

ENTOMOLOGY

Explosions of Firecrackers Make Fireflies Show Off

FIREFLIES can be stimulated into very greatly increased display of their animated "fireworks" by nearby explosions, Dr. Rudolf Ruedemann of the New York State Museum reports. (*Science*, Sept. 4)

On the evening of July 4, Dr. Ruedemann states, he was looking out over his lawn, where about half-a-dozen fireflies were leisurely flashing. Some boys, who had been setting off ordinary small firecrackers, suddenly switched to the much noisier giant cannoncrackers. Instantly the number of firefly flashes increased eight- or tenfold in number, the rate of flashing speeded up to more than double, and the insects kept down very close to the ground. As soon as the loud explosions stopped, the firefly display went dark, with the exception of three insects that rose into the shrubbery.

The flashing of the particular kind of firefly noted by Dr. Ruedemann is often considered to be a warning-response to threatened danger—for these fireflies are refused as inedible by bats and other night predators. Dr. Ruedemann thinks that they may have given the characteristic danger-reaction to the artificial stimulus of the cannoncracker explosions.

Science News Letter, September 18, 1937

ENGINEERING

Housing Still Backward Art; Research Study Would Help

WHY housing is a backward industry, doing things mostly the way our fathers did them, despite the rosy dreams of modern and ultra-modern planners, is a puzzling situation.

A prefabricated house, requiring little time and trouble for erection on the selected site, does not seem an entirely utopian idea. Yet such a house produced at a price lower than the conventional and in large numbers has not arrived.

In a Massachusetts Institute of Technology conference, John Ely Burchard, vice-president of Bemis Industries and housing authority, laid part of the blame on the fact that almost every one thinks he can design a house. Such unskilled, inexpert attempts, plus talk about wholly impractical radical structures that never get as far as foundations, disillusion a hopeful public.

As for those seriously pioneering in prefabrication, Mr. Burchard feels that

the prefabricator has all too often been guilty of complicating his already involved problem with speculation over some production method still in embryo or indeed not even conceived. High-cost synthetics are used when more conventional materials now used widely might have served. Field operations are not fast and cheap and too much of the supposedly factory-made dwelling is still assembled at the site.

Despite the shortcomings there is now considerable prefabrication in all house elements except structure and finish. Windows, doors, furnaces, and other parts roll off mass production lines. If the various makers of materials and equipment could get together and release for use all their experimental developments, house building would be changed greatly in a season.

One great lack is research. Mr. Burchard believes that five million dollars used by the government on fundamental and practical research would be more useful than a five billion dollar a year house building program.

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ASTRONOMY

Encke's Comet Resighted On Its Triennial Visit

ENCKE'S COMET, one of the oldest and best known, has been "rediscovered" by Dr. H. M. Jeffers of Lick Observatory, Calif., who reported his find to Harvard Observatory as the distribution center for astronomical discoveries.

The comet is now making its fortieth trip to earth since its discovery in 1786. It has a period of about three and a third years and has been seen every trip since 1819.

According to Dr. Jeffers, the comet is extremely faint, about the eighteenth magnitude, beyond the range of any telescope usable by the human eye but is fairly easily photographed. It is growing steadily brighter and should reach its peak brilliance just within the range of the naked eye, about Christmas. Astronomers doubt they will be able to see it then, however, for it will be very close to the sun. At its nearest approach to earth it will be about 25,000,000 miles away, relatively close. This will be during most of November. A small comet, it is now in the constellation Aries and is expected to move across Andromeda, Lacerta and Cygnus. It has no tail yet but should develop a stubby one early in December.

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IN SCIEN

ETHNOLOGY

Cannibals? Ridiculous! Just a Traveler's Myth

"CANNIBALISM is a pure traveler's myth."

This statement, which will surprise many people, comes from Prof. M. F. Ashley-Montagu, anthropologist of New York University.

Prof. Ashley-Montagu has grown weary of what he considers unfair tactics in accusing certain inhabitants of the earth of cannibalism. It is particularly unfair, he feels, to call prehistoric men this hard name because they cannot possibly arise to sue for libel.

What happens, as he points out in a report to the journal *Science*, is this:

When charred human bones are found at some campfire that burned out thousands of years ago in the Old Stone Age, it is generally assumed that cannibals feasted there. And if the human bones are cracked, indicating that a human being extracted marrow, why, that settles all doubt. These folk were cannibals, which suggests to most minds that they had the low habit of gobbling up other humans as unconcernedly as they would eat elephant steak.

But, Prof. Ashley-Montagu does not find such evidence convincing, and he declares that it would not stand up in any Primate court.

He points out that, in modern times, starving primitives—and even civilized men—have been known to kill and eat their young. But no one would call these people cannibals. He also points out that many primitive tribes do occasionally consume certain parts of the human body for ritual purposes.

"But," he adds emphatically, "no people of whom we have any knowledge makes any habit of cannibalism."

The argument sums up to this: Men, even civilized men, have been known to eat their fellows, undeniably. But Prof. Ashley-Montagu would have us relegate to fairy-tale realm those ghoulish pictures of savages gleefully dancing around a pot of missionary stew for an ordinary Thursday night meal.

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CE FIELDS

PSYCHOLOGY

Back-Seat Advice Causes More Cautious Driving

BACK seat drivers put on the brakes! That is, motor vehicles with passengers do not travel as fast as those where the driver is alone. This finding has resulted from a survey made by the Connecticut State Highway Department, which also discloses that tourists travel faster than the home folks on the highways and that the farther they are from home the faster they go.

It was found that the average speed for Connecticut drivers was about 38 miles an hour. Visitors from neighboring Massachusetts averaged about 40 miles an hour while New York state cars averaged 41 miles an hour. Motor vehicles from mid-western states averaged nearly 45 miles an hour in the study reported.

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HYGIENE

Don't Fight That Tired Feeling: Rest and Relax

FATIGUE is something most persons in this strenuous, struggling world resent and fight against. Fatigue should, however, be welcomed as a friend giving a first-class safety warning. The person who feels tired all the time should find out why he is tired and take steps to dispel the cause.

Rest and relaxation are probably called for. Dr. Conrad S. Sommer, medical director of the Illinois Society for Mental Hygiene, says that most of us need to reorganize our lives. Fatigue comes to many people simply because they are trying to do too much—and often for not very good reasons. A yearly vacation, an occasional week-end of relaxation and at least one evening a week of really relaxing recreation are prescribed by Dr. Sommer as antidotes for that tired feeling.

Besides overexertion, either mental or physical, there are a number of other causes of fatigue. The weather may make anyone feel tired. This may range from the not unpleasant lassitude of

spring fever to the utter exhaustion experienced on a hot humid day in mid-summer.

Not much can be done about the weather, but eyestrain, strain from exposure to continuous noise, weakened arches, poor posture, hernia, and strain or relaxation of muscles, tendons and ligaments that support important body organs are important causes of fatigue that can be remedied. A physician's aid is indicated in these cases.

More subtle reasons for feeling tired are to be found in the field of personal relations. The complex, competitive manner of modern life makes it doubly hard to get along with people. To this strain is often added the stress of internal conflict, than which nothing is more wearing. It is less tiring and better for mental health to recognize the causes of such inner conflict than to try to bury or ignore them.

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POPULATION

Fewer Young People Today Reflect World War Deaths

GERMANY'S current cannon-fodder crop is proving unsatisfactory to military authorities. Youths reaching the age of twenty in Germany during 1937 will number only about 315,000. In 1932 the number of possible recruits was 644,000. Not until 1940 will the count rise as high as 639,000, and after that it will decline, reaching a low of 431,000 in 1953.

Subtract 20 from these numbers, and meaningful shadows appear. Twenty year ago this year, all of Germany's potential fathers were in the trenches—and hundreds of thousands of them were in their graves. Twenty years before 1932, the war had not started. Twenty years before 1940, post-war weddings had reached their peak. Twenty years before 1953, economic crisis was having its strangling effect on German families.

The German figures also include some on foreign lands, for purposes of comparison. The number of "new" twenty-year-olds in Poland this year exceeds that of France; Italy is just behind Germany. For 20 years Japan has had 700,000 "new" twenty-year-olds eligible for service with the colors, but the comparable number in the USSR is at least twice that, and may be as high as two million.

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OCEANOGRAPHY

Ocean Currents Play Odd Tricks on Mariners

QUEER pranks and conditions played by localized ocean current rips have been reported to the Hydrographic Office of the U. S. Navy.

While on a voyage from Balboa, C. Z., to San Diego, Calif., recently, the American steamer Jefferson Myers reported a current rip directly across its path that had water with a temperature of 84 degrees Fahrenheit and deep blue in color, on its south side. On the north side, however, the water was dark green and had a temperature of only 68 degrees. Similarly when the ship passed over the rip the air temperature changed from 84 to 68 degrees.

The British steamer Pentridge Hill reports, while on a voyage from Rotterdam to Rio de la Plata, South America, a current rip in the South Atlantic that, for five miles of length, has the appearance of breakers in very shallow water.

A current rip was described near the equator in the South Atlantic by the American vessel Charles Pratt, which turned the ship's course off five degrees, as set by a gyro pilot.

The U. S. S. Norwhal, cruising in the Pacific between Hawaii and California, encountered a rip which, while not retarding the vessel, had the unusual appearance of an area of intermittent streaks of foam and spots of water which seemed to "boil," as does water over a slow-turning but deeply-submerged propeller.

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SEISMOLOGY

Quake Shakes Sea Bottom On "Other End" of Earth

A STRONG earthquake shook the bottom of the Pacific Ocean near the Kermadec Islands, about 800 miles northeast of Wellington, New Zealand, on Wednesday, Sept. 1. Location of the epicenter was determined by the U. S. Coast and Geodetic Survey.

The epicenter was in approximately 31 degrees south latitude, 179 degrees west longitude. Time of origin was 8:38.9 p. m., New Zealand time. Stations reporting were those of the U. S. Coast and Geodetic Survey at San Juan, P. R., Honolulu, H. T., and Sitka, Alaska, and those of the Jesuit Seismological Association at Fordham University, New York City, and Weston College, Mass.

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