MYSTERY OF MERCURY.

An Unknown Factor That Causes the Planet's Erratic Motion.

The planet of Mercury is the smallest of the major planets and the near. est to the sun, which it circles in a little less than three months. It reaches its greatest distance from the sun at periods about sixty days apart. Dur. ing the year Mercury is morning star three times and evening star three times. Owing to its nearness to the sun if is never visible for more than a period of about two hours after sunser or the same length of time before sun-

The eccentricity of its orbit'is greater than that of any other major planet: Its greatest and its least distance from the sun differ by nearly fifteen million miles. According to A. W. Me-Curdy of the Royal Astronomical Society of Canada, the most remarkable characteristic in the motion of Mercury is that when it is nearest to the sun it travels faster than it should if it moved only by the attraction of the known bodies of the solar system.

Astronomers have long sought an explanation of the accelerated motion Some believe that there are other plauets at present unknown between Mercury and the sun-hodies that although numerous are too small to be seen. The movements of Mercury indicate an influence that might be accounted for by the presence of another planet revolving within its orbit. If such a planet really exists, there should come a time when it will appear as a dark spot moving across the face of the sun.

Another way to detect the presence of new planets in the vicinity of the sun is to take observations during a total eclipse. If there are no clouds at such a time the stars become visible as the sun disappears. During the total eclipse of the sun in 1878 one observer saw an object that be thought might be the long sought planet, but no other astronomer bas been able to confirm the discovery, and many now believe that the hidden source of the unusual movement of Mercury must be looked for elsewhere than in the orbit of the planet.

LIFE OF THE GUNS.

It Depends Upon How Long the Linings Can Resist Erosion.

The life of a gun depends upon the progress of erosion, which sooner or later is certain to impair the accuracy of fire. Posion is caused by the action of the explosive gases at high temper ature and pressure.

According to the Iron Age, the hot gases cause a thin film of steel to absorb heat. The film expands and becomes set. Upon the release of the pressure it contracts, which causes minute cracks that grow larger with every discharge. As they increase in size they form passageways for more hot gas, and that tends to enlarge them still further. The inner surface thus becomes roughened and the bands begin to corrode. Finally the bore becomes so enlarged that it allows the gases to escape. The shell does not then acquire its proper rotation, and its flight becomes erratic.

All guns except small ones are now constructed with linings in the tube which, when the bore is worn out, are removed and replaced by new ones. The cost of relining a gun is approximately 30 per cent of the cost of the gun. There appears to be no limit to the number of times that a gun can be relined.

The small arms used in this country are considered to be worn out after 5,000 to 7,500 rounds have been fired. Small naval guns can be fired about 1,000 times before they are regarded as worn out. Large twelve luch and fourteen inch naval guns are considered to have a life on one lining of from 150 to 200 rounds.

Low velocity guns, such as howitzers and mortars, have correspondingly longer lives than high velocity guns of the same callber, because the pressures they develop, and bence the temperatures, are lower.

Use of "a" and "an."

Do most educated people say "h unique example" or "an unique example?" In deference to the rule they probably write "an," but if you notice their pronounciation, when they are talking naturally and not thinking of how they pronounce, they will almost invariably say "a." And this is quite natural, for "unique" begins with a consonant. It is pronounced "yuneek." Similarly most people say both "a history" and "a historical fact," unless they drop the consonant "h" and say "an 'istorical fact."-London Chronicle.

Unforeseen.

Helen was attending her first party When refreshments were served she refused a second helping to be cream with a polite "No, thank you," al though her look was wistful.

"Oh, do have some more ice cream dear," her hostess urged.

"Mother told me I must say "No. thank you," exclaimed the little girl, "but I don't believe she knew the dishes were going to be so small."-New York Post.

Vain Search.

"I've got about enough of that old scalawag.

"Fasy, son. Always try to see some

good in everybody." "I have tried. But it gets tiresome when you have to look for it with a microscope."-Louisville Courier-Juor

Envelopes printed at the Courier

RILEY WAS SENSITIVE.

Why He Stopped Reciting One of His Poeme In Public.

"As an illustration of Riley's sensitive nature," said Melville E. Stone. "Jim and I went alone to the theater to see Sol Smith Russell, who also belonged to the Saints and Sinners' Corner. He was playing 'The Poor Rela tion.' In the play was a scene where Russell took a young boy and put him in a barrel while he removed his trousers to mend them. The audience roared with laughter at the comic situation. Next to me in the box sat James Whitcomb Riley, sobbing as if bis heart would break. He saw no humor in the plight of the little boy. To him it was pathos

"He, like Eugene Field, was devoted to children. He loved them, but he loved them artistically. I am not sure that personally—that is, mind you. hanging to a man's coattails—they elther of them wanted children around. They lacked the patience necessary for daily contact with children. Riley and Field could write heartbrenking verse in respect of children and put into them an inordinate amount of human sympathy, but so far as I know this was at arm's length from the youngsters themselves, especially in Field's case. Riley was ever exceedingly sympathetic. One evening Jim was reciting his poem, 'A Happy Little Cripple,' before a large audience. He had scarcely begun the lines-

"I'm thist a little crippled boy an' never

An' git a great big man at all, 'cause aunty told me so.

When I was thist a baby one't I falled out of the bed

An' got 'the curv'ture of the spine'—'at's

what the doctor saidwhen he noticed a man and a weman in the audience leaving the hall. He made inquiry and found out that they had a little lame child of their own much like the one be was describing. He resolved never to recite that poem in public again."-New York Post.

GUIDE YOUR BOY NOW.

Keep Him on the Road That Leads to the Highest Citizenship.

This is a good time to think of your boy. If you do/not look after him in the right way some one will do it in the wrong way. Begin now.

Teach your boy to follow in the footsteps of his father, to respect the law, to obey his parents, to regard the rights of all men, to honor virtue, to respect womanhood and to depend upon no one but himself for his advancement.

Teach him that the Golden Rule of life will be found in the Ten Commandments. They are short. They have survived the ages. They stand today unchanged and unchallenged.

They comprise the first great written law given by God to man. Before these few commandments all man made laws fade into insignificance. Teach them to your boy. There is danger ahead if you do not.

The universal drift of mankind is toward decadence. Heredity pays its premium and also exacts its discount. The son of a good father and an affectionate mother, brought up in an atmosphere of parental regard, never will disgrace the family.

The boys of today are to be the men of tomorrow. The destinies of the American people are to be in the hands of their sons. If the boys are taught respect for the law (both human and divine), obedience to authority, manly independence and the fear of God this great nation will be a noble monument to man's capacity for self government and self control at a time when all the world is a seething cauldron of unrest. unreason and disbellef.

Teach your boy to rule, but first to rule himself,-John A. Sielcher in Leslie's Weekly.

J. PIERPONT' MORGAN.

New York Banker on His Way to Business.



000000000000000000

PRACTICAL HEALTH HINT.

Milk In the Home. Good milk is a bealth pro- o ducer. Bad milk makes stomach o

trouble and breeds disease The three "C's" for the proper o care of milk in the home, ac- O cording to the dairy specialists o of the United States department o of agriculture, are:

Keep milk clean cold covered! o Milk is a highly perishable o food, and the length of time it o will remain sweet and safe. es- o pecially for children, depends. O the specialists say, almost en- o tirely upon the constant care it o receives from cow to consumer. O Milk passes through three agen O cles-the producer, the dealer o and the consumer If the first O two have done their part, clean. O safe milk will be delivered. O thoroughly chilled, to the consumer The consumer's respon sibility begins the moment the o milk is delivered at his door o step

LET HIM MAKE THE SALAD.

000000000000000

And Let Him Hunt For the Ingredients. Too, Says a Woman.

Newspaper comment to the contrary, there still remain a few accomplishments in which a man may excel a woman, and, oddly enough, one of these is saind making! Indeed, there seems to be in the masculine character, psychologically speaking, it may be supposed, something that makes the concoeting of salads a man's special genius in the way of humble skill.

You know the requirements for a good maker of salads-"A miser for vinegar, a spendthrift for oil and a madman to do the mixing."

And there you have it. A woman is too careful, too considerate, too conventional, too much hampered by detalls But give a masculine lover of good salads congental company, full liberty in the use of oil, vinegar and pepper and the freedom of your refrigerator, and you may trust him to produce a masterpiece.

First of all, your saind master enjoys the making of his dish. He puts into it the conviviality of good comradeship and the gest of adventure. He much prefers an exploring expedition in search for his ingredients and some dubious uncertainty as to the result of his efforts to a cut and dried sureness of means and methods. The result is a surprise which, as we all know, is one of the first aids toward good appe-

Next, a man does not want culinary folderols. He is hungry, and he wants his salad to furnish him something to eat, so he puts into it plenty of oil and good substantial vegetables and green things. He likes to eat; he likes adventure and uncertainty; he likes piquancy and pepper: he likes a vigorous way of doing things. Let him make your salads.- Anne Rankin in Southern Wo-

Traveling With a Cello.

Traveling with a cello is as uncom fortable as traveling not only with a baby, but with a donkey. Unless indeed you have an instrument with a convenient hinged door in the back so that you may pack it full of traveling necessities-MSS., and so forth-thus dispensing with a bag, or unless you can cork up its "f" holes and use the instrument as a canoe on occasions a cello is about as inconvenient a travel ing companion as the corpse in Steven son's tale which would insist on getting into the wrong box.-Musical Courier

Curious Superstition.

The ancients believed that the marrow contained in the human backbone often transformed itself into a ser-

page 66 says that the marrow of a man's backbone will breed to a snake The Chinese (Worde's "Eastern Travels") burned the backbone to "destroy serpents that might batch therefrom

Queer, but True. "It's a queer world."

"Why?

"Stand up and say that riches don't make for happiness and everybody will agree with you heartily "That's so.

"And everybody will go out and keep right on trying to get rich.

A Thing of Surprise.

"Opinions differ." remarked the museum guide, "as to what period this extinct animal belongs to."

"That animal doesn't belong to any period," commented the grammarian. "It belongs to an exclamation point."-Pittsburgh Chronicle Telegraph.

Know that "impossible" has no place

How to Have Plenty of Hot Water

Without a Fire. It is disagreeable to keep a fire during the warm summer months merely for hot water. Have the tinner make a Jacket out of galvanized iron, give it a lining of asbestos and place it around the hot water tank. The tron is of such width that two pieces will cover the entire tank and extend far enough above to hold a layer of ashes. The water will stay hot twenty-four

Portland, Oct. 2 .- Today's market quotations were:

Oats-No. 1 white feed, 28. Barley-Feed, 33.

Hogs-Best live, 9.85@10. Prime steers, 7; fancy cows, 5.75; best calves, 7.50. Spring lambs, 8.75.

Butter-City creamery, 35; coun-

Eggs-Selected local extras, 40. Hens, 15; brollers, 15@17; geese, 11@11%.

Copper, 2814.

Her Words Came True.

The squad had been particularly stn pid, and the drill sergeant was exasperated. After vainly attempting to induce them to execute some move ments be gave the order, "Stand at ease." Addressing them seriously, be said: "I remember when I was a small boy I had a set of toy soldlers made of lead and tin. One day I lost them, and I wept bitterly. My mother told me not to fret; that some day I would find them again, and, by gum. I have!"-Vancouver World.

A Penny Saved Is a Penny Gained.

By BREEN.

The wise housewife saves many a penny reading the newspapers.

If there is a bargain advertised she'll not miss it. She constantly is looking for it.

It is up to the mer-chant, Keep the housewife posted. Let her know through the newspaper what you have to offer: Incidentally men today ransack the newspapers for bargains as assiduously as do women.

If you want to sell your wares advertise. Advertise in the best medium, the newspaper. Also if you want to buy successfully read the advertisements.

STATEMENT OF OWNERSHIP, MANAGEMENT, CIRCULA-TION, ETC.

Of the Rogue River Courier, published daily at Grants Pass, Oregon, required by Act of August 24, 1913: Publisher, A. E. Voorhies.

Editor, Wilford Allen. Managing Editor, A. E. Voorhies. Business Manager, A. E. Voorhies. Owner, A. E. Voorhies, Bondholders, mortgagees and other

security holders, holding 1 per tent or more of total amount of bonds. None. Average number of copies of each issue of this publication sold or dis-Pliny ("Natural History," volume 10. tributed through the mails or otherwise, to paid subscribers, during the

six months preceding the date shown above, 930. (Signed) A. E. VOORHIES. Subscribed and sworn to before me this 30th day of September, 1916.

W. L. IRELAND, Notary Public. (My Commission expires December 7, 1916.)

TIME CARD

Coast Railroad Company (The Oregon Caves Route)

Train 4 lv. Waters Creek 5:00 p.m. Arrives Grants Pass 6:00 p.m.

Daily except Sunday. All trains leave Grants Pass from the corner of G and Eighth streets, opposite the Southern Pacific depot. For all information regarding in the brave man's dictionary.-Car freig't and passenger service call at the office of the company, Public Service building, or phone 131 for

> Train will stop on flag at any point between Gran's Pass and Water Creek, Passenger ervision every day in the week.

BOARD AND ROOMS.

ROOM AND BOARD-Pleasant front room in private family, suitable for one or two young men, good board. 864 E. Call at 615 North Fourth.

Letterheads at the Courier.

PORTLAND MARKETS Classified Advertising

FOR BALE

190-J. 787tf

WINONA BERKSHIRES-If you want the most pork per lb. of feed, get a Winona Berkshire for your next herd boar. Spring pigs averaged 100 lbs. each at four months. F. R. Steel, Winona Ranch, Rural Route No. 1. 330tf

4-ROOM house, partly furnished, lot 75x100, on Sixth street, for sale real cheap, or will trade. For particulars inquire B. A. Williams, 323 G street. 878

FOR SALE at a sacrifice, modern seven-room bungalow on north side. Have reason for selling. Need \$1,200 or \$1,500 as first payment. Address No. 1709, care Courier.

120-ACRE RANCH for sale, buildings, small orchard, 40 acres heavy timber. Five miles from town. \$7.50 per acre. Will give time. See O. J. Knips, 616 South Fourth street. 863

FOR SALE-Good milk cow, plow horse, good two-seated spring wagon, double hack harness, new DR. H. WARREN NICE, Osteopathic steel wheel truck. J. W. Osborn, R. F. D. 1, opposite county home 66

FOR SALE CHEAP-Large iron safe, made by Mosler Safe & Lock company. Size 12x18x24 inside, 24x30x36 outside. Inquire of W. R. Nipper. 864

FOR SALE-20 head young cattle at a bargain if taken at once. A. E. Dixon, route 3, Grants Pass. At Jones Creek bridge.

FOR SALE-Two small mules. light wagon and harness, \$175 cash. Inquire P. J. Rush, Takilma, Ore. 68

TO EXCHANGE

TO TRADE-Two lots in Marshfield and some cash for second-hand Ford. Address No. 1730, care Courier.

80 ACRES, two miles from growing town, with good irrigation water rights. Will exchange for stock of merchandise or a going business. Write owner, Wm. Sullivan, 609 11th street, Modesto, Cal.

GOOD HORSE, buggy and harness to trade for young fresh cow. Call at 911 Orchard avenue.

WANTED

WANTED AT ONCE-First class strictly modern, furnished, fiveor six-room bungalow. All improvements, including gas, north side. Will lease for six months, with option of longer period if satisfactory. If you have something V. A. CLEMENTS-Attorney-at-Law, meeting these requirements, telephone at once. Will pay well for right place. Phone 280-J. 871

SALESMEN WANTED-To sell our splendid line of fruit and ornamental trees. Good terms. Good territory. Good prospects. Cash advanced on orders. Albany Nurseries, First National Bank Bldg., Albany, Oregon. 864

LOST

LOST-Between the foundry and the Fashion garage, crank for automobile. Finder return to Josephine hotel, Reward. 865

LOST-Between Grants Pass and Wilderville, 50 ore sacks. Finder please leave at Grants Pass Livery stable, with Peter Gravlin. Re-

LOST-Thursday or Friday, on East school grounds or between there and North Second street, child's gold necklace, with initial H on one side, heart-shaped locket. Reward. Phone 145-J. 863

DRESSMAKING

The California and Oregon DRESSMAKING and sewing of any kind. Will care for children at GRANTS PASS Lodge No. 84 A. F. your home evenings. Mrs. Lizzie Wright, 713 North Eighth.

MISCELLANEOUS

CRYSTAL SPRINGS water .put up in 5-gallon glass jars and delivered at your door, fresh, pure, sanitary. Telephone 293-R and water wagon will call.

where in town 10c. Phone 181-R. invited to be present. Emil Gebers. ti N. G.; Clyde Martin, Secretary. Residence phone 242-L.

ENLARGEMENTS made from your negatives or photographs, portraits or views, in sizes from 5x7 to 14x17. Prices from 20c to \$1.50. in black and white. Coloring extra. Paddock Photo Co., 310 North Sixth street.

ASSATERS

n choicett,-Assayer, chemist. metallurgist. Roms 201-203 Paddock Bullding, Grants Pass.

PHYSICIANS

Wheat - Club, 1,27; bluestem, ANGEL CAKES-Phone orders to No. L. O. CLEMENT, M. D .- Practice limited to diseases of the eye, ear, nose and throat. Glasses fitted. Office hours 9-12, 2-5, or on appointment. Office phone, 62; restdence phone 359-J.

> S. LOUGHRIDGE, M. D., Physician and surgeon. City or country calls attended day or night. Residence phone 269; office phone 182. Sixth and H. Tuffs Bldg.

> J. P. Truax, M. D., Physician and surgeon. Phones: Office 325; realdence 324. Calls answered at all hours. Country calls attended to. Lundburg Bldg.

> DR. ED. BYWATTR-Specialist on diseases of eye ear, nose and throat; glasses fitted. Office hours: 9 to 12 a. m., 2 to 5 p. m. Phones: Residence 234-J; office 257-J, Schmidt Bldg, Grants Pass, Ore.

A. A. WITHAM, M. D., Physician and Surgeon. Office: Hall Bidg., corner Sixth and I streets. Phones: Office 116; residence 282-J. Hours 9 a. m. to 4 p. m.

Physician. Chronic and nervous diseases specialty. Rooms 1 and 2, Lundburg Bldg., opposite post office; phone 149-R. Residence: Colonial hotel; phone 167-J.

DENTISTS

E. C. MACY, D. M. D .- First-class dentistry. 109 % South Sixth street, Grants Pass Ore.

268 BERT R. ELLIOTT, D. M. D .- Modern dental work. Maud B. Bradford, dental assistant. Rooms 4 and 5, Golden Rule Bldg. Grants Pass, Ore. Phone 265-J.

ATTORNEYS

H. D. NORTON, Attorney-at-Law Practice in all State and Federal Courts. First National Bank Bldg.

COLVIG & WILLIAMS Attorneysat Law, Grants Pass Banking Co. Bldg, Grants Pass, Ore.

in all courts. First National Bank Bldg. EDWARD H. RICHARD, Attorney-

E. S. VAN DYKE, Attorney, Practice

at-Law. Office Masonic Temple, Grants Pass, Ore. W. T. MILLER, Attorney-at-Law. County attorney for Josephine

County. Office: Schallhorn Bldg. O. S. BLANCHARD, Attorney-at-Law. Grants Pass Banking Co. Bldg.

Practice in state and federal courts. Rooms 2 and 3, over Golden Rule store.

MUSICAL INSTRUCTION

VIOLIN INSTRUCTION - Franco-Belgian school of violin playing. E. R. Lawrence 215 I street.

S. MACMURRAY, teacher of voice culture and singing. Lessons given at home of pupil if requested. Address 716 Lee street. 851tf

DRAYAGE AND TRANSFER

COMMERCIAL TRANSFER CO. All kinds of drayage and transfer work carefully and promptly done. Phone 132-R. Stand at freight depot. A. Shade, Propr.

Safes, pianos and furniture moved, packed, shipped and stored. Phone Clark & Holman, No. 50. Residence phone 124-R.

F. G. ISHAM, drayage and transfer.

THE WORLD MOVES; so do we. Bunch Bros. Transfer Co. Phone

LODGES

A. M. Stated Communications 1st and 3d Tuesdays. Visiting brethren cordially invited. A. K. Cass, W. M. Ed. G. Harris, secretary.

GOLDEN RULE LODGE, NO. 78, I. O. O. F., meets every Wednesday evening in I. O. O. F. hall, corner 6th and H. TAXI STAND at the Mocha Cafe. Any Sts. Visiting Odd Fellows cordially

DECORATORS AND PAINTERS

PAPERHANGING, graining, painting. For the best work at lowest prices phone 295-J. C. G. Plant, South Park street.

VETERINARY SURGEON

DR. R. J. BESTUL, Veterinarian. Office in Winetrout Implement Bldg. Phone 113-J. Residence Phone 305-R.