

DEER FARMING IN THE UNITED STATES

BY D. E. LANTZ
U. S. BIOLOGICAL SURVEY

That the rising prices of beef and mutton in the United States can be partially overcome by raising deer for venison, is maintained by Dr. C. Hart Merriam, chief of the United States biological survey. According to Dr. Merriam elk meat can be produced cheaper than beef or mutton in many sections of the United States, and with comparatively little effort it is possible to make raising deer for venison as profitable as any other live-stock industry. Everyone who has seen the large numbers of deer browsing on private estates in England as peacefully as cattle and sheep wonders why American enterprise has not long since developed breeding deer for food in this country.



EVERAL species of deer are suited for breeding in enclosures in the United States; the axis deer, the Japanese and Peking sikas, the red and the fallow deer of Europe, and especially the Rocky Mountain elk, or wapiti, and the Virginia deer. While experiments with the foreign species named offer every promise of success to the owners of American preserves, the elk and Virginia deer are recommended as best adapted for the production of venison in the United States.

The flavor of venison is distinctive, though it suggests mutton rather than beef. In chemical composition it is very similar to beef. A lean venison roast before cooking has been found to contain on an average 75 per cent of water, 20 per cent of protein or nitrogenous material and 2 per cent of fat; a lean beef roast, some 65 to 70 per cent of water, 20 to 25 per cent of protein and 5 to 14 per cent of fat; and a lean leg of mutton, 67 per cent of water, 19 per cent of protein and 13 per cent of fat.

The general popularity of venison is so great and the demand for it so widespread that over-production is improbable. The other products of the deer—skins and horns—are of considerable importance and in countries where deer are abundant and especially where large herds are kept in semi-domestication, the commerce in both is very extensive.

The wapiti, known generally in America as the elk, is next to the moose, the largest of our deer. It was once abundant over the greater part of the United States, whence its range extended northward to about latitude 60 degrees in the Peace river region of the interior of Canada. In the United States the limits of its range eastward were the Adirondacks, western New Jersey and eastern Pennsylvania; southward it reached the southern Alleghenies, northern Texas, southern New Mexico and Arizona; and westward the Pacific ocean.

At the present time the elk are found only in a few scattered localities outside of the Yellowstone National park and the mountainous country surrounding it, where large herds remain. Smaller herds still occur in Colorado, western Montana, Idaho, eastern Oregon, Manitoba, Alberta, British Columbia and the coast mountains of Washington, Oregon and northwestern California. A band of the small California valley elk still inhabits the southern part of the San Joaquin valley.

The herds that summer in the Yellowstone National park and in winter spread southward and eastward in Wyoming are said to number about 20,000 head and constitute the only large bands of this noble game animal that are left. Although protected in their summer ranges and partially safeguarded from destruction in winter by the state of Wyoming, there is yet great danger that these herds may perish from lack of food in a succession of severe winters. Partial provision for winter forage has been made within the national park, but the supply is inadequate for the large numbers of animals. Further safeguards are needed to place the Wyoming elk herds beyond the reach of winter starvation.

In addition to the wild herds there is a considerable number of elk in private game preserves and parks, as well as in nearly all the public zoological parks and gardens of this country. The herds in captivity form the nucleus from which, under wise management, some of the former ranges of this animal may be restocked and from which a profitable business of growing elk venison for market may be developed. At the present time this species affords a most promising field for ventures in breeding for profit.

The elk is both a browsing and a grazing animal. While it eats grasses freely and has been known to subsist entirely upon pasture, it seems to prefer a mixture of grass and browse.

The elk is extremely polygamous. The adult bulls shed their antlers annually in March or April and new ones attain their full size in about 90 days. The "velvet" adheres until about August. While the horns are growing the bulls usually lead solitary lives; but early in September, when the horns are fully matured, the mating season begins. Fights for supremacy then take place and the victor takes charge of as many cows as he can round up and control.

Although the elk is less prolific than the common deer and some other species that have been bred in parks, it increases fully as rapidly as the common red deer of Europe. Moreover, it makes up for any lack of fecundity by its superior hardiness and ease of management. It has been acclimated in many parts of the world and shows the same vigor and hardiness wherever it has been transplanted. In Europe it has been successfully crossed with the Altai wapiti and the red deer and in both instances the offspring were superior in size and stamina to the native stock.

The flesh of the elk, although somewhat coarse, is superior in flavor to most venison. That of the bulls is in its best condition about the time the velvet is shed. In October their flesh is in the poorest condition. As the open season for elk is usually in October and November and only bulls are killed, it follows that hunters often obtain the venison when it is poorest. The meat

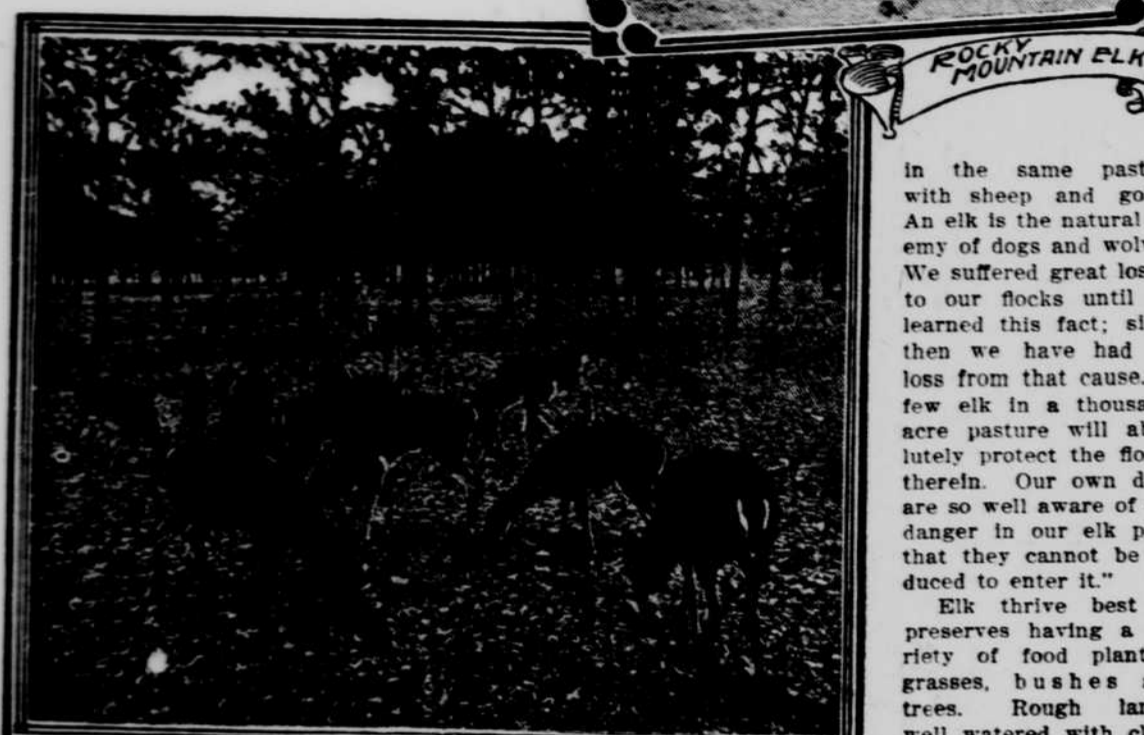
packed with eager spenders. I know a man who went to Martin's three weeks before last December 31 to reserve a table for that night of nights.

"Give me your order now," said a head waiter, "and I will see what can be done about it." In other words, he might have said: "If you agree to spend enough money you may come."

I passed a New Year's eve in Martin's once. No one seemed to mind drinking "nothing but champagne."

They not only drank champagne, but spilled it on the tables and the floor. Many new acquaintances were made that night—and forgotten the next day. Everyone was kind, indulgent now and then some one stood upon a table and bayed at the moon. Every body seemed good-natured, and at almost everybody seemed drunk. But then, you must remember, it is not thought good form, in Lobster Palace society, to be anything but drunk on New Year's eve.

It was at Martin's that the comically brilliant notion of serving nothing but champagne to drink after nine o'clock on New Year's eve originated. To get a table at all on New Year's eve is difficult; when you get one you



HERD OF DOMESTICATED VIRGINIA DEER

is not best when freshly killed, but should be left hanging for four or five days before it is used.

With few exceptions the early attempts to domesticate elk were made by men who were wealthy enough to disregard all thought of profit in raising them. They were usually placed under the care of servants and the bucks were left unattended until they became old and unmanageable. Soon the serious problem of controlling them outweighed the novelty of their possession and one by one the attempts at domestication were abandoned.

A desire to preserve this important game animal has caused a renewal of attempts to breed it in confinement and at present there are small herds under private ownership in many places in the United States. The biological survey has recently obtained much information from owners of herds in regard to their experience in breeding and rearing the animals and also their opinions as to the possibility of making the business of raising them profitable. Of about a dozen successful breeders nearly all are of the opinion that raising elk for market can be made remunerative if present laws as to the sale of the meat are modified.

One especially important fact has been developed by the reports from breeders. It is that the elk readily adapts itself to almost any environment. Even within the narrow confines of the paddocks of the ordinary zoological park the animal does well and increases so that periodically the herds have to be reduced by sales.

The fullest reports that have been received by the department of agriculture from breeders of elk are from George W. Russ of Eureka Springs, Ark.

Mr. Russ has a herd of 24 elk. They have ample range in the Ozarks on rough land covered with hardwood forests and abundant underbrush. The animals improve the forest by clearing out part of the thicket. They feed on buds and leaves to a height of eight feet and any growth under this is liable to be eliminated if the range is unrestricted. If not closely confined elk do not eat the bark from trees nor do they eat evergreens. In clearing out underbrush from thickets they are more useful than goats, since they browse higher. Goats, however, eat closer to the ground, and as the two animals get along well together Mr. Russ recommends the use of both for clearing up brushy land and fitting it for tame grasses.

The increase of elk under domestication is equal to that of cattle. Fully 90 per cent of the females produce healthy young. An adult male elk weighs from 700 to 1,000 pounds; a female from 600 to 800 pounds. The percentage of dressed meat is greater than with cattle, but, owing to hostile game laws, experience in marketing it is very limited. An offer of 40 cents a pound for dressed meat was received from St. Louis, but the law would not permit its export.

Mr. Russ says: "From the fact that as high as \$1.50 a pound has been paid for the meat in New York city and Canada and that the best hotels and restaurants pronounce it the finest of all the meats of mammals, we are of the opinion that if laws were such that domesticated elk meat could be furnished it would be many years before the supply would make the price reasonable compared with other meats. Elk meat can be produced in many sections of this country at less cost per pound than beef, mutton or pork."

Mr. Russ thinks that large areas of rough lands in the United States not now utilized, especially in localities like the Ozarks and the Alleghenies, could be economically used to produce venison for sale and he regards the elk as especially suited for this purpose.

Another feature of Mr. Russ's report is of more than passing interest. He says:

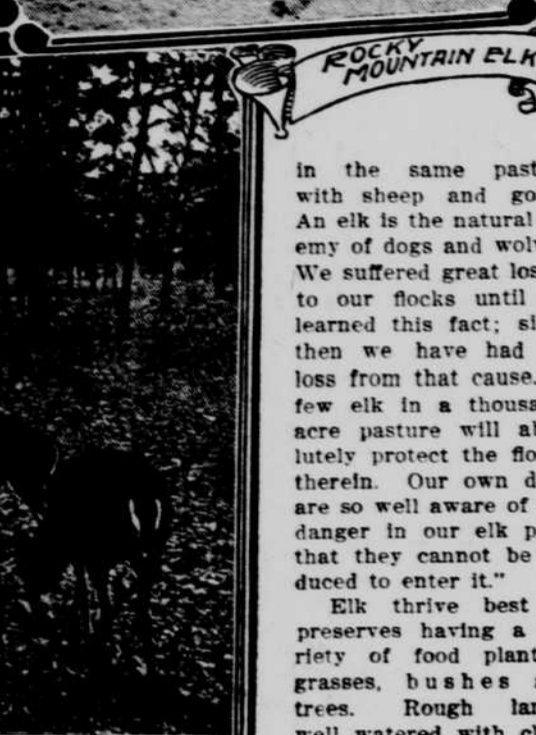
"We find from long experience that cattle, sheep and goats can be grazed in the same lots with elk, providing, however, that the lots or inclosures are not small; the larger the area the better. We know of no more appropriate place to call attention to the great benefit of a few elk

in the same pasture with sheep and goats. An elk is the natural enemy of dogs and wolves. We suffered great losses to our flocks until we learned this fact; since then we have had no loss from that cause. A few elk in a thousand-acre pasture will absolutely protect the flocks therein. Our own dogs are so well aware of the danger in our elk park that they cannot be induced to enter it."

Elk thrive best in preserves having a variety of food plants—grasses, bushes and trees. Rough lands, well watered with clear streams and having some forested area, are well adapted to their needs. About as many elk can be kept on such a range as cattle on an equal area of fair pasture. There should be thickets enough to furnish winter browse, but this should be supplemented by a supply of winter forage.

Except when deep snows cover the ground, elk will keep in good condition on ordinary pasture and browse, but a system of management that provides other food regularly will be found more satisfactory. Hay and corn fodder are excellent winter forage, but alfalfa hay has proved to be the best dry food for both elk and deer.

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ROCKY MOUNTAIN ELK

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The cost of stocking an elk preserve is not great. Usually surplus stock from zoological parks or small private preserves may be obtained at low cost, varying with the immediate demand for the animals.

The Virginia or whitetail deer is the common deer of the United States. Including the half dozen geographic races that occur within our borders, it is distributed over most of the country, except Nevada and the major portions of Utah, Arizona, Washington, Oregon and California. It is extinct in Delaware and practically so in a number of states in the middle west. South of our borders a number of closely related species occur.

In view of the wide natural range of the Virginia deer, its adaptability to nearly all sections of the United States cannot be doubted. Testimony as to its hardiness in parks and preserves is not so unanimous as that concerning the elk; but the general experience of breeders is that with suitable range, plenty of good water and reasonable care in winter, raising this deer for stocking preserves or for venison may be made as profitable as any other live-stock industry. Not only do deer thrive on land unsuited for cattle or horses, but, like elk, they may be raised to great advantage in brushy or timbered pastures fully stocked with cattle or horses, as the food of deer rarely includes grass.

Advocates of the Angora goat industry state that within the United States there are 250,000,000 acres of land not suited to tillage or to the pasture of horses, cattle or sheep, which are well adapted to goats. Much of this land is suited also to deer and elk and can be utilized for these animals with less injury to the forest cover than would result from browsing by goats.

Virginia deer have often been bred in parks for pleasure or in large preserves for sport, but the economic possibilities in raising them have received little attention. Recently breeders have recognized the fact that they are profitable under proper management and would be much more so were conditions for marketing live animals and venison more favorable.

The chief obstacle to profitable propagation of deer in the United States is the restrictive character of state laws governing the killing, sale and transportation of game. Many of the states, following precedent, lay down the broad rule that all the game animals in the state, whether resident or migratory, are the property of the state. A few states except game animals that are "under private ownership legally acquired."

The laws concerning the season for killing and the sale of deer are often equally embarrassing to those who would produce venison for profit. The owner of domesticated deer cannot legally kill his animals except in open season.

Instead of hampering breeders by restrictions, as at present, state laws should be so modified as to encourage the raising of deer, elk and other animals as a source of profit to the individual and to the state.

It is believed that with favorable legislation much otherwise waste land in the United States may be utilized for the production of venison so as to yield profitable returns and also that this excellent and nutritious meat, instead of being denied to 99 per cent of the population of the country may become as common and as cheap in our markets as mutton.

He is in deadly fear that pestiferous germs are lying in wait for him and has adopted an elaborate system of safeguards to ward them off.

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Lieutenant Governor White is the best looking man in the senate. With his good looks are joined a gentleness of voice and demeanor, an unfailing courtesy, a precision of speech which frequently has been interpreted as weakness by those at the capitol who have not had the same advantages of breeding and environment, but which never fails to captivate persons of intellect and education.

WHO'S WHO-AND WHY

PRESIDENT'S NEW SECRETARY



Charles D. Norton, the new secretary to the president, had been holding down the job of "buffer" of the Taft administration only a few days until he "buffered" Francis Burton Harrison, Democrat, and member of congress out of the White House in a huff.

The secretary to the president is there to do just that sort of thing and Mr. Norton did it with such ease that two other members of the Empire state delegation who were present did not know that Mr. Harrison had been "buffered."

The story of the clash between the president and the New York congressman is not the subject of discussion for this short sketch, but suffice it to say that criticism by Mr. Harrison of the presidential action in connection with the Ballinger-Pinchot row made the New York congressman persona non grata at the White House and Mr. Norton was the one who told him so.

Mr. Norton only a short time ago succeeded Fred W. Carpenter to the office of secretary to the president. He had been serving as an assistant secretary of the treasury when President Taft selected him as the "buffer." Mr. Carpenter had expressed a desire, so some Washington newspaper correspondents expressed it, of being minister to Morocco. Why anybody would desire to give up the job of secretary to the president to go to Morocco is hard to tell, but that is what some of the accounts of Mr. Carpenter's retirement from the White House said. Others said it was because the president had found that Mr. Carpenter wasn't quite big enough for the "buffering" job.

The secretary to the president must know who the president wants to see and who he doesn't. Consequently when Mr. Harrison came in Mr. Norton turned him aside. When Grover Cleveland was president Daniel Lamont was the force to be reckoned with. Then came McKinley, who had Mr. George B. Cortelyou. Following Cortelyou came William Loeb. It has been said that Mr. Lamont was the ideal secretary and there has been much praise of Cortelyou. Loeb probably had the hardest job of any of them, for he had a different sort of master to serve as a "buffer" for Roosevelt, the strenuous.

Mr. Norton is in his fortieth year. He was born in Winnebago county, Wis., at what is now Oshkosh, and is the son of the Rev. Franklin B. Norton, a Congregational frontier missionary. From his early manhood until he became assistant secretary of the treasury last year he was identified with the Northwestern Mutual Life Insurance company, first at the home office in Milwaukee, later at Chicago in partnership with A. W. Kimball, becoming sole general agent there in 1905 upon Mr. Kimball's death. He has all the qualities of a good secretary.

RIPLEY ACTIVE RAIL CHIEF



Edward Payson Ripley, president of the Atchafalaya, Topeka and Santa Fe Railway company, is about the busiest railroad chief in this country. Whenever anything big is going on among the railroads, especially those in the west, Mr. Ripley is pretty sure to be found right in the front rank.

Recently the western railroads considered it necessary to increase their freight rates and had everything ready to do so when President Taft took a hand. As a result of presidential interference Judge Dyer of the United States district court issued an injunction restraining the roads from raising the prices for which they would haul freight.

Several of the railroad chiefs, among them Mr. Ripley, E. A. Delano, president of the Wash and S. M. Felton, president of the Great Western met in Chicago. They decided to take the matter up with the president personally at the White House and were received in conference with Mr. Taft. As a result of the meeting it was agreed that the injunction suit would be withdrawn and that the roads would not attempt to increase the rates.

It was not President Ripley's first important visit to the White House. He was there more than once when the railroad rate bill was before congress and caused such a big fight. The president of the Santa Fe had the confidence of Theodore Roosevelt and he wielded his influence in the interests of the stockholders of the Santa Fe.

Mr. Ripley was born in Dorchester, Mass., 55 years ago and after being graduated from the high school there began railroad work as a clerk for the Pennsylvania Railroad company. His work was of such splendid character that he soon gained promotion to New England agent then general agent. From the Pennsylvania Mr. Ripley went to the Burlington, serving first as traffic manager and then general manager. From 1890 to 1895 he was third vice-president of the Chicago, Milwaukee and St. Paul road and in 1896 became president of the Santa Fe, which has steadily improved and grown under his guidance.

BARRETT'S PRAISE OF GIRLS



John Barrett, diplomat, author, one time reporter, editor and war correspondent and a great believer in the future of South America, turned his attention from the affairs of the Latin republics long enough a few days ago to give some advice to the fair girl graduates of the land.

Mr. Barrett was speaking to the graduating class of Belmont seminary in Washington, but his words could well be taken to heart by every young woman who is leaving school this year to enter upon her battle of life.

He said the women of the world have their eyes on the American girl and are watching every step of her progress; they look upon her as a model after whom they may pattern with profit. He said the young women of this country should at all times prove themselves worthy of the trust which the women in the other countries of the world are placing in them.

The young woman, he averred, who leaves a Washington seminary should, upon her return home, do her best to exercise her influence for good upon the community in which she resides. This, it was explained, does not mean that she should enter politics, but rather that she should do all in her power in meeting men who direct affairs to impress upon them their duty to their country, state and city.

The Washington seminary girl, Mr. Barrett continued, has the advantage over girls educated in other parts of the country of having seen the machinery of one of the greatest governments in the world. If she travels, he said, she should take advantage of the opportunity to learn at all points, so that when she returns home she may have profited by her journeys.

Mr. Barrett has been director of the International Bureau of American Republics since 1906 and has never lost an opportunity of talking about its work and the good that is to be attained through closer relationship between the United States and the Latin American republics.

SUCCESSOR TO GOV. HUGHES



When Gov. Charles E. Hughes retires in October to become a member of the United States Supreme court, Lieutenant Governor White will become the chief executive of the Empire state. Lieutenant Governor White is only forty-four years old. His father was Horace K. White, a member of a distinguished Syracuse family. Andrew D. White, ex-president of Cornell university and former ambassador to Russia and to Germany, is his uncle. He is a lawyer by profession.

He has been active in the Republican party ever since he attained his majority. He has fought his party's battles on the stump in nearly every state and national convention for the last 20 years. In 1898 he was chairman of the Republican state convention which nominated Theodore Roosevelt for governor. White was first elected to the state senate in 1895 and remained a member of the upper house until his election as lieutenant governor two years ago.

He eats by the clock and sleeps by the clock. According to his friends, he is in deadly fear that pestiferous germs are lying in wait for him and has adopted an elaborate system of safeguards to ward them off.

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A USEFUL QUALITY.



"This watch of mine is absolutely waterproof."
"That is a great idea. It will not hurt the works when you 'soak' it."

A Protection Against the Heat.
When you begin to think it's a personal matter between you and the sun to see which is the hotter, buy yourself a glass or a bottle of Coca-Cola. It is cooling—relieves fatigue and quenches the thirst. Wholesome as the purest water and lots nicer to drink. At soda fountains and carbonated in bottles—everywhere. Send 2c stamp for booklet "The Truth About Coca-Cola" and the Coca-Cola Baseball Record Book for 1910. The latter contains the famous poem "Casey At The Bat," records, schedules for both leagues, and other valuable baseball information compiled by authorities. Address The Coca-Cola Co., Atlanta, Ga.

According to Her Count.
"Yes," said the young wife; "Phillip and I have lived together a whole year, and we've never had the slightest quarrel."

"What are you talking about! You and Phillip were married seven years ago!"
"To be sure we were, but you forget that he's a traveling salesman."

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We offer One Hundred Dollars Reward for any case of Catarrh that cannot be cured by Hall's Catarrh Cure.
F. J. CHENEY & CO., Toledo, O.
We, the undersigned, have known F. J. Cheney for the last 15 years, and believe his perfect honorability in all business transactions and financial ability to carry out any obligations made by his firm.
WALDECK, KINMAN & MARVIN,
Wholesale Druggists, Toledo, O.
Hall's Catarrh Cure is taken internally, acting directly upon the blood and mucous surfaces of the system. Testimonials sent free. Price 75 cents per bottle. Sold by all Druggists.
Take Hall's Family Pills for constipation.

Not Transferable.

Miss A. had on a skirt of delicate fawn color, which the others coveted.
"Do bequeath that skirt to me, Miss A.," said one friend; "it matches a waist of mine exactly."
"I don't see what you want of this old skirt," Miss A. replied. "It's on its last legs now."—Success Magazine.

Important to Mothers.

Examine carefully every bottle of CASTORIA, a safe and sure remedy for infants and children, and see that it bears the Signature of *Dr. J. C. Williams* in Use For Over 30 Years.
The Kind You Have Always Bought.

Good Scheme.

"It's a shame," commented the friend of the restaurateur proprietor.
"What's a shame?" asked the restaurateur man in surprise.
"Why, that you should give that pretty waitress all the tough steaks for the patrons at her table."

"Oh, I pay her extra for that. You see she is so pretty not one man would kick if the steaks were so tough they pulled his teeth out."

Why He Whitewashed.

A country doctor tells a story of a man who moved into a dilapidated old cottage, and was found by the doctor busily whitewashing it inside and out.
"I'm glad to see you making this old place so nice and neat," said the physician, "it's been an eyesore in the neighborhood for years." "Tain't nothing to me about eyesores," was the reply. "The last couple what lived here had twins three times, and I hope whitewash is a good disinfectant. Ye see we've got ten children."

Honored by the Governor.

Effusive compliments have been paid to Governor Marshall many times, but it remained for an old Irish woman to cap the climax.
The governor met her at a funera, which he attended the other day and she was full of reverence for the Indiana executive.

"Ah," she said, "an 'tis the gov'nor," and she swallowed up the governor's slim right hand in her own right hand, made large and muscular by many days of toil. "Yis, 'tis the gov'nor, an' it's glad I am to see ye gov'nor, an' inside the corse is honored by your pristinse."—Indianapolis News.

Post Toasties

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The crisp, fluffy bits have a distinctive flavour and are ready to serve from the package without cooking.

Convenient.
Appetizing.
Healthful food.

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Family size, 15c.

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Welcoming In The New Year

In a New York Lobster Palace, According to indications, It presupposes a Bit of a "Stew."

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must drink what you are told, declares Julian Street in Everybody's. Notices to this effect are posted in the cafe. Does this strike you as remarkable effort? Let me tell you that it is not more remarkable than the abject apathy with which Broadway receives it. Martin's, and other Broadway restaurants which have copied the device, are almost always

packed with eager spenders. I know a man who went to Martin's three weeks before last December 31 to reserve a table for that night of nights.

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