Vitamon D Added to Both But hygiene! The word smells of iodoform, carbolic acid, surgical Dried and Pasteurized Product - Other Notes

was discovered that poverty-stricken children of the tropics who play in the sun are less likely than city children to have bor-legs—one of the signs of rickets—it occurred to Dr. Hukischinsky that the ultra-violet rays in sun-light must have some effect on bone formation. He proved his theory by some striking experiments with mercury-vapor lamps that emitted ultra

wiolet rays.

When Drs. Hess and Steenbook in-Films in Three Dimensions dependently showed that foods which were not preventives of rickets could be made potent for that purpo merely by exposing them to ultra-violet rays, the case was complete. Cod-liver oil, for example, owes its vitamin content to the fact that fish devour sea food that has been irradiated by the sun. Milk is good be-cause cows digest grass turned green by the sun.

Vitamins are affected by the heat. Pasteurized and dried talk therefore lose some of their more valuable pro For this reason babies fe pasteurized milk are always given rrange juice. It occurred to early in-estigators that if pasteurized cr dried milk were subjected to ultraviolet radiation vitamins would be synthesized—especially the antirachi-tic vitamin D. The experiments were

## INTRODUCING VITAMIN D.

Dr. G. C. Supplee, the director of an industrial laboratory at Bain-bridge, N.Y., where the manufacture of dried milk is scientifically controlled, has now reduced this discov ery to commercial practice by stand ardizing the exposures. He and his associates found that the rays do not penetrate more than a fraction of an inch Hence the milk is allowed to of a carbon arc. Reflectors distribut the rays evenly, and at constantly changing angles. The total exposure does not exceed sixteen seconds - no Dr. Supplee has thus activated 5,000 quarts of milk an hour at a cost of one twenty-fifth of a cent to the

Since it is important to know how intense the radiation is, Dr. Supple makes exact measurements with a modified photo-electric cell. He usethe cell much as any dairyman would use the thermometer, but in this case to control the temperature of the pasteurization.

The work of Dr. Supplee is impor tant because it is now possible for manufacturers of dried milk and pasteurizers to sell a uniform product that will meet the standards set by physicians so far as its contents of itamin D are concerned.

THE BLESSINGS OF DUSTY AIR One of the stock exhibits of committees organized to teach the public how to avoid contracting tuberculosis is a pair of miner's lungs, black with coal dust. Yet that biological revocoal aust. 1et that biological revo-lutionist, Dr. J. B. S. Haldane of Cambridge University, rather start-led an audience of physiologists and bio-chemists at the University of cial solution of a fascinating problem Michigan by maintaining that dust, whether coal dust or rock dust, is not the menace it is commonly suppose

Rock dust by itself, Dr. Haldans admits, is a real danger. It consists of fine particles of silicates, each a little knife that cuts into lung tissu and thus produces the disease known as silicosis. But rock dust mixed with coal dust is no health hazard According to Dr. Haldwe, coal dust stimulates expectoration. As he clears his lungs and throat the mine gets rid of the coal dust as well as the rock dust that may be mixed with it. In fact the irritation produced by Dr. W. Hess have found a substance, coal lust may actually be a benefit of "histamine acid phosphate," which, warding off silicosis. Gold miners in the quartz seams of the Rand in headache in forty seconds. Particu-South Africa are now being shifted lars of their experiments are given to coal mines in order to test this in the Medica

Just what constitutes "bad air," the subject of Dr. Haldane's Michigan address, depends on what the viewpoint dress, depends on what the viewpoint cold in the auge loss they oring to lit. The unquestionably pure air that the aviator breathes at 20,000 feet is "bad" in the sense that there is not emough of it and that it exalts and "It is impossible to find the cure "bad" in the sense that there is not enough of it and that it exalts and leads to reckless acts. Air charged with rock dust, particles tossed up in the process of grinding cultery, sand, and minute bits of cotton "floff" is bad to order and in the degree you wish because, if breathed continually, it The research worker cannot go round may induce tuberculosis and pneum nia. Apparently air charged with jects to examine.

## Recurring Weakness

Mrs. Carr Finds Dr. Williams' Pink Pills Wonderfully Beneficial In Restoring Strength

limestone and flourmill dust is 'pad" in this sense.

TASTE VS. SCIENCE. Protests rise from gourmets. Goo

dressings. A dish hygienically pre-pared tastes of the laborator and not of the kitchen. And the tlass There is good reason to believe that shops with the sterilized air and the from 50 to 96 per cent. of the young children suffer to some degree from rickets—the disease caused by lack of bone-hardening vitamin D. When it was discovered that representatives predict that the conservatives of the procedure. And so the conservatives of the procedure of the procedure of the procedure. servatives predict that the cordo bleu will continue to follow the tradi tions of cleanliness, give all his senses a chance to judge the fitness of fool to be served in a cassero and leave the fear of bacteria to the white-tiled food factories, where machines and thermometers are the real

> The eye and the mind have been kind to the motion-picture director. Ir

the old days of the silent film they were willing to be fooled into accepting a two-dimensional image on a fint screen, a mere animated smear if it was scrutinized closely, as Charlie Chaplin or Douglas Fairbanks. Apparently it is easier to deceive one sense than two senses. Certainly it is hard, even for the most obliging au dience, to believe that photographs talk and sing, no matter how well the action is suited to the word.

Probab'y for this reason the tech nical interest in three-dimensional sound films has never been keener than now. At least a score of laborathan how. At least a score of habora-tories in Europe and America are attacking one of the most difficult scientific problems ever presented to the research engineer. Yet the un-derlying principles that must be applied are well understood. They are thus stated by F. de la C. Chard of the University of Bristol:

The camera must take two sets of pictures, one from the viewpoint of the left eve and one from that of the right eye. The cinema pro jector must project these images of two screens or on a common screen, and the eyes must be provided with some means of insuring that the view only their appropriate pic tures.

To solve the problem by throwing two images on separate screens placed side by side and viewing them through a stereoscope held to the eyes mus be dismissed as commercially imprac tical.

Both in America and Europe the

'anaglyph" method has been tried but without success, because the spectators must wear glasses tinted, respec tively, red for one eye and green for the other. Right and left eye pictures are alternately projected on a single screen, each eye picking out the image that it is intended to see that the brain performing the necessary stereoscopic combination. There is some reason to believe that motion-picture enthusiasts would eventually become color blind if they used anaglyph spectacles persistently, according to Chard. If an object is lit alternately first from one side and then from the other it appears solid, although we can hardly speak of stereoscopic vision. This method of securing three-dimensional reality seems promising, but still has its limitations, be cause it is as yet impossible to flash a sufficiently powerful light in time with

### Doctors Try To Find Cure For Headache

There are twenty different kinds of headache. Is it possible to find single, underlying cause and

That, according to a London (Eng. specialist, is the question behind new research, particulars of which have just been published.
Dr. G. W. Pickering, a member of

the Medical Research Society, and current number of the British Medical Journal.

"I would place headaches," said the specialist, "next to the common cold in the huge loss they bring to

trusting to luck for headache sub-

"The method of producing a pain to find its cure has been followed effectively in other subjects, notably

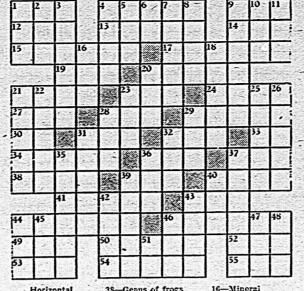
in cobra bite. "It will probably be a long time before research produces any specific against headaches, but it is of enormous importance that the first steps

Feels aged woman, married 12 years. In law a weak heart and sometimes get so weak I can hardly mo ove about," writes Mrs. H. Carr, Port Carling, Ont. "I was advised to try Dr. Williams' Pink Pills and they have been a wonderful tonic to me. After teking three boxes, I feel quite improved and am able to walk again. I consider Dr. Williams' Pink Pills a great blessing to humanity."

Mrs. Carr's high praise of Dr. Williams' Pink Pills a great blessing to humanity."

Mrs. Carr's high praise of Dr. Williams' Pink Pills is typical of what thousands of other grateful women hare written. These pills actually create the rich new blood which is lacking in run-down, exhausted systems. Growing girls in great numbers have found Dr. Williams' Pink Pills a veritable blessins. Older people have equal need of them. Get it supply from your druggist. 50c a package.

**GUR CROSS-WORD PUZZLE** 



39-To terrify

40-Grain

Horizontal 1-Aside 4-Deadiy 12-Mold

43-Sound of knock 13-То гип ажау 44-Salted 14-Joke 15-Again 49-To inspire fear 17-Having flaments 50-Partly heated 52-Rather 19-Vase 20-To crince 53-By birth 54—To eat away

23-Seed bearer 24-Slang; mediocre actors 27-Age 29-Fashionable 30—Not any 31—Scottish for own 32-Conjunction 33-Colluquail: push

36—Hearth projection

32-Instantly 35—Admission 36—Scuttle 55-Number Vertical 1—Poem 2—Paddle 37—Scarf 39—Beverage 40—Sign of zodiae 42—To award 3-Starch 4—Plant 43-Excursion 5-Bererage 6—Preposition 7—Plant louse 44—Container 45—To be due 8-Slim 46—Top 47—Anger 48—Low haunt 37—Piece of information 11—Finish 51-Put outs (baseball)

### The Token-Heart By Ralph Wotherspoon in G. K.'s Weekly (London).

n the old farm chimney Jane and I espied A poor shrivelled sheep's heart, Black and mummified. Tucked away upon the shelf, Where the flue begins, Stuck full of pins.

How it came to be there None could discover: Nor who had stuck the pins in it To plage , her faithless lover. Who the jilted maiden was And who the truant swain. I could only wonder, And likewise Jane.

"How she must have suffered!" Said Jane with a sigh-"She probably deserved to. And more," quoth I.
"When she drove a pin home Did he feel a pain?"
"I hope not," I answered,
"I hope so!" said Jane— "I hope so, I hope so, I HOPE so!" Said Jane.

Treatment of Poles

Ottawa.—The tendency of a water-soluble salt when used as a preservative against decay to climb up the sapwood to the top of the poles when they are placed in the ground has been the subject of investigation by the Forest Products Laboratories of Canada, Forest Service, Department of the Interior. Work conducted in connection with this investigation indicates that poles treated with such water-soluble preservatives as zinc chlorides, are not immune for an indefinite period to fungous attack in the vicinity of the ground-line, the most vlunerable point, be cause of the tendency of the salts to gradually creep up to the upper part of the pole.

Many a good man has strayed into the crooked path by following the direction of the corkscrew.

+ Do You Know? +

That in Wainright Buffalo Park, Alberta, experiments have

been carried out in cross-breeding buffalo and angus cattle in an endeavor to produce a milk and food animal capable of withstanding the

rigors of the very far North? The curious looking beast in the

photograph'is the result of this experiment and is known as a "cattalo"



Honor Car Conductor

There was an unusual scene at the awarding of degrees in the great hall of Vienna University the other day when several hundred street car con-ductors in uniform mingled with the students in their colored caps and sachets to see Franz Sailler, a tram conductor, receive the degree of Doc

conductor, receive the degree of Doc-tor of Laws.

Sailter, who is 33 years old, mar-ried and the father of two children, is the son of a Vienna caretaker. During the war he matriculated and was then called to the colors. After the war he became a bank-clerk, bu tost his post on the failure of his bank and eventually obtained a job in the municipal street car service For seven years he has been attending lectures and studying in the mornings and collecting fares and punching tickets on the cars in the venings.

## THRILLS

The big-game hunter was showing an acquaintance his trophies. He pointed proudly to the wonderful collection of heads round the wall, tiger-skins on the floor, and all the other things that hunters collect. "Very, very interesting,

ed the guest, peering at them through his spectacles. "Perhaps you'll drop in some evening and see my butter-

18-God's vital fluid

23-Woodland deity .

20-To believe

22-Scent

26-Incline

oc\_Along

31-Over

29-Throng

21-Spanish title

25-Witchcraft



beef and is highly; arded as an article of food. Ninety of the car-casses from the slaughter, including

the fifty aged buffalo were set aside to be dried and later distributed among the Eskimo to relieve cases of distress.
The buttalo heads are mounted for sale while the skins are made up into robes and rugs, and coats for

ladies and gentlemen. By careful treatment the weight of the coats has been reduced so that they compare favourably with other ckins in this respect. For warmth, durability and appearance they rank with the best from other Canadian fur-bearers.

## Injections for the Drowsy

A woman of forty-five was always tired. She had to sleep about thirteen hours out of the twenty-four, and at last getting up in the morning beca ne

an agony.

Four weeks of treatment be injection with gland extract enable her now to get up every morning early with ease. This and other cases of the kind, says Dr. Jean Bannin in Je sais tout (Paris), owe everything to a recent discovery of Dr. Leopold Levi, pioneer of endocrinology in

His knowledge of the internal-secre tion glands prompted him to experi ment until he had tested extracts for sleepy-heads. A suprarenal gland ex tract seems most potent with thos who want to get up early. We read: An Egyptian woman, in a condition of profound weakness, was able, after rteen injections of cortico-suprar nal extract, to get up at seven in the

attainable hitherto. dinner so intense would be her desire with suprarenal extract, made it easy fro her to get up in the morning at quarter past six, ridding her of her drowsiness besides.

A doctor, having passed his fiftieth year, could not get up early. After a energy glands—from the ninth medical visit, in fact—he could get up early without difficulty, and at the same time he was freed from nervousness and pain.

Stream Flow in the Maritimes Ottawa.-Stream flow in the Mari ime Provinces during November, a reported by the Dominion Water Power and Hydrometric Bureau of the Department of the Interior was above average. In northern New Brunswick the monthly run-off was 23 per cent and in the southern part of the pro vince 31 per cent. above the Novembe average; these above normal condi tions were mainly due to heavy rain during the last few days of October The highest November flows were re gistered on the first day of the month and thereafter diminished in Nove Scotia run-off was about 8-per cent curring during the early part of November and the maximum on the 21st of the month.

A hope unaccompanied with godly life had better be given up, and the sooner the better; for, if re-tained, it will prove as a spider's web when God shall take away the soul

### Canada Reduces Owl Laffs **Buffalo Herd**

to be Kept Within Graz-ing Capacity of

Reserve

Ottawa.-Upwards of half a million

ounds of huffalo meat was placed o

the Canadian market during the autumn as a result of the slaughter o ome 1 200 animals from the herd i

Buffalo National Park at Wainwright

pers of Canada's great national herd

was made necessary by the grazing

limitations of the immense fenced re

serve at Wainwright and the 1,20

slaughtere! are the equivalent of the

1932 increase. This reduction brings

the herd down to approximately 6,300 The annual reduction of the herd a

Wainwright, Alberta, which is admir

istered by the Department of the litterior through the National Parks of

Canada, calls to mind Canada's success in bringing back the buffalo. The

herd at Walnwright developed from

the Pablo herd purchased by the Do

minion Government in 1907. A total

of 716 enimals were bought from the

these were established in Buffalo Na

tional Park while the remainder form

6d the nucleus for the present herd of over 1,000 in Elk Island National Park.

The animals placed in Buffalo Park have increased rapidly during the

twenty-five years since the establish

ment of the park. A total of 6,673 was shipped north to Wood Buffalo Park

near Fort Smith, Northwest Terri-tories; including this year's number a

total of \$.680 have been slaughtered

and the meat, heads, and hides dis-posed of; which together with the 6,300 still remaining in the park make

total of 21,653 animals.

The practice followed in this year.

disposal of the surplus animals a

several years since a reduction of the

herd became necessary for its future well being. The entire herd was

rounded up and the animals selected

were separated and placed in special

corrals conveniently close to the abat

toir. They included 500 over four years of age, 400 three year olds, 250

two year olds, and 50 aged buffalo

Each day since November 23 when the work began, a certain number were

slaughtered and the carcasses inspect

ed and placed in refrigerator cars fo

shipment to the larger cenres of popu

lation throughout the Dominion, Van

couver, Edmonton, Calgary, Regina Winnipeg, Toronto, Oitawa an' Mont

eal all receive allotments and there

by citizens in every part of the Do

minion were given an opportunity to enjoy a real treat. Buffalo meat has all the juicy tenderness of the finest

Alberta The disposal of these men

My Dog and Old pal, the years are slipping by. Our leaning shadows eastward fall, Great Herd in Alberta, Has won't be long till you and I Will hear and heed our Master

cali: don't know where we'll go from here Or what we'll be or what we'll do, And I don't care—if only fate Will grant me just one friend like

Friend-"bid you ever attend a chool for stutterng? Stutterer — "N-n-no, I 1-1-just p-p-p-picked it up."

Men are like boys. They'll work much harder to amuse themselves than they will to make money. You know 'em, don't you?

Visitor-What nice buttons you are sewing on your little boy's suit. husband once had some like that on

Minister's Wife—"Yes, I get all my outtons out of the collection plate." Stolen kieses may be sweetest, but

little enthusiastic co-operation does not hurt anything. shrewd Montana half breed and 671 of Medlin-I hear that when Gerald Sorder was in the hospital he had to

have two nurses night and day."

Herbin—"Yes, his wife wouldn't trust him alone with just one." When you follow the path of least

resistance, you must be content to arrive long after the crowd.

Modern Love Song Believe me, if all those adhering young charms Which I view with admiring dismay are going to rub off on the shoulders

and arms
Of this suit which was just cleaned to-day.

hou wilt be adored with my usual zeal. My sweetheart, my loved one, my

own. But I'll sternly repress the emotions I feel—
I'll love you, but leave you alone.

Johnson - "Women don't Interest me. I prefer the company of my fe

Sellers-I'm broke too, brother." It's Hanuary Now in San Hosay

New President-"I stopped over in an Juan and—"-Old President—"Pardon me, but you should say San Huan. In California

we pronounce our J's like H's."

New President—"Well, you'll have to give me time. You'see, I've been in the State only through Hune and Huly."

Condensed Geography Teacher-What are the product of the West Indies?"

Boy—"I don't know." "Come, come! Where do you get

"We borrow it from the next-door neighbor."

At April 1st, 385 morning news papers had 14,391,417 net paid circulation; 1,543 evening newspapers had paid circulation of 25,676,674. These figures are within one per cent. of the net paid as of Summer, 1929.—Editor and Publisher, New York.

Sonny-"Daddy, the dog has littered up the living room again. Daddy-"Break anything?"

Sonny—"Oh, no, but she has six pupples."

You shouldn't expect to fly all night with the bats, and then sail around all day with the meadowlarks

Wife-"I've invted one of my old weethearts to dinner. Do you mind? Husband-"Mind! Heavens, No! always love to associate with lucky people.'

Non-Transferable Teacher-"Tommy, come up here and give me what you've get in your mouth." Tommy-"I wish I could-it's the

toothache."

FAIR QUESTION

A couple of men were playing a morning instead of at ten, a result ungolf match, but not very seriously, for they managed to get a good deal of A young woman, an invalid, was af- fun from the encounter. The climax fected by a persistent sleepiness. She came at a hole where one of them went to bed without waiting to eat her attempting a terrific drive, saw th to sleep. A multiglandular treatment, of yards of "whipping" and fall into 

ent, in mock appropriate, "which is it going to be-golf or fishing?"

"Uncle, you're not married, are "No, darling." tells you what you ought not to do?"

# that sluggish feeling

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Get a bottle of Kruschen Salis today, and take one-half a teaspoon in a glass of hot water every morning fore breakfast.

Before the bottle is empty you'll feel years younger—eyes will brighten feet years younger—eyes will brighted
— step grow springhiller — nerves
steadler—you'll sleep sound, enjoy
your meals, and after a hard day's
work you'll be ready for wholesome
recreation—one million women already
know all this.

### Banff National Park

Ottawa.—Banfi National Park is oldest, second largest and best known of the National Parks of Canada. The first reservation : 23 made in 1885 following the discovery of the remarkable hot springs which are one of the main attractions of the park. The mountains in the park reveal two distiret formations with the line of dirision in the neighborhood of Castle mountain. To the east is a veritable "sea of mountains' with ranges rising in parallel lines sloping gentl. wards to the west and breaking sharply off at the crest like waves of an ocean. West of Castle mountain the rock has been lifted straight in the air so that the strata lie horizontally and the mountains take . more massive, block-like form with pyramidai ... dome-shaped heads.

## NO HURRY

"Henry," said Mrs. Glipping, in earful tones.

"Well, my dear?" asked Henry, looking up from the paper. "What is it?"
"If I were to die tonight, world

you marry again?" "Not tonight."

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-No Calomel necessary

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endurable.

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