ASK THE SCIENTIST

If you have a question to ask the scientists, mail it to the New York Press Association, The Castle, Syracuse, 10, New York. The Science Board of the Radio Workshop at Syracuse University will answer each week in the Andover News those questions considered most interesting and timely.

Question 1.—We have a large oak tree on our property. In recent years English ivy has been permitted to grow up its trunk. Will you tell me if the tree will suffer any ill effects?

Answer.—Any of the varieties of English ivy will not harm your oak tree. The ivy plants produce their own food and do not take food material from the oak tree.—Dr. Richard R. Armacost.

Question 2. — During severe thunderstorms, I have observed that the radio may fade out, or the lights may flicker, or the outlets and sockets may pop very loudly, but the lightning hasn't struck anything; when the lightning did strike, these things didn't happen. Why this peculiar behaviour? Why does lightning sometimes have such different colors? In one part of a storm there was red orange lightning, in the next part blinding golden color, and in another terrible blue-violet colors?

Answer.—When a lightning flash, from cloud to earth, is observed, one can be certain that somewhere the lightning has struck. If the strike was on a power line, or even close by, there is likely to be a momentary change in the voltage and hence the lights flicker and the radio program fades. If the strike is far from power lines, no effect is observed.

variation in the color of the lightning flashes of which the observer writes may be due to the distance between the observer and the flash. If the distance is great, the color may be red-orange; if very near, the "terrible blue-violet."—Dr. William Frederickson, physicist.

Question 3.—Does "worry" have anything to do with gray hair?

Answer.—The greying of the hair is largely a matter of heredity. The age at which a person develops this loss of pigment in the hair does not indicate in any way premature aging.—Dr. Verlus Lindeman, zoologist.

Question 4.—A while ago I heard over the radio about a star exploding. So far I have heard nothing further about it. What happened to it?

Answer.—The star referred to is T. Coronae Borealis. It became a nova or exploding star on February 12, 1946. When a star goes thru a nova stage, there is a great release of energy and the star brightens considerably. In fact, on Feb. 12th, T. Coronae Borealis increased seven magnitudes in brightness, an increase of about 650 fold in luminosity. After this explosion the star gradually dims down to its original brightness. Since this star is apparently following the normal course of a nova, it perhaps is of no further interest as news.

It may be worthwhile to mention, however, that this star became a nova in 1866 and from its change in brightness at the time of that explosion, astronomers had predicted that it would repeat the phenomenon. The prediction has been fulfilled. — Dr. William Fredrickson, physicist.

Question 5.—Can clabbered milk be prepared from evaporated milk?

Answer.—There is no reason why clabbered milk cannot be prepared from evaporated milk. Dilute the milk with an equal volume of water, thus restoring it to approximately its original concentration. This milk should then be kept at room temperature until it is soured by the bacteria which are introduced into it accidentally. Better still, the milk may be inoculated, either with a commercial culture of lactic acid forming bacteria, commonly known as a "starter," or it may be inoculated by adding a small amount of milk previously soured satisfactorily.—Prof. Henry N. Jones, bacteriologist.

Question 6.—Can the occurrence of cyclones and tornadoes be predicted? If one should sweep thru New York State, could we have any advance warnings of its coming?

Answer.—Cyclone and tornado are two different terms. For years and years practically all of our weather prediction has been based upon knowledge and number of cyclones and anticylclones. The tornado is an entirely different thing and there is no way of predicting when or where it may occur with any degree of reliability. Tornadoes give us no more than a few moments of warning at the most because they only move across a very small area and do so very rapidly.

Tornadoes are very small but violent eddies of air, whereas cyclones are masses of air some 500 to 1,500 miles in extent and we have 25 or 30 of them every year. We cannot predict the coming of a tornado until we see the masses of air and clouds in the sky, and then we might have time to get into a bomb-proof shelter as they do in Kansas and other places.—Dr. Earl T. Apfel, geologist.

Issuance of Patents Shows Big Drop

There has been a 41.5 per cent decline in patents issued by the United States Patent office from 1933 to 1943. This decline is of more than academic interest, since the number of patents applied for and issued may well be the measure of industrial scientific effort and hence of future industrial development in this country. Moreover, the effect of this decline is cumulative, since every patent stimulates further invention.

The number of patents being issued is affected by war secrecy orders, delays due to manpower shortages in the patent office and miscellaneous factors. Thus, patent applications may be a more accurate basis for examination of the problem discussed here. Filing of patent applications for inventions reached a peak of over 90,000 in 1930, and averaged over 85,000 annually for the preceding 10 years. A precipitous drop followed to 1933, a slow rise to 1939 and another sharp drop to 1943. The number rose again to 49,000 in 1944, but this figure represents only little more than 50 per cent of that for the 1920s.

Use of Perfume One of World's Oldest Customs

The use of perfume is one of the world's oldest customs. Warriors of Babylon and Assyria perfumed their baths, scented their curled locks. Ancient manuscripts and hieroglyphics on tombs record Egyptian fondness for perfume. The Bible indicates that perfumes were in vogue among the Hebrews.

Artistic vases of alabaster, found in early Greek and Roman ruins, were perfume bottles. Greek poets glorified perfume in verse. The men and women of Rome's noble families enjoyed perfumed baths, and placed rose petals in their wine vats. Southern Arabia, the Sheba of the ancients, was the chief source of the "perfumes of Araby," introduced into Spain by the Arabs. France and Italy, early converts, perfumed their gloves. In Elizabethan England book bindings were perfumed.

The perfume bottles of modern trade carry the odor of flowers thousands of miles from their garden homes, and chemical laboratories. Before the war the United States was shipping perfumery to 60 countries, including France.

Western New York Poultry Field Day

On July 17th a 4-H roast and poultry field day will be held at the Glenn Wagner poultry farm at Cuba. The program, starting at 10:30, promises to be one of the best ever offered to 4-H Club members in Western New York.

There will be a poultry and egg judging contest, egg grading contest, and killing and dressing demonstration. Mr. Wagner is also planning an archery contest for all who are interested.

The highlight of the day's program is a poultry barbecue to be under the supervision of Professod Ogle of Cornell University.

All club members who are interested in attending this event should make reservations promptly thru their 4-H Club agent.

The young medical lieutenant walked past the ward each morning. In the yard, one of the inmates was always going thru all the motions of winding up and pitching, an imaginary ball.

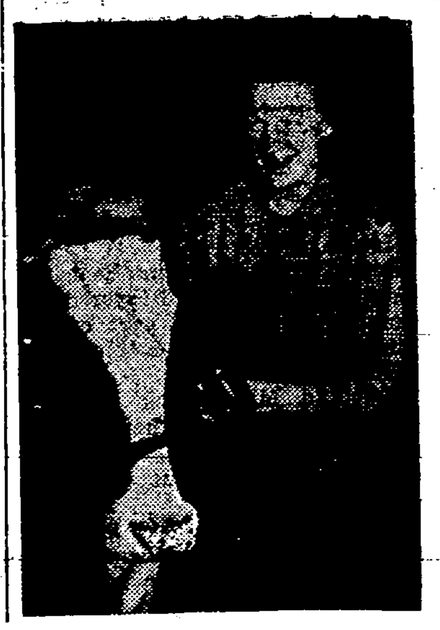
One of his friends finally asked: "Why do you stop each morning and watch that screwball go thru his act?"

"Well," he answered, "if things keep going the way they are, I'll be in there some day catching for that guy, and I want to get onto his curves."

Nothing kills milk production like a water shortage. Dairymen should see that their cows get plenty of water when they want it.

Back in the middle ages, women placed slices of raw dough on their faces before retiring at night to improve their complexions.

DAIRY CHAMP



Marion Neff of Delaware County, chosen as the nation's 4-H Holstein champion, is believed to be the first New York State girl so honored.

Eczema Itching, -Burning-Distress

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Get a bottle of stainless, powerful, penetrating Moone's Emerald Oil. The very first application should give you comforting relief and a few short treatments convince you that you have at last found the way to overcome the intense itching and distress. Moone's Emerald Oil is easy and simple to use—greaseless – stainless – economical – promotes healing. Ask for Moone's Emerald Oil. Satisfaction or money back—good druggists everywhere.

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Relieved in 5 minutes or double your money back

When excess stomach acid causes painful, suffocating gas, sour stomach and heartburn, doctors usually prescribe the fastest-acting medicines known for symptomatic relief—medicines like those in Bell-ans Tablets. No laxative. Bell-ans brings comfort in a jiffy or double your money back on return of bottle to us. 25c at all druggists.

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