

WONDERFUL ELEMENT KEEPS SCIENTISTS BUSY OBSERVING ITS PROPERTIES.

NEW YORK, Oct. 10.—Radium, the new substance that is now calling forth the greatest systematized efforts by the most brilliant scientific investigators both here and abroad, is rapidly unfolding new properties that seemingly defy the laws of nature, astound the senses and mystify the human mind.

Only a fortnight has elapsed since a new property of radium was discovered by Prof. Curie. In the New York Herald of recent date I described how radium had been found to emit heat and maintain a temperature of three degrees higher than the air which surrounds it.

It was over this statement of Curie that the eminent body of scientists who have been working on the problem of heat emissions of radium became divided into two factions—those on the one hand maintaining the truth of the assertion and those on the other that the statement was irreconcilable in virtue of the established laws of the conservation of energy.

But now it has been conclusively demonstrated by Prof. Curie that radium not only possesses this remarkable property, but that its rate of heat emission remains unchanged regardless of the temperature of the element which surrounds it—That is, there is no perceptible variation when the air which surrounds it is 90 degrees or that of 312 degrees, when it becomes liquid air.

If radium is immersed in liquid hydrogen, which is the greatest cold yet produced, it begins to emit more heat, instead of being cooled, as one would naturally expect. These experiments, however, have failed to indicate in the slightest degree how radium can maintain its constant heat-giving powers; it has been suggested that radio-active matter obtained its power of absorbing heat and then emitting it as some of a pebble embedded in a piece of ice and heated by the sun's rays would cause the ice closest to it to melt.

Prof. J. J. Thomson has calculated that the electric charge in the radium atoms would by their disruption supply the amount of energy it radiates for 30,000 years before its internal energy would be completely used up. And at this energy in the form of heat is produced without any chemical composition and without its molecular or atomic structure being altered in any way.

It is with all its incredible properties and mysterious actions radium is not to be regarded as a supernatural element or that perpetual motion has been obtained, for radium can be obtained by the usual method of chemical analysis, forming salts and acids as do other and better known substances, and its atomic weight has been determined as precisely as some of the other rarer elements, all of which shows that it is of the earth earthy.

A beautiful little instrument invented by Sir William Crookes, and called by him the "Spharoscope" has been placed upon the market for viewing the emanations of a minute quantity of radium and demonstrating its marvelous radio-active properties. To those who are interested in the microscope the spharoscope is in the form of a microscope slide and is prepared by placing a small quantity of radium in front of a fluorescent screen, and upon examination through the microscope the scintillations can be observed in a very satisfactory manner.

The object of the fluorescent screen is to transform the invisible emanations of radium into waves of light the eye is capable of perceiving. This is done by permitting the radium emanations to impinge upon a thin fluorescent screen, which, in turn, emits radiations longer than those absorbed by it and thus rendering them visible.

A pocket spharoscope is a clever device for viewing the radium phenomena without a high priced microscope. It consists of a tube one and a half inches long, with a fluorescent screen at one end, a movable pointer carrying the radium being placed over it, and above them a powerful lens contained in a sliding tube. In this case the microscope is not required.

Radium bulbs have also been placed on the market and are employed in the treatment of lupus, cancer, etc. The bulbs consist of ten milligrams of radium. The front of the bulb consists of an aluminum casing which is only one hundredth of an inch in thickness and is transparent to the radium emanations. Behind the radium is placed a being of lead one-tenth of an inch thick, to cut off its effects.

There are other bodies capable of emitting heat radiations, such as polonium, actinium and thorium, and at the present writing it is believed that some of our theories relating to physics will have to be very greatly modified if not indeed re-written.

Russia to Abolish Spirit Duty.

BERLIN, Oct. 10.—Private dispatches to the Tagblatt from St. Petersburg, confirm the statement that the Russian government has decided to abolish the spirit duty in 1904, because of the increase in drunkenness among the peasantry. It indirectly means that the government less revenue than formerly, a reason for this is not clear.

ABSOLUTELY NO HAD EFFECTS FROM THE USE OF CURES GUARANTEED.

THE ST. OMER REMEDY is sold by chemists or sent by mail to Mrs. A. G. ELLIOTT, Secy, by the ST. OMER SOCIETY, 132 Tremont St., Boston.

1,000 Sateen Petticoats Made of Fine Quality Mercerized Sateen \$1.00 Quality 50c

It's the Prices As Well As the Qualities That Make This Store So Popular

The newest of autumn merchandise, the immensity and the variety of which is beyond words to tell. The simple and inexpensive, as well as the elaborate and costly are all represented here. Qualities considered our prices are simply incomparable. Extraordinary preparations are made to accommodate the crowd.

Your choice of 100 Ladies' Suits, in great variety of styles and cloths, long coat effects, etc.; values to \$20.00. See these Monday

500 Ladies' Extra Heavy Zibeline Coats just received for this sale; a bargain at \$7.50. For Monday only, see the price \$4.98

300 Children's Heavy Winter Coats, made of Zibelines. Why pay \$7.00? Monday \$4.98

Great Dress Goods Special for Monday

Do not fail to examine these goods. This is an opportunity to buy new and stylish Dress Goods at about half regular price.

- At 59c A Yard Worth Up to \$1.00
50-inch Camel's Hair Zibelines,
56-inch Heavy Kerseys,
50-inch Venetian Broadcloths,
50-inch Scotch Mixtures,
50-inch Canvas Suitings,
44-inch Whipcords,
50-inch All-Wool Cheviots,
46-inch Pebble Granites, Wool Crepe de Chines and many other Weaves, worth up to \$1.00 a yard \$59c

Silk Department.

- Velvets in Metal print and the Gun Metal, special only 49c
Velveteen—28 inches wide in black only, for jackets and suits, \$1.25 quality. Special 89c
Silk Velvet—28 inches wide, for costumes; a regular \$2.50 quality. Monday only \$1.98
China Silks in cream and black, 28 inches wide, Monday only 48c
Satin Liberty—24 inches wide in black only; 75c quality 59c
Black Taffeta—23 inches wide, warranted to wear, 85c quality. Monday special 65c

Corset Dept. The Royal Worcester Corset, style 553, straight front, medium hip, low bust, well boned with extra side steels, One of the best models—white, black and drab. Why pay \$1.50. Our price \$1.19

Glove Dept. A real Mocha Glove, half pique, made with one large clasp. All colors, every pair fitted and guaranteed. Why pay \$1.25. Our price \$1.00

SECOND-ANNUAL OCTOBER SALE OF Notions and Dressmakers' Findings

You'll find each article exactly as advertised here. We are building up a wonderful notion business and if you are not a regular patron of this department we are confident that one visit will convince you that you get the most for your money here.

- Kleinert's Featherweight Dress Shields, No. 2. Special 11c
Kleinert's Gem Dress Shields, No. 3. Special this sale 12c
Light Weight Dress Shields, No. 3. Special this sale 7c
Good Stockinet Dress Shields No. 3. Special this sale 3c
300 Yard Spool Silk, for dressmakers' use, the best quality made, in black only 15c
Valveteen Facing, extra fine quality, a yard 21c
Mohair Brush Brads, excellent quality, a yard 21c
Nickel Plated Safety Pins, 3 sizes, a dozen 2c
Tubular Shoe Laces, 4-4 or 5-4, a dozen 4c
5,000 Elastic Remnants, enough in each for pair garters 5c
Good American Pins, 400 in paper 1c
Japanese Toothpicks, 5 bundles in a neat braided basket 2c
Bone Hair Pins, shell, amber, black. Special this sale, a dozen 5c
Bone Hair Pins, regular 15c kind. Special this sale, dozen 9c
15c Side Combs, Back & Vassar Combs. Special 9c
10c Rubber Dressing Combs, 8 inches. Special 5c
15c Rubber Dressing Combs, good heavy ones 9c
25c Rubber Combs—Each comb is guaranteed; a new one if it does not last 15c
2,000 Tooth Brushes, made of fine imported bristles. 15c values 8c
50 and 75c Hair Brushes—This lot includes the finest solid back and keep clean brushes. Wonderful special 33c
25c Cloth Brushes. Special at 15c
39c Cloth Brushes. Special at 25c
15c Hand Brushes. Real bristles 9c
Scissors and Shears, steel, nickel-plated, 3 to 9 inches long. Special 10c
25c to 40c Shears, 3 styles, 6 to 9 inches, a wonderful value 19c
50c, 60c, 75c Scissors and Shears, all finest imported German steel 39c
50c Pocket Knives, pearl handles 25c
75c Pocket Knives, large pearl handles 39c
Up to 75c Buttons, pearl and fancy; a great bargain lot, a dozen 25c
10c Ball Pearl Buttons, also fish-eye pattern, 5 sizes, a dozen 5c
Pure White Pearl Buttons, 2 dozen perfect Buttons on a card 5c
New Gilt Buttons at special cut prices.
Ball and Socket Fasteners in white or black, a dozen 21c
5c Dump Hooks and Eyes, with invisible eyelets, a card 2c

Shetland Shawls 70 dry pure wool Shetland Shawls, 40-in. square—made with deep border; all colors and black. Why pay 39c. Our price 23c

Fleeced Lined Hose 1,000 Boys' Fleeced Lined Hose, double sole and heel. Why pay 15c? We say pair 10c

GIRL GANG LEADER DEFIANT IN COURT

Fifteen-Year-Old Bride Colonna Tells Judge She Carried a Gun.

NEW YORK, Oct. 10.—Undaunted and with a defiant gleam in her keen little eyes, "Bride" Colonna, the fifteen-year-old girl charged by the police with leading the rival East side gangs in some of their outbreaks, faced Justice Olmsted in the children's court yesterday.

In the rear benches of the court room at many young toughs, members of the Monk Eastman, the Kelly, the Yakey Yakes and other gangs that were once in a while inaugurate a reign of terror in the streets they dominate.

The presence of the young roughs inspired the girl to make no show of weakness. They keenly watched her behavior during the proceedings and listened intently to everything she said.

That her conduct was up to the peculiar standard the gangs believe in was made evident after she had been committed to the House of Refuge. In leaving the court room one of the Yakey Yakes said:

"Some of the good people will steal her from the 'Ref' before snow time. She's worth taking a chance for."

Policemen Ray and Maher, of the Oak street station, who arrested the girl several days ago, when a police fragnet was run through the lower East side for members of the various gangs, were in court and told Justice Olmsted of her waywardness.

The girl's mother, Mrs. Marie Colonna, of No. 83 James street, was also in court and made the formal complaint. In this document the girl's name was stated to be Bridget, though although the lower East side she is known as "Bride."

There was nothing threatening in the appearance of the child herself, who has been known to carry a revolver, mix in the revelries of the worst toughs in the "The Gap," and who has been described as a girl Dick Turpin. She was dressed plainly and poorly, like any other fifteen-year-old girl on the East side. She is more maturely formed than most girls of her age, and has the assurance and self-reliance of one who has lived the rough and tumble life of the pavements in the old Fourth ward.

Mrs. Colonna, in her complaint, stated that the girl had deserted her home and remained out nights in the company of dissolute and vicious persons. The mother asked that the girl be sent to an institution and kept under legal restraint until she promised to mend her ways.

The policeman told the justice that the girl was exceedingly wild; that her boon companions were the leaders of the toughest gangs, and that she used disgraceful language.

"She carries a gun, judge," said one of the policemen, "and orders Eastman, Kelly and others of their gangs about."

Dick Turpin, but I'm no girl Dick Turpin. I know some of the fellows that take part in racket, and I've had a gun and shot it off, too, but I'm not a thief. I never stole anything in my life or smoked cigarettes. I've stayed late nights, and that's the worst that they can say about me.

"You are a pretty bad girl and I'll have to send you to the House of Refuge until you promise to lead the right kind of a life," said Justice Olmsted.

"Will I be kept there until I am twenty-one?" asked "Bride."

"That will depend upon yourself. If you conduct yourself properly on Randall's island and show that you can be trusted you will be released just as soon as those in charge of you are convinced that you have reformed. Mrs. Sage will take a personal interest in your case, but everything depends upon yourself."

"Well, that's a pretty tough deal," said "Bride" as she turned away from the court rail.

There was nothing but defiance in her words and manner a few minutes later when she was asked about herself.

"I'll do my time all right," she said, "but I don't want any of this ticket of leave business in mine. They can get dead ones to report what they are doing every week, but that isn't my gait. I'm not a dead one."

"If I can't go to a dance when I please then I'll stay in the 'Ref' until they can't keep me there any longer. When I am of age I can do as I please and then it won't be anybody's business."

"They got my mother to sign that complaint, but she can't read writing. She just put her cross mark at the bottom of it. This is one on Schmittberger. If he had got me he would have wanted a medal for sending such a tough girl as me to the 'Ref.' He is a great cop, he is, with a large bunch of nits thrown in."

Some of the toughs who were in the court room thought the gangs had not provided for her interests properly when they got out on the sidewalk one of them said:

"When 'The Monk' got the collar he got \$5,000 bail and a big lawyer, but when the cops got this girl not even a 5-cent lawyer was on hand to look out for her."

PROF. FALB, EARTHQUAKE PROPHET, IS DEAD

Predicted Two Shocks Correctly and Caused Great Terror.

NEW YORK, Oct. 10.—Prof. Rudolf Falb, of Vienna, is dead. He had a remarkable career.

He earned an enviable reputation in the scientific world as a meteorologist. He wrote on this subject with learning, care and authority. In his later years, however, he was largely discredited among scientific men because he became possessed of the idea that he could foretell the occurrence of earthquakes. Some of his guesses hit the mark, which only added to the suffering he caused by erroneous predictions.

Bruin Up a Tree in a Suburb of Duluth.



Special to The Globe.

DULUTH, Minn., Oct. 10.—Apparently terrified at the evidences of civilization all around them, bears have been much more plentiful within the limits of Duluth during the present season than they have been for many years preceding. Three have already been killed within the city limits this fall and many others have been sighted.

Just what brings bruin into the city at this time of the year is an unexplained mystery, but every fall they suddenly make their appearance and as suddenly they go away. During the berry season it is by no means uncommon to find one of the big fellows munching the fruit contentedly in the choicest patch. They do not show fight, but make off through the brush as soon as they are sighted.

The first bear of the season was killed this year by Dr. Craft, a well known local physician. He was using one of Woodland car, near the normal school, with his wife, when the beast was sighted, a short distance from the track. Both Dr. and Mrs. Craft alighted from the car and the plucky woman volunteered to keep bruin in sight while her husband returned to their home, a short distance away, and secured a rifle. He returned and brought down his quarry at the first shot. The bear weighed 300 pounds and was the largest which has been killed here for a long time. Twenty-one bears were killed within the corporate limits of Duluth last year.

The accompanying picture was taken in Woodland and the camera furnishes undisputed evidence of the fallacy of the oft-repeated theory that bears cannot climb trees. The bear in this case is full grown and at the time the snapshot was taken he was sixty feet from the ground.

He never added anything to the work that had given him a respectable standing.

Rival for Standard Oil Company. BERLIN, Oct. 10.—Herr Moeller, the Prussian minister of commerce, during the course of a speech delivered yesterday at a banquet given at the Iron works of Poynne, in the newly discovered oil district of Luenberger Hebe, said he was convinced that the American petroleum monopoly would soon be at an end and capitalists should proceed to unite with the oil land owners and erect refineries. The Standard Oil company's agents here say some oil has been found at Luenberger

North of England Flooded.

LONDON, Oct. 10.—The heaviest rainfall of the year is causing enormous damage in the north of England. The roads are impassable, railroads are being interrupted, bridges are down and the valleys of the Dee and of the Tweed are like inland seas. All kinds of animals and wreckage are floating seaward. Much outside work has been suspended.

PRESIDENT CARRIES A REVOLVER CONSTANTLY

The Elliott Incident Causes Redoubled Watchfulness for His Safety.

WASHINGTON, D. C., Oct. 10.—As a result of the recent incidents at the White House, the crowd which accompanied the president to the funeral services in honor of the late Ambassador Herbert at St. John's church, the president has ordered that the White House family, resumed the practice of carrying a revolver. A Smith & Wesson bullet is the president's and is near at hand in his outside coat pocket.

Each of the several alleged attempts of armed men to assassinate the president has resulted in increased precautions, and the insignificance of the exact number of men detailed to this duty. Secretary Barnes said today that the reason for the reluctance of the White House officials to give details of affairs with cranks was with the hope that as little as possible would be known about the exact number of men detailed to this duty.

There are on duty at the White House proper a number of five armed men, a doorkeeper paid from congressional appropriation, two detectives each from the secret service of the lawyer, and a district government, and a policeman from the Washington city government. Any intruder must pass by all these guards and then stand the test of an interview with Secretaries Lobb and Barnes.

When the president goes riding these days he is followed by two United States cavalrymen from Fort Meyer, across the river to the residence of the president at Oyster Bay, where he was considered as in danger from cranks at least twice last summer. These cavalrymen have been armed with a caliber number 45 revolver as he often selects for his rides the open or wooded country in the suburbs of the city.

When Mrs. Roosevelt or the children accompany him on a carriage ride two secret service men follow in bicycles. They are, of course, armed, as is the driver of the carriage.

5,000 AMERICANS SEE BULL FIGHTS

Great Crowd From El Paso at Opening of Plaza de Toros at Juarez.

EL PASO, Tex., Oct. 10.—The new bull ring at Juarez, Mexico, the most expensive in North America, has been formally opened to the public, and in the presence of 10,000 people, Cervera, the prince of matadors, led his richly clad troop of Spaniards against six successive bulls, which were fought to the death. High officials of the city and federal district presided at the contest. Chief among them was Mayor Montemayor, of Juarez, who sat in the judges' pavilion, surrounded by the federal judiciary.

After the people, 5,000 of whom were Americans from El Paso, had assembled, and as the rays of the declining sun were beginning to start through the yellow dust of the arena, the bugler advanced before the mayor and sounded the call. At the last notes died away a gate flew open and Cervera advanced at the head of his troop. A wild cheer rent the air as with stately steps he advanced to a position in front of the judges' stand, and lifting his close-fitting cap, saluted the high dignitaries.

With a wave of his hand the mayor announced that he was ready for the fight, and the bull fighters ranged themselves around the arena. Once more the bugle sounded, and a ferocious-looking wild and hardy mountain bull, from the ranch of Don Luis Terrazas, at Samalayuca, came bounding into the arena, maddened by the thrusts of sharp gauffs into his flesh as he passed the portals.

The fight was like thousands of others that have been described by spectators at El Paso. Blood flowed in profusion from the beginning and five paltry horses were gored by the sharp horns of the various bulls. Six bulls were put to death, and their torture was dreadful to witness. Numbers of American women fainted and scores of others clutched the arms of their escorts and begged to be taken away. As a bull fight the entertainment was a huge success, and the thousands of Mexicans, men and women, who witnessed it were delighted. The senioritas waved their tiny lace handkerchiefs in enthusiasm.

The entertainment was declared to be well suited to the dedication of the handsome "Plaza de Toros." It began the season of bull fighting on the border, which always commences when the first tourists and the early frost arrive, and lasts until the peach trees along the Rio Grande are in full blossom. The arena is regarded with pride by its promoters. It cost approximately \$50,000, and is constructed of glazed marble. The seating capacity is upwards of 10,000, and the interior is patterned after the Roman Coliseum. The great arena is located close to El Paso, just across the border, and the Eastern tourist who boards an electric car in the heart of the bustling Texas city of 30,000 inhabitants reaches it within twenty minutes.

HARDWARE!

Two Good Things—CORBIN HARDWARE and SHERWIN WILLIAMS PAINT.

LAWN RAKES To collect the leaves. For Men and Boys.

Work Benches Pocket Knives and Razors.

A St. Paul lady was told by a dealer that LEFT-HAND shears were not made—the writer sold them when a boy. We have some

J. F. McGUIRE & CO., 55 EAST SIXTH.