

ENTOMOLOGY

Pasture Rights Denied To Bees—Not “Livestock”

BEES ARE domesticated insects and insects belong to the animal kingdom, yet bees are not domestic animals within the purposes of the Taylor Grazing Act, it appears from a decision handed down by Commissioner Fred W. Johnson.

Three beekeepers near San Diego, Calif., applied for lease of more than 400 acres of public land for the support of 500 colonies of bees. But their application was turned down as not “coming within the intent and meaning of grazing leases authorized” under the Act.

In the meantime the bees are at large among the white sage, wild lilac, and other fragrant honey plants of the San Diego County foothills—presumably illegally. Fences mean even less to them than they do to goats. It isn't at all practicable to put them in the public pound.

Probably the bees will continue to ignore the law, and the officers of the law will continue to ignore the bees.

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PUBLIC HEALTH

Searching For TB in Apparently Healthy

THE IDEA that children and young women need to be carefully watched for signs of incipient tuberculosis has been pretty well publicized. But the fight against the great white plague cannot be won by paying attention only to these groups.

Middle-aged men and old people, especially men over 60 years of age, constitute a danger zone, as do certain other special groups. The National Tuberculosis Association, which is waging an early-diagnosis campaign during the month of April, points out that between the ages of 30 and 45 tuberculosis kills more men than women. These are the years when men are anxious to get ahead in life, to hold their jobs and when many of them have the responsibility of supporting a family. So they are likely to disregard the subtle warning signs of oncoming sickness, even if they know that an early diagnosis and early treatment give them a much better chance for cure.

Older persons are likely to escape suspicion of having tuberculosis because of their age. Bronchitis, asthma, sinusitis and heart disease may be disguising their tuberculosis. Even if these persons are not in the class of early cases,

it is important to find them and start treatment both for their own sakes and because they are among the worst spreaders of the disease.

Curing individual patients and preventing them from unwittingly spreading the disease are twin objectives in the fight against tuberculosis. Both of these objectives can best be achieved by finding the disease in its earliest stages. The tuberculin test and the chest X-ray are modern aids in the search. While it is impracticable to apply these searching methods to the entire population, much can be accomplished, it is believed, by applying them among the groups where tuberculosis is especially likely to be making hidden inroads.

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PHYSIOLOGY

Identical Twins Sought To Aid Study of Deafness

IDENTICAL twins who are hard of hearing and willing to help solve the mystery of progressive deafness, are sought by Dr. Edmund Prince Fowler, President of the American Society for the Hard of Hearing.

Dr. Fowler believes that environment is usually more important than heredity in causing progressive deafness. He is eager to obtain facts about many pairs of identical twins with some experience with loss of hearing. If many pairs of such twins have different experiences with hearing loss, it may lead to tracing a cause of the malady in environmental factors. This would be encouraging for physicians, as they may then learn to prevent development of the insidious hearing loss.

A number of such twins have been examined, but many more are needed for a convincing study. Since there are believed to be fifteen million hard of hearing persons in the United States, and thousands of identical twins, the chance of finding enough cases of twins, one or both of whom have hearing defects, is considered good.

Identical twins are always of the same sex and have close physical resemblance. Such twins start life with the same hereditary background, and therefore offer a scientific basis for testing problems of heredity versus environment.

Twins who wish to volunteer can address: American Society for the Hard of Hearing, Volta Bureau, Washington, D. C., or Dr. E. P. Fowler, American Otological Society, 2 East 103rd Street, New York City.

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IN SCIENCE

CHEMISTRY

Lignin Found Efficient In Removing Iron From Water

LIGNIN, waste wood product in paper-pulp making, has had another addition made to its growing list of possible uses by chemists of the U. S. Department of Agriculture, at the Agricultural By-Products Laboratory. They have found it to be much more efficient than chemicals now in use for the removal of iron from water.

Iron is a problem in most city and industrial water supplies. Lignin is a problem in the wood-products industries. Put the two together and they solve each other.

Lignin is very cheap because of its great abundance, and the little use hitherto found for it. Yet cheap as it is, it can be used with still further economy in the iron-removal process, because it can be used over and over again, as often as ten times, with no appreciable lessening of efficiency. A compound now in use was tried out in parallel tests by the chemists here, and found not only to remove less iron at any one time but also to lose its efficiency after only six runs.

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MEDICINE

Symptoms Like Leukemia's Induced By Injection

SYMP TOMS like those of leukemia (“blood cancer”) were induced in guinea pigs by the injection of a body fluid, lymph, from a dog, Dr. Tom Dougherty of the University of Oklahoma School of Medicine told the American Association of Anatomists. Excessive numbers of certain types of white blood corpuscles were formed, while many red blood corpuscles were destroyed, and damage was done to liver, lungs, kidneys and other internal organs.

Leukemia is one of the worst diseases of the cancer clan, and its cause is still unknown. Dr. Dougherty's studies are directed toward making at least the beginning of a rent in the veil of our lack of knowledge.

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E FIELDS

MEDICINE

Sulfanilamide Saves Lives Of Dogs With Brain Disease

SULFANILAMIDE is making dogs healthier. The same chemical which has been used extensively in successful treatment of more than 14 human diseases has saved dogs doomed to death from a disease that is a combination of so-called sleeping sickness and meningitis.

Drs. M. L. Morris and T. J. Murray of the Raritan, N. J., Hospital for Animals and Rutgers University respectively, report (*Science*, March 24) here that 13 out of 14 dogs suffering from meningo-encephalitis associated with canine distemper recovered completely following sulfanilamide treatment. Whereas meningo-encephalitis associated with canine distemper in the past has been 100 per cent fatal, it can now be classed as 93 per cent curable. Sulfanilamide has little value, however, in the treatment of distemper alone, Drs. Morris and Murray point out.

Meningo-encephalitis is an inflammation of the brain and the membranes covering it. It afflicts humans as well as dogs. The specific cause of the condition associated with canine distemper in dogs is not known. Distemper is generally considered the canine counterpart of human influenza.

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MEDICINE

600,000 Diabetics Are Health Asset To Nation

DIABETES has not usually been considered anything like an asset. To the individual who must watch his diet closely, take insulin regularly and take special pains to avoid illness, the complaint certainly seems a liability.

The 600,000 diabetic patients in the United States are, however, a great asset to the country, Dr. Elliott P. Joslin, of New England Deaconess Hospital, Boston, recently pointed out. These patients, he said, represent an army of health officers who serve without pay and whose tenure of office is not endangered by politics.

These persons are truly health officers, in Dr. Joslin's opinion, because they know the health advantages of proper diet, of cleanliness (the diabetic must be constantly on guard against germs, fighting them with scrupulous personal cleanliness) and of regular exercise, and they are being taught more than any other group the value of eugenics. If diabetes is on both sides of the house, the offspring are likely to have the disease. Young diabetics at Dr. Joslin's clinic are taught to marry non-diabetics. Probably one in every four persons in the United States has a diabetic heredity, Dr. Joslin estimates.

The army of diabetics can serve as health officers by watching over their own families. It is up to them, Dr. Joslin says, to detect diabetes early among their relatives, and to keep their relatives from being fat, because fat people are more likely to have diabetes than thin or average weight persons.

The diabetics must also act as health officers to themselves, living an honest diabetic day, and guarding against complications of the disease. Coma and gangrene are among the most serious such complications of diabetes. If the diabetic gets complications by breaking diet or careless living, he not only hurts himself but injures the reputation of the 599,999 other diabetics in the United States and lessens the help the whole army of diabetic health officers can give to the health of the nation.

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ZOOLOGY

New Name-Book Edition Prepared for Zoologists

ALL BEASTS of the field and every fowl of the air were passed in review before Adam, "and whatsoever Adam called every living creature, that was the name thereof."

It was as simple as that, in the Garden of Eden. But zoologists nowadays have to remember names in the wrinkles of their brows, if not the sweat thereof. A quarter of a million separate names of animal genera and subgenera will fill the massive new edition of the scientists' book, *Nomenclator Zoologicus*, now a-making in London, under the direction of Dr. S. A. Neave.

The work will comprise four thick volumes when finished, and will contain all generic names proposed between 1758 and the end of 1935. The first volume is due some time next summer, and the others at intervals of about six months.

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ENGINEERING

Standard Concrete Parts Now Being Manufactured

NATION-WIDE manufacture of standardized prefabricated concrete units, produced by newly patented principles of manufacture which assure lower cost fireproof construction, has been launched with the formation of the Cemenstone Corporation in Pittsburgh.

It brings nearer systematic use of prefabricated low-cost housing units. The D. J. Kennedy Company, Pittsburgh, is the corporation's first licensee. The company already is producing its newly patented products.

W. P. Witherow of the Witherow Steel Corporation and president of Blaw-Knox Company, is chairman of the Cemenstone Board. Leslie M. Johnston, former vice-president of the A. M. Byers Company, is president of the organization and Albert Henderson, a nationally known construction supervisor, is consulting engineer.

The Cemenstone Corporation will not itself manufacture precast concrete products directly; instead, it will supply its patented equipment to licensees in designated areas of the nation, who will be granted exclusive rights to manufacture, under the corporation's patents and its trademark, "Cemenstone." It is guaranteed that the products will be made according to the corporation's standards of quality.

This widespread regional production program will enable architects, contractors and building owners to obtain products of known quality and utilization, the corporation asserts.

To emphasize the important steps in construction marked by the newly patented products, Mr. Johnston said:

"In the past concrete products have suffered through lack of standardization, not only as to sizes of units, but also as to comparative appearance, weather-ability and strength. This situation has resulted in limited applications and in varying degrees of acceptance, according to the quality of the products offered in a given community.

"Moreover, in the past production costs were too high, because manufacturers of precast concrete products were compelled to purchase a separate piece of equipment to make each specific product.

"The Cemenstone's newly patented system of concrete production remedies the evils of the past inasmuch as every type of concrete unit now can be produced with the same general equipment."

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