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NINETY-SECOND YEAR.

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A BURNING CLIFF THAT HAS DEFIED THE ICE KING FOR AGES

REMARKABLE DISCOVERY ON THE
ARCTIC COAST LINE OF THE AMERICAN CONTINENT BY ANDREW J. STONE

ONE OF THE MOST
ASTONISHING ARCTIC
DISCOVERIES YET MADE.

BY ANDREW J. STONE,
Zoological and Ethnological Department
of the American Museum of Natural
History, Corresponding Member of the
New York Zoological Society.

I have just returned from an exploration of the northernmost coast of America, during which I explored more than a thousand miles of coast line hitherto practically unknown. The most astonishing thing which I discovered on this trip was twenty miles of burning coast line within the Arctic Circle. Here I found a cliff rising directly from the sea to a height of from twenty to two thousand feet, the whole of which, so far as the eye could reach, was one mass of burning lignite and dense clouds of smoke.

The effect at night was sublimely grand. The fire from this enormous mass of burning lignite cast reflections far out among the ice cakes of the Arctic Sea, dense columns of black smoke rolled inland toward the snow-capped mountains, and the glare from this gigantic fire, which, perhaps, has been burning for centuries, lit up every object for miles around. Millions of tons of coal in these Arctic cliffs are being consumed every few days by this extraordinary fire.

By careful measurements I estimate that the blazing cliffs extend continuously for twenty miles. Nowhere in the record of Arctic exploration is there any mention of this extraordinary phenomenon. No explorer, so far as I can learn, ever before penetrated this region, or even heard from the natives of this amazing and unparalleled spectacle.

WRITTEN FOR THE SUNDAY REPUBLIC.
The most extraordinary feature of the Arctic regions has now been discovered. It is a burning cliff 2,000 feet in height and twenty miles long, the whole of which is a mass of flames and smoke.

This amazing discovery has been made by Professor A. J. Stone of the American Museum of Natural History. Professor Stone visited points of the Arctic never before explored. This may be the reason why the gigantic burning cliff which he discovered has never been referred to in the reports of previous Arctic explorers.

When seen from afar, Professor Stone at first supposed that the great cloud of smoke issuing from the burning cliff was a coming storm. He ordered his party into a storm camp, where all went to sleep. The following morning the cloud was still there. Professor Stone then resolved to investigate, and with much labor crossed an ice field, approaching the land as night fell.

Then in the darkness it was seen that the party were in the immediate neighborhood of a gigantic conflagration, whose reflection could be seen from afar. The party camped about a mile out from the shore.

Thousands of glowing apertures extended for miles along the coast. They were at varying levels, from the top of the high cliff to almost the bottom. From them the smoke extended in puffs and in steady streams. The ice fields around reflected the fire from these blazing furnaces of coal and the hummocks of the ice field glistened with red and orange fires. Overhead was a great pall of dense black smoke. The smell of burning lignite and sulphur became almost unbearable.

At intervals huge chunks of burning coal



VIEW OF THE BURNING CLIFF FROM THE SEA

THE ICE OF CENTURIES
HAS SEEMINGLY MADE
NO IMPRESSION ON
THIS GREAT NATURAL
FURNACE.



MAP SHOWING LOCATION OF CLIFF

rolled down the side of the cliff, and far out onto the ice. These glowing masses blackened as they fell and broke into thousands of pieces, scattering their remnants over the ice and marring its purity with a smudge that had attracted Professor Stone's attention when approaching the cliff. When the wind shifted from the land the smoke was dense and breathing became difficult.

As dawn came on the party was able to observe the burning cliff more distinctly. To its great height, almost 2,000 feet, it was a mass of fire. From crevices, from the bottom almost to the top, the smoke poured as if from a volcano. Smoke edged from the wall in puffs and with great regularity, as from a chimney, from great black crevices which were burning strata of coal.

These strata zigzagged their way across the irregular face of the cliff and were seldom more than four or five inches wide, but in some instances a foot thick. The burning material, while largely composed of lignite, is probably made up of several kinds of the chemical substances. Owing, however, to the impossibility of climbing the cliff, Professor Stone was unable to ascer-

tain the exact composition of the burning material. The cliffs are high and steep and cut into pinnacles and chimneys. These chimneys, not being intersected with the inflammable strata, have not burned, and stand out against the glowing background. They are extremely picturesque and convey the same effect as do the Bad Lands of Dakota, except that the latter are not smoke covered and have been created by water erosion, while those in the Arctic have been eaten away by fire.

One of the most remarkable and beautiful features of these miles of burning coast line is the variety of color that they present. Overhead is the bill of dense black smoke; below the blue gleam of the eternal Arctic ice. On the wall of this burning cliff is a variety of rich, warm tones from cream to a deep, rich red, all the shades of terra cotta. Between the strata of burning coal are layers of clay. The constant burning of the many seams of lignite in the face of the cliff has created sufficient heat to turn the clay into terra cotta. As this has burned it has tumbled down the face of the cliff in varicolored streams until it assumes the appearance of a wall down which ribbons of every warm and rich color have fallen. During the thousands of years this wall has probably been burning it has been seriously undermined, and this has produced the great chimneys or towers of rock which stand isolated from the mass, but streaked and stained by the fires that have surrounded it.

On top of this burning cliff the country extends far inland in a level plain, devoid of snow and ice. This would indicate that the burning coal strata extended for a great distance horizontally below the surface. In places the surface is so hot that a man cannot walk upon it. The smoke and heat cascade through the porous soil. It might be asked how the fire could burn so far below the surface and behind the face of the cliff. The hot air from the burning lignite rises, it is supposed, through the earth and creates a vacuum, which is filled by a rush through the crevices left by the burned-out coal. The burning seams extend for an unknown distance beneath the surface.

For several days Professor Stone's party followed the walls of burning lignite along the coast of Franklin Bay, and only left them at the Constable River, also discovered by this expedition. From where the burning wall was first discovered until its end, at Constable River, is exactly twenty miles. In this length millions of tons of coal are being consumed almost every day, and the heat and energy generated in them is incalculable, but in the frozen North, surrounded by perpetual snow and ice, these fires are useless and lost.

Where did this coal which perpetually burns in the Arctic come from? The seams are very narrow and imperfect. Professor Stone has an idea that they were formed by great beds of seaweed or kelp. The Mackenzie River, which flows through this country, is one of the greatest on the continent. It is from one to two miles broad and very deep. Its tributaries are all great streams—the Athabasca, the Liard and the Peace. It drains an immense lake system, in which many of the lakes are very large, notably the Great Bear and Great Slave, each of which is 150 miles wide. Its small feeders extend to as far as Winnipeg, almost on the northern borders of the United States.

In the far past millions of tons of drift-wood went down these streams and into the great sea that washes North America's most northern coast, and were cast back upon its shores. This is probably where the coal that is burning on the shore of Franklin Bay came from. Or was it left on the shores in the days of the mammoth, thousands of years ago, when the vegetation of the Arctic was as luxuriant as that of the equator of to-day?

OUR "FIGHTING THIRTY-EIGHTH" IN THE PHILIPPINES.

Captain Weber, Formerly of Battery A, Tells of the St. Louis Regiment's Lively Services at the Front.

WRITTEN FOR THE SUNDAY REPUBLIC.
Mrs. J. E. Weber of 230 Washington Boulevard, has this week received a letter from her son, Captain John E. Weber of the Thirty-eighth Infantry, United States Volunteers, now serving in the Philippines, which gives some interesting details of his regiment's work, the Thirty-eighth having already distinguished itself by a gallant charge in its first action, which has won much praise from general officers.

Captain Weber was a Lieutenant in Battery A during the war with Spain and served with the battery in the expedition to Puerto Rico under General Miles. First Lieutenant Hausman of his company in the Thirty-eighth Infantry is also a St. Louis boy, and, as will be remembered, the regi-

ment was recruited and prepared for active service at Jefferson Barracks. Captain Weber's letter is, therefore, of especial local interest. It reads as follows:
Batangas, Philippine Islands, Jan. 17.—At last I have a chance to write you a short letter. We left Manila on the night of January 14 and landed on December 23, and have been on a "hike" ever since. We are now in the southern part of the island of Luzon. Will stop in this place one day to give the men a much-needed rest.

We have captured eight towns, 16,000 in cash, and liberated 30 Spanish prisoners. Have lost only one man, and he was killed in a little skirmish we had on the 13th. These people will not fight. They fire a few volleys and then run. As a consequence we are nearly run to death trying to catch them. We came into this town last night and learned that the insurgents had taken seven American prisoners away with them just a few hours before we took the town. We will start in pursuit to-morrow, and hope to overtake them within the next two days. The climate here has been a pleasant surprise to me, as it is not near as warm as I expected to find it, and the health of the men has been better than it was in the States. We have not a thing with us in the way of clothing except what we have on, and as we have been out seventeen days you can imagine that we do not look very well as regards wearing apparel. We have been operating most of the time in the mountains, where it is impossible to take wagons, so everything had to be carried by the men.

Rosario, Province of Batangas, January 17.—I got back here yesterday. Have been on a seven days' trip with my company to Tayabas to relieve some Spanish prisoners. We had six skirmishes, but did not lose any men, and inflicted quite a severe loss on the enemy. The insurgents in this province are pretty well broken up, and are scattering in small bands. We are in garrison at this place with one battalion and are very comfortably quartered in a convent building. The churches through this country are the only buildings of any size. The place in which we are quartered is a very large stone building with ample room for the four companies. The health of the command is very good.

Our regiment has made a good record so far. I received the Christmas box all right and we enjoyed the contents, as we have not had anything to eat in the way of sweets since we left Manila. Send me some papers, as we have not seen one since leaving Frisco. So don't know how things are going in the rest of the world. I will give you a little history of the trip from which I have just returned.

I left Batangas with eighty men and the three officers of my company at 2 p. m. on the 10th, and arrived here at 9 p. m. that night, a distance of seventeen miles through a very rough country. There are no roads here, nothing but trails. We left here on the morning of the 13th at 7 o'clock and went to Tison, a distance of fourteen miles, arriving there at 5 p. m. We surprised a party of about twenty insurgents in this town and captured two carts of rice and a pony after a slight skirmish. We remained over night in Tison and left there the morning of the 20th.

We were to be followed by nine troops of American cavalry. They caught up with us at noon at Candelaria, nine miles from Rosario. I stopped to let my company get dinner, and they pushed on. About twenty minutes after they had gone we were fired on from ambush. No one was hit. It was the work of but a few minutes to deploy the company through the brush and chase the enemy out of gunshot, wounding one man. We then proceeded after the cavalry.

After marching about a mile we heard heavy firing in our front. We hurried up and found the cavalry had had a fight with some insurgents in trenches across and on each side of the trail. One cavalryman was killed and five wounded. The main body of the cavalry had continued in pursuit of the flying Filipinos, leaving the pack train and wounded in my care. We had to construct litters on which to carry the wounded, as the trail was impassable for ambulances. While making the wounded as comfortable as possible and preparing them for the trip to the next town we were attacked from the rear by a body of the enemy who had succeeded in getting around the flanks of the cavalry. The fighting lasted about twenty minutes. We finally drove them back, but could not tell whether we had wounded any of them.

On the morning of the 21st we left Sayaga to go to Tayabas, the main column of the cavalry taking a trail to the south, so as to make the attack on the town from two sides. We had proceeded about two miles on the main trail, with my company and one troop of cavalry, when we came upon a line of intrenchment. The part of my company under command of Lieutenant Hausman led the attack, and, after a spirited fight lasting about twenty minutes, routed the enemy out of the trenches and put them to flight, killing and wounding, as far as we could ascertain, about ten of them. A half mile further on they came upon a second line of trenches, when they had another fight, with the same result as the first, except that one of my men was injured by falling in a pit while making a charge, breaking his leg just above the knee. There was but faint resistance from there into the town, where we succeeded in liberating, in all, thirty-one Spanish prisoners.

We then came back to Sayaga and, after resting a day, started back with our wounded and the Spanish prisoners, arriving here safely after a two days' march. We had to wade ten rivers in our march. The men behaved splendidly, and there was not a word of complaint from any of them, although we had to subsist on rice for three days, as our rations had given out and there was no place to get any more until we got back here.