

HALLEY'S COMET IS A PERFECTLY HARMLESS THING

Density So Low it Would Feel Uncomfortable in a Vacuum, and it Can Neither Poison Nor Pelt, This Time.

By John McNulty.
(Nautical Expert Local U. S. Hydrographic Office.)

Interest increases in Halley's comet as the time approaches for the return of this wonderful heavenly body. People continually ask if it will have any effect upon the earth, what it is made of, and how the astronomers know it will return.

Answering some of these questions, it may be also of value to know that it was this comet which first became known to follow an elliptical orbit about the sun. Halley computed this in the year 1825. Some comets follow hyperbolic orbits; others parabolic orbits. Halley's comet belongs to the group which have been captured by the planet Neptune. If a planet, such as Halley's comet, is attracted near the planet Neptune and accelerated by this attraction, its orbit would become hyperbolic and the planet would go away and never return.

It happens, however, that Halley's comet was following the course of a parabola and as it neared the planet Neptune it was retarded, its orbit changed to that of an ellipse and therefore ever since that time, which we do not know the year of, it has been returning regularly to the earth on a system at intervals of about 75 years.

No Danger in Comet.
As to the danger from a comet, this is insignificant in the present instance. There may come a time in the far future when this will happen; in fact, its occurrence has been determined. Babylonian computers will have seen one every 15,000,000 years. With such an occurrence there are two types of danger to be feared: that from the gases of which the body is made, and which would have a tendency to destroy vegetable and animal life by poisoning, and that from bombardment by the particles of which the head of the comet would be composed. This cannot happen in this instance with Halley's comet, because its orbit crosses that of the earth at a position far beyond the point at which the earth will be at the time.

Speaking upon the "poisonous" gases of which Halley's comet is supposed to be composed, the spectroscopic shows them to be of a hydro-carbon nature, and identical with the blue base of a gas flame or candle.

The brilliancy of the comet is not well understood, but theories are advanced to show that it may be due to either electric flashes within the comet's head, or phosphorescence set up by the light of the sun, to reflection by the same light, or to luminosity arising from internal heat; either or all may be true.

The Comet's Gas.
The comet gas, according to computation, has a very low density, and is equal to only about one seven thousandth of the weight of the air at the surface of the earth, or lower than any artificial vacuum which science has yet constructed upon this earth. Because of this fact, even a contact with the comet might have no consequences, as the gas would make no difference at all to plants or people. In fact, the gases usually found in city air are much more to be feared.

The danger from a bombardment also is not possible at this time. But in case it should happen, say, it is also not known what effect it would have upon the human race. Some astronomers claim that the head of the comet is a nucleus composed of large meteors such as one seen shooting across the sky almost any dark night. These meteors may have a diameter of a few miles or only a few feet. There are good authorities whose study leads them to believe that the entire body is composed of gas such as has already been spoken of in this article.

Three Kinds of Tails.
There are three kinds of tails to comets, long, straight tails, curved, plumelike tails and short, stubby, brush tails. The composition of the tails makes the difference, and with hydro-carbons, as in Halley's comet, the tail should belong to the second division, which it does. When the comet is approaching the sun, the tail blows away from the sun, and when it circles the solar body the tail always blows away from it. This is due to the pressure of the light upon the gases of which it is composed. The gravitational attraction upon such very finely powdered particles as this low density gas is, is not enough to overcome the pressure of the light from the sun, and therefore the phenomenon.

matial laws and is harnessed under a particular formula. If this charted track agrees with this formula then the comet's orbit is necessarily an ellipse, and when the magnitude of this ellipse is known and the speed of the body it is easy to see just what year it will return. There are some corrections to be made because of the influence of Neptune and the sun upon it. The earth has none, at least unless the comet comes to within a closer distance. The comet's influence upon the earth is nothing, because its mass is not enough to affect the earth.

Possible Danger in Comet's Head.
In speaking of the general mass of the comet's head we have in mind the curious fact that stars have been seen through the head of a comet which was 100,000 miles in diameter. This seems to show that there can be but little density to those celestial bodies. If we may use the term. Yet, the mass of particles within the head may be such as to be feared should they enter our atmosphere. Meteors as large as that brought from the north by Commander Peary may be plentiful. The writer has tried to chip pieces from it and found it of too hard steel to make any impression at all. The smaller meteors, of course, would be vaporized by the friction of the atmosphere before reaching the ground, but such large ones as this of Peary's would not disappear so obligingly. However, as mentioned elsewhere, the earth is not to pass through the comet's head, and the tail, as nearly as all data may determine, is of exceedingly rare gas. In order to swerve the earth but slightly from its usual course through space, Halley's comet must have at least 1-100,000 of the earth's mass to furnish enough attractive force, and none of them has ever revealed such a potentiality yet.

COLD SNAP GOOD FOR COAL AND WOOD MEN

Wood and coal yards are the busiest places in Portland during these days of a biting east wind. Every fuel office in town is overrun with orders and all making deliveries.

The whole town seems possessed with the fear that even colder weather than has prevailed for a week past is yet to come and that it may last indefinitely. "Both telephones in this office have rung on an average of once a minute since early Monday morning," declared the manager of one of the largest fuel concerns in the city, "and every call meant an order for some kind of fuel."

Inquiry at other wood and coal yards, developed the same condition of affairs, all having more orders than they can deliver this week.

Every team and man to be had has been pressed into service by the dealers, all of whom are making a strenuous effort to supply the most pressing requirements of their customers.

A happy feature of the situation is the fact that there is an abundance of both coal and wood on hand to last for several weeks to come; the only possible danger of any suffering from the cold being the inability of the dealers to procure enough teams to take care of their orders.

There has been no advance in the fuel prices since the extreme cold set in, say the dealers, nor will there be except in case of a heavy snowfall, in which event the dealers would be put to considerable extra expense in the way of delivery.

STANFIELD SCHOOL POPULATION GROWS

(Special Dispatch to The Journal.)
Pendleton, Or., Jan. 6.—The annual school census, just completed, shows an increase over last year of 81 in the number of children of school age in the county, which is lower than first estimates placed it. The new district of Stanfield shows the largest increase, having more than doubled in the last year. Last year's census showed a school population in Stanfield of 125. One hundred and twenty-three is the official number this year.

HAFIZ REDEEMS CROWN JEWELS

Moroccan Government Pays \$400,000 for Gems Pawned by the Former Sultan.

(United Press Leased Wire.)
Paris, Jan. 6.—Dealers from all parts of the world were disappointed today when Sultan Mulai Hafiz of Morocco put in his appearance and paid the Mont de Piet, the national pawn shop of France, \$400,000 for the crown jewels pawned by former Sultan Abdul Aziz.

The dealers had gathered in expectation of an auction of the jewels, said to be worth nearly a million dollars, after the officials of the Mont de Piet had repeatedly refused to allow Mulai Hafiz to redeem the pledge until the pawn ticket, lost by the former ruler, had been recovered. An announcement was made some time ago that no further delays would be granted the Moroccan government, and that today would see the jewels disposed of unless Mulai Hafiz came forward with the pawn ticket and the money.

The ticket was never found, but the sultan's pleading seemed to have its effect, for the officials today yielded the point and allowed the sultan to take the jewels without the pledge.

POWER DITCH FREEZES; TOWNS IN DARKNESS

(Special Dispatch to The Journal.)
Asotin Wash., Jan. 6.—The ditch which feeds the power plant here is frozen, throwing all the work upon the auxiliary plant at Clarkston. Because of the heavy strain that plant is broken, leaving the towns of Asotin, Clarkston, Lewiston, Genesee, Moscow, Uniontown, Colton and Fullam in darkness. This is the first time in years that both plants have failed at the same time.

Ordinarily the Asotin plant furnishes power for all of the towns, but when the water is shut off the steam plant takes its place. The same ditch that feeds the power plant furnishes water system for Asotin and Clarkston. Thus the two towns are dry as well as dark.

PRISON LIFE BAD FOR HIGHER UPS

(United Press Leased Wire.)
San Quentin, Cal., Jan. 6.—William E. Bradbury, the aged millionaire of Corte Madera, who is serving a term in San Quentin penitentiary on a charge of forgery, is reported dangerously ill. He is suffering from a severe organic trouble and is in great pain.

James McCue, the man whose testimony sent Bradbury to prison, died Tuesday from injuries sustained in a runaway accident.

In a cell next to Bradbury languishes George G. Collins, formerly a prominent attorney of this state, serving his sentence for bigamy. He is also ill and refuses food.

McNear Will Leave All to Widow.
(United Press Leased Wire.)
Oakland, Cal., Jan. 6.—The will of the late George W. McNear, the millionaire mill owner, who died here last week, has been filed for probate. To his widow, Mrs. Amanda McNear, is bequeathed his estate, amounting to about \$4,000,000, and she is made sole executrix without bond. No mention was made in the will of the children of McNear who are Mrs. A. Bowles, John A. McNear, Fred W. McNear, George W. McNear Jr., Seward McNear and S. Elizabeth McNear.

Twenty Condemnation Suits at Vale.
(Special Dispatch to The Journal.)
Vale, Or., Jan. 6.—The January term of the circuit court, Justice Davis presiding, will convene on January 10 at Vale. The calendar is a long one, and will probably occupy two weeks at least. Among the list are 20 condemnation suits for railroad rights of way.

SOUGHT RICHES; NOW IN JAIL

Dapper Young Man Swindled Merchants and Sold Goods to Pawnshops.

Buying goods, having them charged and selling them in pawnshops proved a profitable business for Thomas Ryder, salesman for the Underwood Typewriter company. He was arrested yesterday by Constable Lou Wagner and is held in the county jail on the charge of swindling.

Ryder's methods were unique. He secured fully \$500 by them. Ryder would go into a store, buy something and have it charged to some one whom he knew had credit at the place. In most cases this plan went through without a question.

Wednesday he attempted to make another purchase in the Columbia Hardware company's place. He bought a 37 razor a few days ago, but when he attempted to repeat the game he was caught. He had the razor charged to E. L. Pate, employed at the packing plant of Morris & Co.

A list of Christmas presents was secured from Lipman, Wolff & Co. and jewelry from the Heistemper jewelry store, Morrison and Fifth. These were charged to Nicolai & Neppach, lumber dealers. He represented that he was a relative of Tony Neppach. The goods were sold him without question.

After securing the goods, he would take them to a pawnshop and dispose of them at whatever price he could get. He operated the game in connection with his work for the typewriter company. Ryder is 25 years old. His parents live at Pond du Lac, Wis. He has been in Portland two months, coming from Seattle. His explanation was that he wanted to make money fast. He confessed to all the charges and is held under bail of \$1000.

New Hotel at Walla Walla.

(Special Dispatch to The Journal.)
Walla Walla, Jan. 6.—The Walla Walla is soon to have a thoroughly modern hotel is the assurance given in this city yesterday by E. F. Lawrence of Portland, a member of the firm of MacNaughton, Raymond & Lawrence. The building is to be six stories, 80 by 120 feet. The cost is to be \$125,000.

POPULAR RECIPE

This Home-Made Cough Syrup Stops Coughs Quickly

Make a plain syrup by taking one pint of Granulated Sugar, add one-half pint of warm water and stir for two minutes. Put two and one-half ounces of Pinex in a pint bottle and fill it up with the Granulated Sugar Syrup. Take a teaspoonful every one, two or three hours. Keep well corked and it will never spoil.

The effectiveness of this simple home-made article is surprising. It usually stops a deep-seated cough in 24 hours. It is also excellent for colds, whooping coughs, pains in the chest, bronchial troubles and similar ailments.

Use the real Pinex in making it, however. It is the most valuable concentrated compound of Norway White Pine Extract, and it is far superior to the numerous pine oil and pine tar preparations. If your druggist does not have it he can get it for you without trouble.

The proportion above suggested makes a full pint of the best cold and cough remedy. The taste is so pleasant that children take it willingly. The total cost is about 54 cents.

PORTLAND SAN FRANCISCO SEATTLE

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FOR GLOVES AND UMBRELLAS
SPECIALISTS IN GLOVES, UMBRELLAS, HOSIERY
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Commencing Tomorrow, Friday
AN UNUSUAL OPPORTUNITY TO SECURE RARE BARGAINS IN MEN'S WOMEN'S AND CHILDREN'S
Gloves, Umbrellas and Hosiery
All of Lennon's Standard of Excellence—Every Article of Merchandise Bearing Lennon's Guarantee as to Style, Quality and Durability.

- ### Women's Glove Specials
- \$1.55 values 95¢—Comprising women's real kid, pique kid, English cape, genuine English mocha, loose wrist, cape and chamolis Gloves—\$1.55 values, pair95¢
 - \$1.50 values \$1.15—Women's Arabian mocha, English cape, pique kid, overcast kid and Swiss Alps wash chamolis Gloves—\$1.50 values\$1.15
 - \$1.75 values \$1.39—Women's full pique mocha, genuine English cape, "Reynier" embroidered suedes, all colors—\$1.75 values, pair\$1.39
 - \$2.00 values \$1.59—Lennon's "Regal" and "Laurel" brands of real kid gloves, finest pique capes and mochas—\$2.00 values\$1.59
 - \$2.25 values \$1.79—Lennon's "Dictator" with silk embroidery, Reynier's pique real kid suedes, embroidered pique mochas, finest Kassar cap Gloves—\$2.25 values\$1.79
- ### Bargains in Warm Lined Gloves
- Men's kid and mocha fleeces lined Gloves—\$1.25 value85¢
 - Men's fine kid, fleece lined—\$1.50 value\$1.15
 - Men's kid and mocha, fleece lined—\$2.00 value\$1.39
- ### Special Hosiery Bargains
- Women's fleeced cotton warm Hose, women's ribbed lisle Hose, women's cotton hose, with split sole—All 85¢ and 40¢ values, pair19¢
 - Women's out size Maco yarn Hose, women's fine Cashmere Hose, women's silk lisle Hose—All 40¢ and 50¢ values, pr. 23¢
 - Women's "Onyx" pure thread silk Hose, lisle foot, black and colors—\$1.75 value, pair\$1.19
 - Women's pure thread silk Hose, double sole, toe and heel; best make; black and colors—\$1.50 value, pair95¢
 - Women's all wool Cashmere Hose, women's fine embroidered lisle Hose, women's silk lisle, with wide double garter tops—75¢ values, pair45¢
 - Women's "Onyx" and "McCallum" brands pure thread silk Hose, double garter top, lisle sole—\$2.00 value, pair\$1.45
 - Women's "Kaiser" reinforced pure thread silk Hose, black only—\$2.00 value, pair\$1.65
 - CHILDREN'S HOSE: Children's great wearing black cotton Hose—25¢ value, pr. 17¢
 - Children's silk lisle Hose, black and colors—40¢ value, pair 23¢
 - Children's "Kas-tie-on" (The old reliable) in three weights for boys and girls, pair25¢
 - Children's Wool Hose—40¢ value, pair23¢
 - Men's Hose: Men's light weight silk lisle Hose, guaranteed for six months—25¢ pair, 6 pairs\$1.50
 - Men's "Everwear" guaranteed Hose—25¢ pair, 6 pairs\$1.50

Great Umbrella Bargains

Our magnificent stock of Men's, Women's and Children's Umbrellas, made with best paragon frames, Lennon's guaranteed covers, latest style handles, rust proof ribs, Hercules frames, self opening umbrellas, folding suit case umbrellas, detachable handle umbrellas; all arranged in lots numbered from lot 7 to lot 55. ALL VERY GREATLY REDUCED. We mention a few details as follows:

- Lot 11—Men's, Women's and Children's Umbrellas—\$1.50, reduced to95¢
 - Lot 15—Men's and Women's Union Taffeta Umbrellas, latest style handles—\$1.95, reduced, new to\$1.39
 - Lot 21—Men's and Women's Union Taffeta Umbrellas, handles of Directorate style—horns, pearls, gunmetal, buck horn, etc.—\$3.00, reduced to\$1.95
 - Lot 25—Men's and Women's Union Silk Umbrellas, newest handles—\$4.00, reduced to\$2.79
 - Lot 31—Men's and Women's Silk Umbrellas, beautiful range of latest handles—\$5.00, reduced to\$3.95
 - Lot 35—\$7.50, reduced to \$4.95
 - Lot 39—\$9.00, reduced to \$6.35
 - Lot 43—\$12, reduced to \$8.65
 - Lot 47—\$15, reduced to \$10.65
- HIGHER PRICED UMBRELLAS PROPORTIONATELY REDUCED. WOMEN'S COLORED SILK UMBRELLAS INCLUDED IN THESE LOTS

LENNON'S GLOVE ORDERS

Warders of Lennon's Glove Orders may utilize them, if they so desire, for the purchase of merchandise offered in this sale. Glove Orders are good for Gloves, Hosiery or Umbrellas, or for repairing or recovering of Umbrellas.

Lennon's

FOR GLOVES AND UMBRELLAS
309 Morrison St. Opposite Postoffice

To the Citizens of Portland:

I hereby declare that during my Clean-Up Sale of MEN'S SAMPLE OVERCOATS, RAINCOATS AND SUITS, that I will give bigger and better bargains than any of the other clothing stores in Portland. Call and make me prove it.

- JIMMIE DUNN.
- MEN'S SUITS AND OVERCOATS**
\$20.00 TO \$25.00 VALUES
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 - MEN'S SUITS AND OVERCOATS**
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"KNEW" SAMPLE SUIT SHOP

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Answers the tremendously significant question:
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The story of the greatest of commercial prizes—how we lost it—how we may regain it.
ELIHU VEDDER'S Art Reminiscences begin
January Number now ready, 25 cents
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THE WORLD'S WORK

Doubleday, Page & Company, 133 East 16th St., New York

Mr. Fuller, of the Portland Railway, Light & Power company, is authority for the statement that the extension of the Broadway line to Alameda Park will be completed by the 1st of February.

CAR LINE TO ALAMEDA PARK

Carline to Be Finished by February 1.

The work of grading is practically finished and the rails are already being placed. This will mean much for Alameda Park. Portland's cream residence section, adjoining and overlooking Irvington.

Saturday and Sunday from 2 to 5 p. m. there will be free auto service from the present end of Broadway line into Alameda Park. Everyone desiring a beautiful home and a good investment should visit Alameda Park. It is the most highly restricted residence section of the city and will enjoy all city improvements. All telephone wires will be placed underground. Prices on the lots are much lower now than they will be when carline is completed. Particulars may be had at Alameda Park Company, owner of Alameda Park, 221 Market Building.