

ZOOLOGY

Wolves Menace Alaska Reindeer; Aid Asked

WOLF fighters, skilled in warfare against these voracious pack-hunting beasts, are asked for in an emergency wire from Governor John W. Troy of Alaska, received at the Department of the Interior.

Because of the severity of the winter, vicious gangs of wolves have been raiding the reindeer herds owned by natives of northern Alaska, threatening to undo the work of years in raising their standard of living and teaching them the ways of civilization.

Native hunters have proved unable to cope with the animals, but it is believed that about four hunter leaders, each with a few assistants, could in a swift campaign break up the marauding bands.

Science News Letter, February 22, 1936

PHARMACOLOGY

Doses Will Taste Better After Formulary Changes

BETTER-tasting medicines will apparently be one result of changes in the National Formulary, which might be called an official recipe book for pharmacists. The changes embodied in the sixth revision of this volume, which becomes official on June 1, 1936, were explained by Dr. Adley B. Nichols, secretary of the National Formulary committee on revision, at a conference at the Philadelphia College of Pharmacy and Science.

The National Formulary—known as N.F. for short—is a companion to that other legal standard for drugs in the United States, the U. S. Pharmacopoeia. The latter includes drugs and remedies of proven efficacy, regardless of whether they are widely used or seldom used. Products are included in the N.F., on the other hand, on the basis of how generally they are used, Dr. Nichols pointed out.

In the present revision 321 items were dropped from the book because survey of over a hundred thousand prescriptions, collected from all parts of the country, showed that these items were not used in actual practice. A total of 233 new items were admitted.

Six glandular products were admitted, namely, corpus luteum, ovary, ovarian residue, anterior pituitary, whole pituitary and suprarenal.

Salty-tasting medicines such as the

bromides should taste better because syrup of raspberry is the official "vehicle" for these preparations. The resulting effect is like adding a pinch of salt to bring out the flavor of the syrup.

Syrup of acacia is another new vehicle which makes disagreeable medicines pleasant to take because the colloidal action of the acacia keeps the medicine from coming in contact with the taste buds on the tongue.

Syrup of cherry is another new addition which has been widely acclaimed.

"Its specific value lies in its fruity tartness which makes it a delightful mask for sour products such as the diluted acids, where the acid almost enhances the taste rather than destroys it," Dr. Nichols says.

For a change, pharmacists are advised to use syrup of thyme, which has "a markedly different taste."

A valuable feature of the new N.F. is the addition of many dental products. Among these is aromatized sodium perborate. Because this is now so widely used by laymen without specific directions from a dentist, pharmacists are advised to caution customers about its promiscuous use.

"It has been the cause of severe mouth burns when used as a powder which lodges in cavities and eventually hydrolyzes to sodium hydroxide."

Science News Letter, February 22, 1936

PUBLIC HEALTH

Septic Sore Throat Traced to Raw Milk

MANY cases of septic sore throat are directly attributable to drinking raw milk from infected cows, C. S. Bryan of the Michigan State College told the members of the Society of Bacteriologists and Pathologists and Allied Workers of Michigan, Indiana, and Ohio.

Investigation shows that as high as four-fifths of herds tested, which supplied one large city with milk, were infected. In some herds only one cow had streptococcal mastitis, but as high as 26 per cent. were involved. These infected cattle constitute a grave menace to public health because of the contagiousness of the infection.

From the standpoint of the farmer these cattle are also of little value, the speaker pointed out, for such infected cattle produce 22 per cent. less milk and their butter fat production is reduced 24 per cent.

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IN SCIENCE

MEDICINE

Animal Blood Transfused Into Human Patients

EXPERIMENTS in transfusion of blood from goats, bulls and hens into human patients are being carried on by a number of Soviet scientists. The object of these transfusions is not to replace blood lost in accident or disease, as in the case of transfusions of human blood, but to stimulate the body to greater activity in fighting off disease.

Stomach ulcer, certain forms of rheumatism, various forms of blood poisoning and chronic anemia are among the conditions which, it is claimed, may be helped by animal blood transfusion by the method of these Soviet scientists.

The blood from the animals is specially treated in order to make it safe for injection into the human patient's vein. In the case of the bull's blood, only the red cells are used, on the theory that the albumen of the blood plasma, rather than the red cells would prove most incompatible with human blood and therefore most injurious.

This is the explanation given by Prof. Galpern of the Dniepropetrovsk Medical Institute, who is said to have been the first to make experimental transfusions of large doses of animal blood to men. Similar transfusions have since been made by Prof. N. A. Dogoraz of the Rostov Medical Institute.

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ASTRONOMY

Small Telescope Takes Photo of Planet Pluto

PLUTO, ninth planet of the solar system, discovered in 1930, can now be observed with relatively small telescopes, it is indicated in reports from Poland received at the Harvard College Observatory.

Photographs of two hour exposure taken with a special Zeiss $4\frac{3}{4}$ inch photographic telescope by K. Steins of Riga in Latvia showed the tiny planet distinctly. Heretofore the planet has been observed only with large instruments.

Science News Letter, February 22, 1936

FIELDS

ANIMAL HUSBANDRY

Porcupines Cause Death Of Many Colts and Calves

PORCUPINES must face the charge of killing large numbers of colts, calves and sheep, in addition to their already standing indictment as destroyers of trees, the U. S. Forest Service states.

It all comes about through the habit of all young animals, of sniffing inquisitively at any strange object they see. They touch "porky's" quills, which are very loosely attached, or get a handful of them flicked into the sensitive nose tissues by a nervous flick of the animal's bristling tail. There ensue weeks of misery, and finally death.

"Porky's" sins against young timber are the result of his appetite for juicy bark. He climbs up six or eight feet into a young tree and "gnaws him a meal," working round and round the trunk and completely girdling it, so that the tree dies. Porcupines are "Timber Enemy No. 2" in parts of the West, foresters declare; they are responsible for the destruction of more trees than any other cause except fire.

Science News Letter, February 22, 1936

SURGERY

Urges Quick Amputation Of Badly Crushed Limbs

EARLY amputation of limbs which are severely crushed, as they often are in traffic accidents, is nearly always the safest course.

First advocated many years ago by Dr. Harvey Cushing, famous American surgeon and neurologist, this belief is convincingly reaffirmed by Dr. Lotfy Abdelsamie, late Resident Surgeon of the Kasr-el-Aini Hospital, Cairo. (*The Lancet*, Jan. 25).

The reluctance of many surgeons to operate immediately in such cases is quite understandable, Dr. Abdelsamie points out. If the general condition is good, the gravity of the injury may suggest at least a short delay before amputation; while there is plainly a more alarming cause for hesitation if the pulse is bad and the patient generally exhausted. But an extensive series of cases at

the Kasr-el-Aini Hospital has shown that in either instance the risk of death is increased by delay. A good general condition at first is apt to deteriorate rapidly, and a poor initial condition is all the more likely to pass quickly to a fatal issue.

These considerations apply to cases of "severe crushing" of limbs, the conditions being defined by Dr. Abdelsamie to include laceration and extensive stripping of the skin, pulping of the muscles, injuries to important nerves and blood-vessels, and the breaking up of bone into small fragments.

Such cases are now regarded at this Cairo hospital as requiring almost as urgent treatment as hemorrhage. When all operating theaters are occupied the amputation is performed in any room that is available.

In most of the amputations of severely crushed limbs at the hospital local anesthesia is given, in the form of heavy injections of novocaine.

Science News Letter, February 22, 1936

PHYSIOLOGY

Find Cheaper, Easier Way Of Obtaining Vitamin B

ACHEAPER and simpler method of obtaining antineuritic vitamin B from rice polishings has been developed by Prof. Leopold R. Cerecedo, Douglas J. Hennessy, John J. Thornton and Frank J. Kaszuba of Fordham University.

After five years of research, the Fordham chemists have worked out a process which, it is said, eliminates more than half the steps in the older process and does away with the use of the expensive chemicals involved in isolating pure vitamin B.

The main feature of the Fordham process is the use of Permutit, a sand-like substance widely used as a water-softener. Rice polishings are used as the starting material; these are extracted, and the extract is allowed to trickle down through the Permutit. The latter picks the vitamin out of the extract. The vitamin-rich Permutit is then treated with another solution to remove the vitamin, which can then be isolated without the use of costly materials, such as the salts of gold and platinum which have been used in the older processes.

There is only one ounce of pure vitamin in about a ton and a half of rice polishings, so it is easily seen how necessary it is to get a simple and inexpensive method of extraction.

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PUBLIC HEALTH

New Low Death Rate For Industrial Population

THE BEST health record and the lowest death rate for the industrial population of the United States and Canada were achieved during 1935, Metropolitan Life Insurance Company statisticians announce.

The death rate for industrial policyholders of this company was 8.4 per 1,000. The death rate for the entire country has not yet been computed. Data from 17 states covering fractional parts of the year indicate that the death rate for 1935 was lower than for 1934 but that the 1933 all time record low of 10.7 per 1,000 was probably not reached.

New low death rates were registered for typhoid fever, tuberculosis, diarrheal conditions, chronic nephritis (kidney disease), diseases associated with childbirth, and burns and drownings, according to the life insurance company's figures.

The lowest alcohol death rate since 1921 was recorded in 1935, the second full year since repeal of national prohibition. The 1935 death rate from this cause was 2 per 100,000, which marks a decline of 13 per cent. in deaths from alcoholism among insured wage-earners.

Small declines in the death rates from cancer and diabetes are encouraging features of the 1935 health picture as seen in the life insurance company statistics.

Fewer suicides and fewer deaths in automobile accidents were recorded for this large group of insured wage earners. Although deaths from automobile accidents probably did not decline in the population of the United States as a whole, the lower death rate from this cause among the industrial policyholders, most of whom live in cities, indicates that such increase as there may have been throughout the country was largely in rural districts.

The effect of liver treatment in reducing deaths from pernicious anemia is also noted in the company's statistical report.

"We can now say with considerable certainty that the use of liver based on the work of Drs. G. H. Whipple, G. R. Minot and W. P. Murphy in 1926 in the treatment of pernicious anemia has resulted in definitely checking the mortality from this disease," states the company's statisticians.

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