

THE WEIGHT OF MARS.

The speed of any satellite in its orbit bears, as is well known, a direct relation to the mass which attracts it. The proof of this mathematical relation of the moon's motion to the earth's mass enabled Sir Isaac Newton to demonstrate the doctrine of gravity. The converse of this proposition helps the astronomer to calculate exactly the mass of a planet from the speed of its satellites. In the case of planets that have no known satellite the mass can only be approximated by tedious calculations from the attraction they impress upon their nearest neighbors—other planets whose orbits they distort. These calculations gave for the mass of Mars the 2,580,337th part of the mass of the sun, according to Burchard; that would be about a seventh of the mass of the earth. Le Verrier's protracted and elaborate studies gave the 2,968,300th part of the sun's mass as a correct figure. Professor Hall's discovery of the satellites of Mars enables him to put this question at rest, giving the figures as 3,000,000. Although near Le Verrier's estimate, this reduces the weight of Mars still further, and it is now certain that the planet has not quite an eight of the mass of the earth.

ADJECTIVES.

Adjectives are convenient. It would be difficult to get along well without them. In fact the dramatic critic of the "Philadelphia Press," as the Boston Globe always salutes that worthy sheet, could not possibly get along without them. He says in writing up a new play: "Honest, white-souled, blunt, self-sacrificing Joe Comstock; cunning, polished, base, conscienceless George Sibley; lazy, rough, yet kind-hearted Silas Gray; bold, reckless, wild, though not inherently wicked Brady; innocent, burgh, un-couth, tender-hearted Rocky Cain; loving, true, yet vain, glibly and finally ruined Mabel Morgan; equitish, mischievous, but still affectionate Letitia Lamb; the strong-willed Mrs. Morgan; and last but not least, the pure, devoted, heroic Claire L'Mayne." Still any ingenious person, sitting down and calmly meditating, will be able to think of several adjectives not included in the above. We can think of seven in less than a minute.

A MODEL STRIKE.

The queerest strike yet is reported from Philadelphia. It embraced the whole sisterhood of female models for artists. A model being required to pose in a painful position demanded \$3 an hour in place of \$2.50 as she had been receiving. The increase was refused. The model put on her clothes and left. The others joined her and the artists had to use their brushes to picture other objects than nude women. But the artists stood firm and at the end of a few days the models returned and took positions at old prices.

What He Went For.

It is known that several years ago there was located in Southeastern Oregon, under what is commonly called the five hundred thousand acres grant, thousands of acres of land, which are of no value to the State, lying as they do in many cases on extensive beds of rock and on barren mountains. We understand that in his recent visit to Lolo county, Governor Chadwick had it in view to ascertain, by personal observation, the nature of the objection to these selections with the intention of presenting them to the proper authorities in order to obtain in lieu of these worthless tracts other selections, lands available for purposes of agriculture or valuable for their timber. We sincerely hope that the Governor may be successful in carrying out his object.—Jacksonville Times.

An Informal Talk.

Mr. R. Koshler, Vice President and J. Brandt, Jr., Superintendent, of the O. & C. R. R., are in the city this afternoon and met a number of our principal citizens for an informal talk in relation to bringing the track of the company through Front street. The result of the talk will not be known at present. It is to be hoped that an arrangement can be made to bring the track down, as it would give a vitality to the business portion of our city that would make a favorable impression upon the "stranger passing through our city," and be of mutual advantage both to the R. R. Company and our business men.

An Oregon Porcupine.

Prof. O. B. Johnson has recently stuffed an animal of this species that was killed by a gentleman of this city while hunting in the Cascade mountains. Porcupines are found in Eastern Oregon but not often on this side of the range. The specimen is preserved in very natural shape and will form a part of the collection of the Oregon Natural History Society. Prof. Johnson will be much obliged whenever any person can send him specimens of rare insects, birds or animals.

Is Your Life Worth 10 Cents?

Sickness prevails everywhere, and everybody complains of some disease during their life. When sick, the object is to get well; now to say plainly that no person in this world that is suffering with Dyspepsia, Liver Complaint and its effects, such as Indigestion, Costiveness, Sick Headache, Sour Stomach, Heart Burn, Palpitation of the Heart, Depressed Spirits, Biliousness, etc., can take Green's Atomic Flower without getting relief and cure. If you doubt this, go to your druggist and get a Sample Bottle for 10 cents, and try it. Regular size, 75 cents.—Two doses will relieve you.

Hyatt's Life Balsam.

As a conqueror of Rheumatism, Gout, Neuralgia, and cure for Sciatica and all diseases arising from impurity of blood, the old and reliable Family Medicine, Hyatt's Life Balsam, stands unequalled, as proven by over 300,000 great cures during the past 30 years. It is a radical vegetable compound of sassafras, Dock, Guaiacum, &c., and a permanent cure. Sold by all druggists and country grocers. Take nothing else, and if they haven't it we send by express, boxed, everywhere, at \$1 and \$1.25 per bottle; \$3.00 and \$3.50 half doz. HYATT & HYATT, 216 Grand St., New York.

THE MARKETS.

The Wheat Market.

There is little change and the market stands firm at a slight advance. Speculators are taking a great deal of wheat to San Francisco, but there is more offering than they can take. San Francisco quotations for good Oregon wheat may be placed at \$2.57 1/2 per cental, while Portland quotations are \$2.07 1/2 per cental, a difference of 50 cents per bushel. Mr. W. J. Heron informs us that notwithstanding the low freights all the cost of shipping to San Francisco falls up \$4.50 per ton, at which figure there is no advantage over shipping from Portland direct to United Kingdom by vessel at a three pound freight, which we learn from the San Francisco Commercial Herald is the prevailing rate, though some charters to come to Portland have been made at \$2.17 1/2 per cental.

There is a great deal of unemployed tonnage in San Francisco harbor, and it is evident that we may calculate on low freights for some time to come and perhaps through the whole season.

As will be seen by the press dispatches by cable, giving extracts from Mark Lane Express, the English harvest is more or less damaged and Europe looks to America for bread. There is an immense crop east of the Rocky Mountains, but it is not probable that it will overstock the market and cause any fall in breadstuffs. Our whole country ought to feel the effect of the European demand and the result on wheat prices generally among the producers of our nation.

Salem quotations Thursday, at time of going to press, are \$1.07 1/2 per bushel both at Farmers' Warehouse and Salem Mills. English orders for cargoes shipped on this coast are given at 50c to 60c per quarter of 2000 lbs, charges all paid to Liverpool.

Total receipts of wheat at Salem up to this date, a little less than 200,000 bushels.

European Grain Market.

LIVERPOOL, Sept. 11.—A leading grain circular says: The storms and heavy rains in most parts of the kingdom this week seriously interrupted harvest and did further damage to wheat. The markets consequently maintain an advancing tendency for old and dry, new of home growth as well as for foreign. Receipts generally of most new British are in best condition and entirely neglected by millers, though pressed for sale at reduced rates, on spot since Tuesday and in neighboring counties. Demand for foreign continues fairly active, finer classes realizing an improvement of 10/11, while Egyptian and other low descriptions have advanced 3/4d per cental. This market today is fairly attended, and there was good steady business in wheat, fine white making advance of 1/2 per cental, but red American rather under quotations of Tuesday. Flour is not ready for sale, but held for extreme prices. Malts in fair request at 3/4 per quarter, under rates of last market day.

The Salem Markets.

Wheat is bringing \$1.07 1/2 per bushel; oats 45c; potatoes, 37c; onions, \$1.00; tomatoes, 60c; apples, 37c; pears, 50c; beans, 35c; 1/2 lb standard apples, 6c; plums, 10c; 1/2 lb per lb; fresh roll butter, 20c; 25c per lb; eggs, 22c; 25c per doz. Fresh roll butter is abundant and probably will remain so during the fall as the rains will improve the pastures, besides which there is a great amount of packed butter through the country. Hay and mill feed rates as in our last issue.

Little Giant GRUBBING MACHINE.

We wish to inform the people of Oregon that we have purchased the patent of "The Little Giant Grubbing Machine," and that we are now prepared to supply any number of them at a very reasonable price. The numerous testimonials of the superior qualities of these machines and their comparative cheapness should recommend them to all those desirous of clearing off land at but trifling expense. For further particulars apply to Frank Cooper or Wm. Dolaney, Salem, or Albert Briggs, Seio.

Seio, March 16th, 1877.

This is to certify that we have used "The Little Giant Grubbing Machine" and found it superior to anything of the kind ever used in this part of the country: Preston Munkers, Wm Ireland, Henry Isley, J S Morris, A Davis, J B Irvine, E Baldwin, B F Briggs, Henry T Hare.

We the undersigned have seen "The Little Giant Grubbing Machine" work and can assure the public that it is the best machine of the kind we have ever seen working. M Alexander, G W Hamilton, J C Johnson, Peter Smith, J M Brown, Wm H McKnight, P Blyden, D P Mason. Seio, May 25th 1877.

Cheap City Property.

I HAVE FOR SALE DESIRABLE CITY PROPERTY on easy terms and at the following remarkably low rates: 1 House and lot for \$3,500; worth \$2,500. 1 House and lot for \$2,500; worth \$3,000. 1 House and lot for \$2,500; worth \$3,000. 1 House and lot for \$2,500; worth \$3,000. 1 House and lot for \$2,500; worth \$3,000. The best bargain ever offered in Seio. The above property is offered so cheap because the owners need only or its quick sale. For further particulars apply to MILLEN M. MILLER, Salem Gas Works, sept 11

The Light-draught Steamer

CITY OF SALEM WILL LEAVE PORTIN WHAT, Portland, for Salem, and Intermediate Points, On Mondays, Wednesdays, and Fridays, At 8 O'CLOCK A. M. The Light-draught Steamer OHIO Will make Trips to the upper River. U. B. SCOTT & CO. Z. J. HATCH, General Manager. 9417 PIPER'S SHOT-GUNS, REVOLVERS, &c. sent C. & D. for examination, all charges paid. No risk. No hazard. Write for catalogue. Address Great Western Gun Works, Pittsburg, Pa.

Oregon State Fair, 1877.

The Board of Managers of the Oregon State Agricultural Society announce that the Seventeenth Annual Fair will be held at Fair Grounds, near Salem, Commencing on Monday, October 8th, and continuing six days.

HALF FARE RATES!

For Passengers and Freight, on the OREGON AND CALIFORNIA RAILROAD, and the OREGON CENTRAL RAILROAD, and on the boats of the OREGON STEAM NAVIGATION CO., From WALLELLA And all way points, to Portland, and from ASTORIA and all way points, to Portland.

25,000 PEOPLE!

IN ATTENDANCE!

THE LARGEST EXHIBITION!

Known in the history of the Society.

60 Horses in Training

For trials of Speed, 14 to start for one purse.

GRAND EXHIBIT OF FARM PRODUCTS

And HOUSEHOLD INDUSTRY.

Handsome Displays from California!

FINE SHOW OF STOCK

Of all kinds, including many fine choice importations.

For Premium Lists, Programmes,

Or any information in regard to the Fair, address E. M. WATTS, Secretary, Seio.

For tickets call on or write to the Secretary in person or by letter, one week before the Fair. Entries close TUESDAY, Oct. 5th, at 5 P. M.

NOTICE.

The "State Fair Ticket" issued by the Oregon Steam Navigation Co., at full rate to passengers going to the Fair, and is GOOD FOR FREE RETURN "Provided it is presented to the Oregon State Agricultural Society, at Fair Grounds, and stamped with the seal." Tickets not so provided, will not be recognized on return, and the holder will be liable for full rates. It is however so stamped and will give the holder immediate admission, and save trouble, time and money and trouble. Customer's conditions of tickets by Railroads.

Stock and Freight for Exhibitors Charged full rates going, by railroad or steamer, but return free if swears claim certificate from Secretary that the same has been exhibited and no change made. For order book of Managers, W. F. WATSON, President.

W. WATSON, J. W. WATSON.

WEATHERFORD & Co.

Wholesale and Retail Dealers in

DRUGS, PAINTS,

OILS, GLASS,

Patent Medicines,

CHEMICALS,

Perfumery

TOILET GOODS,

Etc., etc.

PURE WINES and LIQUORS,

For Medicinal purposes.

Medicines Compounded, and Prescriptions Filled.

Weatherford & Co.,

First Commercial street, SALEM.

Carminative

For Diarrhoea and Dysentery use Dr. Jayne's

Carminative Balsam. As changes of climate or water, and indiscretions in eating often produce these complaints, travelers and others should always keep a bottle of this remedy by them. It never fails to subdue the most violent attack, and it is equally serviceable for Cramps in the Stomach or Bowels, Gripping Pains, &c.

For Cholera Morbus, Cholera Infantum and Colic use Dr. Jayne's

Carminative Balsam. It removes all soreness of the abdomen, allays the irritation and calms the action of the Stomach. It may always be relied on to give immediate relief, and besides being effectual, is a pleasant and safe remedy, easily administered to children.

For Asiatic Cholera and all Bowel

Affections use promptly Dr. Jayne's Carminative Balsam. It checks the Diarrhoea, suppresses the Cramps which generally accompany attacks of Cholera, and conquers the disease in its incipency. It has frequently been administered in neighborhoods where the Cholera has been raging epidemically, and it has seldom failed to give immediate and permanent relief. The Carminative has maintained its reputation as a Curative for nearly forty years, and is equally effective in all latitudes, and as a Standard Household Remedy, should be kept in every family.

T. A. DAVIS & CO., Wholesale Agents, Portland Oregon.

Plows! Plows!

FRANK BROS. & CO., Buford Gang Iron and Wood Black Hawk Single Beam Single PLOWS. CALIFORNIA SULKY 8-inch to 16-inch.



Champion "Browne" Sulky, (Never been beaten in the field.)

THE LA BELLE WAGON,

Champion Fan Mill, Pacific Cider Mill, and The McSherry Grain Drill and Broadcast Seeder.

THE MOST COMPLETE LINE OF PLOWS, HARROWS, DRILLS, AND Other Agricultural Implements in the Market.

BEFORE PURCHASING, CALL ON

Frank Brothers & Co.,

104 and 106 Front Street, PORTLAND, OR.

WHEN YOU WANT TO PAINT,

USE THE.....

AYERILL PAINT.

It is prepared ready for immediate use, and of ALL DESIRABLE COLORS AND PURE WHITE.

It is easy to apply, and it will not crack, peel or chalk off.

For durability, beauty, and brilliancy of color it is WITHOUT A RIVAL.

For sale in any quantity by

WEATHERFORD & CO.

DEALERS IN.....

DRUGS, PAINTS, OILS, AND PERFUMERY.

SALEM, OREGON, may 21st

Albany Collegiate Institute,

ALBANY, OR.

The Fall Term of this School will begin Monday, Sept. 3d, 1877.

FACULTY:

REV. H. W. STRATTON, A. M., President, and Professor of Mental and Moral Science.

REV. L. J. POWELL, A. M., Principal, and Professor of Mathematics and Natural Science.

H. H. HEWITT, A. M., Professor of Ancient Languages.

MISS CLARA PRICE, B. S., Preceptress, and Teacher of French, Miss DORA SALINGER, Teacher of German, Miss NETTIE PIPER, Teacher of Instrumental and Vocal Music, Mrs. W. S. PETERS, Teacher of Drawing and Painting.

THE COURSE OF STUDY

is such as is common to schools of this grade. CALENDAR: Terms begin September, 2d. No. 10th, 12th, January 25th, and April 15th. Vacation of one week during the holidays. Commencement day June 12th, 1878.

RATES OF TUITION PER TERM.

Primary Department.....\$ 5 00 Common English..... 5 00 Higher Branches, including Preparatory Latin and Greek..... 10 00 Collegiate, including Higher Latin and Greek, Advanced Mathematics, Mental and Moral Science..... 15 00 Modern L. LANGUAGES, each extra..... 5 00 Instrumental Music..... 12 00 Use of Piano..... 5 00 Commercial Department..... 5 00 Incidentals..... 25

COMMERCIAL DEPARTMENT.

During the second and third terms, a thorough course of instruction will be given in Book-keeping and Business forms. At a comparatively small expense, students may secure, here, what would cost them a large sum of money to obtain at a commercial college. It is impossible for any one to become a qualified accountant without a thorough knowledge of the principles of Arithmetic, English Grammar and English Composition; we, therefore, recommend the study of these in connection with Book-keeping.

ELOCUTION.

Special attention given to Elocutionary drill and Oratorical training. Superior advantages offered in this department.

PENMANSHIP.

Mr. JOHN A. BRIGMAN, one of the best writing Teachers in the State, has been engaged to give a thorough course of instruction in systematic Penmanship during the second term.

BOARD.

Arrangements have been made by which girls and young ladies desiring to attend the College can be boarded either by the Principal or Professor Hewitt. Every care and attention will be given as to deportment, health, morals, study, etc. Price per week, including board, lodging, fuel, lights, etc., \$4.00

HEALTH.

Albany seems to be one of the healthiest localities in the State. It has thus far been comparatively free from those much dreaded scourges—Diphtheria and Typhoid Fever.

APPARATUS.

Already a subscription paper has been started and liberally subscribed to purchase a thousand dollar Philosophical and Chemical Apparatus for the benefit of the school. It is confidently believed we will have the amount secured by the 1st of January.

J. A. STRATTON, Attorney at Law, SALEM, OREGON.

Office on State Street, opposite the Bennett House.

BOOKBINDING

In connection with my Printing Business is a complete Bookbinding Department. Fine Binding in all styles. Manufacturing, Musicians and Books bound in any style. Binding made to order. Prices reasonable. Address: E. M. WATTS, Steam Printer and Bookbinder, 216 Grand Street, SEIO.

F. C. SULLIVAN, ATTORNEY AT LAW

OPERA HOUSE, SALEM. S. E. corner, at head of stairs. 7419

PLUMMER FRUIT DRYERS.

Premiums: I will pay a GOLD PREMIUM for the best ten samples of Fruit dried by the "PLUMMER PROCESS" of five pounds each to be delivered to me in East Portland, in time for the Oregon State Fair of 1877. 1st Premium \$10. 2d Premium \$20. 3d Premium \$10. 4th Premium \$5. These Samples will be exhibited at the Fair marked with owner's name.

DO

NOT FAIL to send for our New Catalogue. It contains valuable information for every person contemplating the purchase of any article for personal, family or agricultural use. Free to any address. MONTGOMERY WARD & CO., Original Grand Supply House, 22 & 23 Wabash Ave., CHICAGO, ILL.

Trees, Plants, Spring Lists free. P. F.

PARSON, Bloomington Nursery, Ill.