

METEOROLOGY

Spring May Be Cold Despite Little Snowfall in Canada

WHEN the snow blanket is thin in southern Canada at the end of March it is no proof April will bring sunshine and showers to northern United States. This, in effect, is the conclusion reached by R. H. Weightman, of the U. S. Weather Bureau in Washington, D. C., who investigated the popular idea that heavy winter snowfalls in Dominion territories mean chilly springs for states along the border.

Although Mr. Weightman found that during the thirteen-year period from 1916 to 1928, warm Aprils were preceded by snowfalls below normal in a number of cases, he does not believe any consistent relationship is indicated.

For the North Atlantic States the March Canadian snowfall was heaviest during the recorded period in the winter of 1923. But that year the April temperature in these states was only a negligible amount below normal. Other years, such as 1917 and 1926, had less snow in March but much lower temperatures in April. Likewise, in 1920, the April temperature was below normal while the snowfall was also under the standard mark.

Records were studied by Mr. Weightman for states from the Great Lakes area along the Canadian border to the Rocky Mountains, but results did not support the popular conception. Cold Aprils were experienced in this territory in 1917 and 1918; snowfalls, however, in most of southern Canada had not been as heavy as usual.

Science News Letter, March 12, 1932

ZOOLOGY

Smithsonian Institution Gets Siamese "Dinosaur"

ALIZARD that looks like a dinosaur, and whose eggs are considered gifts fit for a king, is among the weird "Lost World" creatures recently received from the jungles of Siam by the Smithsonian Institution. They were sent by Dr. Hugh M. Smith, former chief of the U. S. Bureau of Fisheries, now fishery expert for the Kingdom of Siam.

The big lizard, called "hia" in Siamese, is not really a relative of the dinosaurs, but it looks astonishingly like one. It has a little head at the end of a long neck, and a long, thick tail. It is not at all shy, and occasionally ap-

pears even in the outskirts of Bangkok, the national capital. It is reported to be very destructive to poultry.

The collection sent by Dr. Smith includes also a number of interesting snakes. One, known as "ngu kon kob" or "tail biting snake," is believed by the Siamese to bite with its mouth in the light of the moon and with its tail when the moon is dark. These mythical tail-bites are reputed to be absolutely deadly. Another snake is the "ngu seng atit," or "sun-ray snake," so called because of its gem-like, glittering scales. Still another snake is almost pure white, with a few black markings—possibly an albino form of a common species. Then there is the rat snake, which climbs bamboos to catch birds, the peacock snake, brightly marked and with a flame-red tail, and the fish-snake, which can be caught by baiting a hook with a whole small fish.

Science News Letter, March 12, 1932

ARCHAEOLOGY

People of Nineveh Wore False Teeth Around Necks

THERE was a curious fashion in ancient Nineveh of wearing artificial teeth around one's neck, British archaeologists have discovered. In proof that early inhabitants of the Assyrian city did go about thus adorned, archaeologists have a quantity of the beads cunningly shaped to look like human molars.

The beads were unearthed in the ruins of Nineveh and are thought to be the stock of some bead factory which flourished in the city about 2900 B.C.

A report to the British journal *Antiquity* says that it is difficult to account for use of the beads. Dr. R. Campbell Thompson of the British Museum, director of the expedition which has been excavating at Nineveh, suggests that the artificial teeth were used in magic. Many different peoples of the world have believed that magic can be worked against a person if the sorcerer has some of his teeth or his hair or even his name.

Another suggestion is that the artificial teeth were worn as protection against toothache.

So far as archaeologists know, the people of Mesopotamia never took to wearing real human teeth, as some races have. So, the artificial teeth from Nineveh cannot be explained as something "just as good" manufactured to eke out the supply of real human teeth in a shortage.

Science News Letter, March 12, 1932

IN SCIENCE

PSYCHOLOGY-PHYSICS

Medium Illumination Best For Observing Fine Detail

INCREASE in the brightness of light will make objects stand out from one another with greater clearness up to a certain optimum brightness, but beyond that point increase in illumination merely makes them blur and run together again.

The reason for this variation in the acuity of vision with change in illumination was explained by Dr. W. W. Wilcox of the University of Kansas.

When two narrow bars are seen against a faintly lighted background they appear much larger than their actual size would indicate and physically must be separated by a relatively large distance in order not to appear as one object. Increasing the light intensity has the effect of decreasing the apparent width of each bar and thus making the interspace more easily observable. The apparent shift of the edges of the bars accounts for the change of acuity with variations in light intensity. Dr. Wilcox found a similar relation between the shift of contours of the test object for lighted bars on a dark ground.

His experiments do not confirm the theory previously held by some psychologists that change in light intensity calls into use a different number of elements in the retina of the eye.

Science News Letter, March 12, 1932

ZOOLOGY

South African Mule Mother of Two Colts

FOR a second time a female mule in South Africa has borne a colt, an event so rare in the annals of science that many persons still hold it to be an impossibility, it is reported in *Nature*.

The mule is the property of W. J. Kilian, of Weenen, Natal. She is just a common, ordinary mule; but both the colts which she has borne and nursed were sired by stallions and are practically indistinguishable from horses.

Science News Letter, March 12, 1932

E FIELDS

FORESTRY

Poisoning Cheapest Way To Kill Undesirable Trees

UNDESIRABLE trees, that must be gotten out of the way in a forest to give more desirable species a chance to grow properly, can be weeded out more advantageously by poisoning than by cutting or girdling. So say A. L. MacKinney of the U. S. Forest Service and Prof. C. F. Korstian of Duke University, in the *Journal of Forestry*.

The methods most widely practised at present are cutting and girdling; but of recent years the elimination of undesirable trees with poison has been used to some extent, especially in Australia. In order to get a comparison under American conditions, Mr. MacKinney and Prof. Korstian divided into three sections a piece of developing pineland which was due for a thinning out of unwanted young hardwood trees, and used the three methods side by side, keeping a strict account of all costs.

The poison consisted of a mixture of white arsenic and lye, and was applied to the young trees in a "frill" made by chopping downward into the bark, in a kind of partial girdling. One workman wielded the ax and a second followed with the poison pot.

It was found, after a suitable interval, that the poison method had resulted in the highest percentage of outright deaths among the "weed" trees, as well as in the greatest discouragement to the growth of new sprouts among those that did survive. It was also found that if the commercial grade of white arsenic is used, the poison treatment is more economical than either cutting or girdling, both in money cost and in time.

Science News Letter, March 12, 1932

PSYCHOLOGY

Aura Seen by Spiritist Really Optical Illusion

WHEN a spiritist believes he sees a grayish aura around the white flesh of a human body, he really is deceived by an optical illusion, Prof. D. F. Fraser-Harris, physiologist and author, said in an address before the Brit-

ish Psychological Society, reported in a current issue of *Nature*.

To see the aura, you are directed to hold the outstretched fingers of your two hands touching one another at the level of the eyes about a foot or so in front of a black background. You stare at the finger tips for about fifteen seconds, and then draw them slowly apart.

Where your finger tips met, you will then see black spaces which do not show up, however, because of the dark background. Between these are areas filled with the "grayish mists."

The cause of the illusion is what is known to psychologists as a negative after-image. If you stare fixedly at a bright red object for a few seconds and then look at some neutral background, you are likely to see a patch of color, the approximate size and shape of the red object. If your after-image is positive, the color of this "shadow" will be red. A negative after-image in this case would be green.

Staring at the white finger-tips may cause a person to see a black patch when the fingers are withdrawn, and the grayish or whitish mists are similarly caused by staring at the black background, Prof. Fraser-Harris indicated.

Science News Letter, March 12, 1932

CERAMICS

Metal Strips Waterproof Brick Walls Permanently

BRICK WALLS of the modern home are not waterproof even though chemically treated, but may be made permanently so through the use of metal strips, it appears from a report to the American Ceramic Society. This radical method of brick construction was presented in a paper prepared by L. H. Minton, of New York City.

Under the new method, it was stated, a V-shaped groove three-eighths of an inch deep is moulded along the center line of the two faces of each brick which are to be mortared as well as in the corresponding position at the ends. Into this groove goes an L-shaped metal strip, of a non-corrosive alloy. The hook of the L fits into the end groove on the brick.

As the bricks are laid, the grooves of successive layers meet so that the metal strips, which overlap from one brick to another, form a continuous mesh to reinforce the wall and keep out the moisture, Mr. Minton said. It was also stated that use of the metal strips made the task of aligning the bricks much easier besides giving greater heat insulation.

Science News Letter, March 12, 1932

BACTERIOLOGY

More Invisible Bacteria Than Visible Ones in Milk

THE FILTERABLE forms of germs, which are so small that they cannot ordinarily be seen even with the most powerful microscopes, far outnumber their larger, microscopically visible relatives in such substances as milk and milk products, soil, hay infusions and decomposing manure, experiments by Prof. J. M. Sherman and C. E. Safford of Cornell University show.

The ordinary forms of germs may be found by the million or even billion in one gram, which is roughly one-thirtieth of an ounce, in certain types of decomposing and fermenting materials. But the Cornell investigators found not millions but trillions of the minute organisms to the gram in some samples of milk, they reported to *Science*.

The new method combines a series of dilutions of the material to be examined with a longer period for growth in broth at a temperature of about 86 degrees Fahrenheit.

Contamination of milk and water with germs is ordinarily determined by a method of counting the number of microscopically visible germs of bacteria present in a given sample. But such examinations take no account of the invisible organisms which may be present. This class of invisible, filter-passing organisms is becoming increasingly important, especially since it has been found that some ordinarily visible germs may have an invisible stage. So the method developed by Prof. Sherman and Mr. Safford may be of considerable practical significance.

Science News Letter, March 12, 1932

PSYCHOLOGY

Overprotected Child Excels in English Class

THE child who gets too much mothering, or who, as the psychiatrists say, is maternally overprotected, may be the "shark" of the English class, Dr. David M. Levy, of the Institute for Child Guidance, New York City, has found.

Dr. Levy reported his observations on the relation of maternal overprotection to school grades and intelligence tests to the American Orthopsychiatric Association. The overprotected child shows excellence in English, he said, does well in arithmetic and takes a special interest in reading.

Science News Letter, March 12, 1932