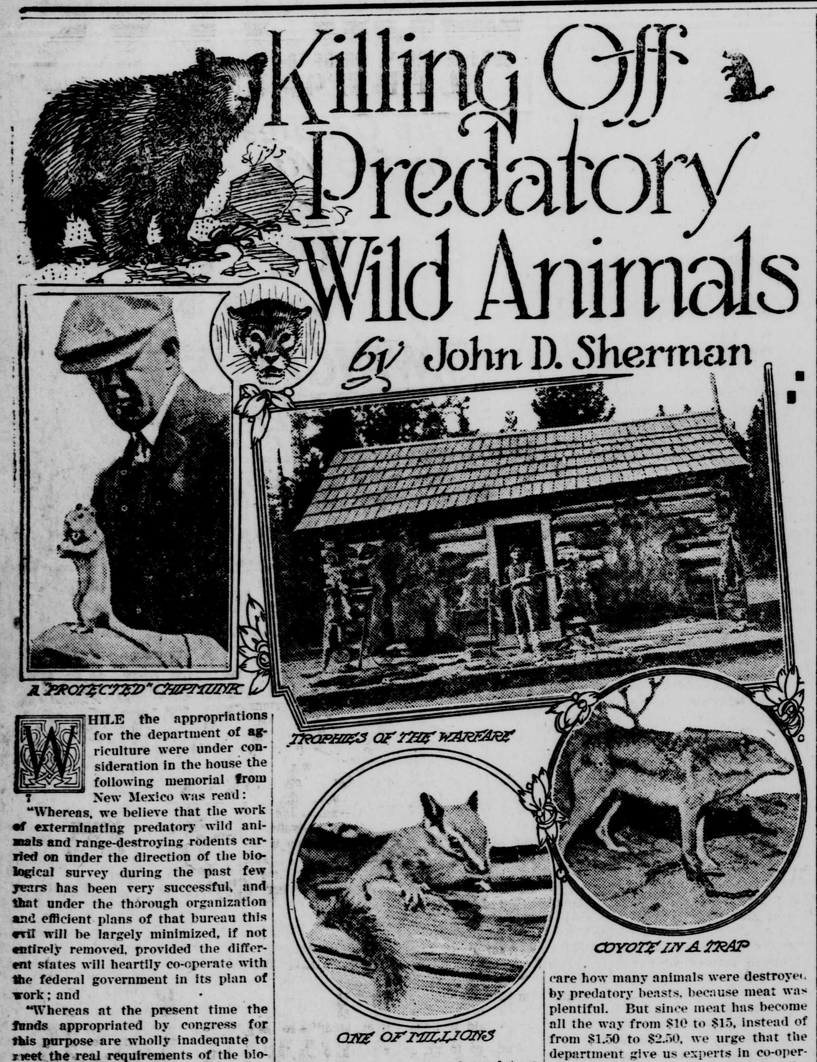

# Killing Off Predatory Wild Animals

By John D. Sherman

A "PROTECTED" CHIPMUNK

TROPHIES OF THE WARFARE

ONE OF MILLIONS

COYOTE IN A TRAP

WHILE the appropriations for the department of agriculture were under consideration in the house the following memorial from New Mexico was read:

"Whereas, we believe that the work of exterminating predatory wild animals and range-destroying rodents carried on under the direction of the biological survey during the past few years has been very successful, and that under the thorough organization and efficient plans of that bureau this evil will be largely minimized, if not entirely removed, provided the different states will heartily co-operate with the federal government in its plan of work; and

"Whereas at the present time the funds appropriated by congress for this purpose are wholly inadequate to meet the real requirements of the biological survey in carrying on this work, and on that account the results obtained are not satisfactory in most sections of the West; and

"Whereas it is our belief that the present laws of the states should be repealed, and in lieu thereof the various states should, through their several legislatures, enact laws appropriating sufficient money to equal the amounts to be expended by the federal government in the different states, and that such state appropriations should be expended under the direction of the biological survey, to be handled in conjunction with the funds appropriated by congress; therefore be it

"Resolved by the New Mexican Cattle and Horse Growers' association, in convention assembled at Albuquerque, N. M., March 25, 26 and 27, 1919, that we urge congress to appropriate the additional sum of $300,000 for immediate use in the extermination of predatory wild animals and range-destroying rodents, and that we petition the various states to make appropriations at least equal to the amounts expended by the federal government in the various states, said money, both federal and state, to be expended under the direction of the biological survey."

This question of predatory wild animals and rodents—which are also predatory animals in the true sense of the word, inasmuch as they raid and pillage the crops—is a serious one in many parts of the West. The case of New Mexico is typical; so the remarks of Representative Hernandez of New Mexico concerning the situation are of interest. He said in part:

"One of the serious problems confronting those engaged in promoting increased production of food crops and meat animals was the tremendous damage to growing crops and to range grasses caused by prairie dogs and other rodents, and the loss of cattle, sheep, and poultry from wild animals. Investigations by the United States biological survey show that the annual losses in the United States from predatory wild animals amounted to several hundred million dollars, and the loss from rodents is probably greater. The annual loss in New Mexico was variously estimated at from fifteen to twenty-five million dollars. The method used by the biological survey has been perfected by years of investigation and experimenting and is very successful. The "kill" of prairie dogs is generally from 85 to 95 per cent by the use of poisoned oats. They followed up the work by using poisoned rolled barley and later by using fumigants, such as bisulphide of carbon, with which, if carefully and thoroughly used, a good start has been made.

"The biological survey had co-operative arrangements in several states for exterminating rodents and predatory wild animals, and in every case the results are much more satisfactory and less expensive than under the bounty system. I have before me now a partial report made by the men in charge of this work in the southwestern part of the country through the council of defense of the state of New Mexico.

"In the spring of 1918 the governor of the state authorized the use of $25,000 from the fund known in our state as the war fund, and under an agreement covering the plan for the co-operative work as executed. Under this agreement $10,000 of this amount, in conjunction with an equal amount by the department of agriculture, was set aside and applied in reducing losses in live stock due to predatory wild animals, an increased force of hunters was placed in the field, trapping was resorted to by this experiment; the results have been very satisfactory.

"State hunters have a total of 1,972 days, at a cost of $5,741.44. They have taken 642 coyotes, 124 bob cats, 14 gray wolves, 5 predatory bears, including 3 grizzlies. The average cost of animals in June was $88.87; in July, $8.53; August, $5.93. The government operations in the state during the same periods cost $9,225.70, and resulted in the killing of 417 coyotes, 77 bob cats, 41 gray wolves, 13 mountain lions, 2 bears. No reasonable estimate of damage inflicted by predatory animals that has been advanced can show anything other than the return on this investment of a very high rate of interest. The estimate generally accepted—and it is conservative, indeed, in view of the present high value of live stock—is that each gray wolf destroys annually $1,000 worth of live stock; each mountain lion, $500; each coyote and bob cat, $50 worth; predatory bears may be rated in the same class with wolves. On this basis the saving represented in this co-operative work is nearly nine times the amount of expenditure. Thus you will observe that the estimated saving to the people of the nation, you might state, is $131,500, at a cost of about $20,000."

While the facts presented by the New Mexican representative are not clearly arranged, they afford a glimpse of the situation that prevails pretty much all over the far West, and the whole nation is interested, too, as Mr. Fernandez said in closing:

"We are all interested in that industry. We send our wool—20,000,000 or 25,000,000 pounds—to the cities of Philadelphia and Boston, so that those merchants can have that product, which will increase the employment of their people. We send our meat to the packing houses. All the American people are interested in that. There was a time when the people did not care how many animals were destroyed by predatory beasts, because meat was plentiful. But since meat has become all the way from $10 to $15, instead of from $1.50 to $2.50, we urge that the department give us experts in co-operation with our own activities for the extermination of these pests."

It is true that predatory wild animals, like the mountain lion and wolf, are expensive. The biological survey is emphatic in its statement that the average gray wolf kills $1,000 worth of live stock a year, and a mountain lion $500 worth. The coyote, which is the smaller prairie wolf, rivals his big cousin in destruction. The biological survey claims to have reduced the wolf population of New Mexico by 260 individuals in three years.

Incidentally, naturalists and sportsmen will be interested in the statement by the biological survey that in the Pecos mountain region bears have been very destructive. The survey uses these words:

"During the recent grazing season bears killed approximately 125 head of valuable cattle in the Pecos region. Similar damage in the Black range and in the Mogollon mountain makes it evident that a total of at least 250 head of cattle as well as a large number of sheep were killed by bears. These facts are worthy of consideration, in view of the general and concerted efforts now under way on the part of sportsmen to enact legislation that will prevent trapping of bears or hunting them with the aid of dogs."

Naturalists and big game hunters hold that bears seldom kill big game or stock, and that when individual bears get the stock-killing habit it is an acquired taste. Big-game hunters holding these views have been active in promoting state legislation for the protection of grizzly and black bears, which otherwise are doomed to speedy extermination except in the national parks, which are wild life sanctuaries.

The warfare against prairie dogs, chipmunks and other rodents is less exciting, but there is much more money at stake. In New Mexico in four summer months co-operative work in exterminating prairie dogs was conducted over 652,000 acres of infested land, 3,403 landowners assisting in the work. An average of over 90 per cent of the prairie dogs was killed. On the untreated land the total loss of the crop, or at least a 50 per cent loss, often occurred as a result of prairie-dog infestation. It is estimated that the crop saving effected by prairie-dog control amounts to approximately $500,000.

Multiply this by a dozen or more—the number of states doing the same kind of work—and the size of the job is apparent.

A new angle to the situation is the recent public announcement that prairie dogs are good eating and that various towns in the infested areas are going to put them on the bill of fare.

## 1,200,000 Cases of White Plague in U. S.

Tuberculosis is the Cause of 150,000 Deaths Annually, According to Statistics

Alarmed by the loss of man power caused by tuberculosis during the war, Uncle Sam is polishing up the M. D., which is among the many letters that follow his name, and preparing to take a leading part in the national program for the prevention of the disease.

Final tabulation of the draft reject slips, recently completed, reveals: Sixty-two thousand men were rejected when called for service in the national army because medical examination showed they had tuberculosis.

Another 20,000 men were discharged at army camps for the same reason.

Six thousand, still in service, are now being cared for in the army's special tuberculosis hospitals.

As these figures show, the government, at a time of a great national emergency, was robbed of the services of approximately enough men for five army divisions by the ravages of this one disease. But this is not all, for, although progress has been made in the control of the disease during the last ten years, it still is the cause of 150,000 deaths annually in this country, and as scientific investigation has shown, for every death from the disease there are eight active cases.

This indicates that at the present time there are in the United States at least 1,200,000 active cases of the white plague.

At the annual meeting of the National Tuberculosis association in Atlantic City a short time ago public health authorities outlined a co-ordinate national plan of battle against the disease. One result of this, it is expected, will be the creation of a division of tuberculosis in the United States public health service.

Already, as the government's first step in protecting the nation's health during the reconstruction era, the United States public health service has been authorized to provide free hospital care for soldiers and sailors suffering from tuberculosis, honorably discharged on or after Oct. 6, 1917. These patients will be treated in government sanitariums.

The even graver problem of caring for the 62,000 sufferers who were turned back into civil life by the draft boards has been assumed by the National Tuberculosis association in co-operation with the surgeon general's office, through 1,500 societies which are affiliated with the national association, and some 600 sanitariums and 500 dispensaries are already available for the work.

The situation is so serious, however, that the national program calls for hospital and sanitarium provision in every state in the Union that will provide, as a minimum, at least two beds for every annual death, as well as dispensary and clinic care so that every man, woman and child in the state who has tuberculosis, or thinks he has it, or who may have been exposed to it in any way, can secure free advice and treatment or treatment at moderate expense.

## THE CELESTIAL ARMY

I stood by the open casement
And looked upon the night,
And saw the west-ward going stars
Pass slowly out of sight.

Slowly the bright procession
Went down the gleaming arch,
And my soul discerned the music
Of their long triumphal march.

Till the great celestial army,
Stretching far beyond the poles,
Became the eternal symbol
Of the mighty march of souls.

Onward, forever onward,
Red Mars led down his clan;
And the moon, like a mailed maiden,
Was riding in the van.

And some were bright in beauty,
And some were faint and small,
But these might be in their great height
The noblest of them all.

Downward, forever downward,
Behind Earth's dusky shore
They passed into the unknown night,
They passed and were no more.

No more! Oh, say not so!
And downward is not just;
For the sight is weak and the sense is dim
That looks through heated dust.

The stars and the mailed moon,
Though they seem to fall and die,
Still sweep with their embattled lines
An endless reach of sky.

And though the hills of Death
May hide the bright array,
The marshaled brotherhood of souls
Still keeps its upward way.

Upward, forever upward,
I see their march sublime.
And hear the glorious music
Of the conquerors of Time.

And long let me remember,
That the palest, faintest one
May to the diviner vision be
A bright and blazing sun.

—Thomas Buchanan Read.

## United States Mints Break Records in Making Pennies

United States mints established a new record for monthly output in June by turning out 98,161,000 pieces of money, Director Ray T. Baker announced. Of the total coins, 91,364,000 were pennies, which was 13,000,000 greater than the previous record made in December, 1917. The remainder consisted of 6,427,000 nickels and 370,000 dimes.

## Fue Oil in Colombia.

Fuel oil of a good grade and sufficient quantity to supply the river steamers of that country has been found in Colombia.

## SHORT AND SNAPPY

Never judge a woman's thoughts by what she says.

Instead of trying to kill two birds with one stone use a shotgun.

No man need hope to reach heaven by walking over his neighbors.

Almost anybody would rather have a steady job than steady work.

A man thinks that his neighbor has no right to hold wrong views.

It doesn't require a genius to make trouble or create a disturbance.

## Some Curious Experiments With Both Flame and Air

"One of the many curious experiments made with the purpose of securing long-range and reducing air resistance resulted in a "flaming shell," writes J. H. Van Deventer in Everybody's. "The forepart of the shell contains a mixture of phosphorus and copper oxid, which is ignited as the shell leaves the gun; not, strange to say, for the purpose of setting fire to the enemy's works or trains, but simply to increase the range. Experiments have shown increased ranges of almost 20 per cent for these flaming shells. The explanation seems to be that the gases given off coat the shell with a sort of frictionless gas film. Wind-tunnel experiments show that air resistance is cut down almost 75 per cent by these gas films."

## Static Disturbances Might Be Far-Off Brotherly Hands Knocking at Our Very Door

In Bunyan's "Pilgrim's Progress" there is a man who ran with his fingers in his ears, shouting at the top of his voice, that he might not hear. In developing the possibilities of terrestrial communication it is of consummate importance that we shall find a way to put our fingers in our ears and shut out the extraneous noises of the "statics," Buckner Speed writes in Harper's.

It is a cheap fancy and unprofitable science to muse about "high and far off things" before we are ready for them. We go on doing the thing next to us, doing it well, conquering the obstacles that it is profitable to conquer, and we do well in doing so; but little by little in doing so we are unquestionably reaching and feeling our way toward the ability on our own part to be cognizant of voices emanating from spheres other than our own; and if there are beings of like or greater intelligence than ours elsewhere, we shall in time certainly be in communication with them. It may be even now that some of these static disturbances which we try so hard to shut out are far-off brotherly hands knocking at the door that we now hold fast closed.

## Famous Fielder, Ty Cobb, Says He Will Quit Great American Game in 1920

Ty Cobb announced his retirement from baseball not during this present year but at the end of the 1920 season.

"I won't be a has-been, so I am going to retire in two more years," said Cobb in a printed interview. "I'd rather step out with cheers than jeers, step out before I am forced out,

Ty Cobb.

and it's about time for someone to fill my shoes anyway. At the end of the 1920 season I will celebrate my fifteenth full season as a major leaguer.

"That's long enough for anyone. The game has been kind to me. It gave me an opening to fix myself for the remainder of my life financially, and I won't forget the pitchers who fanned me with three on, nor the fans who cheered this stunt.

"I feel my ankles stiffening and the arm going back a yard or two on the throws. A fellow can't last forever, and I don't intend to stick around as long as Hans Wagner, Cy Young and some of the other boys."

## Progress Made Thus Far in Discovery of Temperature

Between the temperature of the surface of the sun, estimated at 6,000 degrees Centigrade, and absolute zero, estimated at minus 273 degrees Centigrade, little has been discovered. The field of research has been practically restricted to 725 degrees, or between the temperature of liquid air—minus 200 degrees—and the first visible red or heated iron—plus 525 degrees.

## Poison Root, the Wheat of Barbados, Is Turned Into a Wholesome, Nourishing Flour

The cassora root, or manioc, is the wheat of Barbados. Before it comes to be eaten, it suffers a strange conversion; for, being an absolute poison when it is gathered, the natives submit it to a process by which it is trans-substantiated into wholesome and nourishing flour. The outside of the root is washed clean and it is then held against a wheel, turned around with the foot, the broad surface of which is made rough like a large grate. The grated root falls down in a large trough, appointed as receiver for the purpose.

The thus obtained powder, or pulp, is a rank poison, but it is now put into a strong piece of canvas and pressed hard until all juice is squeezed out. This dried poultice is then spread upon a cloth to be yet more dried in the sun, until it is ready for use. The dough, or "pone," as the natives call it, is then put in a kind of pan standing on three legs, and about six inches high. This pan is about 20 inches in diameter and slightly hollowed in the middle. It is half an inch thick at the edge, but thicker toward the middle. When the pan is getting hot, the dough is spread out on it and the natives keep pushing it down with their hands. This is to make it stick together, it being nearly dry. They then turn it round and round with a kind of battledore until it is done.

## Mexican Hunter Made the First Known Discovery of Oil in the California Field

The first known discovery of petroleum in California was made in 1865, by a Mexican hunter, who had followed a deer trail to the head of Pico canyon in Los Angeles county, near the present town of Newhall. He came on a seepage of sticky fluid that was unknown to him. Prompted by curiosity he collected a small quantity of it and took it to the Mission Settlement at San Fernando. There a man who had formerly resided in Pennsylvania identified it as petroleum and at once formed a company and staked out claims. In 1870 a shallow well was drilled at the head of Pico canyon, and is said to have produced at the time of drilling, between 70 and 74 barrels of oil per day.

## Daily Thought.

To receive honestly is the best thanks for a good thing.—George Mac Donald.

## Couldn't Hurt That Toad

There are many surprising stories about toads, observes Philip Hale, editor of the "As the World Wags" column in Boston Herald. Here is one of them, taken from a book containing the names and crimes of people in Northumberland, England. In 1793 a stone mason, Mr. George Wilson, "wantonly immured" a toad in a wall he was building, making for the toad a close cell of lime and stone, to fit it snugly, and plastering to prevent the admission of air. Sixteen years afterward a gap was made in the wall so that carts could pass through. The toad was found alive. Torpid at first, it was soon active, so that it made its way to a pile of stones and disappeared. There were cruel men in Northumberland. Mr. Thomas Anderson was punished in 1681 for playing on a bagpipe before a bridegroom on a Sunday. Among the women, Elizabeth Mills was brought into court for scolding and drying fish on the Lord's day.

### John Goes Alone.

John was a tightwad, but Mary was unaware of the fact until one evening when he had asked her to attend the theater with him. Upon arriving at the theater John stepped up to the box office and purchased one ticket and called out to Mary, waiting close by in the lobby, "Mary, here's where you buy your ticket; I've got mine." A titter passed through the waiting crowd, and so John had to attend the performance alone, while Mary with a crimson face hid herself in the crowd.

### Valuable Daughters.

A daughter is of considerably more value to the Kaffir than a son. Up to the age of ten, a Kaffir girl is kept at home; then she has to earn her own living, either as a servant at a white lady's house, or by assisting her father in hoeing the mealie and corn patch. As soon as she reaches a marriageable age suitors arrive. Beauty is a small attraction in the eyes of the Kaffir lady-killer. The father bargains with the suitor. A very fair price for a good girl is eight oxen.

### No Wife for Him.

"This coat was made by some sentimental girl. I found a gushing note in one of the pockets."

"Did you write to the writer?"

"Not I. The coat was poorly made and the buttons not half sewed on."—Louisville Courier-Journal.

### Electric Welding.

Three methods of electric welding are now generally employed. In "spot" welding the metals are placed in contact and an electric current is sent between them; in "seam" or "line" welding mechanically driven roller electrodes are used, and in the "carbon arc" process—in which an iron pencil has replaced the carbon rod—the metal is melted by the electric arc. In shipbuilding thick steel plates are more profitably joined than by riveting. In butt welds the tensile strength is 90 to 95 per cent of that of the solid plates.

## Sustained Nervous Energy Always Demands an Outlet

It has been discovered that cases of people who have been exposed to the fear of being torpedoed are suffering from symptoms suggestive of shell shock. Doctor Clunet, in a communication to the Neurological society of Paris, has described the mental effects observed when on board a ship which was torpedoed. After the first excitement following the attack it was observed that several passengers discharged guns into the air or into the sea. In other words, the sustained nervous energy found relief in letting loose the immense energy concentrated in explosives. Similarly, it was well known at the front that a long day of waiting in the trenches was productive of more cases of shell shock than a day of active engagement with the enemy. Next there were a few cases of suicide among the passengers. These passengers were on the whole calm enough, even on the life rafts. It was only when they were on the rescuing ship that psychoneural phenomena began to develop, including mutism, spasmodic weeping, laughter, tremors, spasmodic movements of the limbs, etc.

## Where to View at a Glance Scotland's River System

If there be one place north of the Tweed where, at a single glance, one may view and comprehend the chief river system of Scotland, Stirling is that place. From this point one notes the main streams, the affluents, and the gathering of the waters which make the Clyde, the Forth and the Tay. He can then realize how great and important in the political and economic history of Scotland has been that great central valley, which stretches from the North sea to the waters of the Atlantic ocean.

## Stop the Crack.

Rain which leaks between the panes of tilted windshield may be checked either by having the upper pane cut long to lap over the first or by fitting a rubber strip between the two pieces of glass.


## MOTHERS TO BE

**Should Read Mrs. Monyhan's Letter Published by Her Permission.**

Mitchell, Ind.—"Lydia E. Pinkham's Vegetable Compound helped me so much during the time I was looking forward to the coming of my little one that I am recommending it to other expectant mothers. Before taking it, some days I suffered with neuralgia so badly that I thought I could not live, but after taking three bottles of Lydia E. Pinkham's Vegetable Compound I was entirely relieved of neuralgia, I had gained in strength and was able to go around and do all my housework. My baby when seven months old weighed 19 pounds and I feel better than I have for a long time. I never had any medicine do me so much good."—Mrs. PEARL MONYHAN, Mitchell, Ind.

Good health during maternity is a most important factor to both mother and child, and many letters have been received by the Lydia E. Pinkham Medicine Co., Lynn, Mass., telling of health restored during this trying period by the use of Lydia E. Pinkham's Vegetable Compound.

**You Do More Work,**

You are more ambitious and you get more enjoyment out of everything when your blood is in good condition. Impurities in the blood have a very depressing effect on the system, causing weakness, laziness, nervousness and sickness.

GROVE'S TASTELESS Chill TONIC restores Energy and Vitality by Purifying and Enriching the Blood. When you feel its strengthening, invigorating effect, see how it brings color to the cheeks and how it improves the appetite, you will then appreciate its true tonic value.

GROVE'S TASTELESS Chill TONIC is not a patent medicine, it is simply IRON and QUININE suspended in Syrup. So pleasant even children like it. The blood needs Quinine to Purify it and IRON to Enrich it. These reliable tonic properties never fail to drive out impurities in the blood.

The Strength-Creating Power of GROVE'S TASTELESS Chill TONIC has made it the favorite tonic in thousands of homes. More than thirty-five years ago, folks would ride a long distance to get GROVE'S TASTELESS Chill TONIC when a member of their family had Malaria or needed a body-building, strength-giving tonic. The formula is just the same today, and you can get it from any drug store. 60c per bottle.

ABSORBTION NO SALVE
STOP SUFFERING SAM'S PILE REMEDY SURE AND QUICK
AT DRUG STORES OR $1.00 BY MAIL
SAM E. RICHARDSON
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Why Lose Your Hair
The Cause is Dandruff and Itching; The Remedy Cuticura
All druggists; Soap 25, Ointment 25 & 50, Talcum 25. Sample each free of "Cuticura, Dept. 2, Boston."

PARKER'S HAIR BALSAM
A toilet preparation of merit. Helps to eradicate dandruff.
For Restoring Color and Beauty to Gray or Faded Hair.
60c. and $1.00 at Druggists.

Accountants—Learn install systems; original commercial size forms, $3, postpaid. Industrial Systems Co., 70 Fifth Ave., New York.


### Thankful for Small Favors.

The other evening a young matron was scolding her husband for having forgotten to observe their fifth wedding anniversary. Her single sister, a town schoolteacher, happened to come to their house in time to hear a great part of the lecture. At its end she turned to the defense of her brother-in-law. "I think you should be thankful enough for having had the wedding without expecting anniversaries," she told her sister.

Proverbs are but the offspring of practical experience.


## Back Giving Out?

That "bad back" is probably due to weak kidneys. It shows in a dull, throbbing backache, or sharp twinges when stooping. You have headaches, too, dizzy spells, a tired, nervous feeling and irregular kidney action. Don't neglect it—there is danger of dropsy, gravel or Bright's disease! Use *Doan's Kidney Pills*. Thousands have saved themselves more serious ailments by the timely use of *Doan's*.

**A Virginia Case**

A. L. Moore, Towns Ave., Martinsville, Va., says: "I suffered considerably with kidney trouble and a lame, aching back. Doan's Kidney Pills strengthened my back and kidneys." (Statement given December 10, 1917.)

On February 1, 1919, Mrs. Moore added: "I consider it a pleasure to endorse the merits of Doan's Kidney Pills. My faith in Doan's is as strong today as when I gave my former statement."

Get Doan's at Any Store, 60c a Box
DOAN'S KIDNEY PILLS
FOSTER-MILBURN CO., BUFFALO, N. Y.


### Woman's Wit.

"Nexdore's wife has saved up some money for a nest egg."

"Is that why you call her an old hen?"—Boston Evening Transcript.

If men were compelled to eat their words there would be an epidemic of indigestion.


MURINE FOR YOUR EYES
Rests, Refreshes, Soothes, Heals—Keep your Eyes Strong and Healthy. If they Tire, Smart, Itch, or Burn, if Sore, Irritated, Inflamed or Granulated, use Murine often. Safe for Infant or Adult. At all Druggists. Write for Free Eye Book. Murine Eye Remedy Company, Chicago, U. S. A.


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