

around Springfield, where the people are receiving the Elders with a welcome. Elder Jensen had good health, in which condition he returns, and will go on to his home after Conference.

LIGHTNING'S FREAKS.

A mile and a half from Hooper station, on the line of the Deseret Telegraph company, during the electric storm of Sunday morning, the lightning played some queer freaks with the telegraph wire, knocking down some thirty-five yards of it, and chopping it literally to pieces.

The head lineman, Mr. Carr, of the Deseret company, came to the "News" office last evening with a sack of the wire, which was broken into pieces from a half inch up to several feet in length, most of the pieces being about an inch long. Some of the pieces were found sticking upright in the ground; these were melted at the end that was in the ground, forming a bulk of fused metal. In other instances two pieces of wire had come in contact at the instant of the breaking up, and these were firmly welded together. Another strange fact is that some of the pieces of wire were twisted out of shape, but all were straight as if they had been clipped off by the means of nippers; the ends of all of them, however, were slightly fused.

A handful of the wire was taken to Dr. Talmage, of the University of Utah, and he promptly pronounced it as being one of the strangest freaks of atmospheric electricity he had ever seen. In the course of the conversation he accounted for the action of the current, and brought out many interesting facts on the action of electric shocks. He has made an especial study of lightning, which is a form of electricity but little understood by electricians, owing to the fact that it has a scientific value only, and has nothing of the practical, as is the case with low tension electricity.

Atmospheric electricity is known as high tension electricity. The electricity such as is used in the telegraph is low tension. The former may be compared to heat of high intensity but small in quantity such as small quantity of boiling water. The latter may be compared to heat of low intensity but of large quantity.

To illustrate the point, the doctor drew attention to the fact that "the water of the Great Salt Lake often reaches one hundred degrees of heat; this would not scald the body, yet the units of heat in all the water of the Lake would make an immense total. High tension electricity he compared to a cup of the same water heated to a scalding point." There is not enough electricity in the most violent stroke of lightning to send a message from Salt Lake to Ogden, but a battery can be made in a gun cap out of a tear of sufficient strength to have its influence perceptible through thousands of miles of wire. Atmospheric electricity passes only on the outside of a conductor, while low tension electricity passes through the conductor; hence the practical medical utility of the latter. A lightning bolt is the passage of electricity between the earth and the atmosphere. In the passage from the clouds to the earth, the electricity takes the straightest path, but unlike electricity of low tension, it often leaps across wide separating spaces, and may strike objects in the way and traverse such. Now if such objects oppose little resistance, or in other words, if they are good conductors, they may pass with no manifestation of mechanical violence. If, on the other hand, the body so struck is a poor conductor of electricity, it becomes transformed into heat and mechanical energy, melting,

if the body be fuseable, tearing or rending as the case may be.

"It is evident in case of the stroke at Hooper that the wire, though a conductor, offered a resistance to the high tension electricity of the lightning bolt, and the electricity was transformed into both heat and mechanical force welding and breaking the wire. The characteristic of high tension electricity to remain near the surface of the conductor is proved in this instance, as the wire has been greatly changed upon the surface, a semi-while the inside of the wire is unchanged.

"Often discharges of electricity takes place on sandy deserts, and the passage of the electricity into, or from the ground, produces heat enough to practically fuse and cement the grains of sand together. Masses are sometimes found of many inches in length, generally cubular and of irregular shape. These are called fulgurites.

"With electricity of high tension as with very high explosives, you cannot always be sure that the discharge will take place along the line of the least resistance. As for example, gun cotton, which is generally more effective than gunpowder, but which is likely to make its way through the breech of the gun instead of the barrel. This was shown in the case of one of the early experimenters with electricity, Dr. Richardson.

"In following Dr. Franklin's experiment of drawing electricity from the clouds by the means of a kite, he was killed in his laboratory by the bolt leaping from the conductor to his head. This accounts for the many freaks played by the subtle fluid."

THE FLAMING FORESTS.

Denver, Colo., Sept. 30.—The weather man can offer no hope for those on the western slope whose homes and crops are threatened by the forest fires. There are no indications whatever of rain, and this seems to be the only element able to stay the flames' fury.

Throughout Eagle county high winds have prevailed, giving a fresh impetus to the forest fires that are devastating the timber domain.

In consequence new territory is being devoured. The blaze is rapidly extending along the grand reserves of Girard mountain, west of Homestake creek, and from present appearances will sweep the country to Bear Mountain, at Minturn.

Back of Minturn to the heads of Willow and Two Elk, the country is devastated, little remaining to feed the flames. From Hoosier mountain the wind has driven the fire to the edge of Gypsum creek. The settlers of Upper Gypsum, Cannon, Collins and others are fighting desperately to save their homes and stop its passage across into the magnificent forests of West Brush. If it gets into Brush, the finest body of timber in the state is gone. No loss of life has been reported but several people have lost their homes and their crops.

All the game is leaving the country escaping the smoke and heat of the blazing woods.

Dispatches received here say that the Wheyley's Peak, between North and Middle park, is now a mass of flames and it is greatly feared that they will extend to both of those beautiful camping grounds. The fire has already cut a swath 35 miles long from the Grand river almost to Dillon, in Summit county. The width is as yet unknown. Krumming in Grand county has had a narrow escape and the danger is not yet entirely over. The fires in the vicinity of Ouray are not as bad

as for several days previous, but the smouldering embers may be fanned into an awful conflagration by the slightest wind. The fires around Aspen are working down the mountain side toward town, although it is not burning with the force it has been. At Gunnison, Crested, Butte, Wolcott and Glenwood Springs the fires are still raging. No estimate of the damage to timber and ranches can be given, but it will unquestionably run far into the thousands of dollars.

The Denver Times had the following specials Thursday concerning the progress of the forest fires: Gunnison, Gunnison, Colo., Sept. 29.—Forest fires continue unabated in this section. The two largest are on North Beaver and east of Baldwin. The latter has burned over a territory about thirty miles square. Miners have labored night and day all week cutting timber in order to save the Kibler mine which is situated in heavy timber. That plant is probably now safe.

Crested Butte, Colo., Sept. 29.—Owing to a change in wind this town for the first time in over one week is free from the dense smoke and heat that has enveloped it. However, as there has been no rain, the fire still rages. Irwin, eight miles from here, is almost surrounded, but as it is located in a broad opening, it is considered safe. At Ruby, four miles from Irwin, the situation is critical. The immense breaker which cost the Colorado Fuel and Iron company over \$200,000, is situated in the thickest strip of timber in this section. An extra force of men were put on yesterday to try and prevent the fire from getting any nearer to it. It was within half a mile of the breaker when more men were sent for.

Montrose, Colo., Sept. 29.—Over three hundred miles of valuable timber has been consumed a short distance south of Montrose, and there is no way of checking the fire to the east of here on the Black Mesa, a fire started a few days ago and is steadily spreading; while to the north, in Delta county, a large area of timber has been consumed. Nothing but rains or the complete destruction of the forests can extinguish these fires.

St. Paul, Sept. 30.—A Cumberland, Wis., special to the Dispatch says:

Cumberland presents a sad sight today. The mill portion of the country is a smouldering heap of ruins. The loss is about \$185,000. Forest fires were swept into the city from the southwest at about 5 o'clock last night by a tornado. The air was filled with smoke and burning cinders, and the fire started on the east and west sides of town at about the same time. The flames spread with a rapidity that threatened not only the entire city, but the lives of the inhabitants.

Every part of the town was filled with smoke and flying fire brands, and the people were running in every direction panic stricken with horror. Two of the freight trains took about a hundred people to Shell Lake and hundreds more sought the western lakeshore for safety.

Meanwhile the volunteer fire department did heroic work in trying to save the business portion of the city. The wind had now assumed the velocity of a tornado and the atmosphere was lurid with flames and the air was filled with firebrands. A timely downpour of rain, lasting about 20 minutes, enabled the firemen to check the progress of the flames on the west side of the city, but no human power could save the city east of the Omaha railroad, including the lumber yard and mills of the Beaver Dam lumber company and the residences