebrants in cheers. The scene was one of the utmost patrotism and enthusiasm."

> > ***

Corporal Frederick W. Coombs, G Company, Royal Canadian Regiment, who was wounded in the gallant attack by the Canadians in the early morning hours of February 27th upon the Boer position. the immediate result of which was the surrender of Cronie's army with seven or eight guns and 5,000 small arms, was a valued member of the Massey-Harris staff at St. John, N.B., and as soon as Mr. J. D. Patterson, the manager of the Maritime Branch. heard of Corporal Coombs being wounded, he cabled him: "Sympathy, Congratulations.



The Baby.

WHEN morting proke and baby come, The house did scarety seem the same As just before. The very air Grew forgment with the essence rare of a celesisti garden, where The angels, breathless, leaned to hear The agels, breathless, leaned to hear the hear of the agels, breathless, breathless, breathless, breathless, breathless, breathless, breathless, breathless, breathless, the hear of the agels, breathless, breathless, breathless, the hear of the breathless, breathless, breathless, when bey came the samewhen bey came the samewhen bey came the samewhen bey came the samethe hear of the samethe hear of the samethe hear of the samethe hear of the samethe same the same t When darkness came and haby diel, The mark gref that fell belied The transient joy that filled the room. Ital just before, where broading gloom Now dumbly spoke the buby's doom. We hid away the hulte things Wo can by Nature's matchless loomwas a shared a start of the swape Wascel dummer on the finch's wings the flowers; too, in sorrow vied, As if kind Nature drooped and cried-When buby died.

THINGS WHICH CAN BE MADE OUT OF OLD GLOVES.

VERVONE has lots of old gloves, and as a general rule when they are solied or worn they throw them away as uscless. The most careful anongst us may send them to clean once or twice, but when they show signs of wear and the kid rubs, then they are cast aside as of no further use. This is quite a mistake; there are many little things which can be made of old gloves if only a little pains and trouble be expended upon them.

First of all there is the midget photo frame. Cut a piece of stout cardboard the desired shape, the form of a heart



A PRETTY PHOTO FRAME.

is quaint and pretty, but a square, an oval, or a round would look equally well. Cut out with a sharp penknife the space for the photograph. Take a pair of gloves—grey, tan, or stone color --and cut of the unworn portions at the back of the hand. The part which extends from below the fancy sitching to the wrist will be found in excellent condition. Clean it with rubbing over with benzine, then lay the cardboard on it, and cut the required shape. Gum or glue it with liquid glue firmly round the edges and press. When dry decor-

ate the run where the photo fits with an application of gold paint. If the worker is artistic she may paint a small spray of flowers in the left-hand corner, or, if the frame be a heart-shaped on e, decorate it with arrows outlined in gold paint.



A back and support must be cut out of cardboard and firmly glued on If

glass is desired it will A NEAT LITTLE NEEDLE be found the best to

purchase a small sheet at any glazier's and get him to cut it into the required sizes. The glass should be glued in before the back and support are fixed in place.

A double heart-shaped frame to hold a couple looks exceedingly pretty and novel.

Card cases may be made by doubling a large thick postcard and covering it with suede in some delicate color, and then liming the inside with silk and stitching on pockets of the suede. The outside of this dainty case may be ornamented by a unongram in gold. An exceedingly novel pin-cushion for the dressing table may be made by cutting off a glove at the wrist, sewing up the vent, and stuffing it with bran or cotton wool until it looks as if a hand

were inside it. When stuffed, this quaint pin-cushion may be gilded or coated with pale pink enamel and finished with a bow of ribbon, or a loop to hang it up by.

Out of evening gloves dainty belts may be made with very little trouble. Get a length of stout Petersham the required width, and cover it with suede sold for evening gloves. One pair of gloves will make a belt, and the tops, when rubbed with benzine and ironed on the wrong side, make a charming belt, which is ornamental and new.

The join down the centre of the back should be concealed by

a row of silver sequints sewn on A work convert thickly, and the effect is even PARCEMENT more pleasing if a row of the sequints gram be sewn round the upper and lower flowe edge of the belt. It may be fasnature the work hocks or eyes, or an orma. A mental clasp may be bought for a few cover ents at any fancy shop and attached. with

Dainty little needle-books may be made in the same way as the card case, only the inside should be filled with graduated leaves of flannel, pinked out round the edge and arranged in two

colors. The leaves should be held in place by a strap of baby ribbon in a contrasting color. A very pretty little needle-book would be grey suede of doeskin, lined with white satin, and filled with alternate leaves of white and pink flannel, held in place by a strap, and closed by strings of pink or green baby ribbon.

Small pocket pin-cushions, so beloved of all ladies who indulge in country walks or bicycling trips, can be made by cutting out of cardboard two little rounds the size of a twocent piece, covering them with fiannel and suede, then seaming the two halves neatly together, and sticking pins closely round the edge.

Both pin-cushions and needle-

books are improved by a monogram painted on in gold, or a single flower, such as a pansy, depicted in natural colors.

A useful stamp box can be made by covering any ordinary cardboard box with leather and then decorating it.

A Home-Made Flower Stand

THE flower stand seen in our illus- on to the edge of the box. Then the

I tration can easily be made at home. The upper part is composed of a box, which should first of all be planed and then smoothed.

The supports are broomhandles, and these are forced through the box, holes being first of all bored in the wood by a red-hot poker.

The small pieces that go across and the triangular ledge underneath are glued on.

Round the box you can nail some Japanese leather paper, or you can aspinall the wood itself.

In our illustration an embroidered band is nailed on all round. The lower edge is nailed with tiny furni-

ture tacks to the inside of the work



edge of the box. Then the embroidered band is turned up and over the inner edge of the box, fancy gilt nails being placed all around or

not just as you prefer. O course, the embroidery Must be suited to the purpose. Anything very dainty and liable to be spoil by a little damp from the flowers will not do at all. Serge, embroidered in tapestry wool, is as good as anything, and lasts long.

When this is done, line the box neatly with American cloth, unless you have a tin to fit it. In any case you should stand the pots in saucers, and not allow water to be spilt inside the box.

The supports and bars across must all be enamelied.
CHIT-CHAT.

A WOMAN TALKS TO WOMEN-A MOTHER SPEAKS T MOTHERS.

'Tis Useless to Regret.

THERE'S many a plan that comes to analyhi, There's many a light gone out; And disappointments, griefs and cares, Have heiged us round about; And many a sol mistake we've made Throughout our lives, and yet, We've done the very best we could; 'T's useless to regret.

For out of evil good has come. And out of darkness light; And all wrong-dongs in this world, Some day will be set right; And though we have not reached the height Attained by others, yet We've done the best we could, my dear. The useless to regret. We've tried to live like honest folks, To do our duty well, 'Gainst evil things to take our stand, In goodness to excel. So judge yourself not harshly, desr, Nor at misfortune fret; We've done the best we could, and so 'Tjs useless to regret.

7HEN is a child ill? The answer to this question is not always easy, when the infant cannot speak as yet, nor utter his complaints. The crying of children is not always an utterance of pain, nor does it always show hunger. When a child cries loudly, continuously and vigorously, we may, at least, be sure that there is no disease of the respiratory passages. It nught, however, indicate a disturbance in the digestive canal. If an inflammation of the internal ear is the cause of the crying-and this is by no means a rare occurrence-or some other deep-seated suppuration or inflammation of the periosteum, then the child will cry louder when the suspected place is touched or pressed upon. Single shrill cries, occurring also in sleep should direct our attention to cerebral troubles; a soft, dull, discontinued crying, more sighing and moaning, points to pulmonary disease. If the cry is hoarse and toneless, we should think of laryngeal troubles. A soft, long-continued whimpering should cause us to suspect an inflammation of the abdominal organs; a weakened, but rather continuous crying is a concomitant of, the setting in of fever

·*•

"I KNOW why little black boys is so happy," said five-year-old Willie.

"Why? " asked his mother,

"'Cause their mothers can't tell when their hands are dirty."

IN the days when fortune-telling was more in vogue than at present, the shape and appearance of the finger nails were looked on as having reference to one's destiny. The nails were first rubbed over with a mixture of wax and soot, and, after being thus prepared, were held so that the sunlight fell fully upon them. On the horny, transparent substance were supposed to appear signs and characters from which the future could be interpreted. Persons, too, with certain descriptions of nails were supposed to possess certain characteristics Thus, a man with red and spotted nails was of a fiery, hot-tempered disposition, whilst pale, lead-colored nails denoted a melancholy temperament. Ambitious and quarrelsome people were distinguished by narrow nails. Lovers of knowledge and liberal sentiment had round-shaped nails, Conceited, obstinate and narrow-minded persons were possessed of small nails ; lazy, indolent individuals of fleshy nails; and those of a gentle, timid nature of broad nails.

FATHER: "How is it that you're such a dunce at your lessons, Tommy?" TOMMY: "I expect it's hereditary."

THEY manage wife-beaters very well in Germany. When a man is convicted of beating his wife, he is allowed to continue his work, is looked after by the police, and arrested every Saturday and locked up until Monday morning. when he is again delivered over to his employer. His wages are given to his wic. If he won't work he is taken to gaol, where he has to work harder than outside. The more one studies this plan the more sensible it seems.

٠*•

MAMMA: "What are you and Freddy quarreling about ?"

"We were playing keep house, and Freddy came home and found dinner wasn't ready."

A workan's prospect of marriage is distinctly affected by age. The statistics of all centuries show that the great majority of women marry between the ages of twenty and thirdy. Before reaching twenty a woman has, of course, a chance of matrimony, but the objections raised by parents or friends to marriage at a tender age frequently outweigh the desire of the young woman to acquire a husband, and lead her to defer the wedding day.

All statistics that have been gathered bear out the statement that a woman's best chance to marry is at the age of twenty-five, that over six-tenths of the marriages take place between twenty and thirty, and consequently that a woman's chance increases up to twentyfive, and steadily decreases after that age until it reaches the vanishing point somewhere about sixty. Out of 1,000 married women 149 marry before the age of twenty, 630 between twenty and thirty, 111 between thirty and forty, the womar, in the thirties having not sogood a chance as the girl in her teens; between the ages of forty and fifty the falling-off is enormous, only 41 in 1,000 contracting an alliance in that decade; while past fifty the chances still further diminish, for the woman who has celebrated the semi-centennial of her birth has only 19 chances in 1,000.

[9118: farmer is "a country Jake." When snow lies deep on wintry bills, and have the test of the section take, And have the test ong of nurmanner fills: And many a quip behind his back, The city relative doth creak, Bat when the warm sun starts the grass, A mighty change doth count to pass; The "country Jake" becomes a king, And out upon the farm ere long He counts a hundred thousand storg.

٠.

CONSIDER the following specimen of a little English girl's powers of composition worthy of a place in Chit-Chat The young essayist had been given the task of writing about 100 words on "Boys."

"Boys are men that have not got as big as their papas, and girls are women that will be young ladies by and bye.

"Men was made before women. When God looked at Adam he said to humself, Well, I thunk I can do better if I try again,' and then he made Eve

"God liked Eve so much better than Adam that there have been more women than nien ever since.

"Boys are a trouble. They wer out everything but soap If I had my way, half of the boys in the world would be girls, and the rest would be dolls. My papa is so mee that I thunk he must have been a httle girl when he was a little boy."

Little Sweetheart.

IIITLE Sweetheart, how I miss you When each hard day's work is done-How I miss your fond caresses. At the setting of the sun I For your sweet red lips will linger Never more upon my brow-Little Sweetheart 1 Little Sweetheart ! I am very honely now!

Little Sweetheart, how I loved you In the days that have gone by I Oh, my child-my little dayhter-It was hard for you to die I It is hard for me at evening, Never more to see you wait, Little Sweetheart I Little Sweetheart ! With your kisses at the cate I Little Sweetheart, I am weary Of the fret and toil of ble. Only Death will bring the darl ness, And the solemn rest from str?c. Will you meet meat God's gateway, When my last day's work is come-Little Sweetheart I _ Little Sweetheart I = At the setting of the sun ? ۱ 85

MRS. KRUGER AT HOME.

HOW SHE WAS WOOED AND WON BY PAUL KRUGER-A GLIMPSE OF HER HOME LIFE IN THE TRANSVAAL.

THE wife of "Oom" Paul Kruger is a treasure '--and this by the testimony of a man who, however much he may differ from us in other things, may be allowed this utterance.

When, with his goat-like beard tinged with hairs of gold, and his sunken cyes It wuth the light of low, young Kruger came a woong, he came not a bit in the fashion of the modern youth who offers hand and heart, goods and chattels. According to Boenish custom, his pleasure had been made known. Mrs. "Oom "Paul, who was then only gentle, blue-eyed Miss du Plessis, came forth timidly to greet him, in a gown so simple that she could surely never have expected to win a suitor through it.

And these are the words she uttered with downcast eyes and checks of rosy red. "I can bake, stew, sew, clean, scrub," And behold, it was enough! Her suitor was at her feet. He, who was then only Stephanus Johannes Paulus Kruger, took her from that moment to his heart-to him she was the most rarely accomplished of all women.

Oom Paul's wife has that virtue we call housewifeliness to a remarkable degree. Some women have it in addition to other excellent qualities. The Boer woman has it to the exclusion of all else. Mrs Kruger is, first, a wife; secondly, a housewife; and thirdly, nothing. Through this woman a fortune of substantial proportions has been saved. It will be her epitapli. Future generations of wives may ask: "How did she do it?" and the answer will be the same as on the memorable day of her wooing: "I can bake, stew, serub, sew."

Mrs. Kruger, with her husband's fortune, might live in positive luxury and, indeed, one might say, with almost unequalled splendor. She might have driven in an equipage, and lived in a palace to match our Queen's own residence. She would have none of them,

She looked at the black that shone upon her stove, and was happy. She counted the irons that stood in a row, and rejoiced. She thanked God that there was plenty of clothes-line. She was grateful for the numble fingers that onabled her to sew.

She and her husband live on the amount allowed them from the government for "coffee money." We have all heard of this allowance, yet few are aware that on this coffee money, which has supported them for years, the Krugers have entertained diplomats and travellers from near and far, and no one has come out from that hospitable mansion hungry. No one could, who has a palate for good cooking, for Tanta Kruger's is not of the best. She is her own *biof*, and furthermore she is her own butter.

On the occasions when she has guests, she wears her very best Sunday-go-tomeeting black gown. She dons this gament just before she announces "Dinner is served."

She does this at the last moment, because, before that, she has been adding pinches of salt to the stew, last dustings of pepper to the soup. Then one of her daughters remains in the kitchen. while the first lady of the Transval—just as the scorching African sun as going to rest—takes a second to wash, and dons her single holiday goarn.

At five o'clock every morning the little Boer household is astir. It is a little household' zow, for out of the sixteen childreu who called her mother only seven are alive.

What serves as their Buckingham Palace or W adsor Castle is a hittle twostorey cottage. It has in the parlor a nice, neat set of black horse-har furniture that Mrs. Kruger had on her wedding day. It has two marble-topped tables that came with it. The halls and walls of this little home are as clean as a new bin.

Over her little kitchen stove at five o'clock any morning Tanta Kruger may be seen bending industriously. She has risca half an hour carlier in order to light the fire, and when the President arrives, the aronna of coffee fills his nostrils. It has been said that Mrs. Kruger prides herself upon her coffee. It is one of her boasts, and she is a modest woman. Another is that she

to a state of the state of the

accomplishes her end with less coffee than any other housewife in Pretoria.

After Mrs. Kruger has listened to a Bible reading from the lips of her husband, she has the dishes to wash, the little house to keep clean, the beds to make, the pots to burnish, the stockings and socks to darm

And Oom Paul must be very hard on the heels of his socks, for no writer has ever come out of the heart of the Transvaal who has not described Tanta Kruger with a basket of stockings and socks in her lap, spectacles on her nose and a darning needle in her hand

If the wife of President Kruger is not darning stockings she is sure to be ab sorbed in a pastime equally insportant. Every stitch in every dress she has ever worm, and every stitch in the dresses of her daughters for many, many years, this good lady sewed.

She believes in one black dress for best, one for every day and one for mornings. She has two bonnets; one she wears to church, and one she wears to market. Her church bohnet is a piece of her own handiwork, and it ranks second only in notoriety to that famous "topper" of her husband.

Tanta Kruger loves animals, and here is a story bearing out that affection for dumb creatures. The people went to her when they were crecting a statue to their beloved chief to ask her opinion of the sketches, and to bee her to add any suggestions. The drawings represented him in his black coat. old-fashioned top-hat and best black suit. His wife looked at them with delight. She thought them beautiful. The tears were in her big, brown eyes in the excess of her gratitude and pride Then. modestly, she made a request. She begged that the crown of the top hat might be left hollow so that the birds could always be able to drink from it. And so the hollowed crown of the hat catches the rain when it falls and the birds flutter around it to drink and bathe.

This is only one of the pretty stories, full of tender pathos, which are told of this unique woman. There are others that tell how her people love her, how kind she is to everyone, and how she worships her Oom Paul. When he dies, the people say she will die too. He is her lord and master—her idol, her strength.—Ex.

The Tallest Woman.

THE tallest woman, probably, in the world, is Miss Ella Ewing, of Gorin, a little town not far east of Kansas. She is twenty-six years old, according to the family Bible, and measures eight feet four inches. Miss Ewing was born at Goria, and when twelve years old measured nearly seven feet, but kcpt on growing, to the amazement of her family and the neighbors. In her girlish years she was quite sensitive about her height, because the other children used to tease her, but when she discovered that it was worth filty dollars a week from circus and museum managers she took another view of the case. She earned enough money to lift the mortgage from her father's farm and retired to private life. Miss Ewing has had several offers of marriage, but is still-atmwed.

The Table Set for Two.

III "III subshine fails on the window-sill, And the day looks in as the open door. The kettle sings, and the dear old wife Goes tack and forth over the kitchen floor With plate and platter, and fork and spoon. As every day she is wont to da. And she lays there with a quiet grace On the bouch! table set for two.

- Oh : the bread is like the sea s white spray, And the cloth is clean as mountain snows, From the pantry shelf to the kitchen store
- The dear old wife on her errand goes. The morning-glories over the porch All in a riotous tangle run,
- The cat lies curled asleep on a chair, The old dog blinks at the noonday sun.

But the dar old wife is sad to day, And the moment phone have seened so long. For her thoughts are of the long ago. When the old house rang with mith and so dong? When the red checked boys and nerry grain. Come trooping in through the upon door. Some wander now 'neath an allen sky. And some will come tack no more—so more. There are empty chairs squared the wail. And the wide old rooms are strangely with. The day is sad though the sumaline fails

Like the sifted gold on the window-sill, And the dear old lady in her quiet way Does the homely tasks she is wont to do:

But the tears fall fast as she sadly thinks Of the lonesome table set for two.







Mine Vamily.



Curly headed, and full of glee. Drowsers all oudt at der kake-He vas been blaying horse, you see-Dot's little Otto.

Von hundord seevty in der shade, Der odor day ven she was veighed— She beats me soon, I vas av raid— Dot's mine Gretchen. Bare-footed hed, and pooty stoudt, Mit grouked legs dat vill bend oudt, Fond of his pier and sourkrout— Dot's me himse!f

Von small young baby, full off fun, Von leetle prite-cycd roguish son, Von frau to greet when vork vas done, Dot's mine vamily.



TATA MADE SUCH A SPLENDID SANTA CLAUS THAT EVEN THE DOGS DIDN'T ENOW HIM."

"Brave Bill "-and his Enemy.

HEN the report of the loss of the Maine reached the United States, says Youth's Compan-

ion, the account was given also of the dauntless courage with which the officers and sailors met the disaster. One man, while the thunder of the explosion was still sounding in his cars, appeared at the door of Captain Sizsbee's cabin, and touching his cap, said calmly:

"Excuse 11e, sir-I have to report that the ship has blown up, and is sinking."

He had faced an almost certain death in order to save the captain's life.

When the story was told, the heart of the nation responded with a proud throb. Every American felt honored by the courage and coolness of his countryman, and rejoiced that by some happy chance he was among the few who were saved.

His after story is brief, and as it has been told in all the daily journals there can be no indelicacy in reciting it here.

He was a marine orderly on the Maine, a gallant, generous, friendly young fellow, who had but one enemy -himself, He drank to excess. After the destruction

of the Maine he came to this country, and was received with praise and affection as a hero. His friends gathered around him; hemarried. and soon had another position. He loved his work, his friends and his wife, but not work nor friends nor home could drag him away from the fatal habit.

Not two years after that day when a hero among heroes, he trod the deck of the sinking ship he sat alone in a public park in New York, a unserable outcast, who for hquor had given up all that made life dear Mad with want and despair, he kissed the picture of his child. and put an end

A Klondike Dog.

EEDS of heroism have been enacted in Alaska which history will never chronicle. Truth prints a story of one party of prospectors who owe their lives to a dog.

Upon the desolate waste of that inhospitable glacier, the Valdes, which has proved a sepulchre to so many bright hopes

and earnest aspi-

rations, last win-

ter a party of

prospectorswere

hadworkedtheir

way forward. death disputing

every foot with

them, until it

was decided that

the main party

should remain

in camp, and two

of their num-

ber, accompanied only by a

dog, should en-

deavor to find

a trail which would lead away

from the glacier For days the

two men wan-

nature succumb-

ed and they lay

and exhausted

Their faith-

ful companion

clung to them

and the warmth of his body

was grateful, as

they crouched

low with the

dered until

down weary

Dav after day they

camped.



THE YOUNGEST OFFICER IN THE TRANSVAAL ARMY DENT KRUGER'S GRANDSON, FRITZ ELOFF, AGE 4.

to his life-a life which God had fitted him to make happy and noble.

We tell this true story to American young men, as we would point out a beast of prey hidden by the path along which they must walk.

Tox : "You say the bride and bridegroom looked nice, what about the guests ?"

WILL. "Oh, they took the cake,"

bitter ice-laden wind howling about them.

Their scanty stock of provisions was well-nigh exhausted, when one of them suggested sending the dog back to camp. This was a forlorn hope, but their only one. Quickly writing a few words on a leaf torn from a book, they made it fast round the dog's neck and encouraged him to start back on the trail.

The sagacious animal did not appear to understand, but after repeated efforts

39

they persuaded him to start and he was soon swallowed up in the snow, the mist and the storm.

Two days and mights passed, during which the men suffered untold agonics. On the evening of the third day, when all hope had gone and they were becoming resigned to their fate, out of the binding and dritting snow bounded the faithful dog and close behind him came ready hands to minister to their wants.

The remainder of the story is simple. The whole party returned, having abandoned their useless quest, and on the last *Topches* going south were two grateful men and a very ordinary-looking dog. "That dog will never want as long as we two live," said a grizzled and sunburnt man.

The Children of Dreyfus.

A PATHETIC incident connected with the Dreyfus trial is given by the Paris correspondent of London Truth.

Among the anxieties of the wife of the perscented man, not the least was her four that her children should learn her terrible that of their fahter. To prevent this, during all the years of his impronument she kept them under her own eyes, not allowing them togo to school or play with other children, teaching them herself and going with them in their walks. The oldest boy, who was nine years of age, never saw a newspaper.

But while they were at the seaside, the boy found on the beach a torn kite made of old newspapers. He read them and went to his nurse.

والمراجع المناطقة فالمحافظ المالا المحافة المراجعة المراجعة المراجعة المحافية المحافظ المحافظ المراجع ومعامة للما

"Ah, now I know why my papa is so long gone!" he said, showing her an article headed, "Facts of the Dreylus affair,"

"There are many Dreyfuses in Paris," the woman stammered.

"But not many Captain Alfred Dreyfuses whose wives are name Lucie. I know now why she cries at night!" cried the boy, sobbing. "She should have told me so that I could go to help my father."

In the sufferings of this man, so great that the world stood aghast before them as at a new horror in history, God gave him the steady, faithful love of his brothers, his wife and his children.

For Using His Brains.

A YOUNG brakeman on the Baltimore & Ohio Kailroad, who lives near Cumberland, Maryland, recently received from the railroad company a check for fifty dollars. It was a gift, and accompanying it was this memorandum: "For using his brains."

The story which explains this gift is a very simple one, and yet is well worth telling. It illustrates a fact which business men and employers are well aware of, that the man of brains is ready to act in an emergency on his own initiative, while the less intelligent person waits to be instructed, and losse the one opportunity for successful action.

This young man was a brakeman on a long freight train which one day was coming down the grade between Cranberry summit and Rowlesburg. West Virginia. He was on the front of the train, a long distance from the conductor----in the caboose in the rear--from whom hereceived his orders.

The train stopped with great suddenness. The brakeman did not know why it had stopped; he only knew that the cars were bumping together with noise and violence, and that something was wrong.

He also knew that the west bound Chicago express passed at about that time> He had not stopped to think this out; he was simply instantly aware of it, and was also aware that if he went back for orders, which would have been the natural and possibly, in a technical way, the proper thing for him to do, it might be too late to stop the express. Therefore, he rushed lorward without orders and fagged the express—which, sure enough, was booming along upon them.

He arrived in the nick of time. A few seconds later would have been late As a matter of fact four or five cars on the freight-train were derailed, and they would have thrown the express into the river.

The acknowledgement from the railroad company of his good judgment not only took the form of the check for fifty dollars, but the announcement of it was posted on a bulletin in the stations and shops.

Mother Seal and Baby.

JEAR Anacapa, California, one day recently, the skipper of a sloop captured a young seal, and succeeded in getting it on board unharmed. When the sloop made for 5 nta Barbara, the mother seal appeared.

She swam about the vessel uttering pitcous cries, while the captive barked and whined in response.

At Santa Barbara the youngster, enclosed in a bag, was carelessly left on



" PAPA, will you buy me a drum?" said a little lad to his father.

"Ah-but, my boy, you will disturb me very much if I do !" returned papa.

"Oh, no, papa; I won't play it except when you're asleep ! promised the little fellow.

**-

" I SAY, dad," little Johnny began.

"Now, what do you want? " asked his suffering father, with the emphasis on the "now."

"Will my hair fall off when it is ripe, like yours?"

FOUR-YEAR-OLD GERTIE (to her sister's fiance): "Are you hurt much?"

Augustus : "Hurt much? I don't understand you, Gertie."

"Well, sister said she was fishing for you for a long time, and that she only hooked you after lots of trouble. Did she hurt you when she hooked you?"

٠*.

Boy : "Pa, what is a hero?"

"A hero is a man who tries to read a newspaper in the same room with a boy about your size, " replied the papa.

SUNDAY-SCHOOL TEACHER : "Who loves everybody, Johnnie? "

IOHNNIE: "My pa does, cos he's trying to get into the Town Council."

" I THINK it would be a good plan to send Willie up into the country for a month," suggested Willie's father. "He's never been on a ranch, and it would be rather a novel experience for him," "No you don't," interrupted

deck, when the mother, who had followed the vessel some eighty miles, revealed herself in person and voice. and her offspring, as if in answer to appealing promptings, wormed himself to the sule of the vessel and tumbled overboard.

The mother's sharp teeth made quick work with the imprisoning bag, and in a trice her baby was free.

We are not told the sequel of the story, but it is to be hoped that the mother's love and devotion were appropriately rewarded.

ALL KINDS OF LITTLE PEOPLE.

Willie. "I've read all about the country, and I in not going anywhere where they have thrashing machines. It's bad enough when it's done by hand."

DURING a dictation lesson a schoolmaster read out the following sentence : "His choler rose to such a height that passion well-nigh choked him.

On correcting the exercises he found to his amusement that one little fellow had rendered the above as follows: His collar rose to such a height that fashion well-nigh choked him."

.*.

"WHAT are you crying about, my little man ? "

"Jin, 1y Dodds licked me first, an' then father licked me for letting Jimmy lick me, and then Jimmy licked me again for telling father, and now I suppose I shall catch it again from father."

"I'm not pleased with your school report, Bobby," said his father, with a solemn look.

" I told the teacher you wouldn't be ; but she was too stubborn to change it, the old pelican ! "

" IACK." asked the father, "are you going in for any of the school sports this year? "

"Yes, daddy," replied the unsuspecting boy. "I'm going to try

for the mile race.

"Good," returned his father. " I have a letter to be rysted, and it's about a mile to the post-office and back. Let me see what time you can do it in."



MASSEY-HARRIS... AUSTRALASIAN HOME.

THE MASSEA-HARRIS home in Melbourne, Victoria, Australia, is probably the handsomest implement warehouse in the world. It is most outplete in its appointments and is thoroughly equipped with up-to-date appliance. for handling an immense business with economy and despatch. The building has a frontage of 51 feet and a depth of 313 feet.



The continually growing business of the Company throughout the Austral asian colonies necessitated the erection of a structure suitable for its chief Actralasian offices. No such building being available, the premises illustrated = the accompanying engraving were built.

As most of our readers are aware, the business of MASSEY-HARRIS Cov PANY, Limited—which Company is the largest concern in the British Empr making Farm Implements—was begun in this country fifty-three years $a_{0,0}$, 's Australasian business having been opened thirteen years ago.



Deposits of \$1.00 and upwards received and arrent rates of interest allowed thereon.

CURIOUS WOUNDS.

INIURIES MEN HAVE SUFFERED WITHOUT DVING.

VERY eminent medical authority has been assuring us recently that the term "wounded" will soon cease to have the fearful significance which it once possessed.

To be shot through the lungs, it appears, involves but little risk with proper surgical handling, and other wounds of the limbs count for almost nothing so long as expanding bullets are not employed; while wounds of the abdomen, the liver, and even the head, are far from being necessarily fatal. The present war has been prolific in curious wounds which have failed either to kill or to permanently disable the wounded.

It is interesting to note instances in which bullets have in the past remained in vital parts of the body for a long tume.

A soldier lived for two years and a half after receiving a shot in the chest, On his death it was found that the ball had actually traversed his body, wounding the lungs, kidneys, and other important organs, and had finally perforated the spine and lodged there. -A1most as extraordinary was the course of another bullet which, moving with full velocity, entered a man's side, came in contact with a rib, was thereby deflected in its course, and ran round under the skin to the opposite side of the body.

four rus ourl

This last instance of narrow escape occurred on a battlefield ; and, indeed, the annals of war contain some very remarkable occurences of much the same nature. During the Indian Mutiny a man was struck by a bullet on the outer edge of the left orbit, or bony cavity of the eye. The bone was broken, and there was only a small wound about a quarter of an inch long on the skin,-so small that it was not thought possible that a bullet could have entered it. The wound healed, and for eight years afterwards the man did his duty, About this time, however, an abscess formed at the spot where he had been wounded, and on

HERE'S A MONEY

opening it a small dark object was seen appearing just above the orbut, It proved to be half of the bullet, which, when the wound was infleted, must have been split on the bone, one half flying off, and the other half lodging within the orbit. The main lost the sight of his eye from the moment he was wounded (though there was no apparent injury to the organ; but, strange to say, the half bullet lying under the cychall never gave him the least inconvenience.

In the Soudan War a private had a builet pass through the frontal bonc of his head and lodge in the brain. He was quite sensible, and felt no pain, he said, the only inconvenience was an occasional giddiness. He was sent home, and is still alive.

Dr. O'Callaghan speaks also of an officer who got the breech of a fowlingpiece, three ounces in weight, lodged in his forehead It actually supported the right hemisphere of the brain for at least seven years.

Many a man is going about now with a bullet in his chest or leg, received in some action As a rule, however, this kind of thing tells sooner or later. A native servant of an officer in Indua lived for nearly two years with a bullet in his forchead I was wedged into the bone, the skin healed over it, and the man went about his duty, feeling no monventence whatever. Ife feli down suddenly and died one day, and the bullet was found to be pressing right c., the brain. di

rissi

Another very curious thing, arising out of the excitement of the nund at the time, is that men are often wounded without knowing it, or for the moment without feeling any pain. We have in proof of this the case of the soldier whose limbs were carried off by a cannon ball, and who was not aware of the injury he had received until he tried to rise. In another case a soldier advancing at a run, received a bullet in his mouth, which was open. The ball passed between the skin and the muscle which is attached to the angle of the jaw-bone, but the man was quite ignorant of the wound, and was astonished to find himself spitting blood, and to feel his jaw becoming stiff. The bullet was subsequently removed from beneath the skin at the back of the neck.







PROFESSOR "Wait, wait You are playing that part too foud Don't bang so " MAIDEN "Oh, don't worry about that, professor The platto is a hired one."

LOOK here old chappic, just introduce me to your pretty cousin."

marry her, don t lay the blame on me.

SAVAGE PARTY (annoyed by velping dog) 11 I kick that dog in the ribs perhaps he il stop back VELTING DOG'S OWNER

YELFING DOG'S OWNER Perhaps he will He

MISTRESS (to servant who has just had a wordy conflict with the dustman) And did he use vi-lent language³¹¹ SkyrANT Violent Language¹ I should just think 'e did Why master ain t got no chance

against 'un

SIR ROBERT. "Look here, John, my lady com-plains that when you meet her in the street you never solute her. What do you mean by it?"

never same her What do you mean by it?" John. "Beggin' your pardin, Sir Robert, but in a book on ettyketty which I posess it is set down that the lady ought to bow first,"

FATHER "You are very lackward in your arithmetic. When I was your age I was in cube root

Boy: "What's that'"

Boy: "What's that?" FATHER What's You don't even know what it so't That sterrible | liefs' | dive me your pen-cil Now we lit take so, i.e. e.e. and find the cube root First you divide No, you Let me cost nitro-sections. Well, neter mind After all, perhaps you're too young to understand it

Just heard something scandalous about you, Louise

"I thought so , you look so an fully pleased

NEWSTAPLE MAX "I should like to telegraph home that the commanding general is an idot" CENSON "I regret to inform you that we can primit the transmission of no military secrets.

"I cast tell son said he, how much water runs over Nagara Falls to a quart," "How much?" asked she.

"Two pints."

He was watching his neighbor's troublesome boy climb a tree, and he had a look of paulful

"Are you afraid the lad will fall?" he was asked. "No," he replied; "I'm afraid he won't."

"MARIE didn't you feel very bad when your engagement was broken off?" "Yee, and I had another dreadful blow the same day-my new dress came home and didn't fit."

MR H "Congratulations, old fellow. Boy or

MR. B. (sorrowfully); "Both."

CALLER . "Is Miss Sweetic in ?" SERVANT "No. sit " "But I just saw her come in "

"Yes, sir ; but she saw you as well."

Territeric Ciri Micksian Good g What sthat' Mary bring the gnn quick a wid beast in the yard Mary (who was once in the country, you old silly, that's a cow T. C. Micksian ' You don't say so? Good gracious There >

\\ b\

SITE (passionately) "Will you ever love another, dearest ?"

HE (wearily) 'No, never, if I get out of this

Do not neglect to keep your boots polished You can always shine at one end if you cannot at the other.

I HAVE never met." he said. " more than two really lovely women." Ah. 'said she, looking up innocently into his face, "who was the other?"

TOMMY "We have got a new baby at our house

SALLS (with opturned nose) "We don't want one, we've got a plano1"

MOSES, JUNIOR "Fader a shentleman in de shop wants to know if dat all-wool, nonshrinkable shirt will shrink?"

MOSES, SENIOR " Does it fid him?" "No. id is too big." "Yah, id vill shfink '"

JOBSON How did Hobson manage to become engaged to the wealthy Miss Antique? I thought she was a man-hater."

Bollsov So she was but when he advised her not to get a bell for her bus; cle for when she tode it there was already one oil it, she innuclately succumbed."

CHARLES "Miss Spindle has pretty teeth, hasn't she?"

MAUDE (spitefully) 'Yes, and quite mexpen-slice ones, too."

BROWN "I'm glad I met your wife She seemed to take a fancy to me." JONES "I wish you'd met her sooner."

What is there for breakfast this morning? With at is there for breakfast this r Not ham and eggs again. I hope?" No. sit—not ham and eggs to day " "Thank goodness I What is it, then?" "Only ham."

BINNY "So you asked the old gent for Ethel's hand, ch? Well, how did you come out ?" LOTHARIO "I don't distinctly remember. I

think it was through the window, however,

Massey-Harris Ellustrated

AN INCEPENDENT ILLUSTRATED JOURNAL OF NEWS AND LITERATURE FOR RURAL HOMES.

PRINTED AND POBLISHED BY THE MASSEY PRESS.

PROF SCRUB	-		-			Editor-in-Chief
FRANK VIPOND		-		•	•	Acting Editor.

Subscription Price:

To all parts of Canada and United States, only so cents per annum, postage prepaid, stamos

Alcoass address :

MASSEY PRESS, 927 King Street West, Toronto, Canada.

STAMPS THE FINEST STOCK AT LOWEST PRE

Lid of prect had cond Can-ads Jamps with the second second second second cent for ze damp with the second second second second ze damp withed on bond paper, and second s

W. F. BISHOP & CO., La Crange, Ill. Dealers, Importers and Exporters of Postage Stand

96