

## ASTRONOMY

**Star Flares Up in Constellation Scutum**

➤ ANOTHER "EXPLODING star" or nova has blazed forth in the heavens. It is in the constellation of Scutum, the shield, to be found in the south these summer evenings. But even with its new brilliance, the star is too faint to be seen without a telescope.

The nova was found on Saturday, July 19, by S. Arend, of the Royal Observatory of Uccle, Belgium, famous for having discovered two new comets last year. News of the "new star," of the 11th magnitude, was received by Harvard College Observatory, clearing house for astronomical news in the western hemisphere.

Science News Letter, August 9, 1952

## MEDICINE

**To Avoid "TV Neck" Adjust Screen Height**

➤ PHYSICIANS WILL be seeing more and more patients with a condition called "television neck," Dr. William Kaufman of Bridgeport, Conn., warns.

From his description of the condition, *Journal, American Medical Association* (Aug. 2) it appears to be a kind of painful, stiff neck which comes from straining head and neck down and forward to see the television screen. Husbands and wives are likely to get it on opposite sides.

To avoid the condition, Dr. Kaufman says, raise the TV set or lower the chair or make whatever adjustments are necessary to give proper posture for relaxed viewing.

Science News Letter, August 9, 1952

## PSYCHOLOGY

**Teach Deaf Child With Other Deaf Children**

➤ THE BELIEF that a deaf child is just like the normal child except that he can't hear is wrong, and it is an injustice to the deaf child to believe it, Dr. Helmer Myklebust, professor of audiology and director of the children's hearing and aphasia clinic in the school of speech at Northwestern University, said in Milwaukee, Wis.

Speaking before a group of parents of deaf children at Wisconsin State College, Dr. Myklebust explained that deaf children do not have the same experiences as normal children, and consequently do not think as normal children do.

"Hearing is one of the primary senses," he said. "We can hear in all directions at the same time. We can hear in the dark. We can hear around corners. We hear even when we're asleep. Hearing is a vital factor in most of our perceptions, in telling us what is going on around us. The deaf person does not have these perceptions, so his world is different."

Because of this difference, Dr. Myklebust said he did not believe it wise to enroll deaf children in schools with normal children. The normal children, he explained, usually reject deaf classmates from their social activities, thereby adding to the sense of isolation the deaf child already has.

It is better for a deaf child to be with other deaf children and to be taught by a teacher who understands their problem, Dr. Myklebust said. He warned, however, that a deaf child should have some contact with normal children.

"And don't expect your neighbors to understand your child's problem," Dr. Myklebust added. "Society generally doesn't understand because there aren't enough deaf people in it."

Science News Letter, August 9, 1952

## INVENTION

**Device Warns Pilots of Stall**

➤ A DEVICE to indicate when a plane is about to go into a stall by ionizing the air stream around the wing has received a patent.

The stall detector takes advantage of the fact that when a plane's wing is in normal position, the air flows back along the top of the wing, clinging close to the surface. When it is in a stall position, the air stream leaves the surface of the wing and, close to the wing, a state of turbulence exists.

The inventor, Paul J. Campbell, Middletown, Conn., provides a device which ionizes the air at the leading edge of the wing. Toward the rear of the wing, a detector picks up evidence of the ionized air. When the plane approaches a stall, the detector no longer can pick up the ionized air, thus indicating the approaching stall to the pilot.

Mr. Campbell assigned his invention, number 2,603,695, to the United Aircraft Corporation, East Hartford, Conn.

Science News Letter, August 9, 1952

## INVENTION

**Patent Trainer Aid for Night Radar Navigation**

➤ EDWIN A. LINK, Binghamton, N. Y., of "Link Trainer" fame, has received a patent for a new trainer which helps pilots to learn to navigate by the radar set in their planes. Night fighter planes in particular use radar to find and approach enemy bombers.

A simulated oscilloscope and range meter are in the pilot's cockpit of this new trainer. On these the position and range of the "enemy bomber" are indicated. The pilot must maneuver his trainer in the proper manner to bring him in position to attack the bomber. A record of his maneuvers is made outside the trainer. Mr. Link received patent number 2,602,243 for his invention.

Science News Letter, August 9, 1952

**IN SCIENCE**

## BIOCHEMISTRY

**Tagged Chemicals Tell How Body Fights Ills**

➤ INFECTION-FIGHTING antibodies, released into the blood stream, strike at disease-causing invaders in several ways.

Dr. Felix Haurowitz of Indiana University, Bloomington, has tagged invading foreign proteins with radioactive carbon, sulfur and iodine.

War on the cellular and molecular level consists of invasions of the disease-producing proteins into cells, which in turn produce substances that destroy the invader's chemical powers.

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## EDUCATION

**Research Programs Affect College Teaching**

➤ RAPIDLY EXPANDING research programs in American colleges and universities are having an effect on teaching programs, it is indicated by recent action in Washington of the American Council on Education which has just appointed a nine-member committee to study the problem.

The committee will study "broad problems arising from the impact on colleges and universities of the rapidly expanding research programs sponsored by government agencies and by industry," the Council states. Most of such research is in science and engineering. The amount of research sponsored annually by the Federal government in colleges and universities may exceed \$150,000,000 this year.

Major areas for the study by the committee will cover relationships among various interested groups within individual institutions, and the principles and practices of government agencies, industrial concerns and other organizations that sponsor research.

President Virgil Hancher of the State University of Iowa is chairman of the committee. Other members are President J. R. Killian, Jr., Massachusetts Institute of Technology; Chancellor Franklin D. Murphy, University of Kansas; Vice-president T. P. Wright, Cornell University; Vice-president J. C. Morris, Tulane University; Comptroller Larry R. Lunden, University of Minnesota; Vice-president James H. Corley, University of California; Prof. Robert F. Bacher, California Institute of Technology; and Rev. James B. Macelwane, S.J., dean of the Institute of Technology of Saint Louis University.

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# E FIELDS

## DENTISTRY

### More Saliva in Mouth, Less Decay in Teeth

► **TOOTH DECAY** may be affected by the amount of saliva in a person's mouth, it has been found in research by Dr. Ralph E. McDonald at the Indiana University School of Dentistry, Indianapolis.

The more saliva normally produced in a person's mouth, the less tooth decay he is likely to have, Dr. McDonald learned. Also, the more viscous the saliva, the more the chance of decay.

Apparently it is a matter of the washing effect of the saliva on teeth. The more saliva, the greater the washing effect, and the more viscous it is, the less the washing effect.

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## INVENTION

### Pocket Is Large Enough To Carry New Typewriter

► **A TYPEWRITER** small enough to be carried around in a pocket has been invented by Maurice Julliard, Paris, France, for patent number 2,603,336.

In order to make the typewriter small enough, the inventor has done away with the conventional roller. Instead, circular sheets of paper, placed on a revolving cylinder, meet the keys. As a key is struck, it revolves the cylinder to the position for the next letter to be typed. The inventor does not give precise measurements of his typewriter but he says it can be contained in an average sized pocket and can be used without any support, being simply held in the hand.

Science News Letter, August 9, 1952

## VETERINARY MEDICINE

### Chickens Fog-Sprayed To Keep Them Cool

► **POULTRY SPECIALISTS** are revising the old saying "madder than a wet hen"—making the 1952 version read "as comfortable as a sprayed chicken."

In experiments to keep chickens cool during hot weather, W. O. Wilson of the University of California, Davis, fog-sprays the birds. This wets the chickens and makes them "sweat." Cooling is accomplished by evaporation.

A hen's discomfort during hot weather, he points out, is due to her inability to lose the heat generated by her metabolic processes. Body temperatures of chickens are about 107 degrees Fahrenheit. The problem is to help reduce the temperature of

both the surroundings and the chicken.

In addition to fog-spraying the birds, Mr. Wilson suggests these methods of beating the hot weather:

1. Give your birds plenty of cool water. A hen, for example, may double her intake of drinking water during a hot spell. If the water is warm, consumption falls off.
2. Give chickens plenty of shade—either in the form of open-type shelters or trees and fast-growing vines.

3. Sprinkle the roofs of poultry houses to keep them cool.

At the present time, he pointed out, it is not economically sound to use a closed poultry house and to cool the birds by means of an evaporative cooler.

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## TECHNOLOGY

### Copper-Steel Brake Drums Aid Safe Driving

► **COPPER-STEEL BRAKE** drums, now available for heavy trucks and buses on the highway, dissipate rapidly the heat of friction created when the brakes are applied, thus assuring faster and surer slowing down and stopping.

Designed to replace the present cast iron drums, their use is expected to decrease greatly highway accidents due to brake failure.

Iron has a tendency to hold the heat generated by friction when brakes are applied. On ordinary brake drums, high temperatures "burn" the surfaces of the lining and cast iron drums, causing excessive wear, cracking and loss of braking power. With the new brake drums, made of welded copper and steel, temperatures developed have far less adverse effect on the braking action because copper is a good conductor of heat and the heat generated is dispersed.

The drums are made by welding a copper base with a parallel series of copper fins to the outer surface of specially alloyed steel drums. As explained by the manufacturer, the Copperweld Steel Company, Glassport, Pa., the result is that heat is drawn off rapidly from the braking surface, equalized over the copper base, and then sent into the air through the fins much on the same principle as heat is dissipated from steam radiators employed in house heating.

Science News Letter, August 9, 1952

## VETERINARY MEDICINE

### 30-Day Solitary For Show Animals

► **IF BOSSY** goes to the fair, she will have to pay for it by 30 days in solitary. The American Veterinary Medical Association advises a minimum quarantine period for all show animals so that they will not bring disease hazards back to the farm with any ribbons they may have won.

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## PHYSICS

### New Pilot Reactor Uses "Fuel" in Form of Slurry

► **THE SECOND** atomic energy production of electricity will soon be a reality, it was revealed in the 12th semiannual Atomic Energy Commission report.

A pilot reactor that has its fissionable material in the form of a mud-like slurry started operation at the Oak Ridge National Laboratory April 15. A small experimental plant to produce electric power is part of the installation.

First atomic electric power production in a small way occurred when the AEC experimental breeder reactor began operation at Arco, Idaho, last year.

The new Oak Ridge homogeneous reactor is investigating the fluidized method of handling the plutonium or uranium used as "fuel".

Zirconium and hafnium metals, useful in reactor building and for other purposes, are being produced under AEC contract at \$15 a pound, the report stated.

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## GENETICS

### One-Celled Animals Tell How Body Cells Develop

► **THE MYSTERY** of how the countless different kinds of cells in the body, from eyebrows to toenails, develop from a single egg cell is being probed by Prof. T. M. Sonneborn and fellow geneticists at Indiana University.

They are hoping to find the answer by studying the tiny, one-celled animal, paramecium, which lives in water and multiplies simply by dividing into two identical parts. The Indiana scientists have found that contrary to previous belief this one-celled animal is not "sexless" but does have mating types which unite with opposite types.

Science News Letter, August 9, 1952

## INVENTION

### Spaghetti Tamer Gets New U. S. Patent

► **DOES YOUR** wrist get tired from twisting spaghetti onto a fork? Do you become angry when the spaghetti slips off and you have to go through the whole tiresome task again?

Well, you need no longer approach a plate of spaghetti with trepidation—only with an appetite. A revolving spaghetti fork has been invented. Philippe Piche, Valleyfield, Quebec, Canada, has provided that the shank and tines of the fork revolve independently of the handle. They are revolved by a flick of the thumb on a little wheel attached to the shank. M. Piche received patent number 2,602,996 for his invention.

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