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NORTHERN LIGHTS

FROM THE ROMANTIC AMERICAN DRAMA.

THE NOVELIZATION BY A. D. HALL.

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 life for the United States, met his death, fighting against odds that were as fearful as 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, outfitting ranch after outfitting ranch had been attacked, 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 to both 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 inexorably.

Still, on this Sunday afternoon, nothing 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 was evolving in his brain.

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 be given him.

Not far away, monotonously and with no object whatever, carrying cannon balls back and forth, under the guard and watchful eye of a soldier, was a young man, who, with eyes never raised, performed his task, as heart-beatingly as one of the 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 worse than death—the pyramids.

"You thoroughly understand your instructions, Lieutenant?" said General Crook.

"Yes, general."

"Give your men all the rest you can between this and marching time," knowing full well that what he said 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 departed to fulfill the command given him.

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

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

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

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

"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 is Colonel Gray's son."

This was news to Crook, and voluntarily 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. "I thought his name was Jordan."

"That was the name under which he enlisted."

"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 sure that he would not make such a statement unless he was absolutely certain of its truth.

"Um!" he said at last. "He has been in your charge, I believe?"

"Yes, general, for the past two 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, ready to be led to his task, and when night comes it is difficult to turn him out of his quarters. He will not turn in, and 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 soft-hearted or much given to sentiment, but it seems to me that here is a case

was Strong, and whose fine face full of character did not belie his name.

"My reports from your scouts, captain," asked the general, thrusting aside the emotion which had momentarily threatened to over-power him and becoming once more the calm, well-poised commander on whom so much depended.

"Not yet, general. I have been expecting them for the last two hours."

"Couldn't be better. They're burning with impatience to be off, and there seems to be considerable disappointment among those who are to be left behind."

"Ah!" ejaculated Crook, with a gratification he made no effort to conceal, so pleased was he at this display of bravery by the men under his command. "They haven't forgot the slip we got on the Rosebud. You understand the plan of action? There must be no mistake tomorrow. The blow must be so swift, sure and overwhelming that the twenty-sixth day of June will go down in Indian history to the last survivor of the race."

"At what do you estimate their strength, general?" asked Strong, his eyes gleaming at the prospect of battle.

"Anywhere from twenty-five hundred to four thousand fighting men. A general opinion prevails that it is less than that, but I don't care to be outnumbered a second time."

"And the hour for attack? Day-break tomorrow, is it not?"

"The understanding upon that point was thorough. Monday morning, June twenty-sixth, was the day agreed upon. Barring accidents, at the first peep of dawn tomorrow our turbulent red friends will meet with a swift and awful judgment. If—"

He was interrupted by the sound of rapidly approaching footsteps, and an orderly came rushing around the tent.

"General, a scout has come with a report of the greatest importance."

"Bring him here immediately."

Strong was about to follow, but the general stopped him, ordering him to remain as there might be necessity for some action.

The scout was Horton, who arrived breathless and covered with dust.

"General Crook, you know me?" he asked, with difficulty, so exhausted was he.

"I do," replied Crook, recognizing him at once as a man who had done valuable service for him some years before. "You have serious news?"

"Rouse your men, general!" gasping with excitement and lack of strength, "for the devil has taken possession of his red lips, and he'll set loose Colonel Gray and his men for a holiday."

"What is it, man?" cried General Crook, wrought to the most intense pitch of suspense. "Speak!"

"Just a minute!" then, as soon as he had partially recovered, he proceeded to tell his story. It appeared that on the day when Colonel Gray and the men under his command were about to start to join General Crook, the Indians in some way learned of his intention and also of the strength of his forces, and about four hundred Ogallalas surrounded the fort and fired it, this was the best course to take.

"You were tried and convicted of desertion by a military court presided over by Colonel Gray. You were returned to me for sentence and punishment. There have been times, and not many years ago, when for such a crime you would have been shot."

These last words pierced Wallace's brain and, melting the icy band which had been compressing it, brought him back to his senses.

A flush stole into his cheeks and a faint light into his eyes.

"Yes, yes," he cried, eagerly. "Shot, but they wouldn't do it. I wanted them to, but they wouldn't do it!"

And then he sighed heavily.

General Crook looked at him narrowly. He found difficulty in understanding. This was certainly a most extraordinary criminal.

At last he said, very deliberately: "What promises can you give me of soldierly conduct in the future should I restore you to the ranks?"

"None," was the hopeless answer.

"None!" repeated General Crook in blank amazement.

"None."

"Gray," after a pause, "your father is well known and esteemed by me. I would go to great lengths, even stretch discipline, to do a service through you to him."

Wallace dropped the cannon ball to his feet, and exclaimed with the most intense earnestness:

"You can do my father a service, sir, one for which he will never cease to thank you."

"And that?" asked the general, wondering what could be coming next.

Wallace extended his hand, with a gesture that was almost tragic, toward the horizon.

"See, the day is drawing to a close. The sun is going to rest. For ten long days it has set thus upon my punishment, and tonight it is going down blood red. The first day I was strong; I built over a hundred pyramids; the second day eighty; today I have built only fifteen. You wish to do my father 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 will cease, and I shall be at rest."

"Oh, with all my heart, with all my soul," was the passionate reply, spoken with such yearning that it was impossible to doubt the truth of the words. "I have prayed to God that He would so lift from me the bitterness of my degradation. But it comes so slowly, so slowly."

Hardened veteran though he was, The Gray Fox was moved more than he would have liked to acknowledge, and there was a suspicious moisture about his eyes.

He scarcely knew what to reply, and he was thankful to be spared this infliction by the sudden appearance of an officer who came rapidly forward and saluted, evidently anxious for a consultation with his superior.

"Guard, remove the prisoner," commanded the general, "and tell Lieutenant Varnum to keep him in the guard house tomorrow."

The guard conducted Wallace back to his work. The young man's head sank upon his breast, and, with the former hopeless expression, he again betook himself to his task. The general turned to the officer whose name



SENATOR JOSEPH B. FORAKER.

HUNT FOR NOAH'S ARK.

Expedition Going to Yukon to See If It Is There.

"Mount Ararat With the Ruins of Noah's Ark on It, Discovered in Yukon" was the headline that appeared in a Dawson newspaper some few years ago. And, while a controversy may well be waged as to the meaning and original purpose of the great story that Indians declare exists on the top of a mountain far in the interior 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.) correspondent of the St. Louis Post-Dispatch.

The story of the first discovery of the alleged Noah's Ark is of itself a classic in the north. In the early days of the Klondike rush a brilliant coterie of writers gathered in the new camp. Of those who have since given to the world their impressions were Jack London, Rex Beach, Jack Corbett, ex-Senator Jerry Lynch of California and others. But in the newspaper world of Dawson—then particularly bright—the particular star was one Bernard H. Moran, or as he was known from Point Barrow to Atlin, "Big Casey" Moran.

As a reporter Casey was unexcelled anywhere. There are whole weeks in Dawson when telegraphic wires are down and no news whatever arrives 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 newspaper of the outside world is some two or three months old and every one has read it twice at that. Getting out a daily under these circumstances is no job, but the inevitable ubiquitous Casey was always there with the ink, the speculation, the suggestion. A man that has successfully been street preacher, whiskey smuggler, walking delegate, mining broker, ice trust magnate and boat builder could always evolve enough news, whether or not the real article was in evidence.

It was one of these times, and the editor was troubled. "Casey," said 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' northern limit to the southern cross."

This was an order such as Casey loved. He grabbed a pad, pulled on his parka, and in a minute the 65 low zero fog had closed about him.

The story appeared the next morning. That night a tribe of interior Indians had arrived in Dawson, and Casey started 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 supposed to be haunted. At any rate, the Indians and Eskimos gave it a 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 a hundred villages built on a great plateau, as one of the chiefs described it in the vernacular. The building had been turned to stone, but was once wood, so the tribesmen declared. And when Casey had found a family Bible—one of the old kind with pictures of the scenes in the Old 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 mountain was very much like the picture.

Moran got affidavits from the Indians, 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 carried with him. He never failed to come to him, but always went to it, and by 1909 the great exposition which will demonstrate so many things concerning Alaska and Yukon may depend upon a word he has investigated and put the seal of truth or the mark of falsity on this the finest newspaper story that the north has ever produced.

Old age insurance is compulsory in Germany, and the cost of carrying the insurance is shared by the government and the employer.

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 races of mankind today, one's imagination is sorely taxed to picture a time when the ready means of striking a light was not available. Yet it is certain that such a time must have been—far back in the dim ages, when man roamed the wilds and dwelt in holes and caves of the earth, scarcely more advanced in his domestic arrangements than the beasts of the field, writes Percy Collins in the Scientific American. In what manner the art of making fire was first discovered is a matter upon the mind of man must ever remain 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, of friction caused by falling rocks or the chafing of limbs and stems in the dense forests, or the volcanic overflow of the smouldering furnaces within the properties of fire to time display.

Probably man first feared fire, then began to worship it as a god terrible and omnipotent to destroy. Then, his fear departing from him, he began to employ fire to benefit himself and his tribe, using it for cooking and warmth. Notice that he did not at first make fire. 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 Flitig family of Indians in southeastern Alaska say that the Raven gave them fire, and have an elaborate story of 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 brought from tribe to tribe, or family to family, are reminiscent of the unquestionable fact that man knew and employed fire long before he discovered the means of making it for himself.

Probably the first essays of man as a fire maker were confined to the friction 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 "pounding," by moving across the grain, or "sawing," and by twirling a pointed stick within a wooden socket, or "drilling." All these methods have been used by early man. Neither the first nor the second method, however, was brought to a high state of perfection, or to the precise, efficient, and reached perfection in rudimentary form. The fire blow, which was widely used among the Indo-Pacific races 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, and is 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 skillful 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 is the only really suitable wood. Two pieces are used, 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 drilling. In its most simple form a stick of dry wood is twirled vertically between the hands upon a very hard and partially decayed lower platform. It is 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 smouldering 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 holds the vertical spindle by means of a socket, while the other wraps it backward and forward as rapidly as possible. A further complication of the fire drill was the application of the bow-string—similar to the drilling appliance used by the jeweler. The socketed rest for the vertical shaft was then held by one hand, while the string was alternately pulled and slackened with the other. Thus a saving of labor was attained.

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

Modern forms of the flint and steel are well known to most people from examples preserved in museums. There is the very old type of wooden box, perhaps the earliest strike-a-light ever used 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. 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 tinder box is of metal. In the bottom

DIRECT TO CONSUMERS.

Interesting Suggestions to Farmers' Union Business Agent.

We understand that Mr. W. C. Moore of Greenville, business agent of the State Farmers' union, will leave for Bremen, Germany, in a few days for the purpose of trying to perfect arrangements with cotton exporters on the continent whereby the Farmers' union may sell cotton direct to the exporters without the interference and expense of the middle men and speculators.

We hope Mr. Moore will succeed. The efforts of the Farmers' union along this line should have the sympathy of every legitimate business interest in the south. Such an arrangement, if made, would be of great benefit to the farmers, and whatever efforts the farmers will help every other interest.

If Mr. Moore succeeds in the prime object of his visit, we hope he will then call on the officials of the North German Lloyd Steamship company, at Bremen and talk with them about handling this export cotton through the port of Charleston.

Charleston is nearer the cotton fields than Norfolk, Baltimore or New York, and not appreciably further from Bremen. There would be a shorter railroad haul to Charleston than to the other ports, and consequently cheaper freight charges, while the ocean freight charges would not be any greater.

Moreover, Charleston is a South Carolina port, and Mr. Moore, as a patriotic South Carolinian, should do whatever may be in his power to build up home ports.

If Mr. Moore will call on the officials of the North German Lloyd company he will find them to be very charming men socially, as well as keen, alert business men, ready and anxious to talk business.

He will find, perhaps somewhat to his surprise, that they are quite well informed as to conditions in the south, and particularly as to the city of Charleston. They will tell him that they believe the south is the coming section of the United States, and that they are anxious to get a line of their ships established to a southern port. They will tell him that they will put on a line to Charleston if they can get any sort of guarantee or promise of support in the way of freight shipments 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 membership line established between Charleston and Bremen he will do a great service not only to the city of Charleston and the state of South Carolina, but to the farmers of the south as well.

And we would like Mr. Moore, while he is at Bremen, to take some little 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 it.

The Farmers' union, we believe 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 acts on the suggestions that we are giving him, that it would be a great thing for this state if we could get a number of thirty young German farmers scattered around on the farms in South Carolina. If Mr. Moore makes as thorough an investigation as we 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 to have some of these come to South Carolina.

If Mr. Moore will then talk over the matter with Mr. Von Plattenberg and Mr. Von Kioch 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 them.

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 men in opposition to immigration of any kind, and we would like a man of Mr. Moore's intelligence, and especially one who is patriotic to a marked degree, as is 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 is 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.

Even a family tree may occasionally need a little pruning.

MIGHTY NEW BATTERY.

Electric Device Gives Tremendous Power, So Gives Inventor.

Frank C. Curtis, inventor of the new battery expected to supplant present devices for the furnishing of light, heat and power, recently gave some remarkable instances of its ability, according to a Milwaukee special dispatch to the New York Times.

"For power purposes," he says, "eighteen cells 4 by 4 by 13 inches, weighing about twelve pounds each, of a total of less than 250 pounds, were used to run an electric pump over the streets of Milwaukee for 150 miles with one charge of the chemical solution at a cost of \$1 for the change of solution."

"Eight cells 4 by 5 by 12 inches were 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 put on an electrical piano in conjunction with a small motor and have been in constant use, furnishing power for the piano for upward of four months, and have been recharged within that period at intervals of two months. It is equally successful in lighting experiments."

"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 a large quantity as may be desired. The power battery is composed of a series of cells, each containing a solution of the metal from which 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 ionite plates are produced direct from the ore by an electrolytic process which precipitates the metal from its sulphides in the form of a sponge, which is rolled into sheets. The process is inexpensive and produces an alloy consisting of zinc, aluminum and cadmium, which is not acted upon by the ionite solution when the battery is not in use. When it is in use it has the property of decomposing the ionite solution, which action furnishes 20 per cent of the energy furnished by a cheap battery. The ionite solution, being heavier than the metal, furnishes a cheap fuel for the production of electricity."

"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 element being in constant use, there has been no perceptible deterioration of the graphite or its antimony casing, and it is found to have the same capacity as when first put in use."

"Many a man who merely passes the hat gets a reputation for philanthropy."

"The foreman of the flint and steel are well known to most people from examples preserved in museums. There is the very old type of wooden box, perhaps the earliest strike-a-light ever used 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. Genuine specimens of these matches are now extremely rare, though 'faked' ones are often offered for sale by dishonest dealers in curios.

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