

**KINDRED.**  
By Able Farwell Brown.

I wander through the wo'land ways,  
And not a whispered sound,  
No shudder in the leaves, betrays  
The quivering life around.

And yet I feel the kindred near,  
In every ambushed shade,  
From tree and grass they peep and peer,  
Half friendly, half afraid.

I bend above the magic tide;  
But veiled in berry light,  
The countless ocean-creatures hide,  
With crystal eyes and bright.

The rainbow shapes glide to and fro,  
Or gaze in still surprise;  
The wonder-kin I do not know,  
Yet feel their curious eyes.

Above, the stary mystery,  
With teeming space between;  
I feel its wonders close to me,  
Its presences unseen.

As in a childish game, I stand  
Blindfolded and alone,  
And stumbling reach an eager hand  
To kindred all unknown.

Bewildered in the living space  
With wistful arms I roam,  
Thrilled by a breath upon my face,  
A shadow—and a hope.

—Youth's Companion.

## The Lonesome Dog

BY JESSIE WRIGHT WHITCOMB

A good, kind dog found himself all alone in the world. He was hungry and thirsty and lonesome, and thought he would see if he could improve his fortunes.

As he trotted through the streets of a town he smelled the smoke of a factory. "That means something for me at last," he thought, and traced the smell to a meat shop. The screen door was shut, but he waited patiently until some one went in and he followed close behind. A most excellent smell! He nosed along up close to the counter. With grateful heart he snatched his share. It fell and he waited it up. No sooner had he done so than the butcher saw him, and the butcher's boy and two customers and they all started at him and jumped at him and hustled him out of the shop, bereft of his meat and ashamed.

"My sakes," he said to himself, as he ran down the street, tall between his legs. "I have learned one lesson here—never to go around sniffing at smells as good as that again!"

When he could run no more, panting with the heat, and with his tongue hanging out of his mouth, he looked for a place to rest. He had reached a house with green grass, and with a soft, damp-looking flower bed, full of bright flowers, in front of the house. There was no fence.

"It is quite free," thought the tired dog, "and I am glad of a place to rest." So he went over to the flower bed, turned around and around on the cool soil until he had crawled out for himself a comfortable resting place among the plants.

"Oh, how good this is," he thought, as he panted for breath, "how kind these people must be!"

He had just dozed off, when he heard a scream above him. "Peter! quick! quick! an awful dog! right in the flower bed! Drive him away!"

Move as quick as he could, the dog could not get away before he had been pelted with all sorts of things, and had been called all sorts of names, which hurt him almost as much as the missiles.

He ran as far as he could without stopping, but he was so intolerably thirsty he kept looking for a place to drink. There seemed to be no water in all that town. As he lagged slowly along one street he reached a latticed kitchen porch. The porch door stood open. He knew there was water on that porch. The open door invited him. "These people know how to take care of their dogs," he thought, "they have left their door open."

Up the steps he crept; he could see the pail of fresh water; he was just about to bury his nose in the pail and drink his fill, when the kitchen door slammed back and he was descended on his head, and he was ordered off in no uncertain tones. With his head aching from the blow, and thirstier than ever, he ran slowly along.

"There is no place for me," he thought, "nor any food, nor any water. I do not understand it."

He ran by more houses with vines, and flower-beds, and green lawns, and no fences, but he did not venture in. A pretty child sat on some steps and called, "Here doggie, here doggie!"

How he would like to be called that way! He turned his head imploringly. "Here doggie—good, pretty, kind doggie, come to Roxie."

The dog hesitated; could the child mean him? Was it a boy? Some children were boys and some were girls. But he couldn't tell the one. Some boys were named John and Tom and David, and some girls were named Daisy and Lulu and Sally, but he didn't know Roxie.

"Come, doggie," urged Roxie, "come—I'll give you a drink—a nice, long, cool drink," and Roxie led the way encouragingly to the shady side of the house. There was a large crock. "This is for the birds," explained Roxie, "and now I'll fill it up for you," and Roxie turned in a stream from the house and drank—never did water taste so good. He raised his grateful eyes and wagged his tail.

"Oh, you good dog," smiled Roxie, "be my dog. I'll bring you something to eat in a minute. I'll be awful fast—now stay right—there—impressively."

The dog scarcely knew what to do, but while he was still undecided, Roxie came back with a pan of scraps. "These are my very own bones," said Roxie. "I've been praying for a dog for two days, and I've saved all my bones and scraps—now eat 'em!"

The dog ate in a half-famished way—what good scraps!

"What are you doing, Roxie?" called a voice from a upper room. "Feedin' my dog. God's best him. Pretty good dog, too."

Roxie's mother hurried down, across she would find a many-colored dog, but instead she found a gentle creature, with a silky coat and beautiful eyes.

"Very well, Roxie," was the relieved answer. "We may as well settle this thing right now. If we find the dog belongs to any one else we can give it back."

"He doesn't," was the positive reply.

"Well—we'll play that way. We'll put the rest of the afternoon on the dog. We'll scrub him and comb him and brush him and trim him and sleeping-places, and we will telephone right down to papa to bring up a collar. What name do you want?"

"Theodore," promptly.

"Why, Roxie! Theodore isn't a dog's name."

"It's this dog's name," in a final tone. "You told me yourself Theodore meant 'Gift of God'—and that's what my dog is. And the lonesome dog wagged his tail happily.—Pittsburg Christian Advocate.

**Blast Furnace Gas.**  
The amount of gas generated by a blast furnace to produce pig iron is so enormous that if collected and utilized for power purposes it would prove revolutionizing in manufacturing industries. Thus to produce an ordinary well-equipped works about 150 tons of pig iron the blast furnace would generate upward of 20,000,000 cubic feet of gas. To harness this enormous amount of waste fuel in the aim of the builders of gas engines, utilized for generating steam by burning, has been a problem long obtained; but by burnt directly in a modern large gas engine, the horsepower generated would be several times as much. Eminent engineers estimated that even if half this volume should be wasted or used for heating, the blast of the furnace, which would still be sufficient to produce between 3,000 and 4,000 horsepower. Such an enormous gas generator would thus prove of the greatest value for ordinary manufacturing purposes. Likewise, the gases of coke ovens could be utilized in the same way, adding to the horsepower of the gas engine in its new field.—Mining World.

**French Priests Earn a Living.**  
Some of the clergy have taken to poultry rearing, others breed rabbits, while a few have taken to raising the Tarn and Garonne, has already earned a reputation for his jams and jellies. Many priests have become workmen. The parish priest of La Ponnelle is a turner, another in Avallon in the Loire et Cher, makes bicycles and sewing machines. The fish priests of Mayet de Montagne, in the Allier, and of Serrieres, in Corsica, manufacture acetylene lamps, and the priest who officiates in the parish church of Maurages, in the Meuse, is a working locksmith. One of the priests most generally adored by the clergy are the artists, and clock makers. Seven parish priests are already employed. The parish priest of Cavler, in the Gard, is a tailor, and his colleague in Negron, in the Indre et Loire, is an upholsterer. A dozen others knit stockings and waistcoats, while the priest of Bourbois, in the Haute Saone, has become a printer. A certain number of priests are bookbinders, and many are photographers. Two parish priests—one of Saint Paul in the Oise, and another of Magny, in the Vendee—are artists, and the second using the sculptor's chisel.—Tablet.

**Foreign Waterways.**  
Since we began the neglect and abandonment of canals France has quadrupled her waterways. According to figures furnished by commercial associations the British Isles have 8,000 miles of canal, and it does not all antedate the railroad. The Manchester canal was built at a cost of \$75,000,000 to reduce freight rates for the carriage of heavy cargoes, and, while it did not prove a good investment, bearing in mind such a large expenditure, its indirect and more permanent benefits are said to have warranted it. Germany has 3,000 miles of canal carefully maintained, besides 7,000 miles of other waterways. France, with an area of 210,000 square miles, has a large waterway system, and in the northern part, where the canals are most numerous, the railways are more prosperous. England, Germany, France, Holland and Belgium are all contemplating further extensions of their canal systems.—Century Magazine.

**Gold in Walls of Old Mint.**  
The passing of the old United States Mint building reminds old timers of the early struggles of the government to make good money. The mint worth while. Then came 1873 and the great strikes at Leadville, which brought tons of bullion to Denver and kept the mint officials busy and the institution running at full capacity.

The destruction of the building marks the end of the chapter. By the terms of the contract for the destruction of the building and the erection of the new Doetcher building on its site all the material becomes the property of the contractors; and they are saving every particle of plaster on the theory that there must be some valuable settlements of gold dust in any of the previous material after the mint's long years of use. The plaster will be submitted to a process whereby much gold is expected to be extracted.—Denver Post.

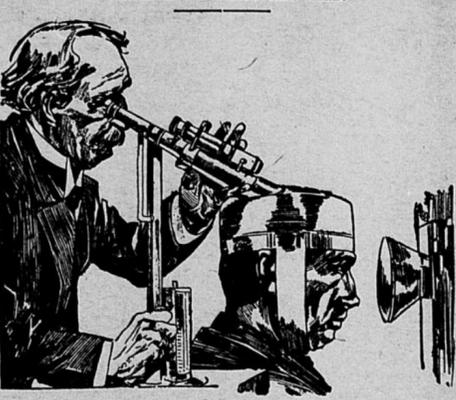
**Geese on a Spree.**  
Martin Beck, a farmer on the Conewago Hills, related a story while attending market this morning to the effect that three of his geese went on a disgraceful spree after having eaten some pulp from a cider mill. Some time after the eating of the pulp the peculiar actions of the fowls attracted the attention of the farmer. They swayed from side to side and then they detected a quiver on one they fell limp and apparently dead.

Mrs. Beck carried the fowls into the house with the intention of plucking them, believing that they were dead. She had about half finished the first when she detected a quiver on the body and dropped the goose in astonishment. Soon after the geese revived. The farmer then realized what had happened.

The pulp, lying in the sun, had fermented and his poultry had been indulging in grapes upon the sand.—York (Pa.) Dispatch to the Baltimore American.

An average of 800 persons are killed in the United States each year by lightning. This means one in every 100,000.

## CHRONOSCOPE READS THE MIND.



MACHINE WHICH LAYS BARE INNERMOST THOUGHTS.

Starting revelations have been made of the secret tests applied to Harry Orchard, the self-confessed multi-murderer and chief witness at the trial of William D. Haywood at Boise, Idaho, by Prof. Munsterberg, of Harvard. The disclosures are contained in an article by Prof. Munsterberg in McClure's Magazine.

The Harvard professor of psychology probed to the very recesses of the convict's brain, and used for his startling revelations perhaps the most remarkable scientific instrument ever devised—the chronoscope.

The use of this instrument on a actual criminal in connection with a murder trial marks an epoch in legal history, the final developments of which may substitute this mute, inexorable revealer of the inside of a man's or a woman's brain for Judge, jury, district attorney and police inquisitor alike.

Imagine the use to which this perfected chronoscope will be put—indeed, can now be put. Suppose the suspect arrested in some mysterious murder, like the Tanshanjan crime. No police "third degree," but an absolutely certain decision, by the application of the chronoscope, will declare whether or not the man is guilty.

The chronoscope is affixed. Two little metal bits are placed, one in the mouth of the inquisitor, the other in that of the suspect. A dial, divided into the thousandth part of a second, is in electric contact with the bits, and then a single word is spoken by the inquisitor.

The prisoner is told to speak, in reply, the first word that comes to his mind in response. The time this takes is recorded on the dial. If the prisoner refuses to speak it is a confession of guilt. If he replies his guilt or innocence can be surely proven. For other words follow, and the time of the answering ideas is taken. Then when

the enterprise for that day and the people thought it solved the transportation problem for all time. They didn't dream that within four or five years steam engines would be cavorting around in these parts and that the bulk of business would sweep by regardless of the river.

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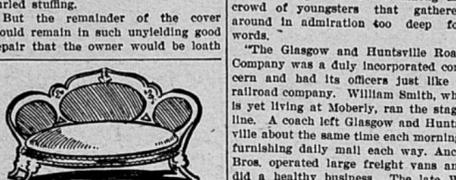
"The Glasgow and Huntsville Road Company was a duly incorporated concern and had its officers just like a railroad company. William Smith, who is yet living at Moberly, ran the stage line. A coach left Glasgow and Huntsville about the same time each morning, and the distance between the two cities was furnished daily by mail coaches. The Glasgow made large freight vans and did a healthy business. The late W. R. (Bob) Samuel of Huntsville was secretary for the road, an important position which paid quite well during the days of the road's activity.

Boonville, in Howard county, was the biggest town between the terminals. It grew up into quite a place during the plank road's prosperity and many stores were operated there. But by and by the railroads came, the road was torn up for firewood and Boonville was marooned far back in the country, swelling a long list of once good towns that have become lost or forgotten."

## FADS OF THE PAST.

It has taken many years for horsehair covered furniture to pass into oblivion, for the reason that there was no wear-out to it, except in a boarding house. Most people, therefore, will remember last having seen horsehair furniture in a boarding house, whether it probably was relegated in the hope that it would be worn out. When such a phenomenon did occur, the fact was usually heralded by the protrusion of a rusty spring and a mossy bunch of dust-stuffing.

But the remainder of the cover would remain in such unyielding good repair that the owner would be loath



HORSEHAIR FURNITURE.

to sacrifice the piece of furniture, which made it a white elephant, there being no way to repair it, unless the horsehair was replaced.

Another thing that tended to longevity on the part of the almost immortal hair furniture was the difficulty of getting on it. Its curves were steep and its surface slick, so it was much like trying to cling to a slipper. You would slide first perceptibly, and then with the speed of a roller coaster, till you hit the floor in a heap.

## EARLY DAY PLANK ROAD.

When the Railroads Came This Missouri Highway Was Abandoned

"This talk about a highway across the State recalls to mind a similar enterprise presented in the interior of the State in the steamboat days," says the Kansas City Star. "It was a twenty-five-mile plank highway between Glasgow and Huntsville," recently remarked Milton C. Tracy of Macon, Mo., whose father was interested in the road and who used to live in Huntsville.

"The road between Huntsville and Glasgow was a succession of clay hills the greater part of the way and in many places the Christian religion made great headway in those parts. We didn't know it then, but we do now, that those anaesthetized red birds were a blessing to Missouri, for they served to develop the largest and strongest muscles in the world and their big-boned descendants are now moving more merchandise than the steam cars.

"Glasgow was the distributing point for up-the-country merchandise. A dozen back lines run out from there, the main one of which journeyed to Huntsville. The traffic over those molasses candy hills became so great and was attended by so many difficulties that something had to be done. Various kinds of road material were discussed and timber decided upon because it was plentiful and most of the pioneers were plentiful in its use. The hills were cut through and the bottoms raised so the roadway was fairly level. Oak plank, twenty feet long, two inches thick and eighteen inches wide were nailed on heavy stringers, laid close together. There were five to six stringers, with a tariff rate of a cent a head for stock, 5 cents for a man on horseback and 10 cents if he traveled in a vehicle. A footman paid the same as other animals.—Cent.

"There was a keeper at each tollgate, and his job with the road company, together with a cottage and garden donated for his use, made him a fair living. His rake-off on the tolls was 20 per cent.

"Work on the plank road was begun in April, 1853, and the last spike was driven in October, 1854. It was a giant

enterprise for that day and the people thought it solved the transportation problem for all time. They didn't dream that within four or five years steam engines would be cavorting around in these parts and that the bulk of business would sweep by regardless of the river.

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**The Zoo By Night.**  
The average growlup who visits the zoo thinks it rather a dull sort of show, for the fact that the animals are captive robs them of all the romance that would attach to them in their native forests.

But let the blaze lighten their permission to visit the zoo at midnight, and his impressions will be very different. Darkness hides the bars and the boards, and the eyes of some wakeful creature gleam maliciously at you. For the moment you imagine that you are in the world on equal terms with the creatures around.

Poised on the swings and platforms at the top of their cages sleep the monkeys, instinct surviving their loss of freedom, for in the forests they had to sleep thus to avoid the beasts of prey.

Here rests a lioness, prone upon her back, her legs rigid in the air and her paws hanging limp, asleep upon his side, his paws turned in and his general pose not unlike that of a dog.

The more cunning and more cowardly of the animals do not seem to sleep at all, for as soon as they hear our approaching footsteps they give us their greeting with snarls and malevolent glowerings and watch us suspiciously till we depart.—Pearson's.

**His Real Meant.**  
"I see," said the aide of Gen. Putnam, "that they are agitating my ride on earth."

"Yes?" said the astral body interpreter.

"They have overlooked my prime achievement," declared the old war hero. "For unlike most men I got out of predicament by getting in a hole."

—Baltimore American.

**He Knew What's Inside.**  
Bing—What are you ordering, old man?  
Bang—Chicken pie. John me?  
Bing—All right; I'll get it with you.  
—Harvard Lampoon.

**The Old-Fashioned Kind.**  
"Are there any talking machines in this flat?"  
"Six of them. Four married and two single."—Detroit Free Press.

## POLITICS OF THE DAY

**Then and Now.**  
In 1882, under a Democratic administration, the expenditures of the Federal government amounted to \$415,063,823. In 1906, the expenditures amounted to \$730,717,582, an increase of \$315,653,759. This is an increase of more than 70 per cent. Where it cost the taxpayers a dollar in 1882, it now costs them \$1.70 to run the government. In 1882, the total cost of the Federal government per capita was \$6.39; while in 1906, it was more than \$8.75, an increase of more than \$2.36 per capita. This entailed an average increase of more than \$1.80 in the annual expenses of every family of five persons. But this is not the worst. This extravagant increase of expenditures has necessitated the maintenance of a tariff tax system which has bred trusts like vermin, and these trusts, having a monopoly of the home market for their products, have been lowering their prices here. So that it costs every person, on an average of \$20 a year more to live now than it did in 1882, exclusive of the \$1.80 contributed to public expenses; making \$31.80 per capita more now than in 1882; or \$150 more for every family of five persons. Ever since December, 1906, there has been a result of this wretched policy, a succession of spasms in Wall Street. In that month, and in January, February, March, April, May, June, July, August, September and October, 1907, there have been reactionary movements. Practically every public finance for eleven months, and is not yet. This year-long panic has resulted from wicked, dishonest, infamous legislation on our statute book, put there by Republican Congresses, and from the usurpation of the executive and of the courts by the executive and the courts are still increasing; and, therefore, discredited is increasing. If the discredited will change their party affiliations, and elect a decent Democrat to the Presidency, and decent Democrats to the National Senate and House of Representatives, expenditures and taxation will be decreased; the power of the trusts will be destroyed; the evil work of the executive and the Federal judges will be remedied; corporations will be brought to book, and the condition of the people will be improved and their generalities will get better.

**The Value of Competition.**  
The enormous value of competition as a national asset is not generally understood. But as to one line of business, it may be realized when we consider carefully the following statement of the New York Journal of Commerce: "The only force powerful enough to induce the prompt adoption of improvements, and to inspire enterprise and industry, is competition."

This sage and indisputable proposition has reference to railroad rail-making. It is a question, not of economics merely, but of life and death. Better rails must be had. For the last fiscal year, 10,618 persons were killed, and 97,000 injured by reason of railroad accidents, due mainly to defective rails produced by the tariff-protected trust and its subsidiaries. The economic results attending this wholesale slaughter have never been calculated. They are incalculable. And both the slaughter and the property and business losses are due to what?

The tariff monopoly and greed of a tariff protected monopoly. The Journal of Commerce says and truly says: "Subsidiary companies of the United States Steel Corporation have had a practically a monopoly of rail-making and the prices of the product for the country, and its vast equipment does not seem to be adapted to improving the quality without radical and drastic changes. In the last few years the railroads have been increasing the capacity and the weight and the power of their rolling stock to handle the growing traffic with as much economy as possible and this has been putting a heavy strain upon the tracks. At the same time the demand for new rails has been such as to stimulate the steel mills to rapid work to keep up with their orders, and this has not been favorable to careful manufacture. So many of the multiplying accidents have been attributed to defective rails that the railroads have been driven to insist upon an improved type of rail, and a better quality of steel in their production."

But how are we to get better rails so long as a monopoly, weighed down with antiquated plants, controls the market? And how can we expect improvement in other lines of production so long as similar monopolies, all bred and fed by dishonest and murderous tariff schedules control all other lines of production? The stand-patners and their President will have to answer for this shocking loss of life and property. The tariff monopoly is a heavy burden upon the people at large who have no share in it?

**Salaries, Prices and Gold.**  
The Washington Post claims that the men and women of this country who work for "salaries," as distinguished from the laborers who work for "wages" support one-third of the entire population of the country, and reach the number of 10,000,000. It says that there has been no increase in salaries since 1880, while the purchasing power of the dollar has, owing to the flood of gold, decreased thirty per cent or more; so that this large salaried class for its services by 80 per cent or more. In 1880, such prosperity as the country enjoys is due largely to the increased supply of gold—perhaps solely to that cause. Yet the very cause of this prosperity brings poverty, and want to the salaried class—the great middle class of the American people. The bricklayer gets six cents a day, because his class has organized; so with other mechanics. The capitalist makes from 10 to 100 per cent on his investments, because his class has organized. Most of the school teachers, the bookkeepers, the clerks, the salesmen, etc., get from forty to sixty dollars a month, because they have organized themselves to organize their class into labor unions on the one hand, and predatory trusts on the other. They are, therefore, helpless. They can grumble, but no one in power cares for such helpless unorganized grumblers. They usually vote for "prosperity" and get chaff and bait to feed their stomachs with, second-hand clothes to wear, and a half dollar to live in. A rule that the President is for the "President's policies" right or wrong. He despises the poor insignificant Democrat, because he regards him as a free-trader, a labor agitator, a silverite, and a perpetual menace to slabby-genteel society in general. He despises him at his fate, but he despises him for his respectability, and thanks God that he is not as other men. The result is that his owners, the trusts and the Republican party, fleece him and kick him; while the laboring men and the Democrats generally pity him, but cannot help him, because he is on the average, a fool beyond redemption.

**Popular Movements.**  
From Mr. Quigg's revelations regarding the setting on foot of "popular education" by the New York Evening Post, we are led to conclude that the crusades were the work of Peter the Hermit acting as "chief adviser" for the Venetian ship-owners, and that the French Revolution was brought about by Danton acting as agent for the syndicate that had acquired Mr. Guillotin's patents. It might have added a word or two to the purpose of Mr. Roosevelt in starting a popular movement for the incorporation of Congress of all trusts, insurance companies, and railroads, as a means of depriving the States of the right of taxing and controlling such institutions. Is the President to be the "chief adviser" of these corporations? He and Mr. Quigg, Senator Platt, and Senator Quay, started the popular movement which made Roosevelt Vice President and afterwards President. That popular movement was supported by the Hyde, McCallis, McCurdy's, Cassatts, Harney's, Greifers, Armours, Carnegies, Fricks, Schwabs, and the Corey, Harries and all the rest of the gang who have secured "swollen fortunes" through special privileges; and who now want the additional privilege of escaping State taxation and defying State laws. And that popular movement was encouraged by a great many writers and officeholders who believe that the end justifies the means, just as Roosevelt substantially declared in his Memphis speech.

**Is This Prosperity?**  
For the first quarter of the present fiscal year, that is, for July, August and September, 1907, the total of in-

solventcies was greater than that of any similar period within ten years. The liabilities of insolvents in June, July and August were twice as great as those for the summer months of 1905 and 1906. This may account for the tightness of money. People are getting more and more cautious because of these conditions. They are wisely hoarding their money for the rainy day.

**Congressional Log-Rolling.**  
Powerful efforts will be made at the coming session of Congress to increase the number of battalions. The steel trust, the rail officers and the administration all favor such an increase, and these interests will probably log-roll with the ship subsidy people, with those who demand increased pay for army and navy officers and civil service employees; with those who oppose tariff revision; with those who are seeking to get subsidies; with those who demand the abolition of conscription; with those who would retain the subsidies paid to certain railroads; and finally, if possible, with those who advocate appropriations by Congress for irrigation and for improving interstate waterways. A skillful combination of all these interests would probably carry through all of these new schemes at once, and thus save the Dingley Tariff schedules as a means of getting money to meet the increased expenditures thus made necessary. The strategists of the lobby and the navy are exceedingly keen, and while the latter are using the war scare, the lobby will see to it that they get nothing unless they concede the demands of all the other special interests.

**Animals.**  
Little Willie—Say, pa, what does it mean when a man takes the lion's share?  
Pa—It is a polite way of insinuating that he acted like a hog, my son.



More husky young men die from over-exertion on the football field than in the harvest field.

Keep the old sow as long as she continues to give you a good litter. Do not turn her off simply because she is old.

All animals thrive best when fed at regular intervals and given each time no more than they will readily consume.

Brain is a good feed better fed for fattening steers that most farmers understand. When you can buy it at a low price, try it.

Those who have to buy hay may console themselves by recalling that in the spring of 1870 hay sold in New York at \$40 to \$45 per ton.

The proportion of profit is usually greater where small numbers of stock are handled than otherwise. That's where the small farmer comes in.

When you are feeding poultry scatter the feed around so the birds will have to hunt for it, as it will then exercise and prevent them from gorging themselves.

The under of the ewe suffering from garget should be well bathed with very warm water, to which has been added an ounce of cooking soda, and after bathing it should be well rubbed with an embrocation composed of lard and turpentine.

Statistics show that 90 farmers of 100 keep hens. It is estimated that 75 per cent of this number raise mongrels and crossbreeds. Now that the campaign for pure-bred cattle, hogs and even field seeds is on, it would seem wise to reduce the number of mongrel-bred poultry.

An osage hedge if trimmed up five or six feet, may be converted into a first-class hog and cattle-tight fence by adding about six barbed wires. In a year or two when the branches grow again over the wire it makes an impregnable barrier to live stock's exit or entrance.

**New Variety of Red Clover.**  
A recent Government bulletin gives accounts of new kinds of clover obtained from Russia. The variety that has been most promising is that called Orel. One great advantage of this type is that it is leafless. Every reader who has examined either red or mammoth clover must have noticed the abundance of hairs, so-called, on the stem, and the midrib and skeleton of the leaf. It is this hair or fuzz that renders red and mammoth clover so exceedingly dusty, and we suspect it is this that causes it to turn black and spoil so readily in bad weather. The Orel furnishes the very best opportunity for accumulation of the fungi which are the cause of the heating of clover hay. One of the merits of alskie is that it is smooth like the Orel clover.

In most places where it has been tested this variety yields much better than the red in the winter, and where it has failed it has been in comparison with varieties of similar origin. It has much more leaf growth, but is about two weeks later, coming in along after the mammoth clover; so much later, in fact, that it is not easy to procure seed from the second crop, except by the cutting method. It is recommended as a substitute for the common red or mammoth, but as supplementary to either one, particularly in sections north and west of the present limit of clover growing.

**Care of Turkeys.**  
At the Manitoba Station an experiment was made as to the gains by turkeys confined in pens, as compared with those that ran at large. Those in pens were given all they would eat of a mixture of wheat, oats and barley, 2:1:1 in the morning the grain was fed the turkeys which were not but in the evening it was fed whole. It was noted that the turkeys were apparently more fond of oats than of the other grains, so toward the end of the fattening period the proportion of the grain was increased. A little grain was fed the turkeys which were not confined in addition to the food which they could gather. The five turkeys in pens weighed on an average, 6.55 pounds each at the beginning of the test. During the forty-two days of the feeding period the average gain was 4.05 pounds, 0 pounds of grain being eaten per pound of gain. The turkeys running at large also weighed at the beginning of the test 6.55 pounds each, and made an average gain of 1.55 pounds. On both cases the greatest gains were made during the first three weeks of the period. It is stated that the penned turkeys when dressed shrank 5 per cent less than those running at large and that they were plumper and were in every way more inviting in appearance.

**Fungus Growth on Grains.**  
Smut is annoying to farmers, as it not only causes loss, but compels one to cease using the seed from the variety, which may be of some valuable variety. So damaging has been smut on all kinds of grain that the United States Agricultural Department has issued several special bulletins on the subject. The loss of grain from smut in this country is very large, and yet the matter has received but comparatively little attention. Smut is caused by minute parasitic fungi, the spores, or seed-like bodies, which form the black, dusty mass that takes the place of the

kernel, or the entire head. These spores are very minute, and are easily blown about, often adhering to the kernel before it is planted, and when such kernels sprout the spores also germinate and send delicate threads into the young seedlings. These threads follow the growth of the plant, all the head as soon as formed, and there develop a mass of spores instead of kernels. This black mass is so well known as to be recognized by every farmer who has grown grain, but many farmers may not be aware of the fact that every ear of corn containing smut is a menace to the grain crop of next year. All such stalks should be cut out and burned on the field sign of smut, and where oats, barley, wheat or any small grain is affected seriously it will sometimes pay to mow the crop and burn it.

**Meat as Chick Food.**  
In a recent report of experiments in feeding chicks, the Rhode Island Experiment Station says: "The use of the proper proportion of animal food will pay a handsome profit through decreased mortality and increased weight of the chicks. In feeding, bear in mind that chicks in a state of nature spend practically all of their working hours in search of food, and that they do not fill their crops in ten minutes every two hours. Feeding should be, as far as the time of the attendant renders profitable, a continuous process, but by no means a continuous pour."

The experiment which led up to this conclusion was with an incubator hatch of 210 chicks. These were separated into lots of about fifty each and placed in similar brooders. For thirty days all conditions were kept alike except rations. Pen A was fed a balance ration of grains, meats and green food. The chicks grew and thrived, and not one chick showed symptoms of digestive disorder. The deaths amounted to 3.9 per cent. In Pen B all animal food was withheld; the deaths were 9.5 per cent, of which 75 per cent had bowel trouble. Pen C was fed on grain alone, all animal food and all green food being omitted from the ration; the deaths were 32.7 per cent, of which 96.5 per cent showed digestive trouble. In Pen D all grain food was omitted; the deaths of chicks were 63.7 per cent, of which 85.3 per cent showed bowel trouble. All the living chicks were weighed at the close of the test, and Pen A showed the greatest average weights for all broods.

**How to Exterminate Hen Mites.**  
Some years ago our henhouse was badly infested with hen mites. They gave my wife of getting rid of them. For I think it is a good one; at least, it proved successful. We began by pulling out the old roost, which was nailed against the wall, and then whitewashed the walls and nests. We poured some kerosene on the cracks around the nest, and then only showed symptoms of digestive disorder. In Pen D all grain food was omitted; the deaths of chicks were 63.7 per cent, of which 85.3 per cent showed bowel trouble. All the living chicks were weighed at the close of the test, and Pen A showed the greatest average weights for all broods.

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