LAND'S DEADLY RIF OLDS TEN LIVES WITHIN MAGAZINE.

e and Most Effective Piece of h sm -The Manufacture of Mode earms Brought to Perfection. rifle in use by the British fore narvelously effective weapon. Lee-Metford and has been r the past four years, replacing d Martini-Henry rifles. Lee-Metford, which for rapidit

e is practically a ten-chamber er rifle, consists of three princi rts. The stock, which is of talian walnut, and is subdivid he butt and fore end; the barn ie lock. Of these the woodwor course, the simplest of construc

By a most ingenious arrange of the lathe the entire butt it of an oblong piece of woo mazing rapidity, while the for formed with equal rapidity, th of the joinery needing only sandpapering and polishing o fit it for service. construction of the barrel

rably more complicated. Th etford barrel is made from teel bar of a circular section r is, in the first place, consider horter and thicker than t t will finally assume, the nec elongation being effected g it to a white heat and pass over a steam anvil, where in nutes it is rolled and hammered e required length. In this way msy looking block of mild steel ing 2 feet by 11-2 inches, i converted into an unbored rrel nearly four feet in length minating in a thickened end ing about one tenth of its en. is the outside date for the completion gth.

DIFFICULT OPERATION.

follows the process of boring The boring is conducted her end and meeting in the They are kept cool by means eam of soap and water, which into the barrel by hydraulic As soon as the barrel pred it is polished ready to he rifling. The accuracy exf the driller and polisher will appreciated from a descriphe test employed to check his aship.

rrel is placed in a vertical and its lower end made airclose-fitting gauge is then at the top of the bore, when, ore is mathematically correct, e should not only be supporte air within the bore, but, upemoval of the seal from the he barrel, should drop easily the same, from top to bothout wedging. the barrel goes to the "rifl-

inclosed in a strongly proing cell. Here it is repeatved, with the aid of charges nes heavier than it will actuequired to carry in battle, 1 h is again repeated after the f rifling.

ocess of rifling a barrel is which are cut the spiral which run inside the bore ech to muzzle, and are der the purpose of causing the to rapidly rotate, gimle n its flight.

UE OF THE "TWIST."

benefit of the uninitiated it xplained that this twist not les the bullet to cut its way nto its billet, but also gives longer and more accurate he grooves thus cut are sevmber, but the process by y are produced is too technie unprofessional reader. plishing and "browning," the order that no -tell-tale glint

ay betray the marksman to

the barrel is ready for atto the "body," "bolt' and ," The "body' is that e rifle which holds together nent parts, the "bolt" is a on of the common or frontof our own houses, and, in extracting the spent carontains the "striker," by cartridge is exploded. Most of all, however, is the "ma-

a familiar simile, the main magazine mechanism is an of the principle of the metal . You put your 10 cartone by one, upon a species platform, which will always st cartridge ready to hand. difference is that, whereas purse the coins are withhand, the Lee-Metford maemptied automatically. It with an ingenious mechancauses it to disgorge its ne by one, into the breech e as soon as the preceding

ase has been ejected by the azine is further fitted with by means of which the e fired and reloaded in the ay, shot by shot, until such soldier finds himself in 3 r. Then the "cut-off" is and Tommy Atkins knows the forthcoming rush with

nce which comes of having his sleeve without the trouading. R MERCY'S SAKE.

name is Mercy. She keeps ning on errands of Mercy

vators Costing \$4,500,000 and a Dozen berne Another Buffalo.

steamers to be Constructed-Port Col-

ANS FOR DIVERTING GRAIN TO

THE CANADIAN ROUTE.

IONS WILL BE SPENT

The plans originated by a syndicate american and Canadian capitalists. hich provide for the construction of are grain elevators at Montreal, Queand Port Colborne, and the conruction of a fleet of steel vessels to masport grain from the upper lakes to Canadian seaboard, are now pracally complete, and in fact well under The elevators are to be off steel. some of them will have a capacity 3(00,00) bushels. Their construction grolves a total outlay of \$4,500,000. fentracts are being awarded for the mostruction of a fleet of a dozen grainarriers, and these are to be ready by he fall of 1901, so that they may take and in that season's operations, Each these vessels will cost from \$150,000 \$200,000, and in dimensions will be 30 by 43 feet. It is understood that Bertram Shipbuilding Company of onto has received the building six of the

steamers. Of emainder, some will be built by the ingwood Shipbuilding Company, ome in the shipyards at Three Rivers if the rest on the Clyde. A repreentative of the syndicate left last seek for the Clyde to give the necesy instructions to the contractors

THE FALL OF 1901

d the vessels. It is hoped, however, bave two or three ready for operaparrel, an operation requiring that even a dozen steamers will skill on the part of the work. The suffice to meet the immense le at least doubled.

> moe Canals to a uniform depth of to do it with. burteen feet. Hitherto the fact that

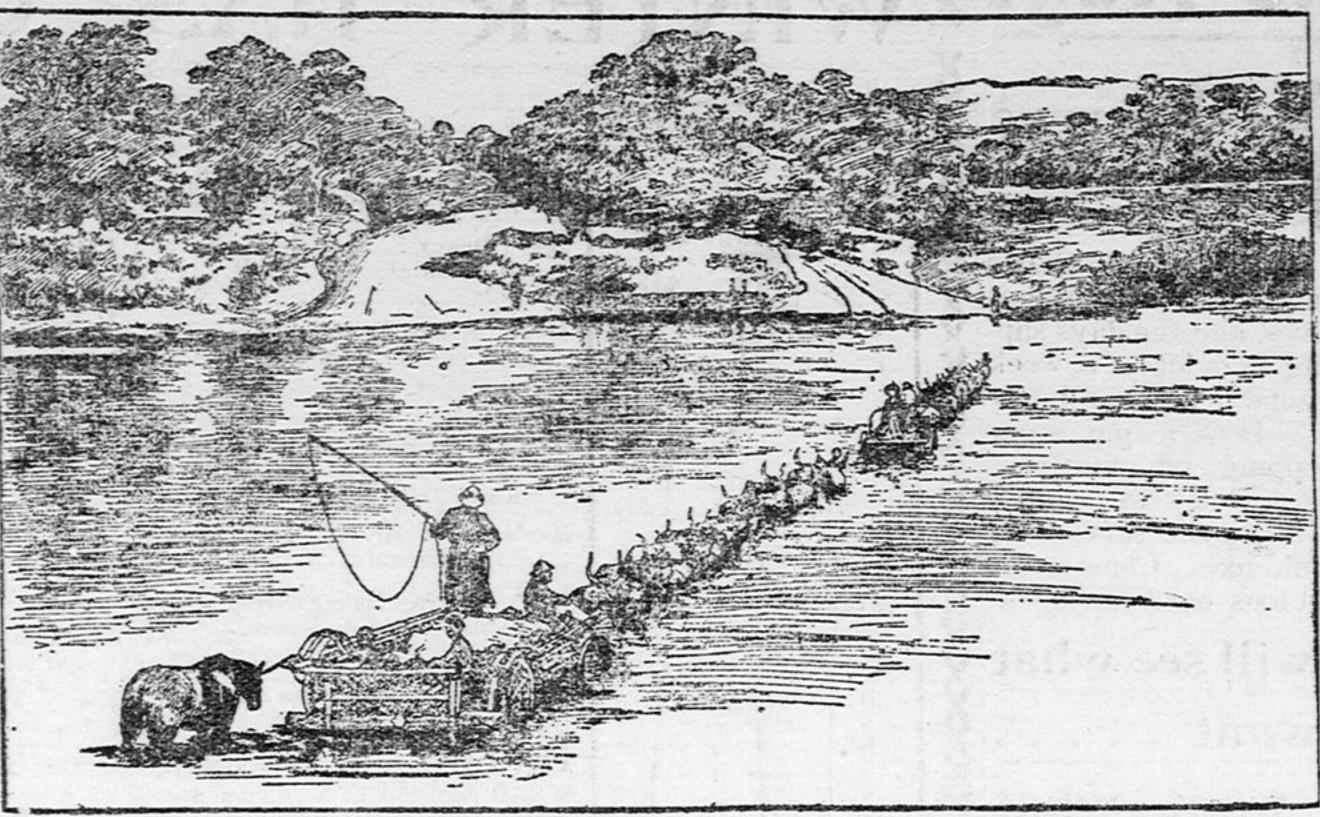
the Canal. PORT COLBORNE

make it still more accessible and se- kets with the spoilt forms. complete the facilities needed.

time last summer. Mr. Connors by parcel-post." come to the conclusion that the Madian is the cheapest carrying Mule for western grain, and has given Practical evidence of his views by ac-Wely associating himself with the preenterprise. Many of the Buffalo larwarders, while conceding the suenority of the Canadian route, have amed that it could only be made prohable by the vessels employed bringing return packages from the seaboard. this point has not been overlooked in plans of Mr. Connors and his Canleian associates, and such arrangements are being made as will insure for the fleet of grain-carriers an ample trade in commodities intended for the herior. Large receiving and forwardwarehouse at Toronto and cheap season of navigation are included in the freight rates from the east during the

SUBLIME FAITH. Parson-Do you take this man for better or for worse? Bride-He couldn't be better than he

THE TUGELA A SHALLOW RIVER.



This picture of oxen fording the Tugela shows that even though the bridge at Colenso should be destroyed, the British troops can easily cross that stream to relieve Ladysmith.

SOLDIER'S LAST MESSAGES.

Passion, Pathos and Puns Over the Tele- After Living in Poverty for Seventy Years graph Wires.

If any one wanted to have another a London paper.

made which it is hoped to divert to has been unparalleled for years; in- heir to six million dollars. She is the of a pair of drills, working fanadian waterways, and the view of deed, it probably has no fellow, for widow of the late George Hillson, who the gentlemen who have engaged in Tommy, as a class, seems only just to died several years ago. She is very the enterprise is that at the expiration have realized that the "last of the very modest in the possession of her newa three or four years their fleet will last" of his messages of love, cheer- found fortune. direct the grain-carrying trade which an advantage of the discovery that it to worry for the future." now goes by the Buffalo and Erie Canal is declared that scarcely a man who Mrs. Hillson, it seems, is one of the note to New York into Canadian has left is there who has not sent at direct heirs of Elisha Crowell, an Engmanels. This has been rendered pos- least one message over the wires-even lishman, who, at his death, many years sole by the deepening of the St. Law- though he had to borrow the money, ago, left an amount equal to \$30,000,-

The "good-bye" by telegraph craze tessels of large draught could not pass began with the very first extra troops from the point of transhipment on who left; but lately the spectacle has the upper lakes straight through to become one to be witnessed by the contreal has greatly handicapped the philosophical observer; and on Saturtemoved this drawback, and now neighborhood of the telegraphic of- larger than that of many of the is possible for grain-carriers fice, sometimes framing a message others. da draught equal to those which are with difficulty and then asking his strike him down.

In and around the office the reader grandchildren. the be the point where grain destined might have seen more spoiled telefor Montreal or Quebec will be trans- graph forms than he ever saw before lerred from the huge vessels navigat- at one time, and the persistent and ing the upper lakes to the canal all-pervading relic-hunters who notreighters. Port Colborne has a harbor ed this fact saw a chance of having Well adapted by nature for the an- mementoes of an event likely to bethorage of large vessels, but in order come historical, and stuffed their poc-

the Government have determined One form, evidently a draft that has the construction of a large been accurately copied afterwards, is heakwater, piers and other works, addressed to a "Mrs." at Manchester, erection of the big elevator con- and must be from a boy to his mother, aplated by the syndicate referred to in spite of the familiarity of the 'old girl. It runs: "Cheer up, old girl; The leading member of the syndicate shall come back to match Dad in gas-Mr. Connors, proprietor of The sing about his battles .- Arthur." And diffalo Courier. That gentleman is another, from son to mother, judging algely interested in the grain-handla by the address—says, "God bless you trade at Buffalo, but, in common all. Shall bring you a Boer's whiskers others in the same business, has as chimney ornaments." A youth, who the time to a Buffalo for a consider- ent of a gold mine from Johannesburg

HEIR TO SIX MILLIONS.

a Woman Gets a Fortune.

This is a story of a woman who, aftestimony as to what a brave yet ter a long life of hard work and povcheerful soul Tommy Atkins is, such erty, had no reason to expect any hapa seeker might fitly have taken up his piness in the few remaining years of stand near one or other of the tele- her existence, but now, at the age of graph offices at Southampton, nearest 70, after having been poor from childto those points of departure whence hood, she suddenly finds herself to be tions next summer. It is not consid- the recent transports have sailed, says one of the richest and luckiest women in the States, says a despatch from In its humor and pathos the scene Bridgeport, Conn. She has fallen

fulness and hope can be sent at the "It seems comfortable," she says, dif-The object of these plans, involving, very moment before he steps on to the fidently, "to feel in one's declining is they do, an immense outlay, is to transport; and he has been taking such years that there is no longer any need

> 600 in the Bank of Bristol. The interest which has accrued since that time has increased the original principal enormously. It has been impossible thus far to ascertain the exact amount of the estate. There are about 150 heirs, but as Mrs. Hillson is in the direct succession from the ori-

ward Island. She was married early ed century old trees and the moor- eral Buller enters the enemy's country. He is not likely to cross the Orways. But the lack of a sui- times borrowing another penny in or- alive. She is a motherly old woman, ficient depth of water in the canals der that he might just send one more self-denial and rowers she maintains s not the only one from which the wire; "Our Tora would be so pleased, a slight vivaciousness that one would and show it about," sometimes asking-; scarcely expect. The fact that she is delevators at the point where grain both seriously and laughingly- "Ere, now very rich has naturally cheered is transhipped from the upper takes Bill, how can I send kisses by tele- her to a considerable extent, but it ed to his master one morning a pair of and a pontoon bridge will be hard to and also at Montreal has been severely graph?" sometimes heaving many a has not created any appreciable rip- boots, the leg of one of which was maintain. lel. Now this want is to be made good sigh, and looking as though a good sob ple of excitement or induced her to much longer than the other. and under the proposed scheme eleva- would do him good as he has bitten at make the slightest change in the daily! How comes it, Joseph-John, that testined to play a most important part his words loud and hilariously out; so tune that is to come to her; she stead- stairs is in the same fix. In the project, and will bear the same that his comrades might see what a lily refuses, however, to do so, but contelation to the Canadian grain route funny dog he was, and how cheerful tinues to live along in the same old that Buffalo does to the route via the at the prospect of a fight that might way on the top floor of a small, plain house, with her daughter and her four

A MERCILESS JUDGE.

Horrible! Horrible! he exclaimed. What's horrible? she asked. Here's a story of a man with five wives, he explained.

I should say it was horrible, she as- fire. serted. And when he was arraigned in Court all five were there, he went on.

And what did the judge do to him? she asked. Abandoned him to his fate, he as- friend at a classical concert.

OBJECT LESSON.

Young man, asked the proprietor of Wiered considerable loss and had his seemingly hails from the Old Kent the store, who was making the rounds Whence sorely tried by vexations oc- road, after telling the lady to whom, of the various departments, how can Arrences, such as the strike of grain- he addresses his message to "boss up," you afford to dress so elaborately and enders, which paralyzed the move- goes on to say, "Look out for a pres- expensively on the salary we pay you? man, I ought to have more salary.

ODDS AND ENDS.

In 1877 England annexed the Transvaal and evacuated it in 1881.

Boer bread, butter and tea, or coffee, furnish many a farmer's meal. The Transvaal is probably the richest country in the world so far as minerals are concerned.

The supreme court of the state of Michigan has decided that women cannot hold elective offices.

In 1848 England conquered and annexed the Orange Free State, and evacuated it six years later. Missouri chickens to the number or

amount of 365,000 lbs. have been ordered by the British War Department. A jury in Chicago has given a verdict of \$21,000 against a trolley company to a boy who had both legs cut

off by a car which ran over him. The southern part of Africa is of volcanic origin, and the land in the neighborhood of Kimberley is so sul-

Literary attainments are not in high favor in the Transvaal, the only book of the Boer being their beloved Bible. Letter writing is almost totally neglected.

Fewer deaths are caused by mining accidents now than in 1855, although at the present time there are two thadian route. The completion of day last Tommy pervaded the whole ginal millionaire, her share is to be ampleted underground

The forest fires devastated the Mrs. Hillson was born in Prince Ed- Grampian hills of Scotland and burncedented drought last summer.

A MIX-UP.

A domestic, newly engaged, present-

tors of the largest capacity are to be the pencil that has indited his missive, methods of her life. It would easily these boots are not of the same length? trected at Montreal, Quebec and Port for Tommy is often very young both be possible for her to raise money im- I really don't know, sir; and what The last mentioned place is in years and heart; sometimes reading mediately on the strength of the for- bothers me more is that the pair down-

IF YOU CATCH FIRE.

Don't run and scream if you catch fire. Scream if you want to, but don't run. Sink on the floor and roll your- Cromwell's Roundheads and the desself up in a hearthrug if there is one peration that comes in defending one's handy. If there isn't the flames can own land. Weeks, rather than days, probably be crushed out against the may measure his progress toward the floor. It is fatal to move about, as the lesser Boer capital. least current of air will increase the

HIS IMPRESSION.

What key did the programme say that composition was in? asked the swered. He discharged him. Oh, isn't "I don't believe it was any particular key," answered Mr. Conroy, "It sounded to me like a bunch of 'em.

THE WRONG KIND, THOUGH.

That carpenter says he hasn't had any work for over two months. Guess he don't to work, then. Why. I can't, gloomily answered the sales- every time I take up a paper I see a whole list of "Boarders Wanted."

A HUGE MILITARY TASK

THE PRESENT WAR IS ONE OF MAGNIFICENT DISTANCES.

Only Once Before in the World's History Has Such a Large Army Been Sent So

A war of magnificent distances-the phrase fits and epitomizes the present conflict in South Africa.

Probably only once before in the world's history has such a large army been sent so far on a war or conquest involving a plunge of several hundred miles into a continent. That was the task of Great Britain in the Indian Mutiny, when she sent about 50,000 men around the Cape of Good Hop to save her empire in the East.

The factor of distance is easily the most important one in Sir Redvers Buller's campaign. Practically his entire force must be taken from England, six thousand miles away by sea, an eighteen to twenty day voyage for the average transport. Should he decide to land his military host, as is shrewdly guessed by home experts, at Port Elizabeth, Port Alfred and East London, or even part at Durban, it means from one and a half to three days more steaming to port. These are all seaports round the corner, as it were, from Cape Town, the political centre of South Africa.

When the 50,000 or 60,000 men of Buller's corps are disembarked from the scores of streamships transportation difficulties of great moment confront them. Without the railway these could not be overcome, and even with the railway they constitute a huge military task.

It can be assumed that the present Natal campaign is only an incident, though a bloody one, of the war. The more serious and decisive combats will come when General Buller huris his troops over the southern border of the Orange Free State on his way to Pretoria. This is the well defined plan of the British commander, according to trustworthy reports, and is not likely to be modified greatly by ever the trapping of Sir George White in Ladysmith.

PORTS FAR APART.

From each of the three Cape Colony ports, Port Elizabeth, Port Alfred and East London, runs a line of phurous that even ants cannot exist railway northwesterly toward the Free State frontier. By no line is the distance to the enemy's country less than two hundred miles. Whether the troops be forwarded all or part of the way by train, weeks will be consumed in organizing them into columns and gathering together all the horses, artillery, war material and food indispensables for such a host. As an army moves "on its belly," in Napoleon's phrase, and the Boer republics will have scanty resources for either man or beast, the commissary problem is a vital one.

Finally equipped and ready. Genange River without a sharp encounter, perhaps a severe engagement, with the strenuous defenders of the Free State. All the bridges will have been destroyed, fords will be almost impassable in the present swollen streams,

But when once across, the main invading army will move cautiously forward toward Bloemfontein, the capital, one hundred and ten miles away. The solitary railway line will have been torn up and a slow march northward is the only choice.

In his coming invasion of the Orange Free State Buller must count on coping with a foe much more nearly his equa! in numbers, and fighting with the religious fervor that characterized When he enters Bloemfontein he will

be in the heart of

A HOSTILE COUNTRY,

nearly as large as England, sparsely settled, to be sure, but with many natural features that invite long guerilla warfare. Every important point in his rear must be strongly garrisoned lest his line of communication with the Cape Colony base be cut and the experiences of the Mafeking siege be repeated for many an isolated British

More than two hundred miles to the northeast, along the line of the only railway, must the British invaders then move before the frontier of the Transvaal is reached. Johannesburg. the commercial capital of the Republic, is fifty miles away, and Pretoria, the political capital, is fifty miles be-

youd that. Here a last desperate stand seems likely to be made by the Boers. Buller will be more than four hundred miles from Cape Colony territory. The nearest seaport, Durban, will be ar equa! distance away, and the railway will have been made impassable by Boer destruction. Port Elizabeth and East London will be more than six hundred miles distant and Cape Town nine hundred. From Pretoria the hostile territory into which an alert enemy may escape to prolong the conflict stretches one hundred and sixty miles to the westward, two hundred and thirty miles to the eastward and two hundred and fifty miles to the northward.

TOO MUCH PROFIT IN IT. Why do you think postage stamp sellers ought to pay a license? Because they are in the licker busi-

