

# Rain Dries Air, Says Scientist

Some Interesting Paradoxes Are Explained by Dr. Humphreys of Smithsonian Institution.

## HOTTER SUN—COLDER EARTH

Old Sol Rises Before He Is Up and Sets Before It Goes Down—Bent Rays of Light Account for This Paradox.

Washington.—A rainstorm dries the air; more goes up than comes down; as the sun sets, the air grows warmer, the hotter the sun grows, the colder the earth becomes; the sun rises before it is up and sets after it is down; these are strong, statements and sound like a fairy tale, but they are all true. Dr. W. J. Humphreys, quoted in the annual report of the Smithsonian Institution which has just been made public, explains all of them. They are perfectly well known to scientists, if not to laymen. As everyone knows, Dr. Humphreys declares, water evaporates and is taken up in the air as vapor. This action is continuous all over the earth and the atmosphere would soon become very soggy if it weren't dried out. Rain is the collection of rain droplets, and precipitation of these moisture particles, consequently the more it rains the less water there is left in the atmosphere, or the drier the air becomes.

The third paradox is merely a way of stating that the warmest part of the day is not at noon, when the sun is at meridian or overhead and should accordingly be pouring down greatest heat, but several hours later in the afternoon. That is because, the surface of the earth and the lower layers of air continue to absorb radiation from the sun. While it is not yet universally conceded that the next paradox, "the hotter the sun, the colder the earth," really is true, Dr. Humphreys states the evidence in favor of it is already very strong.

Another paradox explained. The paradox of the sun rising before it is actually up and setting after it has actually gone down is explained by the bending of light waves when passing through the air. A stick when placed in clear water seems to bend; a light ray when sent through the air does actually bend. The rays from the rising sun are bent when they strike the air envelope. This angle varies according to well known laws but on the average the light from the sun is bent 34 1/2 seconds of degree, so that the upper limb of the sun when first seen is actually half a degree below the horizon. As the angular distance of either sun, moon or star is less than this fraction it follows that when the sky is sufficiently clear the whole apparent position is geometrically above the horizon.

Contradicts Old Saying. While the reverse is not absolutely correct, astronomy fact is not so simple as it seems. The sun or moon set, because of the slight modification of refraction due to earth's rotation, nevertheless the sun appears to set before the sun has actually gone down, before it is seen by a terrestrial observer.

# Woman Making Record Killing Wyoming Snakes

Gillette, Wyo.—Gillette ranchers have declared open season on rattlesnakes, and a woman, the head of the list a peck-and-neck race in disposing of the rattlers. To date she has killed 100 in the Pleasant Hill community, which is a close second to the number reported by Dick Bell and Hill Jones, who have slain only four from this dens.

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# WE STOCK

LAMBING-OFF IS PROFITABLE

Demonstration in Indiana County So Successful Last Year That Another Is Planned

(Prepared by the United States Department of Agriculture.) A lambing-off demonstration in La Porte County, Ind., proved so successful last year that plans have been made for a similar one this year. A report received by the United States Department of Agriculture last year from a 20-acre field was planted to corn and to soy beans. The bean seed for all but 60 acres was inoculated. 200 lambs, purchased for \$6.00 a hundred pounds, were turned in to harvest them. The lambs were sold for \$10.25 a hundred pounds, with a total profit of \$284. After the lambs were removed from the field about 30 bushels of corn were picked up and some hogs and other livestock turned in to clean up the remainder.

# HESSIAN FLY IS ENORMOUS PEST

Farmers Are Urged to Wait for Local Fly-Free Date Before Sowing Any Wheat

## HEAVY INFESTATION IN PAST

Great Deal of Crop Neglecting Lost Last Spring by Those Unwilling to Wait Until Danger Line Had Been Passed.

(Prepared by the United States Department of Agriculture.) Wheat growers are urged by the United States Department of Agriculture to observe their local fly-free date for sowing in every state before the Hessian fly in the past the state experiment station and the county agents have taken steps to work out a safe date, after which sowing might be started. It was found last spring that a great deal of wheat was needlessly lost by those who were unwilling to wait until fly emergence was over, or who were not convinced of the date of late sowing.

# CONTROL LEAFHOPPER BY USE OF BOREAUX

Mixture Is Best Remedy, Says Department of Agriculture.

## Combined With Nicotine Sulphate Acts Little More Quickly but Is Expensive—Spraying Must Be Thorough

(Prepared by the United States Department of Agriculture.) Results of two years' work have shown that bordeaux mixture is best for the leafhopper, control "hopburn," and is the best remedy. Bordeaux mixture is a mixture of copper sulphate and a pound of copper sulphate and a pound of water mixed with 10 gallons of water.

Bordeaux combined with nicotine sulphate acts a little more quickly in killing lines of leafhoppers than does bordeaux alone, but the results obtained do not appear to justify the added time and expense of using the mixed remedy. It is suggested to make the application thorough. Additional details are contained in the bulletin, which may be had free upon application to the department at Washington, D. C.

# GIRL NOW WELL AND STRONG

Daughter Took Lydia E. Pinkham's Vegetable Compound as Mother Advised

Wasson, Ohio.—"My daughter always had backache and leg-ache at certain times, causing her to stay in bed. I could not get her feet at all. She was so weak that she could not get up. I read about Lydia E. Pinkham's Vegetable Compound and I bought a box. I gave her a few pills and she was able to get up. She is now well and strong. I give you my permission to publish this as a testimonial."—Mrs. A. M. BURKHOUSER, Route No. 2, Box 1, Wasson, Ohio.

Something out of balance will affect the blood, causing it to get too thick or too thin. The proper adjustment made, all is well. So it is with women. Some trouble may upset you completely. Lydia E. Pinkham's Vegetable Compound will correct the cause of the trouble. It is a natural remedy and will disappear as they did in the case of Mrs. BURKHOUSER's daughter. MOTHERS—It is worthy of your confidence.

# HAS LARGEST ANNUAL INCOME

New York State Gets Eighth of Total for the Nation

Analysis of Distribution of Income by States Shows Diversity in Per Capita Income in Different States. New York—New York leads every state in the Union with annual income of \$9,074,850,000, or more than one-eighth of the total national income, according to figures announced by the National Bureau of Economic Research, Inc. Nevada brings up the rear of the procession of states with

# MAKING TEST WITH PEANUTS

Government Farm at Bettavia Experimenting With Goobers as Feed for Hogs

Is a soft, oily fat on a hog, produced by feeding peanuts, a characteristic which can be inherited and which will persist regardless of the nature of the ration fed the offspring. That is one of the interesting questions to be investigated by the United States Department of Agriculture at the experiment farm at Bettavia, Md. Both the brown and light types will be used, the former to be represented at the start by 4 Tamworth gilts and the latter by 4 Poland China gilts.

# HANDY TROUGH TO FEED HOGS

Animal from Gets More Than His Share

Feeding hogs in the usual manner results in wasted feed and many times one hog will get more than his share. A person can, of course, get into the pen and pour the feed directly into the trough, but usually the hogs try to get into the pen and make a mess of things, writes Paul Gorton, editor of the Hessian Fly Campaign.

# LOOK OLD?

Dr. J. D. Kellogg's Asthma Remedy

Dr. J. D. Kellogg's Asthma Remedy is the most potent of all remedies for asthma, bronchitis, and other respiratory ailments. It is a natural remedy and will disappear as they did in the case of Mrs. BURKHOUSER's daughter. MOTHERS—It is worthy of your confidence.

# 16799 DIED

In New York City alone from kidney trouble last year. Don't allow yourself to become a victim by neglecting pains and aches. Guard against this trouble by taking

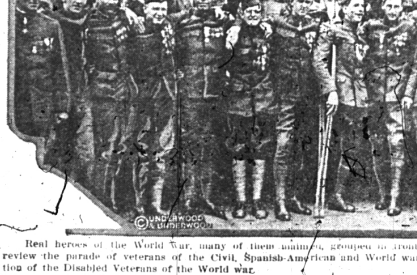
GOLD MEDAL HARBLEN OIL CAPSULES. The world's standard remedy for kidney, liver, bladder and uric acid troubles. Sold by National Remedy since 1866. All druggists, three sizes. Look for the name Gold Medal on every bottle and accept nothing else.

# Why They Call It the Melting Pot



Here is an amusing example of the democracy and cosmopolitanism of America—three Japanese youngsters doing a Dutch dance, wooden shoes and all, at a school in Monte Bello, Cal.

# Heroes of World War Watch Other Veterans March



Real heroes of the World War, many of them disabled, grouped in front of the city hall in San Francisco to review the parade of veterans of the Civil, Spanish-American and World wars which was a feature of the convention of the Disabled Veterans of the World War.

# CUPID LETS DOWN THE U. S. BARS

Russian Refugee Stowaway Permitted to Enter Country. First Officer of the Mantowoo Falls in Love With Girl He Found in Hiding on Ship—Passports Are Waived. Washington—Love came to Anna Yivdenko, a Russian refugee stowaway on the high seas, after she and her companion, Eugenia Bonar, had been discovered hiding on the American steamship Mantowoo, bound from the Black sea to Baltimore.

# CLEAN WATER IS NECESSARY

Nothing Discourages "Growth Impulse" Quicker Than Hot Hankering for a Drink. Pure clean water is all that's needed for all kinds of life. Nothing encourages the "growth impulse" in a dog as wandering around looking for a drink of water when it is thirsty.

# FEED USED WHERE PRODUCED

When Hauled Aboard on Trucks and Railroads the More Expensive It Becomes. The purpose of feed is to feed livestock, and the feed is hauled about in trucks and railroads, the more expensive it becomes. For this reason feed should usually be fed where it is produced.

# Cattle for Market

Success in growing cattle for the market depends in large degree on the kind of care that is produced. No amount of proper feeding will overcome mistakes in breeding and formation. Self-Feeding Sows. Some breeders are very successful in self-feeding sows during the suckling period. Experimentally, this practice has given better results than hand feeding.

# USE MILLET FOR LATE FEED

Small Area of Land May Be Prepared and Sown at Little Cost—Stock Thrive on It. Many farmers find a late patch of millet helps out in feeding. A small area of ground, provided it has not been left until too weedy, may be prepared and sown at a small cost for feed of labor, and considerable feed produced in ordinary seasons.

# EVERY WEED IS BIG ROBBER

Take Up Moisture and Plant Food Needed by Different Vegetables. Every weed in the garden robs the plants of moisture and of plant food as well as crowds the vegetables. Anything dead of garden weeds is just as applicable to the whole farm. Weeds grow to sharpen the toes and go after them.

# Experiments for Gardener

There should be a more general practice among gardeners of making simple tests of varieties, fertilizers, etc. They involve very little labor and can be made to be of great value in making plans for future operations. Poison Gas Grasshoppers. Poisoned bran mash gets the grasshoppers. Don't hesitate when they appear. Get busy.

# PICTURE SHOWS BEE-KEEPING

Film Outlines Bee Practices in Handling Honey Gatherers and Control of Disease. Bee keepers will be interested in a new motion picture prepared by the United States Department of Agriculture showing the best practice in handling bees and the control of bee diseases. The film, which is entitled "Keeping Bees at Work," is intended to supplement a picture entitled "Beekeeping in the Home." It is issued some time ago for most popular use.

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# Then Father Flared

A young man was wheeled a perambulator to and fro in front of his house. He looked hot, but contented. "My dear!" came a voice from an upper window of the house. "Now let me alone!" he called back. "We're all right." An hour later the same voice, in a different key, called out: "Arthur, dear!" "Well, what do you want?" he responded. "Anything wrong in the house?" "No, dear; but you have been wheeling Father's doll all the afternoon. Isn't it time for the baby to have a turn?"—Chicago Herald.

# Sure Relief FOR INDIGESTION

BELLAN'S HOT WATER SURE RELIEF. Kill All Piles! They SPREAD. Kill All Piles! They SPREAD. Kill All Piles! They SPREAD. Kill All Piles! They SPREAD. Kill All Piles! They SPREAD.