

SPEED OF SHIPS.

Influence of the Depth of Water and the Dragging From Below.

On first thought the sea's depth seems of small importance if the ship finds depth enough to give her an easy draught. If she can run free apparently it makes little difference whether she has six feet or 600 feet between her keel and the bottom. Such an inference is erroneous, however, for the depth exercises an important influence. The British cruisers Blake and Blenheim were expected to run twenty-one knots, but actually ran two knots less in shallow water. They ran again under the same power, but the depth was between 135 and 165 feet, and their speed was twenty-two knots—one knot over the maximum calculation.

The difference in speed is attributed to the influence of the "wave of translation" displaced by the ship as she moves forward, which acts as a brake. The nearer the ship's keel to the bottom the stronger the friction. A ship drawing twenty-seven feet of water (say a ship of 12,000 tonnage) feels that friction over a depth of 250 feet. According to some calculations, the dragging influence ceases to be felt at a depth equal to ten and one-half times the draft if the ship stands high out of the water.

A curious feature of the matter is that the speed of the ship is as important an element as the depth of the water—that is to say, the influence of the depth on the ship's speed is more or less powerful in proportion as the speed is great. A ship increases her speed more easily over deep water; but, on the other hand, the faster a ship runs the more depth of water she needs to prevent the hindrance caused by the dragging influence of the friction which is always felt when the ship's keel senses bottom. Running ten knots an hour, a ship must have between twenty-six and twenty-seven feet of depth or she is dragged from below. If running twenty knots she needs a depth of 104 to 105 feet, and when running thirty knots she feels the drag over a depth of nearly 324 feet.—Harper's Weekly.

PASSING OF BILLIONS.

The Yardstick For Measuring Space is One Light Year.

If you were asked the distance from San Francisco to London you would not say so many inches, but would give it in miles. If asked the distance from the earth to the sun the answer would be in millions of miles. If asked the distance to the nearest star the answer would not be in millions or billions, but trillions of miles. Even this reply would be too long. Twenty-five million million miles (twenty-five trillion) are too many words, so it is shortened to light years. The yardstick for space is not billions or trillions, but one light year.

This is the difference traversed in one sidereal year, 31,558,149 seconds, by light moving with its sets and fixed specific speed of 186,283 miles per second. Distances traversed by space energy, given by time as in minutes, hours or days, would soon run into cumbersome trillions, so that the time interval used in physics, mathematics, electricity, etc., is always one second. Say one second. Then while you are speaking radiant energy has traversed a distance nearly equal to a line long enough to reach around the equator of the earth eight times.

Twenty-five thousand billions, the distance of the nearest known star, is condensed in 4.26 light years. This is the passing of miles, for the mile in space is about equal to the one-millionth part of the thickness of a spider's thread in comparison with the length of the room you are in.

Draw a scale with the distance in between the earth and sun equal to three inches, then the distance of the nearest star would be thirteen miles. Space traversed by miles per minute would be almost without meaning, for to go out to the nearest star sun at one mile per minute would require 47,528,000 years, not days.—Edgar Lucien Larkin in New York American.

Art of Dressing.

Elegance in dress is too often confounded with extravagance in dress. That is one of the great big errors. What is really needed to make the art of dressing bless him that looks and her that wears is intelligent dressing, and that is a subject worth any woman's study not to the exclusion of all else—any one subject alone will unbalance the mind—but enough to make her a mistress in it. If she cannot be that let her do as we do in all other lines where we wish the best results—apply to a specialist—for dressing, after all, is only another human problem.—Dress.

Commendable Caution.

"I wish," said the dashing bride, "that we could arrange to take our wedding trip in an airship."
"I don't know," replied the cautious youth, "whether it would be well to take chances on being obliged to take our first falling out so seriously."—Washington Star.

Sympathy From Pa.

Geraldine—What did pa say when you asked him for my hand? Gerald—He said that he was just as sorry for me as if I were already one of the family.—New York Press.

Inherited Traits.

Knicker—Jones is very keen of hearing. Bocker—No wonder! His father was a pastor who always heard calls, and his mother always heard burglars.—Judge's Library.

Laughing cheerfulness throws sunlight on all the paths of life.—Richter.

SELLS LAND

Matt Mueller, who resides just across the river has sold fifteen acres of his fifty-five acre farm to Mr. Hensley, a brother-in-law of Mr. Jephcott. The sale includes the Mueller house and outbuildings. The purchaser expects to locate here soon, and Mr. Mueller will at once commence the erection of a new house on his remaining forty acres.

BIRTHDAY SURPRISE

About 30 young people gathered at the Morton home Monday evening at the request of Mrs. Morton as a surprise birthday party for Miss Mattie Dunagan. The time was very pleasantly spent playing games on the spacious lawn. Refreshments were served.

NEWPORT EXCURSION

Another Newport excursion will be run Sunday by the Corvallis & Eastern. The train will leave Kingston at 7:30. A number of local people are planning to go.

OFF TO THE COAST

Mr. and Mrs. J. E. Sloper, Messrs. Dare Sloper, Guy Sloper—Ed Blakely, Paul Blakeley and Oliver Leslie and Misses Emma Frank, Cora Cooper, Carrie McIntire went to Newport Monday for a vacation at the beach.

Arnold Funk went to Newport yesterday.

E. E. Lee was in Salem on business Monday.

Geo. Keech was a business visitor to Aurora Tuesday.

Herschel Shreve went to Portland to work last Friday.

Cheer up! It might change and get a whole lot worse.

Walter Mayo is taking a two weeks vacation in Newport.

Mr. and Mrs. Carl Seize of Jordan were in town Monday.

Geo. Brown went to Portland on business the first of the week.

G. W. Adams of Marion was in town Tuesday writing insurance.

S. C. Stewart went to Newport last Sunday for a two weeks' stay.

A. C. Hyrons and wife of Shelburn were over in their auto Monday.

Frank Riesterer and wife of Sublimity were in town Sunday evening.

Wanted—Good driving horse. Inquire at Mail office.

Henry Mutschler and family were in Sublimity Sunday visiting Mrs. Mutschler's parents.

Jos. Susbaur of Sublimity visited at the home of his daughter, Mrs. W. F. Klecker, Sunday.

Clarence Anderson is here visiting at the home of his parents, Mr. and Mrs. Marvey Anderson.

Miss Mabel Gardner is working in the Beauchamp Drug Store in the absence of Dare Sloper.

J. M. Ringo and family, Mrs. John Lau and Miss Hedwig Lau drove over to Silver Creek Falls Sunday.

Trespass Notices for sale at this office, printed on heavy cloth, 10 cents each.

G. D. Trotter is back in Stayton again after quite an extended trip to eastern Washington and other places.

For Sale—2-year-old colt, roadster, at a bargain. O. E. Gardner, 8-15 Stayton.

Mrs. E. D. Alexander and daughter Marion, returned home Saturday, after a week's visit with friends in Corvallis.

Doc. Korinek and Lu Thomas claim to have caught over 900 fish during their camping trip. They have some nice pictures to prove it too.

PICNIC SUPPER

The Eldeen Club ladies entertained at a picnic supper in the grove last evening. A delicious spread had been prepared, and was fully enjoyed by those present. The arrival of the sudden thunder shower forced the party to break up somewhat earlier than had been planned.

UNDERTAKER HERE

N. C. Low of Silverton has charge of the Ridge Undertaking Parlors, as Mr. Ringo, who is assistant cashier of the Farmers & Merchants Bank, is very busy during the absence of the cashier, S. L. Stewart at Newport.

COUNCIL MEETING

The city council held their regular monthly meeting Tuesday evening. No special business was transacted. Good by, street improvement this year.

BAND CONCERT

The Stayton Band gave a nice little concert on our streets last Saturday evening. The boys are to be congratulated on their improvement, and we hope it will not be long until they can afford those uniforms.

MARRIAGE ANNOUNCED

Invitations are now out announcing the marriage of Hally Grace Shelley to Archie Eldon Bradshaw of Albany, Monday, August 19, at the home of the bride's parents in this city.

D. E. Clow of Mill City drove through town Wednesday on his motorcycle. He was on his way to Portland.

Wanted:—You to buy a first class four-year-old Jersey milk cow for \$55. Inquire of Guy Kearns, Stayton. 1tx

The infant son of Mr. and Mrs. Henry Smith died Thursday, after a few days illness of pneumonia. The funeral was held the next day.

J. P. Davie, Ellis Hill, John Bailey and Tom Riggs are in the mountains on a fishing and hunting expedition. There will be stories galore when they return.

Dr. Pintler, Miss Alta Hobson and Mr. and Mrs. C. A. Beauchamp, went to Salem last night to see the production of "Louisiana Lou" at the Grand.

Did you ever stop to think that the right time to advertise heavily is when business is dull? If you have all you can do, what is the use to advertise for more?

Miss Eva Darby of Stayton received a nice box of oranges and grape fruit from San Diego California this week. The Stayton Mail man got a sample from them.

Dr. W. N. Pintler and Miss Alta Hobson went to Elk City Sunday in the Doctor's auto. They were accompanied as far as Marion by Lura Thomas and wife.

Geo. Spaniol was in Walla Walla, Washington on a business trip the first of the week. While there he saw the Stayton boys who are at work in the harvest fields.

Mrs. Sarah Peters of Madras, Ore., Mrs. Theresa Bechtold of Portland and Mrs. Jack Ditter of Sublimity visited with their sister, Mrs. W. F. Klecker of this city Sunday.

FOR SALE CHEAP—A 24 in. Buffalo Pitts threshing machine with 8 horse power engine and wood saw. All in good repair and ready for work. Would take some cattle as part pay. For further particulars address, 8-15x John Girardin, Turner, Ore.

E. Sutton Mace, pastor of the M. E. church is preaching a series of sermons on "The Christian Church." The subject next Sunday morning will be, "Methodism." In the evening he will preach on, "A Great Question once asked by a Lawyer, 'Which is apropos today?'"

Mrs. Roxie Lake of Port Orchard, Wash., who has been visiting with her sister, Mrs. Joe Miller, was called home by the news that her husband had been injured in a fall. Mrs. Miller accompanied her sister to the northern town, but is expected to return this week.

HARVEST TIME IS HERE

During this season you need many things, and you want just the right articles, sometimes very quickly. Whatever you may need, remember we have it—just the right thing, in the right quality, at the right price. We are headquarters for all staple articles, and other goods you want at harvest time.

Flour, Canned Goods, Cured Meats

Salmon, per doz.	\$1.60	HANDBAGS--SEE THEM! A new line, which includes some extraordinary values, from 75 cents to \$2.50
Corn, per doz-	\$1.15	
Tomatoes, per doz.	\$1.10	
Oysters, per doz.	\$1.00	

Dishes Now at the Red Tag Prices

THOMAS-MAYO CO

Sold Out

Having sold our lumber stock and leased our mill property to Jos. Petzel, we have discontinued our lumber business in Stayton. In order to close our books and complete the transfer of the business, we request all persons owing us to call at once at the mill office and settle their accounts. We have only a limited time to settle this matter, so we will appreciate your promptness. 8-8-12 Lee Brown & Sons.

CARD OF THANKS

We wish to thank sincerely all our kind friends who extended us assistance and sympathy during the illness and death of our little son, Ralph Clark Smith. We also greatly appreciated the beautiful floral offerings at the funeral. Mr. and Mrs. Henry Smith.

Ed Trask of Lyons went through our city on his way to Salem Saturday.

The Santiam valley was visited by quite a heavy rain this morning. Although the crops were not specially needing it, the downpour will help late meadows and pasture.

A young people's service is being held each Sunday evening by young people at the Methodist Church. The young men and women are especially invited. The hour is seven o'clock.

NOTICE TO CONTRACTORS

Notice is hereby given that the undersigned will let a contract to clear a right of way 60 ft. wide, from a point near the Battle Creek school house, running in a westerly direction two and one half miles along the right of way of the Salem, Stayton and Eastern Ry. in Marion Co., Ore.; Also a contract to clear a certain right of way over what is known as the John Rhoten farm, situated about one and one quarter miles from West Stayton, Marion Co., Ore.; Also over and across the Dively tract of land between West Stayton and Stayton, Marion Co., Ore. The bids for said work will be received up till the 20th day of August, 1912, at the hour of 10 o'clock a. m. Further details of said work can be had from the undersigned in Salem, Ore. J. F. MOUNCE.

Jackson county's tax this year is \$718,000, and of this \$500,000 has been paid up.

Men's Summer Toggery

NOW THAT WARMER WEATHER IS HERE, YOU WILL WANT YOUR SUMMER TOGS.

**Comfortable Negligee Shirts
Nobby Summer Neckwear**

and other neat goods for summer use, we have in great variety and our usual quality. Be up to scratch and make your pick now.

CHAS. GEHLEN

DAILY TRIPS

Downing's pack train will make daily trips from Detroit to the Hot Springs during the summer. Special trips to the lakes. For further information write J. M. Downing, Detroit.

Clifford Harold was in town this week.

F. K. Spalding returned to Portland Monday.

Jake Missler is working for Henry Mutschler.

S. H. Heltzel made a business trip to Albany yesterday.

E. H. Hobson is back from his trip to Eastern Oregon.

Adam Burns brought the first load of new wheat to market yesterday.

Miss Nora Crabtree and Mrs. A. L. Murphy went to Newport to-day for a few weeks stay.

The convicts are soon to be done with their work at the rock crusher north of Sublimity.

M. W. Wheeler and son and Merrick Spalding came through from Ashland in an auto last week. Young Wheeler and Spalding are staying here with the latter's sister Mrs. S. H. Heltzel for a while. Mr. and Mrs. Wheeler accompanied by Mrs. M. J. Kitchen of Stayton left for Portland this week.

A. G. Raab, superintendent of the North Bend schools, advocates running the public schools all the time, cutting out vacations.

OREGON AGRICULTURAL COLLEGE

This great institution opens its doors for the fall semester on September 20th. Courses of instruction include: General Agriculture, Agronomy, Animal Husbandry, Dairy Husbandry, Bacteriology, Botany and Plant Pathology, Poultry Husbandry, Horticulture, Entomology, Veterinary Science, Civil Engineering, Electrical Engineering, Mechanical Engineering, Mining Engineering, Highway Engineering, Domestic Science, Domestic Art, Commerce, Forestry, Pharmacy Zoology, Chemistry, Physics, Mathematics, English Language and Literature, Public Speaking, Modern Languages, History, Art, Architecture, Industrial Pedagogy, Physical Education, Military Science and Tactics and Music.

Catalogue and illustrated literature mailed free upon application. Address: Registrar, Oregon Agricultural College, Corvallis, Oregon.

School Year Opens, September 20th.

O. M. Baker of Kingston has grain sacks at 9 c apiece.

For Sale—Pure-bred white Orphingtons. Inquire C. D. Stayton. 8-15-x

Henry Mutschler has a new 25 cal Remington automatic rifle. Look out, Bre'r B'ar.

For Sale—Modern story and a half residence, cor. Ida and Second Sts. Call tf. Mrs. M. J. Kitchen.

W. F. Klecker returned from his eastern trip last Thursday evening. It is unnecessary to state that he had an enjoyable trip.

The annual picnic of Iowa people living in this section of Oregon will be held at the State Fair Grounds, in Salem, Aug. 15. All Iowans take notice.