

SPECIAL SERVICE IN FORECASTING OF WEATHER OUTLINED

Mariners, Fruitgrowers, Stock-raisers and Airplanists Are Few of Many Who Benefit.

This is the third of a series of articles on the making of weather forecasts and observations written exclusively for The Sunday Journal by Edward L. Wells, meteorologist, United States weather bureau, Portland.

In addition to the regular daily forecast of weather and temperatures the weather bureau carries on several special services for the benefit of particular interests.

Probably the most important of these special services is the one devoted to the issue and dissemination of storm warnings for the protection of shipping on the seacoast and on the Great Lakes.

Whenever severe wind storms are expected on the lake or any part of the sea coast, telegraphic warning is sent to all ports likely to be affected. These warnings are distributed by telephone and through the press, and by means of flags and lanterns. Most of the important ports are now provided with steel towers upon which the flags and lanterns are displayed.

The "flags" are of various shapes and colors, and are for display in daylight. The lanterns are provided with powerful lamps, such as are used in locomotive headlights, and are equipped with specially constructed lenses which throw the light rays out horizontally so that they can be seen from a great distance.

So efficient is that service that the loss of vessels by storm along the coast has been reduced to a minimum. Vessels leaving port in the face of storm warnings run the risk of losing their insurance.

In connection with a recent hurricane on the Gulf coast it was remarked that the center of the storm was "lost", that is to say the center could not be accurately located, for there were no vessels in the gulf from which radio reports could be obtained.

In the case of some recent hurricanes the loss of life on land was much lessened by advance information given out by the weather bureau.

Of particular interest in the Pacific Northwest are the fire weather warnings. Forest fires depend on weather in three ways. They spread best when the period of weather sufficiently dry to ripen or dry up the green growth; their spread is much more rapid when the air is dry and the wind is high; in some sections a large percentage of forest fires are caused by lightning.

In many localities, during the haying season, special forecasts are issued whenever several days of dry weather are expected.

In parts of the country where a large acreage of fruit is grown, it is sometimes essential to take weather conditions into consideration in planning spraying operations. During 1919 a special forecast service was maintained at Rochester, N. Y., for the benefit of fruit growers in this connection.

Cold wave warnings are issued in winter whenever a sudden change to severe cold is expected in any section. These are helpful in connection with the operation of heating plants, hydro-electric plants and water systems, the running of trails, shipping of perishable products, unloading of ore.

The contestants in the recent trans-Atlantic airplane flight received detailed forecasts covering wind and weather to be expected over the course. Some of the best forecasters in the bureau were assigned to this work, and gave it their entire attention till the flight was completed.

During the war trained weather forecasters were on duty with the troops at all times. Their special value in connection with the sighting of heavy artillery and the use of gas, but were useful also in connection with aviation. The most accurate work with the movement of troops and equipment.

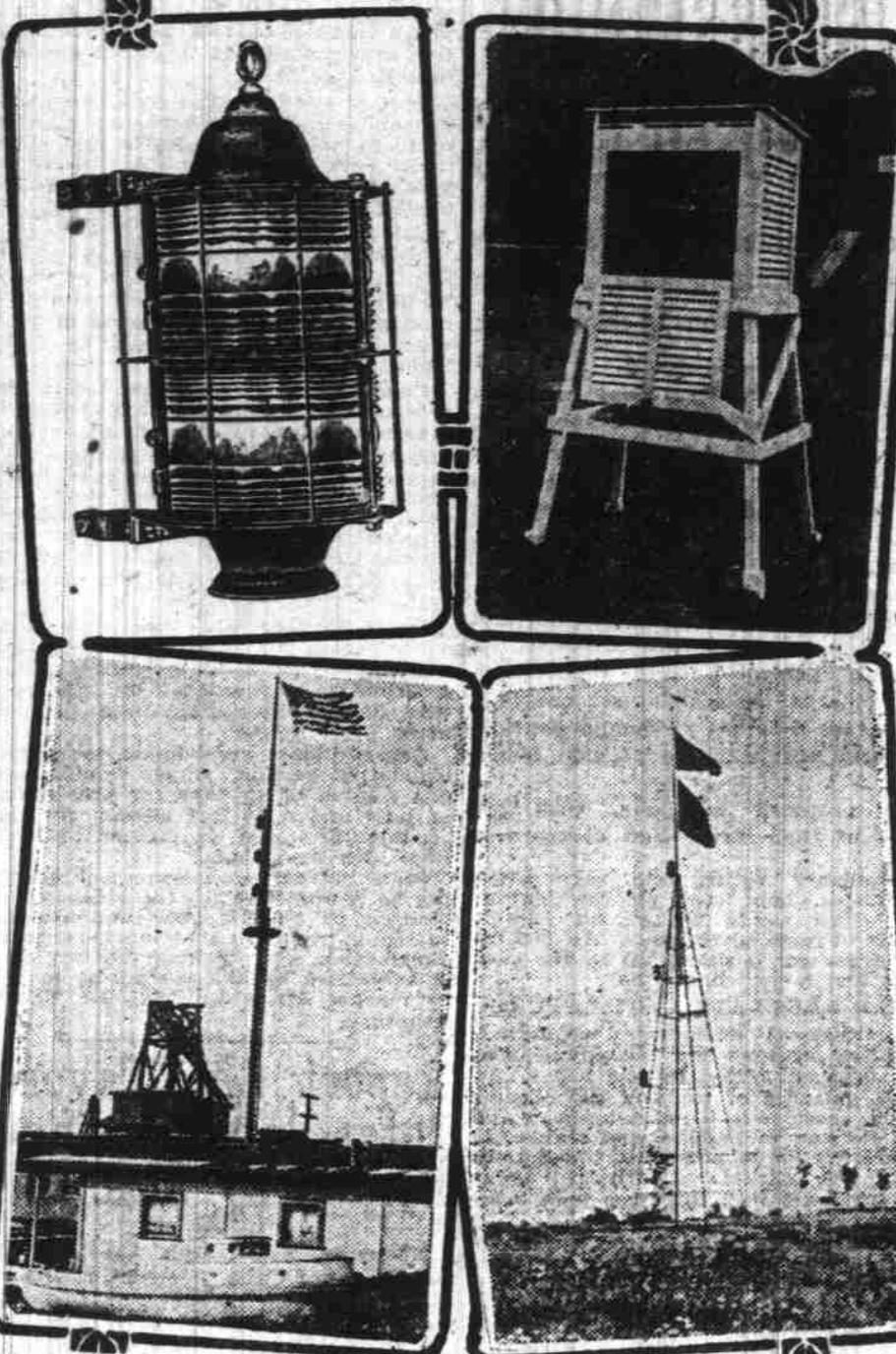
Two of the most important lines of special forecasting are those having to do with river stages and floods, and with injury to crops by frost. These will be treated in separate articles.

The next article will describe some of the studies of the upper air now being made.

Corvallis Intends To Curb Speeding. Corvallis, Aug. 14.—Violation of laws and ordinances by automobile and motorcycle drivers has become so flagrant in Corvallis that the mayor has determined to put an end to it if possible.

Legion Posts to Picnic. Newberg, Aug. 14.—Members of the Newberg and McMinnville American Legion posts, their wives, families and sweethearts, plan to hold a picnic at Lafayette locks on August 22. Sham-bathes will feature the day.

WEATHER BUREAU WARNINGS



Above, left to right—Electric lantern used on weather bureau storm warning towers; standard instrument shelter used at weather bureau substations. Below, left to right—Storm warning pole at Everett, Wash. Most storm warning stations are equipped with steel towers from which flags and lanterns are displayed.

Wins Race to City Hall as First to Settle Paving Bill

It is a common enough occurrence for property owners to run to the city hall in protest against the high cost of improvements, like paving, but for the first time in the memory of Sigel Grutze, the oldest employe, a property owner clamored at the gates Saturday morning for the privilege of being the first man to pay for some city work assessed against him.

The unusual visitor was Sergeant John Quinton, retired veteran of the police department, who made anxious inquiry as to when he could pay in a lump sum the assessment against his property on East Sixteenth street, in Sellwood, where a sidewalk paving job was recently completed.

Quinton informed Commissioner Barbur that several other property owners were striving for the honor of being the first to make payment for the work, which was done by the municipal paving plant, and that he did not want to lose out in the race.

He was told to return in a month or so when the final estimates will have been made, the assessments advertised and the remonstrances passed upon.

Quinton commented on the excellence of the job, Commissioner Barbur declared.

Big Band of Sheep Reported Dying; Are Without Water

Answering a call from the city attorney at Newport who said a large band of sheep were dying from lack of drinking water, the Oregon Humane society yesterday dispatched a man to the region to see that the animals got water and the owner, if he could be found, arrested.

"Sheep may get along without water when the grass is green and fresh," said Mrs. F. W. Swanton, indignantly, "but the grass is now dried up. The society only gets \$10 from the state for carrying on this work, but the loss in sheep would be \$10,000, if the animals are permitted to die off."

Anderson New Head Of State Osteopaths

Dr. J. E. Anderson of the Selling building was elected president of the Oregon State Osteopathic association at the close of its annual convention Saturday. Joe Ingle of La Grande, was chosen vice president. According to the custom of the society, the president and vice president will themselves appoint the other officers.

Woman's Minimum In California, \$16

San Francisco, Aug. 14.—(L. N. S.)—Twenty thousand women workers in California are affected by a new wage order issued today fixing \$16 a week as the minimum wage for experienced women and minor workers. The award is effective September 25.

Greek Newspaper Plants Are Mobbed

Athens, Aug. 14.—(L. N. S.)—Crowds of political adherents of Premier Venizelos of Greece, who was attacked and wounded at Paris Thursday night, today wrecked the plants of a number of "opposition" or royalist newspapers. The government is taking strong repressive measures to maintain order.

1400 REGISTERED BUYERS' WEEK GET PORTLAND SPIRIT

More Than Half the Visiting Merchants Buy in Excess of Sum for Traveling Guarantee.

More than 50 per cent of the merchants who registered for Buyers' week in Portland the last few days, made purchases aggregating totals sufficient to guarantee the payment of their traveling expenses to this city, according to final records compiled by the Buyers' week committee Saturday afternoon.

A total of 750 merchants bought more than \$500 worth of goods each last week from Portland jobbers and manufacturers. This total alone would make for a minimum of \$375,000 worth of goods purchased last week.

Many of the visiting buyers bought goods valued at thousands of dollars, and every one of the 1400 registrants purchased some goods. From this basis the committee members estimate that the value of goods purchased during the last week must amount to about \$1,500,000.

The bringing of this vast amount of money into the city was a sufficient guarantee of the success of the eighth annual gathering of buyers. In addition to this, there were a number of other phases which made the gathering worth while.

Of the 1400 visitors at least 1000 were from states outside the Northwestern group of Oregon, Washington and Idaho. Each of these visitors learned something new of the business of the Oregon country, and of the industrial growth of Portland and of the rapidly with which this city is developing as the trading center of the Pacific coast.

Some of the buyers traveled long distances. There were representatives here from Alaska, from two provinces of Canada and from 14 states west of the Mississippi river.

Entertainment features of the week were a success throughout. The visitors were pleased with the hospitality shown them and declare they have found new thoughts to carry back to their friends. Some have decided to bring their families here for their vacations this fall, others are impressed with the trading opportunities presented here and have announced their intentions of coming back soon to look over the field.

Committeemen agree that the 1920 convention of buyers has been the most successful of any of the gatherings held in Portland. Seattle and Spokane held Buyers' weeks last week, but neither could rival the favorable as those reported from this city.

Streetcar Service Tied Up by Strike

Jacksonville, Ill., Aug. 14.—(U. P.)—Refused an increase of approximately \$1 a day motormen of the local street railway took their cars to the barn at noon today. Not a wheel turned this afternoon.

Shirts to Your Order

for \$2.50 each, that is, FOR THE MAKING. Come and buy our materials at actual cost price or BRING YOUR OWN Making \$2.50

and no conditions other than you buy two or more shirts and pay the cash. Our ability to do this depends entirely on volume, and we believe by this reduction, which is 20% to 40%, we will get the volume.

It will take the first dozen shirts to pay the overhead, but after that, OH BOY, we begin to get the "KALE."

The reason we said above that we would ATTEMPT this is that the percentage of profit is so small that if we do not get volume we certainly cannot continue at these prices, but of course, you don't care—we'll take a "shot" for about 30 days—in the meantime you will benefit by it whether or not we succeed.

We have in stock Percales, Madras, Oxfords, Flannels and Silks from 50c per yard up, which we will sell you at ACTUAL COST PLUS \$2.50 FOR MAKING.

Come in Monday and investigate this proposition—it won't cost you anything "to lookitover," and we will save you a lot of money besides guaranteeing you a perfect FIT and SUPERIOR WORKMANSHIP.

Jacobs Shirt Co.

RALEIGH BLDG. 327 Washington Street Cor. Sixth ESTABLISHED Since "Heck" Was a Pup 1888

LOCAL AGENTS WANTED IN ALL TOWNS. WRITE US



Don't Let Anything Prevent Your Attending This Great Clean-Up Sale of Broken Lines of Embroideries

Laces, Ribbons, Trimmings, Handkerchiefs, Neckwear, Veils, Etc. Dozens and Dozens of Bargains at a Sensationally Low Price—Only

10c

MISS THIS SALE AND THE LOSS IS YOURS! It is a most sensational clean-up of all old lots, broken lines and slightly soiled or mussed merchandise in our Fancy Goods section.

When this sale starts you'll have choice of LACES in linen and cotton Torchon Edges and Bands, French Platt Vals, narrow and medium Venise Edges, Imitation Crochet, Colonial Edges, Fillet, etc., all at 10c

EMBROIDERIES, narrow Cambric and Longcloth Edges, broken Baby Sets, Beadings, etc.—all in desirable patterns and finished with fine, firm edges, all at 10c

RIBBONS—Narrow fancies, discontinued colors in Satins, Messalines and Taffetas—odd pieces in Picot edge—Stripe Hat Bands, etc., all at 10c

TRIMMINGS—Both narrow and medium width Silk Bands, Metal Braids, Silk Edge Cords, Silk Medallions, black and colored Silk Tassels and Bead Drops, etc., all at 10c

HANDKERCHIEFS for both women and children. They come in Sheer Lawn printed, or with embroidered corner in white or colors, all at 10c

SLIP-ON VEILS—This is not a hair net veil, but a genuine imported veil with motif—comes in all colors and only, at this sale. 10c

NECKWEAR—All soiled or mussed Collars, Sets, Jabots, etc., also odd colors in Windsor Ties. Dozens and dozens of pieces to select from, all at 10c

No Phone or Mail Orders—None Exchanged



Do Your Shopping at This Store Before 1 P. M. Wednesday, as

"The Store That Undersells Because It Sells for Cash"

We Close at This Hour During the Months of July and August

Jantzen's Bathing Suits in all styles, sizes and colors. Men's, Women's and children's. All prices, \$3.50 to \$11.50.

Prinster's Cotton and Worsted Bathing Suits in all styles, colors, sizes—\$3.00 to \$8.50 suit. Both women's and children's.

Exquisitely Dainty and Beautiful Fancy Dress Voiles In a Wonderful Underpriced Sale at 98c Yard The Season's Greatest Values



Most Exceptional Values at This Sale of Women's Silk Hose 98c Pr. For Choice From Broken Lines Selling Regularly Up to Twice This Price



Just Received: Women's Silk and Mercerized Hosiery In the New Heavier Shades at \$1.50 Pair Sizes 8 1/2 to 10

At 59c We are closing out a special lot of women's Knit Bloomers in flesh color—well-wearing garments worth a great deal more. At 49c At this low price we are closing out a fine lot of children's Knit Bloomers in white, flesh and black. Sizes 4 to 6 years.

Well-Known Makes of First Quality Silks and Satins Decidedly Underpriced

Everything in Bags and Suitcases See Our Window Display

Prices Have Broken on Summer Lines of Men's Underwear Come—See How Well You Will Be Repaid by Taking Advantage of the Underpriced Assortments in Our Men's Section

Our Store Now Opens at 9 A. M. Store Closes at 5:30 P. M. Saturdays at 6 P. M. The Most in Value—The Best in Quality