8 DIE, 400 RESCUED IN AN ILLINOIS MINE

Explosion Is Followed by Death-Dealing Gases in Pit Near Herrin.

OPEN LAMPS CAUSE DISASTER

Prompt and Gallant Rescue Measures Are Put Forth by Management and Others.

Eight men were killed and the lives of 400 others were imperiled by an explosion of gas in mine "A" of the Chicago and Carterville Coal Company, near Herrin, Ill. Open lamps carried by the mine's engineer and his assistants caused the disaster. There were three men and a boy in this party and all lost their lives. Prompt action by the management of the mine resulted in the safe exit of the hundreds of men who were at work below ground. Within five minutes of the first reports of the explosion the miners in the immediate vicinity of the accident were started toward the surface and on the return trips of the cages rescuers were lowered to entries Nos. 7 and 8 west, where the catastrophe took place.

The dead are: Eugene Barrett, assistant engineer; Salvatore Greeco, Thomas Harber, miners; W. T. Pierce, mine engineer; Pietro Romeo, laborer; George Snyder, miner; Thomas Williams, assistant manager; unidentified boy, about 16 years old.

James Guinney, superintendent of the mine, and Robert Hueston, manager, headed the first relay of rescuers. Despite the black damp which flowed into the chambers adjoining those in which Pierce and his party were killed, these men plunged into the workings. Three bodies blocked their path. Hasty examination showed that the men were alive, and they were rushed to the surface. One of them was A. J. Hueston, a brother of the manager. The others were Charles Klem and Albert Shelton. All were revived and are expected to recover from the effects of the gas.

The rescuers next found the bodies of Snyder, Greeco and Romeo. None of these men had been burned, the condition of the bodies testifying mutely to the force of the concussion. Harber's body was badly burned, the features being scorched almost beyond recognition. The valiant efforts of the rescuers to penetrate more deeply into the workings were repulsed by increasing banks of after damp. The ventilating aparatus of the mine had not been damaged, but it could not cope with the gases and Guinney and Hueston and their helpers were forced to retreat, leaving the bodies of Pierce and his companions.

Fire also began to gain headway. Later all efforts were directed towards fighting the flames. Conditions are such that it is hoped they will be confined to the two entries affected by the explosion.

The mine is under the active management of J. B. Peters, of Carbondale, who is vice president of the Chicago and Carterville Coal Company. The president of the concern is James Pease, of Chicago, former sheriff of Cook County.

EX-SENATOR HARRIS DEAD.

Prominent Kansan Is Suddenly Stricken in Daughter's Home.

Former United States Senator William A. Harris, of Kansas, who two years ago was Democratic candidate for Governor of that State, died suddenly of heart disease at the home of Mrs. Lydia M. Mackey, in Chicago. He was a member of Congress from 1893 to 1895, and was United States Senator from 1897 to 1903. He was prominently connected with the American Short Horn Breeders' Association and the International Live Stock Exposition.

FORTY HURT IN TRAIN WRECK.

Mail Clerks Barely Escape from Burning Car Near Mankato, Minn.

St. Paul passenger train No. 43, running north at thirty-five miles an hour, spread the rails one-half mile east of Good Thunder, Minn., and plunged into the ditch. Forty passengers were hurt, none fatally, it is believed. The mail car rolled down a thirty-foot embankment and caught fire. The mail clerks had a narrow escape.

Slays Wife, Children and Self.

George C. Cheuvrent, a prominent resident of Fresno, Cal., killed his wife with a hatchet and then, perhaps fatally injured his children, a boy of 14 and a girl of 10 years. Following this, Cheuvrent rushed to the Southern Pacific tracks, threw himself under a passing train and was killed. It is thought he suddenly became insane. He was a rancher.

Three Children Burned to Death.

Three children lost their lives in a fire which destroyed the residence of Jasper Williamson, of Sunbury, Ohio, while the parents were working in a barn 200 feet from the house. It is believed that one of the children was playing with matches in a bed, as the fire started in a bedroom.

New Orleans Plans Exposition.

An exposition will be held in New Orleans to celebrate the opening of the Panama canal and incidentally the 200th anniversary of the founding of the city. Plans have been announced for a meeting of all the commercial bodies of New Orleans to work out the details of the project.

Armory Burns; Cartridges Explode.

The Fourteenth Regiment armory of the Pennsylvania National Guard was totally destroyed by fire in Pittsburg, entailing a loss estimated at $100,000.

RE-APPEARANCE of HALLEY'S COMET

WAITING for the return of Halley's comet after a lapse of over seventy-five years is very much like waiting for a train. We know the track on which the train will speed toward us; but whether the train will be on time or not, we cannot know. We know the orbit of the comet, but not the exact minute when it will swing around the sun. A photographic plate at the end of a telescope will perform the functions of a celestial telegram for us, inasmuch as it will tell us how late the comet may be and when it will glide into full view. Every night during the present year telescopic cameras have searched the heavens for a hazy disk of light, so dim that the naked eye cannot see it. To Prof. Max Wolff of Heidelberg belongs the honor of having first detected the comet on Sept. 11, 1909. As a tribute to modern mathematical astronomy it may be stated that he found it very nearly in the exact position indicated by the calculations.

The return of Halley's comet will be an astronomical event of much pith and moment, because it was the very first body of its kind for which a time table was computed, because an opportunity will be presented of revising that time table, and because it will enable the astronomer for the first time to obtain photographs of its striking features for comparison with photographs to be taken by unborn astronomers in 1986 or 1987.

Of such mathematical importance is the return of Halley's comet that at various times scientists have spent months in calculating the exact period of its revolution. Even now, when comets are discovered at the rate of two or three a year, we know only that it may be expected to become a striking object some time in the middle of April, 1910. Such are the accelerations and retardations suffered by every comet as it sweeps past the planets of our solar system that absoluteness of prediction is well-nigh impossible. Often a comet is twisted out of its normal orbit by planetary attraction, with the result that we may lose sight of it forever. Jupiter is responsible for many such deflections. Thus, in 1886 he wrenched a comet out of its course, derailed it, as it were, and reduced its period of revolution from twenty-seven to seven years. In 1779 a comet known as Lexell's glided so near him that it was never seen again. All told, Jupiter has captured a family of thirty comets, and holds them by virtue of his enormous attraction. Saturn has similarly acquired two comets, Uranus three and Neptune six. Obviously a comet's course may be both devious and uncertain.

Great Age of Halley's Comet.

Of all comets that have ever been discovered, Halley's is the most important, because it is the most historical. It flashed upon the world when Egypt was young and when Greece was a wilderness inhabited by savages. Perhaps it will continue to return when mankind is old and decrepit, and the earth is entering that last tragic stage of its existence when it will be reduced to a cold, dead, desolate world. Yet, ancient as the comet is, its scientific history begins with the man whose name it bears and with Sir Isaac Newton.

It was Edmund Halley who urged upon Newton the necessity of publishing that famous manuscript in which the laws of gravitation are laid down; it was Halley who paid for the printing out of his own pocket, although he was sorely reduced in circumstances; and it was Halley who so dramatically drove home the truth of Newton's immutable laws and became the prophet of gravitation, by plotting the orbit of a comet that had alarmed the world in 1531, 1607 and 1682, and foretelling its return in 1758. He was indeed the "Ulysses who had produced Achilles," to use the words that he himself employed in describing his relation to Newton. A man of 49 when he boldly proclaimed the comet's reappearance, he knew that he would die before his prediction could be verified; and so he left behind him a touching plea that reads:

"Wherefore, if, according to what we have already said, it should return again about the year 1758, candid posterity will not refuse to acknowledge that this was first discovered by an Englishman."

No Longer an Omen of Evil.

When the comet blazed forth on Christmas day, 1758, it was forever shorn of the dreadful divinity with which for ages it had been hedged, and became an object of dispassionate scientific study. Newton's conclusion that, in accordance with the laws of gravitation, comets must describe ellipses, parabolas or hyperbolas, was brilliantly verified.

A comet is more than a neat mathematical problem. Although no longer an omen of evil, it is still wrapped in a veil of mystery which has not been wholly torn away by the physicist and the chemist. Indeed, it is only within the last few years that really plausible theories to account for cometary phenomena have been advanced. To understand just what these theories are we must first pick a comet apart, as it were, and regard it as we would a dismembered watch.

In a general way, it may be said that every comet comprises a nucleus, an envelope (called the "coma") surrounding the nucleus and measuring from 20,000 to 1,000,000 miles in diameter, and a long tail which streams behind the nucleus for sixty to a hundred million miles or more. From all that has been gathered, astronomers have decided that the nucleus is probably a heap of meteorites varying in size from a grain to masses weighing several tons each; a heap, moreover, so easily sundered that its elements are distributed gradually along the orbit. It follows that every comet must eventually perish unless it restores its nucleus by collecting stray meteors. That disintegration does occur has been observed time and time again. For example, Biela's comet, which was discovered in 1826, burst into two fragments, which drifted apart a distance of one million miles. Thus it became a twin comet. Eventually it disappeared as a comet, and in its stead we see a shoal of meteors whenever we cross its track every six and a half years. It is possible that the comets of 1668, 1843, 1880, 1882 and 1887, all traveling in approximately the same path, are fragments of a single large body which was broken up by the gravitational action of other bodies in the system, or through violent encounter with the sun's surroundings.

The Comet's Tail.

The luminous tail which streams behind the nucleus, and which Milton regarded as "horrid hair" that "shakes pestilence and war," is startling, to say the least. Despite a length which, as has been stated, may exceed a hundred million miles, it is so diaphanously light and subtle that it is difficult to compare it with any earthly fabric. The air that we breathe is a dense blanket in comparison. Several hundred cubic miles of the matter composing that wonderful luminous plume would not outweigh a jarful of air. By reason of its fairy lightness, it is possible for a tail occupying a volume thousands of times greater than the sun to sweep through our solar system without causing any perturbations in planetary movements. The earth itself has on more than one occasion plowed through a comet's tail, and no one was the wiser until the astronomers announced the fact, months later, when they had finished their computations.

Because comets have whisked us with their tails it must not be inferred that collisions with fiery wanderers are likely to occur. Such cataclysms happen only in Jules Verne's novels and in the Sunday newspaper. The alarming possibilities of a collision were appreciated long before the days of sensational journalism. When Olbers calculated that Biela's comet would pass through the earth's orbit in 1832, a panic ensued. No one thought of inquiring where the earth would be. It was not until Arago reassuringly figured out that the earth would be 50,000,000 miles away when the passage did take place that the run on human emotion was stopped and confidence restored. The chances in favor of a collision are, roughly, one to 281,000,000, and then only once in fifteen million years. A blind sportsman, bent on duck-shooting, stands a better chance of hitting his target than the earth of ramming a comet.

No celestial phenomenon has caused more perplexity than the ghostly sheaf of light we call a comet's tail. In a day, in a few hours even, the form of that wonderful gossamer may change. Hence it is that periodic comets are identified when they return, not by the length and arch of their tails, but by their orbits. These alone are permanent. When a comet is first seen in the telescope, it appears as a diminutive filmy patch, often unadorned by any tail. As it travels on toward the sun, at a speed compared with which a modern rifle bullet would seem to crawl, violent eruptions occur in the nucleus. The ejected matter is bent back to form the cloak called the "coma." With a nearer approach to the sun, the tail begins to sprout, increasing in size and brightness as it proceeds. Evidently there is some connection between the sun and the tail, something akin to cause and effect. When the comet rushes on toward the sun, invariably the tail drifts behind the nucleus like the smoke from a locomotive. But when the comet swings around the sun and travels away from it, a startling change takes place. The tail no longer trails behind, but projects in front, as if some mighty solar wind were blowing it in advance of the head. The phenomenon has long been an astronomical riddle. Here was a kind of matter that refused to obey the laws of gravitation and yield to the enormous pull of the sun. It was thought for a time that the tail was flung away from the sun by stupendous repelling electrical forces. That electricity plays its part in the formation of the fairy plume is conceivable, and even probable; but recently the physicist has discovered a new source of repellent energy which very plausibly explains the mystery of a comet's tail. This new source of energy is nothing less than the pressure or push of the sun's light. Solar gravitation is a force more powerful than many of us perhaps realize. If it were possible for you to live on the sun, you would find yourself pulled down so violently that your body would weigh two tons. Your clothing alone would weigh more than one hundred pounds. Running would be a very difficult athletic feat. Light pressure must indeed be powerful if it can conquer so relentless a force.

A Tail of Dust and Soot.

So much has been discovered about the particles that compose a comet's tail that the more progressive scientists of our day have accepted this ingenious theory. It has been discovered, for example, that the delicate tresses of a comet are to a large extent composed of fine particles of dust and soot.

Before we can completely accept the view that light pressure forms this train of soot we must ascertain whether the pressure of light is capable of accounting for the flashlike rapidity with which a comet's tail changes. A comet may throw out a tail sixty million miles long in two days. Is it actually possible for light pressure to accomplish that astonishing feat. Arrhenius has computed that 865,000 miles an hour is the speed of a light-flung particle of one-half the critical diameter. Because they are only one-eighteenth as large as this particle of critical diameter, cometary dust grains would be propelled over the same 865,000 miles in less than four minutes. It follows that the solar radiation would experience no difficulty in tossing out a tail of sixty million miles in two days.

THE FIVE AGES OF BASE BALL.

At first the barefoot youngster
Learns the game upon the city's lots.
Then the prayerful, doubting player
Facing the ogre manager and his contract.
Then the minor star to whom's accorded
The cheers that always will attend success.
Then the baseball wonder who commands
Respect and salary in five figures.
And so he plays his part. The fifth age shifts
Into the has been and a seat upon the bench.

ATCHISON GLOBE SIGHTS.

There is never plenty of time.

The more a man amounts to, the busier he is.

Somehow, we always hate to see a woman handle a gun.

How we all admire discipline when it is applied to someone else!

You can't work and worry at the same time to good advantage.

A man who worries throws rocks at his troubles, and hits himself.

It is as important to keep out of court as it is to keep out of debt.

Lots of men have discovered that it is not dangerous to swear to a lie.

An unhappy woman always looks unhappier than an unhappy man.

Every man represents some other man's idea of an undesirable citizen.

A true test of the friendship of a hunter is when he gives you a quail.

We never care much for the woman known as "a popular society woman."

Even if a farmer intends to loaf, he gets up in time to get an early start.

It is always safe to bet that the man who isn't prejudiced isn't interested.

HOUSEHOLD HINTS.

If it be necessary to stir rice, use a fork.

Always add a pinch of salt to your cake; it will improve it.

Use vinegar and a copper cent to remove paint from windows.

Always cook oats in boiling water and sprinkle them in a few at a time.

Mop off linoleum once a month with boiled linseed oil and it will look like new.

Dip a new broom in a good soap suds once a week and see how much longer it will last.

Keep an oyster shell in the tea kettle and the lime will collect on it and not on the sides of the kettle.

If you will add salt to your starch the clothes will not stick to the irons; also add a little lard to make clothes shine.

When laundering starched articles in winter always add borax to the starch and the cuffs and collars will not lose shape.

By adding one tablespoonful of butter or a half cup of cream to the batter, pancakes can be baked without greasing the griddle.

FACTS ABOUT NEW YORK CITY.

Over 250,000 people work at night.

There are 132 department stores, employing over 50,000 people.

Over 476,000,000 gallons of water are used every day in the greater city.

The transient hotel population is figured at 250,000 people a day. The hotel properties are valued at over $80,000,000.

A child is born every four minutes, and a death occurs every seven minutes.

The city contains 8,000 lawyers, 5,000 actors, 3,000 actresses, 6,000 artists, 10,000 musicians, 15,000 stenographers, 69,000 salesmen and saleswomen, 1,900 farmers, 1,600 undertakers and 852 female barbers.

The population is now 4,800,000. London's population is 500,000 more, but New York is growing seven times as fast as the British metropolis, and should become the largest city in the world inside of 10 years. The population increases at the ratio of five to one, compared with the increase of the rest of the country.

THINGS WORTH KNOWING.

Buckles were first made in 1680.

The Belgian navy is the smallest in the world.

Barometers were first made by Torricelli in 1643.

The London police arrest over 108,000 people a year.

Moscow has the lowest priced daily publication. It costs a farthing.

Young Lone Wolf, a Kiowa Indian chief, is a Baptist minister. He is a Carlisle graduate, and reads in his Greek testament every morning.

There are more than 100 firms manufacturing chocolate in the United States.

Japan's postal and telegraph receipts for 1908 were $18,730,000, a gain of $225,000 over 1907.

Londoners live, on an average, to an age of 57 years. In most parts of England the standard is below this.

Elizabeth Akers Allen, who wrote the famous poem, "Rock Me to Sleep, Mother," fifty years ago, is 77 years old. Born in Maine, she began to write when she was a girl of 15.

DYNAMITE ON A FARM

Experiments of "Shooting" the Soil Successfully Tried in Pittsburg, Kan.

DR. WILLIAM HAMM'S PLAN.

Nearly 3,000 Farmers Saw New Means of Loosening Earth and Many Are Converts.

Farmers in this section are greatly interested in the scheme of using dynamite to loosen up the subsoil of fields being prepared for cultivation, a Pittsburg (Kan.) dispatch to the Kansas City Times says. Three thousand persons watched a demonstration of the system given on the grounds of the Manual Training School.

Dr. William Hamm of Vienna was the first to recommend the use of explosives in agriculture. His idea was that the lowest strata of the soil could not be reached by any of the agricultural implements now in use. To demonstrate the feasibility of the idea a number of interesting experiments have been conducted by agricultural departments over the country, among them that conducted by the Kansas department a few days ago.

The demonstration was so satisfactory that many farmers are planning to follow up the scheme on their farms as soon as possible. If all the farmers who are talking of trying the explosives in farm work really make the attempt it will soon be a common occurrence in this part of the state to drive out in the country and see farmers "shooting" their ground as steadily as if they were following the plow.

One-half of the shots were fired by battery and the other half was by fuse. The dynamite was in stick form and a quarter of an inch in diameter. It contained 25 per cent of nitrate ammonia powder. The sticks were placed twenty-five feet apart and holes were drilled to a depth of three feet. The shots fired by the battery seemed to give the best results, seemed to shake the ground better and leave it in a better condition, as the whole surface of the ground was shaken at once.

The soil was thoroughly pulverized for a distance of six feet from each shot. Cracks ran in each direction from the shots, showing that the explosions had left fissures in every direction under the ground as well as on top.

It is estimated by those who have experimented in this class of ground culture that each shot leaves a reservoir where several hundred gallons of water can collect and furnish moisture from the bottom, instead of receiving all of the moisture from the top, the water thus carried into the ground feeding the roots of whatever is planted much more readily than if all the water came from the surface.

PEANUT SHELLS CAUSED DEATH.

Peanut shells poured into the cook stove at her home caused a column of flame to shoot upward, which ignited the kimona worn by Mrs. Kate Hoover, of York, Pa., and before the flames were extinguished she was fatally burned. Mrs. Hoover is 24 years old. She had enjoyed a lunch of peanuts, after finishing which she went to the stove and poured the shells into the fire. With her dress ablaze she hurried into a neighbor's house, and then ran again into the open. She was followed by the neighbor, who threw water over her, extinguishing the blaze. Her burns extended from her feet to her head.

The Unattainable.

Bill Biffins yearned to satisfy
The men who criticise.
When he resolved that he would try
To make a name and rise
They said he was too young as yet.
A few years onward rolled
And then with courteous regret
They said he was too old.

He once was slender as the limb
That grows upon a tree;
Then broader outlines came to him,
Quite comforting to see.
Approval still he fails to win;
His friends assure him that
While once he may have been too thin
At present he's too fat.

He eats too much or not enough;
He's oversad or gay,
His language is a bit too rough
Or too ornate, they say.
No wonder that his frame of mind
Grows steadily more glum.
How can he ever hope to find
The happy medium?
—Washington Star.

That the aurora borealis, or northern lights, is an electrical display is evidenced by the fact that during a recent wonderful exhibition of this natural phenomena it was impossible to use the Atlantic cables or the wireless stations.

The government of Brazil has determined to develop iron smelting and the iron and steel industry generally, and thus make use of the vast deposits of iron ore which exist in several sections of the country.

COLD BATHS AID TO BEAUTY.

DIVINE MYRMA

Cold water will enable corpulent women to acquire sylphlike forms. Divine Myrma, stage diver and swimmer, is the discoverer of the secret. Since childhood, the diver, whose real name is Ethel May Donough, has been a devotee of all aquatic sports, and through these, she says, she learned how the form can be molded into lines most desired. "Bathe every morning in the outer air until it reaches a temperature of 45 degrees," she says. "When outdoor bathing is impossible, the bathtub is a fair substitute. With one-half pound of salt added to a tub of water the effect is better. The bath should be taken one-half hour after rising and the same length of time before breakfast."

PERUVIAN MUSIC.

The native music of Peru, according to Geraldine Guiness, the author of a recent book on that country, is exceedingly interesting and strange. It seems fitting that the people of such an unusual country—the children of a unique social system—should have a characteristic style of national music. Certainly the *yaravis* of Peru are unlike any other music.

When first I heard their plantive notes come wailing through the night air, I listened spell-bound to this new thing. As I came to know and love the ancient melodies they took hold of me in a strange way.

There is surely a similarity in spirit and construction between these Indian *yaravis* and the sobbing lyrics sung by the exiles of Babylon. They are intensely patriotic and deeply mournful. "The memory of former wrongs has tinged their most popular songs with sadness. The young mother lulls her infant to sleep with verses, the burden of which is sorrow and despair, and the love songs usually express the most hopeless grief."

Indians are always singing. Far out on the pampas away from all human habitations, I have heard strange Kechua words crooned by little sheep herd boys; harvesters, as they toil up hill with their immense loads of barley, invariably sing some plaintive old song, and families traveling along the dusty roads unite their voices in strange part-harmonies to wailing melodies in a minor key.

GUILLOTINED BY PAPER CUTTER.

The first man ever guillotined in America was John Drey, who fell to his death under the keen blade of a huge paper cutter in a paper mill at Whippany, N. J. Drey was employed by a paper company, his duty being to see that sheets of paper were properly placed under the knife, which regularly fell and rose, cutting thousands of sheets at each fall. A piece of paper fell awry athwart the knife plate and Drey, in stretching over it to straighten the sheet, slipped and fell just as the knife came down.

DEVELOPMENT.

Fast interurban trolley cars.

Telegraphy and telephony without wires.

The electric propulsion of vehicles and boats.

The luminous arc lamps which turn night into day.

The telharmonium, which produces electrical music.

The powerful electric searchlights which are visible for a hundred miles.