ESTABLISHED 1855.

YORKVILLE, S. C., FRIDAY, OCTOBER 25, 1907.

## \*NORTHERN \* LIGHTS\*

FROM THE ROMANTIC AMERICAN DRAMA.

THE NOVELIZATION BY A. D. HALL.

consideration who the sufferer was

his brief comment. "That is all, lieu-

After Varnum's departure, Crook

The general made a motion to the

to pick up one of the cannon balls,

turned and looked at him in a dazed

The general pitied him from the very

He motioned the guard to retire, and

"Ralph Jordan," he replied, automa-

"That is the name under which you

"Ralph Jordan," in the same expres-

"Answer me truthfully!" exclaimed

not seem to take in anything within

"Are you not the son of Colonel

The general was moved to the mos

intense pity, but he went on, appar

ently remorselessly, yet knowing that

"You were tried and convicted

desertion by a military court presided

over by Colonel Gray. You were re-

A flush stole into his cheeks and

"Yes, yes," he cried, eagerly. "Shot

but they wouldn't do it. I wanted

General Crook looked at him nar

At last he said, very deliberately:

"None." was the hopeless answer

"None!" repeated General Crook, in

"Gray," after a pause, "your fa-

stretch discipline, to do a service

"You can do my father a service

"And that?" asked the general, won-

Wallace extended his hand, with

gesture that was almost tragic, toward

"See, the day is drawing to a close

The sun is going to rest. For ten long

ment, and tonight it is going down

glood red. The first day I was strong

built over a hundred pyramids; th

econd day eighty; today I have built

only fifteen. You wish to do my fa

ther a service. Then keep me at work

all night, all tomorrow, and I promise

you a glorious row of pyramids. Then

when the sun sets again, my labors

"Oh, with all my heart, with all my

oul," was the passionate reply, spok

possible to doubt the truth of the

would so lift from me the bitterness of

Hardened veteran though he was

he Gray Fox was moved more than

would have liked to acknowledge,

and there was a suspicious moisture

He scarcely knew what to reply, and

e was thankful to be spared this in

fliction by the sudden appearance of

and saluted, evidently anxious for

"Guard, remove the prisoner

Lieutenant Varnum to keep him in the

The guard conducted Wallace back

o his work. The young man's head

sank upon his breast, and, with the

consultation with his superior.

ommanded the general.

guard house tomorrow.

But it comes so

"and tell

will cease and I shall be at rest."

"You wish to die?"

about his eyes.

dering what could be coming next.

them to, but they wouldn't do it!"

And then he sighed heavily.

restore you to the ranks?"

this was the best course to take

their vision, answered stupidly

nlisted. What is your real name."

name Wallace Gray?

"Not now."

"Not now,"

back to his senses.

faint light into his eyes.

extraordinary criminal

olank amazement.

through you to him."

intense earnestness:

o thank you.

the horizon.

"None."

Gray?'

"I will inquire into the matter,"

but he did not say so in words.

which he was subjected.

guard, who approached

sort of way

ness or death.

"Bring your prisoner here!"

CHAPTER XV.

Ghastly Tidings. It was Sunday, the twenty-fifth of June, that day which will always be memorable in the annals of history, when one of the most gallant officers that ever gave his allegiance to the United States, met his death, fighting against more fearful odds than the Greeks had to encounter at Thermopylae or the famous Light Brigade at Balaklava.

The Indians were on the war path there was no doubt of that. Settlement after settlement, outlying ranch after outlying ranch had been attack ed, and at least, after much discussion, much shilly-shallying among the powers that be at Washington, it was resolved that some decisive action must be taken. This was good news officers and men, who had hitherto been forced to act only on the defensive, but alas, as the events proved, the decision came too late. Moreover, some one blundered and blundered inexcusably

Still, on this Sunday afternoon, noth ing of this was known at the camp upon Goose Creek, where was in command that brave, intelligent officer, General Crook, to whom the Indians had given the name of "The Gray Fox," a sobriquet which had been enthusiastically adopted by the men of the United States army.

The Gray Fox knew that action was at last to be taken, that very day in fact, and as a war-horse sniffs the battle from afar, so was this gallant soldier eager, alert, anxious for the moment to come when at the head of his men he could move forward to deal out merited retribution upon the cowardly redskins for their savage depredations.

There was little, however, on General Crook's face, as he sat that cloudless day in front of his tent, to show anything of what he was evolving in

Near him stood a young officer to whom he had been imparting certain instructions, and some distance back, but still within call was an orderly, waiting for such commands as might

Not far away, monotonously and with no object whatever, carrying guard and watchful eye of a soldier, was a young man, who, with eyes never raised, performed his task, as heartbreaking a one as that of Sisyphus of mythology, continually rolling up the

stone which as regularly fell back. This young man was Wallace Gray, who, as Horton had surmised, had been condemned to that punishment wors than death-the pyramids.

"You thoroughly understand you instructions, lieutenant?" said General

Crook. "Yes, general." "Give your men all the rest you can between this and marching time,"

knowing full well what may be before them. "Orderly!" The man called for stepped forward and saluted

"My compliments to Captain Strong. Tell him to report to headquarters at once."

The orderly again saluted and de to fulfill the command given

"By the way," continued "The Gray turning again to Lieutenant Varnum, "any news from Fort Terry?

"Nothing, general, since the main body under Captain Markham moved north to reinforce Gibbon. The wound réceived by Colonel Gray at Rosebu of course kept him behind.'

At this, the condemned man paused in his monotonous task and, with a cannon ball poised in his hands, stop ped to listen.

"Colonel Gray is an old and valued friend of mine," said General Crook. "I trust the wound may not prove se rious."

"Sh!" said Varnum, warningly, with a glance toward Wallace, who at once resumed his occupation. "Beg pardon general, but he may hear us.

"He! Who?" exclaimed the general in surprise.

"The prisoner."

"Well, what then?" Varnum approached close to his commanding officer and said in a tone which could only reach the ears of the person addressed:

"It is not generally known, but he Colonel Gray's son.' This was news to Crook, and volun tarily he cast a quick glance at the young man, moving back and forth at

his cruel, fruitless task. "What? the deserter?" he exclaimed in-a shocked, incredulous tone.

thought his name was Jordan.'

"A son of Colonel Jack Gray a coward and a deserter! Varnum, I can scarcely believe it."

"It is true, nevertheless, general. Crook knitted his brows in reflection. He knew Varnum, and was quite en with such yearning that it was imsure that he would not make such a statement unless he was absolutely words. "I have prayed to God that He certain of its truth.

"Um!" he said at last. "He has been in your charge, I believe?" "Yes, general, for the past tw

weeks. "What has been his conduct"

"Toward the end of the first week he acted like a madman and begged and prayed to be shot. Since then, a singular calm has settled upon him. He has spoken scarcely a word for four days. He neither eats nor sleeps. The guard finds him like a dumb animal, waiting every morning, patient, understand that it is time to turn in. He can't last much longer. You will pardon, me, general," feeling that he was rather over-stepping the bounds of his authority, but yet his pity getting the better of him, "I'm not softhearted or much given to sentiment, but it seems to me that here is a case

of character did not belie his name. well-poised commander on whom so much depended.

"Not yet, general. I have been expecting them for the last two hours." "Your men are in good condition?" "Couldn't be better. They're burn-

ing with impatience to be off, and where clemency would be no mistake." left behind." The general was rather inclined to "Aha!" ejaculated Crook, agree with him, especially taking into

"They haven't forgot the slap we got on the Rosebud. You understand the plan of action? There must be no mistake tomorrow. The blow turned and looked curiously at the must be so swift, sure and overwhelmyoung man who was undergoing his ing that the twenty-sixth day of June errible sentence. The latter, moving will go down in Indian history to the ackward and forward, seemed to be last survivor of the race."

utterly oblivious of the scrutiny to "At what do you estimate their strength, general?" asked Strong, his eyes gleaming at the prospect of bat-

"Anywhere from twenty-five hun-The guard went forward, and dred to four thousand fighting men. A was not the time for mourning. That ouched on the shoulder the man in his general opinion prevails that it is less would come later. Now all must be harge. Wallace, who was just about than that but I don't care to be out- action. numbered a second time." "And the hour for attack? Day

reak tomorrow, is it not?" The guard pointed toward General Crook. But even then, the unfortunate twenty-sixth, was the day agreed up- is 'Remember Custer!'" on. Barring accidents, at the first peep of dawn tomorrow our turbulent red general turned again to the scout. "Lead him here!" commanded Crook. The guard took Wallace by the arm friends will meet with a swift and and led him forward until he was in wful judgment. If-"

front of the general. He stood there He was interrupted by the sound staring -blankly and stupidly before an orderly came rushing around the make it by 10 o'clock tonight." him, mechanically turning the cannon

"General, a scout has come with bottom of his heart. He knew well report of the greatest importance." how terrible was the punishment which "Bring him here immediately." had been inflicted upon him and how Strong was about to follow, but the to pass over that gulch alive." it almost inevitably led to either madeneral stopped him, ordering him to emain as there might be necessity for can reach him?"

nmediate action then asked in short, quick tones of The scout was Horton, who arrived command in order to arouse the man reathless and covered with dust. before him from his confused condi-"General Crook, you know me?" he asked, with difficulty, so exhausted

was he. Wallace raised his dull, listless eyes. "I do," replied Crook, recognizing before. "You have serious news?" "Rouse your men, general!" gasping with excitement and lack of strength,

his red imps, and hell is turned loos the general, sharply. "Is not your real over these valleys for a holiday." "What is it, man?" cried Genera Wallace moved his head, and, after Crook, wrought to the most intense

looking about him with eyes which did pitch of suspense. "Speak!" he had partially recovered, he proceedmen under his command were about to start to join General Crook, the Indians in some way learned of his in tention and also of the strength of his forces and about four hundred Ogalallas surrounded the fort and fired it. cut their way through them, and reach- again." ed the bluffs back upon the Tongue

turned to me for sentence and punish-There have been times, and he Indians at bay ever since. The general had listened with rap not many years ago, when for such a ttention. These last words pierced Wallace's out?" he asked, as Horton paused in

brain and, melting the icy band which nis recital had been compressing it, brought him "As long as mortal man can go vithout water. The last drop was ex- a message for him." austed twenty-four hours ago."

"Last night," continued the scout, limbed the bluffs, secured a pony and lace was standing. nade for your camp. We'd all have made a rush for it were it not for the know me?"

owly. He found difficulty in under-"Women!" cried the general and up erect and saluted. standing. This was certainly a most Strong in unison, while their cry was re-echoed by another, which proceeded from the prisoner, who was within earshot and who had a more personal he could not believe the evidence of What promises can you give me of oldierly conduct in the future should interest than they in this information. his ears.

'My God! Are there women?' "Of course. When we abandoned the fort we could not leave them behind." "Orderly." commanded General crook, with that quick decision which was one of his prominent characteristics, "instruct Lieutenant Varnum to

her is well known and esteemed by me. I would go to great lengths, even order his men to horse at once." "At what hour was the concerted at ack to be made upon Sitting Bull? asked Horton, as the orderly started father?"

Wallace dropped the cannon ball to his feet, and exclaimed with the most "At daybreak tomorrow." sir, one for which he will never cease

An expression of horror swept across "Then a terrible mistake has bee nade, and at least one detachment of

cavalry has been swept from the face f the earth." "Horton!" cried Crook, excitedly What do you mean?"

"That the attack upon Sitting Bull as been made. Oh, General Crook, it brave. vas a cruel command that sent three nundred men to attack six thousand."

"On the Little Big Horn." "There has been some terrible mis-

And this as rapidly and tersely as ad found that Crook had struck for many a day. eamp on Goose Creek and so set out find him. He discovered a trail at he murmured. three that morning, and knew it was help, I will!" cavalry by the marks of the iron shoes. At break of dawn, he looked lown into the valley, and saw an Indian encampment that stretched for

of a rollicking Irish melody. The reds blanketed rascals hurrying to and fro

an officer who came rapidly forward dashed into view from charged the village. For a moment the reds seemed paralyzed with surprise; then it appeared as if every shrub and the roar of battle.

Horton waited for no more, but dashed down the slope to join the former hopeless expression, he again fight; only to realize, however, that Machine."-Tit-Bits. betook himself to his task. The gen- the brave fellows were in the jaws of death. The balls whistling around

was Strong, and whose fine face full him thick as hail told him that he was discovered. One struck his revolver tain," asked the general, thrusting have been the madness of folly to have remained longer. He wheeled and started for the heights again.

Reaching an elevation, he turned in his saddle and looked back. A cloud of smoke hung over the village through which flashed the glittering sabres and the darting glint of steel. Riderles horses galloped about in frenzy.

Then came a lull in the firing. Then there was one more volley, a few scatthere seems to be considerable disap- tering shots, one wild, exultant yell pointment among those who are to be from six thousand savages, and thensilence.

Horton paused. His terrible story gratification he made no effort to con- was finished. The general's rugged ceal, so pleased was he at this display face had become more and more set more and more stern, as he listened. "Were you close enough to see what regiment they belonged to?" he asked. "No, general."

"Stop!" with a sudden suspicion which was very close indeed to the truth. "You spoke of hearing an Irish song, as they made the charge. Did ou recognize the air?"

"Yes, general, it was 'Garry Owen.' "Custer!" cried Crook, rage and errow filling his heart at the massacre of this, the bravest and most dashing officer in the frontier service. But it

in his saddle in fifteen minutes. Let the men know what has occurred. "The understanding upon that point Tell them our destination is the Big was thorough. Monday morning, June Horn Valley; tell them our battle cry

Strong started off on a run, and the "Horton, how long will it take to reach Colonel Gray?"

"We'll have to approach over the of rapidly approaching footsteps, and bluffs, sir, but, by hard riding we can "Is there no nearer way?"

"Yes, through the canon, but there are reds behind every ledge of rock. It would be a miracle for a white man

"Can Colonel Gray hold out until aid Horton shook his head doubtfully. "I cannot say. He is wounded and growing worse for want of attention."

the general in surprise.

"Have you no surgeon?" inquired

"No. The chief surgeon died suddenly just before the attack was made him at once as a man who had done upon the fort. His wife was very ill valuable service for him some years at the time and continued so for some days after we were encamped upon the bluffs. As soon as she was out of danger, the assistant surgeon, John Swiftfor the devil has taken possession of wind, an educated Indian, disappear-

> "The scoundrel!" cried the general, "But you can't change an angrily.

At this moment the bugle stantly the orderly appeared with the ed to tell his story. It appeared that announcement that the men for Colon the day when Colonel Gray and the onel Gray's relief were in their saddles. Horton started to go, but the general stopped him

"Here," he said, with that thoughtfulness and generosity which ever dis-"You say you lost tinguished him. your revolver; take mine. Now, go, Colonel Gray and his men managed to Horton, and God grant we meet

Again Horton turned, but as he did river. There, intrenched among the so he caught sight of the prisoner, rocks, they had succeeded in keeping whose hollow, sorrowful eyes were fixed upon him. This brought to his recollection something which in the one has read it twice at that. "How long can they hold excitement of the moment he had almost forgotten.

"General," he said, "will you allow me to speak to the prisoner? I have "Yes, yes," replied Crook, shortly,

but be quick. Lose no time." Horton crossed over to where Wal-"Gray," he asked, gently, "do you

Wallace with an effort drew himsel

"Will you not shake hands The poor fellow looked at him, as i

"You would take my hand? Mine? "Try me," replied Horton, with a

In silence Wallace took the proffered hand and pressed it. There was no

need for words "Gray, I have a message for you, ontinued the scout.

Wallace's eyes kindled "Ah!" he cried, eagerly. "From my From a woman. Can't you "No.

> ness? Wallace's lips formed rather ronounced the name-Florence "Yes," assented Horton.

e strong for my sake." "Brave for her sake!" repeated Wal lace, with a bitter, hopeless laugh. "My God! the mockery in that word

"No," replied Horton, earnestly "She meant it, for she believes in you." "March!" The bugle call sounded "Goodhurriedly, but impressively. ake, as you say. Go on! Tell me all by, and remember her words.

Wallace with a dawning hope in his "Be brave, be strong for my sake,"

"Florence, with God's

## (To be Continued.

THE BOOK FOR HIM .- "Here, clerk I'm in a hurry. I want a book for my miles up and down the stream. All husband. It's his birthday. And I want it for a present. Show me what you have and be quick about it. Nothng too expensive, mind you, and I heard it as well, and in a moment the don't want anything too cheap, either; scout saw hundreds, thousands of the do you hear? He's a mild-mannered pended upon to dig up. He never lon't show me anything in that line. For goodness sake, don't offer me any exposition which will won't take anything in the way of his a dreadful hurry, and I've already wasted too much time here. Of course blade of grass turned into a painted you don't know my husband, but from devil, and the morning was filled with all I've said can't you suggest some thing appropriate? "Yes, ma'am. Here is a little volume entitled 'How to Manage a Talking

Time may be money, but it isn't



SENATOR JOSEPH B. FORAKER

HUNT FOR NOAH'S ARK. Expedition Going to Yukon to See If

"Mount Ararat With the Ruins of Noah's Ark on It, Discovered In Yukon" was the headline that appeared years ago. And, while a controversy may well be waged as to the meaning and original purpose of the great ruin that Indians declare exists on terior of northern Yukon, the management of the Alaska-Yukon-Pacific exposition which will be held at Seattle in 1909 intends to sift the story and if there is any ruin to have photos and plans of it at the Pacific world's fair in order that archaeologists may be able to give an intelligent opinion, says a Seattle (Wash.)

classic in the north. In the early days of the Klondike rush a brilliant coterie of writers gathered in the new en to the world their impressions were Jack London, Rex Beach, Jack Corbett, ex-Senator Jerry Lynch of California and others. But in the particularly bright—the particular star was one Bernard H. Moran, or

to Atlin, "Casey" Moran As a reporter Casey was unexcel ed anywhere. There are whole weeks in Dawson when telegraphic wires rives from the outside world, when the trails are snowed up completely and no one either leaves or enters the city and when the most recent news paper of the outside world is some ting out a daily under these circum stances is no joke. But the inevitable, ubiquitous Casey was always there with the item, the speculation the suggestion. A man that has suc cessfuly been street preacher, whisky smuggler, walking delegate, mining broker, ice trust magnate and boat builder could always evolve

article was in evidence It was one of these times, "Casey," said editor was troubled. he, "the paper is going to the dogs. People blame us for the wires being down and the roads being impassable Go out and get an article that will make 'em sit up, that will be talked of from the aurora borealis' north-

ern limit to the southern cross.' This was an order such as Case; loved. He grabbed a pad, pulled on his parka, and in a minute the 65 be low zero fog had closed about him.

The story appeared the next morn ing. That night a tribe of interior Indians had arrived in Dawson, and Casey caught them within an hour after starting on his search. They told him of a trip that winter after food far into the heart of a country no Indian had ever penetrated before away past the circle and east of the Mackenzie. It was a country sup closely, for I must be off. These were posed to be haunted. At any rate, her words: "Tell him to be brave, to the Indians and Eskimos gave it wide berth, and only necessity of food drove them into it this time. And they told how they finally reached a great mountain on whose top were the remains of a vast building "like a hundred villages built on a grea canoe," as one of the chiefs described it in the vernacular. The build-"We all believe in you," he added, ing had been turned to stone, but was once wood, so the tribesmen declared. And when Casey had found a He strode rapidly away, leaving family Bible-one of the old kind with pictures of the scenes in the Old ossible Horton proceeded to do. He heart which had been absent from it Testament-and turned up the drawing of Noah's ark one and all of the tribesmen grunted with satisfaction and declared the boat on the moun tain was very much like the picture. Moran got affidavits from the In-

dians, and the story traveled all over the world. The noble red men stuck to their story notwithstanding the most jealous questioning of newspaper rivals who had been scooped. And, while many will call Moran's getting the story luck, it is the sort of luck that Moran always can be deman, and not fond of sports, so waited for it to come to him, but always went to it, and by 1909 the great demonstrate so many things concerning Alaska and Yukon may depended upon to have investigated and put the seal of tory or biography. Come, now, I'm in truth or the mark of falsity on this the finest newspaper story that the north has ever produced.

the insurance is shared by the govern-

It is claimed that only one out of 250,000,000 passengers on English trains meets with an accident.

OLD WAYS OF FIRE MAKING. Queer Methods of Striking a Light In Primitive Times.

Looking around upon the civilized aces of mankind today, one's imagnation is sorely taxed to picture a s certain that such a time must have en-far back in the dim ages, when nan roamed the wilds and dwelt in noles and caves of the earth, scarcely nore advanced in his domestic artific American. In what manner the value of fire as a servant first dawned ipon the mind of man must ever renain mysterious, but at all times there must have been fires and great conflagrations kindled by natural means and entirely without the aid of man. Thus, the effect of the lightning stroke. f friction caused by falling rocks or he chafing of limbs and stems in the nse forests, or the volcanic overflow f the smouldcing furnaces within the globe would from time to time display dering eyes of primitive mankind. Probably man first feared fire, then

egan to worship it as a god terrible and omnipotent to destroy. Then, his employ fire to benefit himself and his tribe, using it for cooking and warmth. Notice that he did not at first make ire. He took it from Nature's hand, so to speak, just as he gathered fruit from the forest boughs. There is direct evidence of this in the traditional history of many races. For example the T'lisngit family of Indians in southeastern Alaska say that the raven gave them fire and have an elaborate folklore descriptive of the bird and its flight through inky darkness bearing the divine spark in a box. The fire was religiously preserved and fed, and members of the tribe took of it for their domestic hearths. These and similar fables of the preservation of fire in a box, and its being borne from tribe to tribe, or family to famfire long before he had discovered the means of making it for himself. Probably the first essays of man as

fire maker were confined to the fric-

tion of sticks. There are just three

ways in which one piece of wood may be rubbed upon another, namely, by moving with the grain, or "plough-'sawing," and by twirling a pointed stick within a wooden socket, or "drill-All these methods have been used by early man. Neither the first nor the second method, however, was brought to a high state of perfectionor, to be more precise, they both reached perfection in rudimentary and sporadically in America, consists of two parts: first, a stout piece of thoroughly dried wood perhaps three feet long and two inches in diameter, which forms the hearth or stationary part; second, a smaller stick of the same kind of wood about a foot long, cut wedge shape at its lower end, the edge forming a very obtuse angle. This constitutes the working part, or plough. It was rubbed violently backward and forward on the stationary piece, cutting a groove running with the grain for a distance of some four inches. Minute shavings were thus detached, and in the hands of a skill-

ful manipulator these were soon heated above the point of ignition. Fire making by sawing was a Malay device and has never perhaps been successfully employed save in countries where the bamboo flourishes, the reason being that bamboo is the only really suitable wood. Two pieces are taken, one with a sharp edge, the other with a notch cut in it nearly, but not quite severing the substance. After sawing for a time the floor of the notch is completely pierced and the heated particles fall below and ignite. But the most important method of primitive fire making is that of drill-In its most simple form a stick of dry wood is twirled vertically between the hands upon a very dry and partially decayed lower platform. It extremely difficult to obtain fire in this way, as modern experimenters may prove for themselves. Yet there is a certain knack about the operation and this once being mastered smould-

ering wood dust may be created with comparatively little labor It is clear, however, that the fire drill could be made more effective and rapid in action in several ways. One such way calls for the co-operation of two individuals, one of whom supports the vertical spindle by means of a socketed rod, while the other wraps a cord about the spindle and pulls it backward and forward as rapidly as

A further complication of the fire drill was the application of the bowstring-similar to the drilling appliance used by the jeweler. The socketed rest for the vertical shaft was then held by one hand, while the thong was alternately pulled and slackened with the other. Thus a saving of labor was attained.

The forerunners of the comparative y modern flint and steel as a means of striking a light were flint and pyrites, or two pieces of pyrites. These vere struck together and the sparks thus generated were caught among little dry moss. The Esquimaux from Smith Sound to Bering Strait use this method. A very complete strike-alight, set, including flint, pyrites and tinder in little bags and a leather pad in dainty little bags and a leather pad to guard the fingers, comes from Cape Bathurst. Evans points also to Fuegia and the European archaeological sites for the antiquity of this

Modern forms of the flint and steel examples preserved There is the very old type of wooden box, perhaps the earliest strike a light set made by civilized mankind. With this are certain small angular pieces of stout paper, the tips of which are dipped in sulphur. These are the most primitive kind of match known. They were used for generating a flame, by application to the smouldering tinder. in Germany, and the cost of carrying Genuine specimens of these matches are now extremely rare, though "faked" ones are often offered for sale by dishonest dealers in curios.

Another and more compact type of the hat gets a reputation for philantinder box is of metal. In the bot- thropy.

tom is seen the old dry rag, used a inder, and upon this the flint and steel reposed when the box was not in use. Still more interesting is the in genious strike a light made in form of a pistol. The flint is worked by the trigger and strikes upon an upright plate of steel, throwing the sparks through an opening upon the tinder contained in a narrow box which takes the place of what would be the barrel the continent whereby the Farmers' in the case of a pistol. This contrivance is a relic of the old stage coach exporters without the interference and days. By means of it a light could be expense of the middle men and specustruck in a high wind. The matches lators. which were then used were strips of thin pine wood, the ends being dipped The efforts of the Farmers' union in sulphur. One other tinder box may be mentioned, namely, the "Chamak"still in use among the Himalayan tribes. It is a little leathern pouch containing flint and tinder, while the

In conclusion we may dwell briefly proper as perfected by civilized man. the seventeenth century, and was the port of Charleston. used as a means of obtaining fire shortly afterward. But its costliness, together with the danger attending its and not appreciably further from use, militated against its popularity. fear departing from him, he began to But in the year 1805 the Parisian Chancel introduced the so-called oxymuriate match. It was a slip of wood tipped with a mixture of chlorate of ootash, sugar and gum. To ignite it the match was thrust into a bottle containing a piece of asbestos saturated with sulphuric acid—an awkward

matches, whose career was short lived They were a kind of paper cigarette, lipped in a mixture of sugar and chlorate of potash. Rolled within the paper was a tiny glass bulb filled with sulphuric acid. To strike these matches the tip was compressed beliberated and subsequent chemical action caused ignition of the paper. The first really practical lucifer natch, however, was invented by John Walker of Stockton-on-Tees in 1827,

and by him named after Sir William Congreve of rocket fame. It consisted of a splint of wood, first tipped with ture. These matches were drawn rapidly through a piece of folded sand paper to ignite them. It is curious o note that a tin box containing sev en dozen of them, together with the necessary bit of sandpaper, cost one

Finally, after endless experimenting inspired by handsome prizes offered by America, England and other enlightened countries, the non-phosphorus safety match was brought into being, putting the top stone, as it were, upon

problem of striking a light. It is a curious commentary on the old world's slowness of inventive genius that the first practical match should have been made less than a century

## MIGHTY NEW BATTERY.

Electric Device Gives Tremendou

Power, Says Its Inventor. Frank C. Curtis, inventor of the nev battery expected to supplant present devices for the furnishing of light heat and power, recently gave some remarkable instances of its ability, acacts on the suggestions that we are cording to a Milwaukee special disgiving him, that it would be a great

patch to the New York Times. "For power purposes," he says 'eighteen cells 4 by 4 by 12 inches weighing about twelve pounds each, or total of less than 250 pounds, were used to run an electric runabout in the streets of Milwaukee over 150 miles with one charge of the chemical solusolution.

"Eight cells 4 by 5 by 12 inches wer used in connection with the motor of the submerged type and propelled the boat for nineteen hours consecutively

or a distance of about 150 miles. "Six cells of this battery were pu or an electrical piano in conjunction with a small motor and have been in constant use, furnishing power for the plane for upward of four months, and are still in active use and have been recharged within that period at intervals of two months. It is equally suc-

"The invention is the discovery of new alloys to form the electrodes, both negative and positive, and also in the combination of chemicals used in connection with the electrodes. The decomposition of the chemicals in solution furnish the electric current in as large a quantity as may be desired. The power battery is composed of material that will last for many years, the solution and ionite being the only parts to be acted upon.

"There is no disintegration of any parts of the cell except the ionite cylinder, which will give 20,000 ampere hours before it is consumed. The size of this cylinder is 12 by 12 inches by one-quarter inch and can be replaced at the present market price at a cost not exceeding 20 cents per cell. These onite plates are produced direct from the ore by an electrolytic process which recipitates the metal from its sulhides in the form of a sponge, which rolled into sheets. The process is nexpensive and produces an alloy consisting of zinc, aluminium and cad nium, which is not acted upon by the onite solution when the battery is not When it is in use it has the property of decomposing the ionite so lution, which action furnishes 20 per cent of the energy produced by the battery. The ionite solution, being cheaper than the metal, furnishes a cheap fuel for the production of elec-

tricity "Both solutions cost not over 5 cents per cell for renewal.

"The negative element consists of a round element which is composed of a specially prepared graphite. These are treated with an antimony solution and are then treated with a second solution, which leaves the antimony in an insoluble form.

"After one year's testing, the ment being in constant use, there has been no perceptible deterioration of the graphite or its antimony celling, and it is found to have the same capacity as when first put in use."

# Many a man who merely pass

DIRECT TO CONSUMERS. Interesting Suggestions to Farmers

TERMS---\$2.00 A YEAR IN ADVANCE.

Union Business Agent. We understand that Mr. W. C. Moore union may sell cotton direct to the

We hope Mr. Moore will efit to the farmers, and whatever bensteel is a strip of metal riveted along efits the farmers will help every other

one side of the pouch. It is of small interest. size, suitable to be carried about the object of his visit, we hope he will upon the developments of the match German Lloyd Steamship company, at Bremen and talk with them about Phosphorus was discovered by Brandt handling this export cotton through

Charleston is nearer the cotton fields than Norfolk, Baltimore or New York, other ports, and consequently cheaper freight charges, while the ocean freight triotic South Carolinian, should do

up our home port. If Mr. Moore will call on cials of the North German Lloyd company he will find them to be very charming men socially, as well as keen,

his surprise, that they are quite well ween the teeth of pliers. Ey this informed as to conditions in the south means the bulb was broken, the acid and particularly as to the city of they believe the south is the coming ments for their steamers.

They will tell him, also, we believe that they have been trying to get a promise of this kind for some time. but have not been successful. Perhaps Mr. Moore can help them along this line, and if he can succeed in getting a steamship line established between Charleston and Bremen he will do a Charleston and the state of South Carolina, but to the farmers of the south

as well. trips out into the farming sections of Germany and study the life and habits and conditions of the German farmers and stock raisers, and then go back to the steamship people and talk with

them about immigration. The Farmers' union, adopted some sort of resolutions against immigration last summer, and of course, we know that Mr. Moore is not going to Germany to try to encourage immigration, but he ought to study the question while he has such an excellent opportunity for doing so.

He will be bound to admit, if he

thing for this state if we could get any number of thrifty young German farmers scattered around on the farms hope he will make, we believe he will become quite an enthusiast on the subject of German immigration. Of course he will find that the prosperous, middle-aged German farmers do not want to pull up and go to a new country, but he will also find that many young German farmers, of the very best stock, are leaving and going to other parts of the world because they can not get the opportunities they want at home, and he will be anxious

If Mr. Moore will then talk over the matter with Mr. Von Plattenberg and Mr. Von Kloch of the steamship company, he will find them very intelligent and sympathetic to a marked degree. He will find that they have a good understanding of the needs of the south, and of the kind of immigrants

we want here. They will tell him, we believe, that the people who came over on the Wittekind were mostly Belgians, and of a not very desirable class at that, and that they advised against bringing these people to South Carolina, believing that they would not suit us and that our conditions would not suit

Mr. Moore will also find that the steamship people have exceptional opportunities for encouraging the better class of immigration to this state-immigrants who are not paupers, and who can not be classed as "riff-raff" or "scum"—and that they will be glad to co-operate with the people of this state in securing for us a good class of new citizens. He will be told, of course, that it

will take some time to bring all this about; but he will be convinced, we are quite sure, that it will be to the best interests of this state to make an intelligent effort in this direction.

Much is being said now by ignorant nen in opposition to immigration of any kind, and we would like a man of Mr. Moore's intelligence, and especially one who is identified with such force as the Farmers' union, which has put itself on record most unfortunately in wholesale opposition to immigration, to make some study of this important matter under the exceptional advantages that he will have.

The establishment of the direct connection with the European cotton firms is of supreme importance. So also is the establishment of a steamship line between Charleston and a northern European port, and so also s German immigration. We say, again, that we hope Mr.

Moore will succeed in the prime object of his visit to Germany, and we also hope that he will be able to do something with the other two matters .-Anderson Daily Mail

to Even a family tree may occasionally need a little pruning.