Great Hot Springs of the Black Hills and Their Manifold Attractions

PLUNGE BATH
HOT SPRINGS S.D.

A PART OF THE BATTLE MOUNTAIN SANITARIUM

VIEW NEAR
HOT SPRINGS

A WARD IN
BATTLE MOUNTAIN
SANITARIUM

DINING ROOM, BATTLE MOUNTAIN SANIT--ARIUM

... EVANS FISH POND.

STATE SOLDIERS HOME...

TRAVELING west from the Missouri river en route to Hot Springs, S. D., the black soil of the prairies had turned to the red-brown of the Black Hills, the farm house has given way to the ranch and its extensive outrider of corrals and buildings, feeding racks and yards, and the roll of the prairie grows more pronounced. One sees unique towns with typical western surroundings; the crusted buttes of the foothills rise here and there and the dark points of the Hills begin to be seen as the train reaches Buffalo Gap.

The history of the pre-civilized days of Hot Springs is something more than a vague, mysterious legend. Since the beginning of the seventeenth century the now famous Minnekahta Springs have been the natural sanatorium of the Cheyenne Indians until little more than half a century ago, when tradition says occurred the sanguinary three-days' conflict which gave Battle Mountain its name, proved the "Waterloo" of the Cheyennes and gave the coveted springs to the Sioux Indians. In June, 1879, Prof. Walter T. Jenny and Colonel W. J. Thornby left Deadwood on horseback on a mine location trip. They arrived at Buffalo Gap and Colonel Thornby found and located what are now called the Minnekahta Hot springs. He located his stakes from the present site of the Evans hotel, a half mile up toward the present Soldiers' home. The same year Messrs. Trimmer, Rumbo and Reno came down from Hill City and located cattle ranches in the valley where the city now stands, the next year bringing their families and establishing permanent homes.

Early in the next year Joseph Petty brought John Wilson, the first white patient for the treatment of rheumatism, to the springs, prostrate with the dread disease. By six weeks' use of the mineral baths he was fully restored and never suffered a return of the malady.

By the summer of 1881, Trimmer, Laravie and Davidson had formed a partnership and built a log hotel, seventy feet long near the springs. Meanwhile a man had come to the Hills who was destined to play a most prominent part in the future of Hot Springs. This was the late Fred T. Evans, who had made large sums of money in real estate and street car lines at Sioux City and had first visited the Hills with an exploring outfit in 1876. It was he who hauled the first machinery of the Homestake mine to the Hills, and many is the story told of the feats accomplished by this determined character, with his enormous freighting outfits, in the face of the most trying circumstances. But when at last the Northwestern railroad had built from Rapid City on to Whitewood, he turned his entire attention to the development of Hot Springs, where he had invested first in 1885, and he became a dominant force in the upbuilding of this now famous place. He erected the magnificent Evans' hotel, the Hot Springs hotel, the Minnekahta business block and many residences. He graded and built the streets of the upper town at his own expense, and it was mainly through his influence that the Northwestern railroad built into Hot Springs. The town suffered a great loss in his death in 1902. At present both the Northwestern and the Burlington railways run trains into Hot Springs, the former from Buffalo Gap and the latter from Edgemont.

The town has an altitude of 3,260 feet and is situated in a valley, or canyon, between surrounding hills. When Colonel Thornby located the Minnekahta springs he was much attracted by the beautiful Fall river stream, which pursues its course through the town and parallel with the main street. He says at that time the stream was literally filled with wild geese and ducks that were in such vast numbers as to be unintimidated by his presence. Today this river is a glowing mass, winter and summer, of watercress, while tame ducks of varied hue lend a great beauty to its naturally picturesque appearance.

The climate of Hot Springs is invigorating the year around, and while the great influx of strangers is usually in the summer, people are beginning to discover the fact that Hot Springs is a charming winter resort.

The first natatorium was that erected by Mr. Evans. It is fitted with toboggan slide, springboards, rafts and every convenience for those who can or cannot swim. The temperature of the water is about 96 degrees, and there are springs in the bath itself bubbling up through its pebbled bottom. The waters are as clear as crystal. Altogether there are more than seventy-five springs in and around Hot Springs, and they vary greatly in their constituent qualities. They are all absolutely free from any vegetable substance and most of them are from 90 degrees upward. The supply is constant, invariable and inexhaustible, flowing nearly 1,000,000 gallons a day. The most prominent among these springs are the Mammoth Hot springs (and Lakota group) which supply the two natatoriums and the city, at present, and the National sanitarium.

The Minnekahta spring, which adjoins the Hot Springs hotel and which was the original spring used by the Indians, as evidenced by a moccasin-shaped stone bath carved out of solid rock by the Indians, and still in use at these baths, supplies the Lady of Lourdes hospital and the Evans hotel in its annex. Then there are the sulphur baths and the Hiawatha, formerly called the Catholicon springs, which are used in conjunction with the hotel and sanitarium of the same name. In addition to these are other springs, among them the Mud Baths, adjoining the court house and on the river bank.

Commencing with rheumatism and ending with the diseases of the liver and kidneys, the list of troubles treated successfully by the various baths is too long for present space, but there is no disease cured by the baths of Carlsbad, Germany, or those of Hot Springs, Ark., that has not been treated successfully in the baths of Hot Springs, S. D., while the conditions of climate and scenery are so effective that no health resort on earth conduces so greatly to nature's curative powers. There are a number of hotels in Hot Springs. The pleasure of the plunge baths would be a sufficient endorsement for Hot Springs, but at its very door are a great many varied amusements. Camping parties are numerous. The mountain streams abound with trout. Hunting includes the deer, wolf, wildcat, rabbit and many kinds of birds. Horseback and burro riding are liberally indulged in, and geological excursions are made interesting by trips to the Bad Lands. Many beautiful paths and drives, wonderful caves, cascades, waterfalls, grand canyons and wild flowers in great profusion are found in near proximity to Hot Springs.

Two of the most famous drives within easy access of the city are the Bad Lands, where the most remarkable fossils in existence are found in a perfect state of preservation and where the most peculiar formations on earth can be found, and the Wind cave, with its 2,000 subterranean caverns and 100 miles of passages already explored without finding a limit. The Wind cave was discovered in 1877, but was not turned to account and was unexplored until 1890, when it was located as mineral claims, and an easy road was made from chamber to chamber by blasting. Later on the proprietors got to quarreling among themselves, until finally the United States government took control and put a stop to the vandalism which was despoiling it of its beauties in the carrying away of specimens. The peculiar formations of these various caves are perhaps more delicate than those of any well known cave as yet discovered, and United States guides are constantly on hand to conduct parties through the cave after their arrival from a short drive from Hot Springs.

The original entrance to the cave was a round hole in the rock, ten or twelve inches in diameter, worn smooth by the action of the wind and water for unknown centuries. The hole has been masted out and the opening enlarged, making a comfortable passageway over which has been erected a small log cabin, in the further corner of which is a trap door, which the guide raises and we follow him down one stairway after another in utter darkness for a distance of 155 feet, when candles are lighted and we find ourselves in the Bridal Chamber, the first room in this gigantic fairy palace, so named from a wedding having been performed there. From here three routes have been opened for comfortable traveling, in which 123 special features are pointed out by the guide. The shortest, requiring two hours to traverse, has been named the Garden of Eden route. The next, requiring three hours, is called the Fair Ground. The largest one, called the Pearly Gates, requires six hours. The dazzling splendor of the various chambers, the largest of which covers three acres, one-third larger than the largest in Mammoth cave, illuminated with calcium light is indescribably beautiful and can only be comprehended by actual observation.

The United Statees government has designated Hot Springs at the site of a national sanitarium for disabled soldiers. A group of handsome buildings has recently been completed at a cost of almost $1,000,000, and the "Battle Mountain Sanitarium" was opened May 15, 1907. The main group of buildings is in old Spanish mission style and a happy grouping of them in a circle makes them very compact and wonderfully easy of access to each other. Some idea of the extent of the buildings can be had by realising that within the main group itself, four full city blocks could be placed, filing as it does a circle 585 feet in diameter, or about five acres. The sanitarium property includes a total area of 3,461 acres. The roadways around the main group will cover five miles.

Nothing has been spared in equipping the sanitarium in every way for the comfort and pleasure of the veterans who may become members. A fine military band is provided, which plays daily at the raising and lowering of the colors. Orchestral music evenings within the court or arcade.

To the person acquainted with western South Dakota, it is a source of constant surprise and disappointment to note the way in which thousands of visitors gallop through the Black Hills. They try to do too much. They spend their days in sightseeing and their nights in traveling. In a few days they have seen the entire Hills. When they start for home they are completely worn out. Their holiday has been of no benefit, they are rested neither in body nor in mind. Let us suggest that your trip through the Black Hills be what it is supposed to be, a holiday, a pleasant outing. Don't hurry. Don't rush. But whatever you do or wherever you go, visit Hot Springs. Spend a week or a month at Hot Springs. You will find enough of interest there to occupy every moment. "God's country" it is sometimes called. Rather it is a woman's country, children's country, the country where the invalid lives out of doors. The visitor to this region will carry in his mind for the rest of his life pleasant memories of his trip, and a warm place in his heart for the people and the surroundings. The strongest impression one gets of Hot Springs and its surroundings is the air of restfulness, the complete absence of care and the congenial social surroundings everywhere.

The saddle is indispensable to the full enjoyment of the country around Hot Springs. The streams, the hills and the canyons are always beckoning the rider. The saddle horse is in full evidence everywhere. Many a delicate woman finds her way where she wishes without escort, and careless as to fashion in mounting. Either she is bent upon recruiting her health or means to have a good time, or has business requiring her attention. It is essentially a country made especially for an outing. The place is not a fashionable resort where people go on dress parade, but just a cosy corner of Nature, where one does not think much about dress in the enjoyment of its restfulness and beauty. The railroad trains steam past the picnic parties, and the four-horse stage trots by with its jolly crowd of pleasure seekers. In time the trolley line will be laid here. There are large scopes of country here that have missed the whistle of the locomotive and the noise and bustle which the railroad implies, but they are up-to-date people and keeping step with the present century mark of civilization.

This is one of the ideal places of the west for camping out. The cool, bracing air, the abundance of fuel, water and grass are all appreciated by the old-time camper. The romance of the early miner is one of the most thrilling in the history of the Black Hills. Men are living who took part in it. The deserted pathways of men are all through the Hills. The growth of shrub and weed and brier is striving to hide the scars and gashes made by the pick and shovel of many years ago.

Notes on Recent Experiment and Discovery in Field of Electricity

National Control of Wireless.

CONGRESSMAN ROBERTS' bill for a governmental regulation of wireless telegraphy and telephony proposes the appointment of a board of seven members, "one expert each from the War, Navy and Treasury departments, three experts representing the commercial wireless telegraph and wireless telephone interests, and one scientist well versed in the art of electric wave telegraphy and telephony." The duties of the board, according to the resolution, shall be "to prepare a comprehensive system of regulations to govern the operation of all wireless plants afloat and ashore which come under the cognisance of the United States, with due regard alike for government and commercial interests." It is provided that within thirty days of the organization of the board it shall submit its report and recommendations to congress. To defray the expenses of hte board $2,000 is appropriated.

The international wireless telegraph business of the world is conducted under a treaty signed at Berlin on November 3, 1906, relates the Boston Transcript. This treaty was the result of a convention which was participated in by twenty-six of the principal nations. Of these countries the following have confirmed the treaty: Belgium, Denmark, The Netherlands, Norway, Brazil, Sweden, Mexico, Roumania, Germany and all of its protectorates, Great Britain (under certain reservations), Spain, Bulgaria, Persia, Russia, Austria-Hungary, Portugal, Turkey. As the United States up to this time has not given its adherence to the convention, ships flying the American flag find themselves without standing in international wireless telegraphy, as none of the contracting countries is compelled to receive a telegram from the ship of a noncontracting country, and any coastal station in a foreign country may refuse transmission of a message to a station on shipboard subject to a noncontracting country. This condition of affairs was brought forcibly to the attention of the War department by the cruise of the United States army transport Kilpatrick enroute from New York to Manila February 17 to April 23, 1909, and returning May 15 to July 25, 1909. The report from this ship says it had great difficulty in communicating in different parts of the world, and that in several instances, after ascertaining its nationality, messages were refused.

The only action of the United States government looking to regulation of wireless telegraphy is the approval of the president of the United States, dated July 29, 1904, of the report of an interdepartmental board appointed by the president to consider the entire question of wireless telegraphy in the service of the national government. Owing to the absence of definite regulations, there is considerable confusion in the transmission of wireless messages on the coast of the United States, which interferes very materially with wireless communication between the various seacoast defenses and with our ships at sea. The army now has twelve wireless telegraph stations located at military posts in this country and nine stations at points in Alaska.

Electric Sleep.

Investigation going on here and abroad, just made public, shows that electricity may prove superior to any of the drugs now used to produce analgesia. This discovery, if confirmed by future investigations, would mean a revolution of modern methods of surgery. People suffering from diseases that call for operations, but who cannot get relief through danger of death, if put under ether or chloroform, might be cured, for electricity, when used as an anaesthetic, has no bad effect, it is claimed, on the heart. It produces a state of insensibility, by acting on the nerve centers of the brain, that is called "electric sleep." The sleep is not fatal, but when the electric current is opened the influence is immediately lost and the patient becomes conscious without feeling any of the after effects common with drug anaesthetics. To Stephane Leduc of Naples the medical profession is indebted for the comprehensive study of "electric sleep." He has conducted numerous experiments on animals, most of them being very successful, and other investigators are following in his footsteps. In this country the chief investigator in this field has been a woman doctor of New York City, Dr. Louise G. Robinovitch. Dr. Robinovvitch has performed some of the most delicate operations known to surgery with electricity as her anaesthetic, and has been very successful. All her operations have been on animals, the work being still too much in the experimental stage to be used freely on human beings. Some of the operations she successfully performed are trepanning within exposure of the brain, exposure of the large arteries of the neck and operations calling for abdominal sections. She has found that electricity can be used in operations that are either local or internal, and with equal success. At the Philadelphia General hospital the city will shortly procure the necessary apparatus to be used to produce the "electric sleep" and will conduct a series of exhaustive investigations. Dr. Mihram Krikor Kassabian, director of the Roentgen ray laboratory of the Philadelphia hospital, is now engaged on this work with Dr. Solomon Solis-Cohen.

Twelve Million Telephones.

It is reported that there are now in this country 12,000,000 telephones, or one for every two houses in the country. This does not mean that one-half of the residences in the country contain an instrument, but the figures are instructive and illuminating. Practically everybody who is anybody in the cities or towns and villages has a telephone, while those in the country districts are legion. The astonishing fact, says the Philadelphia Inquirer, is that each of these phones is used on an average of six times a day. The total number of calls in a year runs up into the billions and is not appreciable by the human mind.

This is the more remarkable when we consider that forty years ago there was no such thing as a telephone, and even twenty years ago the instrument was not common outside of business houses. Now they have become one of the necessities of life. We use the telephone not only in business, but for social purposes, for shopping and marketing and for almost every purpose where we used to use the mails or do without. If by any catastrophe the telephones of the country should be silenced forever it would amount to a calamity of the first magnitude. We have adjusted our lives to the telephone and could not do without it unless we made new and undesirable arrangements.

Registering Heart-Beats of Dog.

"Jimmy," the bull terrier, was the hero of a lecture in London the other day. One of the lecturer's most interesting experiments showed how heart-beats were measured by electricity. For this purpose "Jimmy" acted as subject. The dog stood on a table, with his feet in vessels of water, and Prof. Duddell having adjusted his apparatus, the lights were turned down and the shadow of a thin wire was projected on a screen. The wire jerked backwards and forwards. "Those jerks," said Mr. Duddell, "represent the electromotive force of Jimmy's heart. You will notice that they are very unequal. That inequality is not due to excitement through Jimmy finding himself in the presence of such a large audience, but is the natural action of a dog's heart. The beatings of the hearts of all animals are, in fact, unsteady. It may interest you to know that Dr. Waller performed this experiment with Jimmy at a conversazione of the Royal society, and afterward a question was asked in Parliament about the great cruelty to Jimmy by having to paddle in a little water to show this experiment."

The main object of the lecture was to illustrate the more modern methods by which scientists are able to measure electrical currents. Mr. Duddell performed some interesting experiments to show the physical effects of the currents, such as the heating, and even the fusing of wires of different thickness.

The Lightning Rod.

Prof. Elihu Thomson, in Science, justifies the lightning rod as of all the value that was ever claimed for it, under right conditions. Prof. Thomson says in his article: "Let us add with emphasis that the Franklin rod when properly installed undoubtedly secures practical immunity from lightning damage. Its installation is an engineering undertaking demanding study of varied conditions and proper care and judgment in meeting these conditions. The one consideration originally left out was that if there were any better or more direct paths for lightning existing in the building or structure or better ground connections than the rod possessed these must be included in the protective system. But it is also a fact that the construction of most modern buildings, particularly in cities, involves so much metal in roofing, ventilating and other pipes, wires and the like that it is generally unnecessary to resort to any separate means for protection. In cities there are many lofty structures framed in steel, piping that projects above the roof, and metal stacks, generally in good connection with the underground pipe systems, all of which together tend to minimise danger from strokes of lightning. The best vindication of Franklin will, however, be found in the fact that the firmest reliance is placed by the trained electrical engineer upon the provision of an easy path for the electricity of lightning to reach the ground.