

# Donald-Hubbard Chautauqua At Hubbard June 13 to June 17 RIP VAN WINKLE COMING

Breaks Long Nap to Attend Chautauqua.



SCENE FROM RIP VAN WINKLE.

When Rip Van Winkle went off into the Catskill Mountains to take his long sleep and escape the torments of a hen-pecked life he hadn't heard of Chautauqua. However, the "world do move" and this year Rip will be the central figure at the biggest program to be given on the Westcoast Circuit. He will be represented by Herbert Sprague declared by many critics to be the greatest "Rip" since the days of Joseph Jefferson. The patrons of the circuit will thus have the double treat of seeing the greatest play ever produced in America and the "leading man" in the title role.

Last year Herbert Sprague and Floy Mahan Sprague, his wife and leading lady, presented Rip Van Winkle on the Cadmean Six-day Circuit and were received everywhere with acclamation. When the possibility of pre-

sending Mr. Sprague at the head of his own company in the smaller towns of the Westcoast Circuit was suggested, it seemed at first impossible on account of the expense involved. However, it was finally arranged and the Westcoast program thus secured by far the most expensive feature ever offered on this circuit.

Rip Van Winkle is most elaborately staged with scenery, curtains, and costumes especially manufactured for Chautauqua travel and presentation. The play itself is a beautiful comedy with laughs sprinkled generously through it, it has a number of very touching scenes and finally ends with Rip restored to his town and his daughter where he becomes the beloved patriarch of the quaint old Knickerbocker village and has grown from that to be one of the beloved patriarchs of the American theatrical life.

## LOCAL AND PERSONAL

Mr. and Mrs. A. ... business visitors in ... day of this week.

Mrs. Julia Bullard ... came last Saturday ... days with Mr. and ... lory.

Wallace Williams ... Van Cleve of Wood ... day guests of Mr. ... McKey.

Mr. and Mrs. F. A. ... family left Wednesday ... in Canada where they ... a few weeks.

C. E. Jasin of ... for F. A. Pook at the ... station, while Frank ... on their vacation.

Mr. and Mrs. Her ... sister, Mrs. H. G. Bau ... Portland Wednesday, ... and Mrs. Will Dre ... Thursday they beauti ... their moth- ... afternoon.

The following mem ... bard I. O. O. F. atte ... Salem Wednesday ev ... spectacular and impr ... gree put on by the C ... team: Ed. Ball, G. ... Beck, L. M. Malone, ... Orlie Boje, Ralph Gri ... ke, H. A. Hagen, J. H ... Peterson, L. T. Hodge ... and T. Johnston.

Rose bushes shou ... the finest grade of ... as soon as any milde ... retreated as soon as ... shows up.

## METHODIST CHURCH NOTES

We are planning to ... ate Memorial service ... We therefore give a ... tion to all the G. A. R. ... also all the soldiers of ... with their families ... Everybody invited.

Our Sunday school ... growing, will ... greater things.

Our church services ... and helpful. You mi ... being absent. Come ... the Lord together.

## DONALD-FARGO MEMORIAL SERVICES

Sunday, May 2 1921.

A cordial invitation extended to the G. A. R., the Spish-American War Veterans, and Ex-Service men to be with us in memorial services for our heroic de-

"And thus in tribute to the forms that rest

In their last camp ground, we strew the blades, and fragrance of the flowers they loved the best, in silence o'er thomb.

And in the holy sence reigning round,

While prayers overfume bless the atmosphere

Where loyal souls above and faith are found,

Thank God that see is here."

The Fargo M. E. church memorial service will be held 10:30 a. m. The subject of the address will be "He is Our Peace." Sunday school as usual at 11:30 a. m.

The Memorial servs at the Donald Community club will be held 7:45 p. m. "God Memorializes Man's Sacrifices," will be subject of the address. Special music being arranged for the occasion.

J. Stanford, more, Minister.

## COMETS

Comets come and go; but whether they go and come all from whence do they come these are, to us, no doubt interesting questions, yet perhaps a few words as to their general nature may enable us the better to draw our own conclusions regarding their future destiny.

According to lead astronomers comets as well as stars and shooting-stars are the "bris" of the solar system. This "bris" is on the whole rather light they assume its presence in the various forms previously mentioned, to be due to the action of large bodies on the loose matter of the original planetary nebula in which the solar system evolved.

The various planets (Earth, Mars, Venus, etc.) we will remember, all rotate around the Sun from west to east in paths (orbits) which are not true circles, that is, the orbits are slightly eccentric, which means simply that the axis of rotation (in this case the sun) is not in the center. Some comets move in similar directions while others travel oppositely, or retrograde, but all have orbits of great eccentricity. This feature indicates to us that the known comets all belong to the solar system, since if the solar system should encounter a high velocity comet during its sojourn thru space its effect thereon would merely cause the said comet to follow an hyperbolic path about the body exerting the greatest influence on it (usually the sun) after which, it would, to us, be lost forever.

The Hyperbola, may, for all practical purposes, be called the right angles of space since it is the critical curvature of path which any body may assume and yet remain free. From this we gather that any low velocity body affected by the solar system describes an orbit whose eccentricity is less than unity; in other words the curve or path described by it in its progress thru the solar system is less than a Parabola, the half way between an ellipse and an hyperbola; thus the parabolic path is the actual critical value of path curvature and a distant deviation from this towards either an ellipse or an hyperbola identifies a body as a permanent or transient member of the solar system to which the Earth belongs. We may know, then, that the eccentricity determines the path length or period; thus a comet whose incoming and outgoing paths lie comparatively close to each other is said to describe an ellipse whose eccentricity is less than unity, the parabola, and it will therefore return in a rather short time. Most of the known comets, though, describe paths closely approaching unity, the parabola, and while these paths are closed curves (real orbits) yet the time period required to make the circuit may run into the thousands of years. Donati's comet, 1858, considered as one of the greatest during the 19th century, had a period of more than two thousand years. Its aphelion (the point of its orbit furthest away from the sun) is fully five times the distance to the planet Neptune. Neptune's distance from the sun is approximately 1,775,000,000 miles. Since no cometary orbit has ever been found to be hyperbolic "we may assume all comets as permanent members of the solar system."

Most periodic comets are invisible to the naked eye even when comparatively close to the earth. It is now known that comets are bodies of great bulk and comparatively small total mass (low density) thus the force with which they attract other bodies seems very small when compared with the gravitational attraction of the sun which causes the Earth to fall towards that body, at the rate of 0.117109982 inches per second of time. The result of this difference in attractive force is a district variation in the orbit of the comets which approach the neighborhood of any large body such as Jupiter, Saturn, or the Earth. It is for this very reason that the orbits of most periodic comets extend to just beyond the orbit of Jupiter, the largest of the planets, this indicating that at one time they came close enough to this body to come under his influence which altered their courses sufficiently to bring them again under the influence of the sun.

Perhaps the most interesting feature of a comet is the characteristic tail developed as it approaches the sun; this tail always extends from the comet in a direction away from the sun, and it is this fact which some years ago aroused the interest of astronomers and scientists in general—since, that the tail should precede the body—when leaving the vicinity of the sun—was obviously contrary to all known laws. This particular action, or motion described by the tail is attributed to the low density, characteristic of all comets; the sum total of their mass being for the most part made up of such light substances as hydrocarbons, cyanogen, or carbon monoxide together with perhaps several small particles of heavier matter as sodium iron, or other metal, each not exceeding a small number of tons in weight. While it was evident that the sun had some effect on the loose matter which composed the outer envelope or coma of comets it was not

until it was discovered that the pressure of sunlight acting on minutely small particles had more effect than even the gravity of such a body as the earth, that the real secret became known. Thus, when minute particles are driven from the earth by sunlight, larger particles may be driven from the heads of comets, which, as we have previously shown, have less attractive power than the earth. Comet tails are not dense, in fact, it has been demonstrated by experiment and subsequently proven by direct observation that their density is less than the air density in the lowest vacuum obtainable. Long straight comet tails have been determined as composed chiefly of hydrogen, while the short "bushy" tails are mixtures of metallic vapors such as sodium and iron, on which sunlight has less effect. Long curved tails are composed mainly of hydrocarbons. It becomes obvious, then, that one comet may have several tails and on searching we discover in old astronomical records an account of a six tailed comet which appeared during the year 1774.

Winneck's Comet, which is due to reach perihelion during the latter part of June, is known as a short period comet. While it is expected that the earth will encounter its tail, no harmful or other detrimental effects are looked for since the air is deemed sufficiently dense, (thick) to assimilate larger quantities of the characteristic "tail" gases than we are ever likely to meet. It is known that the earth has on several previous occasions "past directly thru such tail gases without experiencing the least harm." So far as actual collision is concerned, when we consider the awful distances existing between planets, sun and stars, and the fact that the earth moves not only around (18.47 miles per second) but with the sun in its journey (12.4 (arrhenius) miles per second) around its primary, the said chances of any collision appear insignificantly small, in fact it may be computed to be as small as 1 in 15 million.

Astronomers are agreed that should the earth encounter a comet "head on" probably no worse effects would be experienced than a shower of Meteors which would in the main part be consumed by friction with the earth's atmosphere.

The attractive power of any body decreased as the square of the distance in radii; thus at a distance of two radii from the center (the earth radius 4000 miles) the attraction would be only 1/4 as strong as at the surface; at three radii it would be 3x3 or 1-9 as strong and so far as the earth and the sun (whose gravitational attraction is more than 28 times that of the earth) are concerned, we find by computation that at a distance of 930,000 miles from the center of the earth these two attractions balance; thus any body passing outside of that limit would hardly come under our influence and besides there is a distance limit within which all solid non-rotating bodies of any consequent size are disrupted by gravity and the torical friction resulting from the usual inequalities of surface. The distance to this rupture point in radii is 2.44 which, for the earth, corresponds to a distance of 9,760 miles. Every comet that has been known to pass within the sun's disintegration distance limit (2,113,000 miles) during perihelion have been so disrupted by tidal forces that the head separated into several pieces, each thereafter pursuing paths parallel to the original orbit.

The Director of the Lick Observatory, (W. W. Campbell), with whom the writer recently communicated, writes that "astronomers and scientists in general are agreed that the known periodic meteor swarms are nothing more or less than the remnants of comets disrupted by too frequent returns to the vicinity of the sun." Besides this, it is now recognized that did comets not obey Kepler's first Law, known as the law of areas, and "sweep over equal areas in equal times" they would never leave the vicinity of the sun and would gradually be absorbed by that body; but comets, like the earth and other planets—obey this law, the latter never appreciably increase their velocity, since the eccentricity of their orbits is slight; the orbits of comets, on the other hand, are as a rule highly eccentric and as a result their velocity during perihelion (closest point to the sun reached during their passage around that body) often exceeds 200 miles per second of time.

1323 —Chas. M. Will

## REV. T. ACHESON TO DELIVER MEMORIAL ADDRESS MONDAY

The usual program and exercises will be held in Hubbard next Monday and it is announced the address will be delivered by Rev. T. Acheson, well known here and a former pastor.

The day will be generally observed in honor of the men who offered their services to our Nation.

District convention of the Pythian Sisters convened at Portland Tuesday and was attended by the following: Mr. and Mrs. Julius Stauffer, Mr. and Mrs. A. J. Smith, Mr. and Mrs. Avon Jesse, Mrs. H. F. Scholl, Mrs. L. M. Scholl, Mrs. M. C. Crittenden, Mrs. Geo. Zeek, Mrs. A. R. Bevins, Mrs. Clarence Johnson, Miss Ruth Calvert. The Hubbard team put on the work for the initiation of the brothers. A fine time is reported.

## Read Hubbard Enterprise ads

## NOTICE TO CREDITORS

Notice is hereby given that the undersigned has been duly appointed by the County Court of Marion County, Oregon, administratrix of the estate of Isaiah D. Pike, deceased, late of Marion County, Oregon, and that all persons having claims against said estate must file same with me at my residence in Hubbard, Oregon, within six months from date of first publication of this notice.

Published first time May 13, 1921.

Published last time June 10, 1921.

CLARA L. PIKE,

Administratrix of the Estate of Isaiah D. Pike, Deceased.

**DR. W. G. HOWE**  
DENTIST  
X-Ray work  
Gas for Extraction  
Office over  
Moore-Dunn Drug Store  
Phone—Red 18  
WOODBURN, - OREGON.

## MARKET REPORT

Eggs	14c
Hens over 4 lbs	20c
Hens 4 lbs and under	14c
Broilers	18c
Old Roosters	07c
Country Butter	17 1/2c

## IN MEMORIAL

During the past several weeks construction work has been progressing on the Schoor Memorial in the local cemetery and the first of this week saw its completion.

The field of the lot has a protecting coat of heavy cement with a very low lawn-wall border. On special slabs are the several stones and urns; the latter containing growing flowers. Over another slab is a large glass case, this containing flowers also, besides a recording tablet. The whole being very complete and harmonious in setting and outline.

Construction work was done by Dave Hovendon and George Zeek.

What will a man do in honor of a loved one. The knowing world can ne're forget. Let due honor be done.

## HELP US BOOST

Kind Subscriber, you we greet  
By putting out a bigger sheet,  
When you've read it to the end  
Pass it on to a friend.  
We do not ask you for praise,  
Nor will we our subscription raise—  
But as your eyes on this does rest  
Do what you think is best.  
Send this paper far and wide  
Read it o'er on either side  
Show your friends—put them wise,  
Help us boost the ENTERPRISE.  
—Mountain Slim

# Woodburn Chautauqua May 30 to June 6