TALKING IN THEIR SLEEP,

"You think I am dead,"
The apple-tree said,
"Because I have never a leaf to show—
Because I stoop,
And my branches droop,
And the dull gray mosses over me grow!
But I'm all alive in trunk and shoot;
The buds of next May
I fold away—
But I pity the withered grass at my root."

"You think I am dead,"
The quick grass said,
"Because I have parted with stem and blade!
But under the ground
I am safe and sound
With the snow's thick blanket over me laid.
I'm all alive, and ready to shoot,
Should the Spring of the year
Come dancing here—
But I pity the flower without branch or root."

"You think I am dead,"
A soft voice said,
"Because not a branch or root I own!
I never have died
But close I hide
In a plumy seed that the wind has sown.
Patient I wait through the long winter hours:
You will see me again—
I shall laugh at you, then,
Out of the eyes of a hundred flowers!"
—*Edith M. Thomas, in St. Nicholas.*

THE BINSTEAD FARM.

We all knew when sister Clarissa loaned the thousand dollars which was the accumulation of her six years of teaching, to Sam Binstead, that it was as good as sunk in the sea. And we told her so, but it was of no use, for you see, Clissy is one of those visionary people, who see the "angel in the human heart" most clearly when it isn't there; and Sam, cousin by a good many removes, had borrowed out every other relative before he thought of us. Al hadn't a dollar to spare. She wouldn't have if Judge Hilton had divided his legacy with her, and I wouldn't have given him a nickel of my three hundred if he had gone on his knees for it; not I—but Clissy—think of it, will you, actually and positively handed over her thousand dollars as if she'd been a princess, and said:

"I'm very glad to accommodate you, Sam. You needn't mind a mortgage, your note is quite sufficient. I know that you will pay it all back."

Did he? Well, I think not. You never knew him or you wouldn't ask.

To be sure he died; but he wouldn't have paid it if he had lived, for he was one of those easy-going men who wear sack-coats with the pockets sagging down, and who always complain of their bad luck, and never pay their debts. That was the way that Clis happened to go West. He did give her a mortgage on a farm out in Missouri, and when he died it fell to her. I don't suppose that she'd have taken it if there'd been anybody to give it to; but there wasn't, and no stranger would have accepted it for a present, so she had to keep it. She couldn't sell it, and she couldn't rent it for enough to pay the taxes, and her tenants burnt the fences because they were too lazy to cut wood, let the barn tumble down and the house go to ruin, until one evening Clissy looked up and said: "I'm going out to my farm."

Al almost screamed with surprise and I was speechless. It was no use to say anything, for Clissy is very decided. So, the day that her school closed, she went down to the depot and bought a ticket to St. Louis, and took the evening train out as coolly as if she expected to return next day. Al and I went home and had a good cry, and decided that we should start as soon as our schools closed, and spend the summer with her. We taught in town, and had a ten-months year while Clissy was out in the east-end, where the schools close the last of May.

No length of years will ever make me forget the night that we reached Sparta—that is her town—and saw dear old Clissy on the rickety platform, whip in hand, waiting for us. Bless her heart, how she hugged us, although she hadn't been away five weeks! Then she took us around, behind the station, to her red, spring-wagon, hitched to the most killing little gray mule you ever saw, and we clambered in. She was mortally afraid of the little beast, and he knew it. You'd have died to see her untie him from the post, standing at arm's length from him. It was two miles to the farm, and we all talked as hard as we could, and yet we hadn't begun to tell all our news when we reached that forlorn, unpainted old wooden house, with the chicken coop right in front. We were starving after three days' ride, and Clissy had a good supper, and then our life in the West began.

It would take a book to tell about the events of that summer, so I must just pick out two or three things that led directly to the grand finale:

She had things started pretty well when we came. It was to be a stock-farm, and she had bought sheep and calves, and a cow, and chickens, and a ferocious old mother pig with a lot of dottie dumpling little piggies: but the old cannibal ate up four of them—how I hated her for it—and a hoe, and a big shovel, and lots of other things.

The first morning Al and I thought we'd take a ramble and see how we liked it. But she wanted to go down to the stream and I wanted to go up to the "knob," as Clissy called it, and see the landscape. I hadn't got there when a cow looked menacingly at me, and I ran as I never dreamed I could run. The man was milking in the barnyard, and he looked up with a grunt when I came. We had to call him Cornrod because he wouldn't answer to Conrad.

Al didn't appear to breakfast; but she is such an irresponsible creature anyhow, that we supposed she was sketching some stump, so we kept her chops warm, and washed the dishes so as to churn before it became too hot.

About ten o'clock I went out to hunt eggs, and was sure that I heard my name, in accents wild. I called "Clissy!" and "Cornrod!" and we followed the sound until we could see the poor girl perched in a little, shaking thorn tree, about four feet from the ground, while a murderous old ram stood guard below. She had been there three blessed hours. Conrad threw a piece of earth at him, and he walked away, and the poor child limped home with us. Her hands were all blistered with clinging to the tree, and she had screamed for us till her throat was sore.

"I have a fine flock of sheep there," remarked the proud owner, as we climbed awkwardly over the bars. "They are more profitable than cattle, because they increase so rapidly and mature so quickly. The increase is quite wonderful. The gentleman of whom I bought these says——"

"Yaw, yaw—he say von lie," interrupted the stolid Conrad. "He sell you forty ram, he keep de ewe. Increase! Nein!"

Clissy was silent for two minutes. Then she said:

"A beautiful, sensitive plant grows wild here; it is a briar; perhaps we can find one here."

"I should be delighted," I replied, faintly. When we reached the yard-fence, Al cried in amazement: "Where's the barn?" And sure as I am telling it, that vicious little mule had kicked it down.

It was what they call a "Kansas barn," made of poles, with a straw roof, tied down to keep it from blowing off, and the beast was eating the roof. When Conrad went up to see about it, he was sent flying heels over head, and I laughed; he never forgave me, either.

It rained that afternoon, and we helped Clissy cut carpet-rags for a kitchen carpet. We were afraid to go down cellar on account of the enormous rats, so we stood in the stairway and passed milk and meat to and from the invincible Conrad. He set three gaping steel traps, and we retired the second night in the blissful fancy that the rats would soon be vanquished. Toward morning we were awakened by an odor that would have made those stenches of the plague-stricken Egyptians seem as perfume by contrast. Poor Clissy sat up and gasped. Al began to cry, as usual, and I wished that I were a man long enough to swear.

It would be two hours before Conrad came to investigate, and we should all die in that time I knew.

What could it be? Several things were suggested, but the solution was not satisfactory until Al sprang up from her cot (we only had one bed) and screamed: "Oh, I know; it's naturel gas. Your bored well has struck it. We shall light the town and make our fortunes. Hurrah for old Clissy! Now you must do the handsome by us. I will take a diamond necklace for my wedding present, and you can build a house in town and we'll live with you."

It seemed so probable that even Clissy forgot her usual caution and planned a substantial barn on the possibility. We were sure that we heard a rat dragging the trap down cellar, and we ventured to the head of the stairs in the gray dawn and peeped down. The natural gas, the supply of which was apparently unlimited, seemed to emanate from the cellar, and was so stifling that we could not investigate long at a time.

"Girl," said Al, "it's not a rat, but the dearest black and white creature that you ever saw. It's caught by the foot. Where's your book of natural history. May be I can tell what it is."

"I take him in von bag und gill him," said the manly tones of Conrad, coming up just then. I schmell him half-mile avay. Mein Gott, how ever I dakes him out von dot?"

"Girls," said Clissy, from the other end of the pouch, "it is the most beautiful sunrise I ever saw. Only see that crimson!"

Perhaps you won't believe me, but we didn't get that odor out of the house for three months, or out of our clothes either, although we almost bought out the cologne from the Sparta drugstore.

The day that followed was the most heart-rending of all. We couldn't eat, and were so faint that we could scarcely work. We resolved that no chance visitor should be admitted to the house upon pain of death to the offender. I was learning to make shortcake when a scream from Al made me look up.

"Somebody is coming. What shall we do? Go and meet him, Clis, and keep him from the house."

"He's only a tramp, and I think he is drunk, too. I'd better call Conrad, I'm afraid of a drunken man." She walked timidly to the end of the porch and met the intruder.

"I beg your pardon, but as I was crossing your field in my walk, one of your rams assaulted me, and made me so unpresentable, that I must ask for some soap and water, and a needle and thread. I am a clergyman from the village, madame."

"Certainly," said Clissy, "I am very sorry that anything so serious should have happened to you upon my place," and she showed him into the sitting room and gave him the necessary articles. He staggered as he walked, and I saw that the blood was dripping from his hair. He was hurt more seriously than he would confess. When he had been there an hour we thought we had better peek, and we did. He had got to the lounge and fallen upon it. The blood from his head was dropping upon the floor, and his face was as pale as death. We forgot all about our mortification at our plight, and flew about in great distress. Clissy is so motherly and knows so much about everything that she soon brought him around; bandaged his cut and rubbed arnica upon his bruises. He was so modest and pleasant, and so patient—I knew he was suffering dreadfully—that we couldn't help admiring him; and it was such a surprise to him to find three ladies in that desolate little house, and it was such a surprise to us to find a gentleman in one who looked so like a tramp. And Clissy cleaned his coat—it had absorbed a great deal of sticky mud from the rain of the day before—and took him home in the evening in the horrid spring-wagon, drawn by the mule.

Well, nothing would do, when he called the next week, but that we should come to church and take classes in the Sunday-school and attend the socials. And we found that the people were pleasant and the country beautiful, and Mr. Haven—oh, well, I shall not say one more word about him—or you will guess—but then, who cares if you do?"—*Lizzie Hyer Neff, in Current.*

An Odd Judge of Good Cattle.

One of the very best judges of hogs and cattle on the hoof—he has no superior in the whole country—is Thomas Cole, of Kansas City, Missouri, who has grown rich in the business. He bought for Plankinton, in Milwaukee, thirty odd years ago, and afterward for Armour when he opened a packing house in Chicago. Now he buys for Armour's house in Kansas City, and invariably shows great sagacity. In the old days, when cattle were driven east on the roads leading to Chicago, the herders would send word forward to Plankinton and Armour that their drivers would be at Madison, Jefferson, or some other station at a given date. This would give drivers the benefit of two markets; if they could not make a favorable sale at Milwaukee, they would push on to Chicago. Thomas Cole would cram his pockets full of bank notes, as much as $100,000 sometimes, and, with a number of assistants, would intercept the drovers at some given point. He never kept any accounts, except in his head, and could not be persuaded to do so. He would return with a lot of cattle to his employer, with the words: "Here's your cattle, and here's what's left of your money." Then he would examine all his pockets and hand over every dollar he could find. Sometimes he would discover, days afterward, bills that had been tucked carefully away, and promptly deliver them. Nobody ever doubted his honesty, which was of the strictest sort. Cole has done a great deal toward swelling the fortunes of his employers, and is to day as capable and as much of a character as ever. —*Commercial Advertiser.*

COLONEL BOWIE.

SLAVE TRADER, DUELIST AND TEXAN REVOLUTIONIST.

Eventful Career of the Man Who Invented the Celebrated Hunting Knife Named After Him —A Life of Danger.

James Bowie was born in Logan County, Kentucky, in the year 1786. His parents were natives of Georgia, his father being a woodsman and hunter, in which craft James was brought up. The family wandered from place to place, usually seeking the remotest frontier, and finally settled on the borders of Louisiana and Texas. Here, in 1814, James Bowie made a clearing for himself, built a log cabin, and lived principally by fishing and hunting. Many were his deeds of daring and recklessness in his forest adventures, and many stories have been preserved of his wild exploits. He would catch and ride not only wild horses, but wild deer, and on one occasion he caught, roped, and rode an alligator.

He grew to be a large and powerful man, six feet in height and extremely muscular. His temper is said to have been good, but he was easily aroused to anger, which was terrible and unappeasable, and led him into many a tragical encounter. He never fought a regular duel, but was engaged in many fights, most of which had a bloody termination. He was said to have been a general favorite among his friends and neighbors, which goes to disprove that he was not of a cruel or bloodthirsty disposition.

Texas, at that time belonging to Mexico, was a sort of promised land to the adventurers of the Southwest. One of the first expeditions into that country was under General James Long, of Tennessee, and Bowie accompanied it. This was in 1819. The expedition resulted disastrously, Long being captured and killed by the Mexicans, but Bowie returned safely to his home.

He now sold his land, and in company with his brothers engaged in slave trading with Lafitte, the notorious pirate of the Gulf. Under the laws of the United States at that time slaves were not allowed to be imported into the country, but the brothers Bowie easily evaded difficulty. Their plan of operations was to go to Galveston and purchase from Lafitte a number of negroes, for which they paid at the rate of $1 a pound, or about $140 for each negro. These they would bring into the limits of the United States, and then go to custom house officers and become informers against themselves. The law gave the informer half the value of the negroes, which were put up and sold by the United States Marshal. At the Marshal's sale they would themselves become the purchasers, would receive half the purchase money back and a certificate of sale, which entitled them to dispose of the negroes in the United States. Bowie followed this business until he made some $60,000, most of which he soon spent in riotous living in New Orleans.

It was during these expeditions to Galveston that his genius evolved the hunting knife, with which his name will always be associated. It was made for him by a blacksmith after a design of his own. It was made with a heavy back, so that it could be used in chopping as well as thrusting, thus fulfilling the purpose of a hatchet, for which he used it in his woodsman life.

In the exciting political contests that grew out of Jackson's advent as a candidate Bowie took an active part. In 1826 he was residing at Alexandria, on Red River, and during a political campaign he got into an altercation with Norris Wright, Sheriff of Rapides Parish. Bowie was unarmed, and Wright drew a pistol and shot him through the body, but even then, if Wright had not been rescued by his friends Bowie would have killed him with his fists. This attack so enraged him that he determined thereafter never to go without his knife, and he had a scabbard made for it, and said he would wear it as long as he lived. A year later this feud with Sheriff Wright culminated in a terrible encounter at Natchez. In September, 1827, two very respectable citizens of Louisianna, Dr. Maddox and Samuel Wells, having a difference to settle, agreed to meet on a sand bar in the Mississippi River opposite Natchez with a few friends. They met, exchanged shots, and became reconciled.

When retiring from the ground Wells invited Maddox and his second, Colonel Crane, to the woods adjoining, where some others of his friends, excluded from the field, were, to take refreshments. Crane objected, on the ground that there were certain men there he could not meet. Wells then assented to go where Maddox's friends, who had also been excluded from the field, were. When on the way the party were met by the friends of Wells, who were James Bowie, General Curry and another person. Crane and General Curry were mortal enemies, and immediately drew their pistols. Crane had a pistol in each hand, and shot Bowie first and then Curry, the latter being instantly killed. At this the friends of Maddox hurried to the scene, and among them was the Sheriff Wright who had the encounter with Bowie a year before. Wright also fired at Bowie, and he fell. A general firing ensued and several others were killed. Wright seeing Bowie lying apparently dead, approached and bent over him, when Bowie suddenly drew his knife and stabbed Wright to the heart. He then arose, though severely wounded, and stabbed another of the party with his knife, and the battle then terminated.

When Bowie recovered from his wounds he determined to leave the United States and take up his residence in Texas. There he went in the year 1830 and engaged actively on the side of the revolutionists, his valor soon gaining him a distinguished name in that country. He married a daughter of one of the ex-governors of the province and was appointed Colonel of one of the Texas regiments. During the next few years he was engaged in many fights with the Indians and with the Mexicans, in one of which he and nine or ten men succeeded in defending themselves against 150 Indians, with a loss of only one killed and two wounded.

His career was finally ended at the bloody battle of Alamo. He had been ordered to that place to take command, but a few days after he reached there he was taken down with pneumonia, and during the siege was confined to his bed. As is well known Santa Anna, commanding 3,600 Mexicans, besieged the fort in March, 1836. It had only about 150 defenders. After some days of attack the place was stormed and every Texan put to the sword. No one escaped. Bowie, sick in bed, is said to have shot down with pistols and killed with his knife a number of his assilants before he yielded up his life. Whether this is true or not it is safe to assume that if he had strength and consciousness enough to do it it was done. The celebrated Colonel David Crockett was also a victim of this massacre.—*Chicago Herald.*

WORDS OF WISDOM.

A good cause fears no judge.

Ask thy purse what thou shouldst buy.

No man is good unless he is good unto all.

It is difficult to combine patience with grief.

Creditors have better memories than debtors.

A good man even in death makes no mistake.

Real merit of any kind cannot long be concealed.

When your superior entreats you you partly rule.

In this world a man must be either anvil or hammer.

When the judge is merciful the law is disregarded.

It is hard to refuse when a superior asks a favor.

Never trouble trouble, till trouble troubles you.

It is a happy thing for us that this is really all we have to concern ourselves about—what to do next.

Go not for every grief to the physician, for every quarrel to the lawyer, nor for every thirst to the pot.

Give what you have. To some one it may be better than you dare to think.

The best characters have a mixture of infirmities, and the worst have some redeeming virtues.

Stonewall Jackson in Battle.

In an article on Stonewall Jackson in the *Southern Bivouac* Thomas M. Boyd tells of his appearance on the field of battle:

I never was close to him on the field of battle but once; that was on the hill not far from the Henry House, at the first battle of Manassas. He was extremely pale, but his eyes glared with unnatural brilliancy. It was on that occasion that Colonel Baylor, of Augusta County, rode hurriedly up to him and said: "General, my men are armed with the old flint-lock musket, and not half of them will fire." He replied: "If you will examine it, you will find that old musket has the best bayonet in the world. Use the bayonet, Colonel." In a short while the Federal troops began to give way, and it is possible that this circumstance turned the tide of battle. I have seen the statement somewhere, that General Bee said to him: "General, they are beating us back," and Jackson's reply was: "We will give them the bayonet, sir." This may be true, but it is probable that the remark made to Colonel Baylor was afterward claimed to have been made to General Bee. I will never forget the terrific fighting that evening about 3 o'clock—the roar of the artillery, the screaming, bursting shells, the rattle of small arms. The smoke blinded me; I stooped low to see how to lead my men. We were almost exhausted, and burning with thirst. Beauregard galloped by; this gave us some hope, and we cheered him and passed on. The Federals fought desperately. At last I saw Jackson, and I felt safe, for his presence always inspired his men with confidence. That evening he was shot through the bridle-hand. General Imboden approached, called his attention to the fact, and suggested surgical aid. Jackson said: "It is a mere scratch, sir." His hand was bound up with a sash, he continuing on the field until the engagement ceased. He then repaired to the place where the wounded had been collected. The surgeons were busy, of course. One of them seeing General Jackson, approached, and offered his assistance. The General insisted that the surgeon attend to those who were more seriously hurt than himself, saying he preferred waiting until the private soldiers were relieved.

Rice.

The word "rice" is evidently of Eastern origin: Tamil, *arisi;* Arabic, *aruz;* Latin, *oryza;* Italian, *riso;* French, *riz.* It is only second in importance among the cereals to wheat, and forms the grain food of over one-third of the human race.

Its use by the inhabitants of China and India extends as far back as the earliest records of either country. A Chinese classic describes minutely the drainage and irrigation works constructed by the Emperor Yu on the Yang-tse-kiang 4,236 years ago. It was cultivated in Egypt fully fifty centuries ago, though not the principal food of the latter country. Frequent Biblical references to rice are found. Herodotus fully describes it, as does Pliny in his treatise upon the food plants of India. While Gibbon considers that it was cultivated in Spain at the time of the Roman occupation, it certainly, as an industry, attained no prominence in Europe until comparatively modern times, and it is generally believed to have been introduced by the Moors into Andalusia during the eleventh century, and to have crossed from Spain into Italy about a century later.

Rice is grown in nearly every portion of the globe—in Java, Brazil, Hawaii, America, Italy, Japan, India, but principally in China and Burmah. The Burmese crop is nearly all exported, the inhabitants subsisting on some cheaper food, as millet or dourrha; that of China is principally consumed at home, though a good deal finds its way into this country.—*Southern Bivouac.*

A Mongolian Prayer.

The worship of ancestors at graves is not seen here, as the bodies are sent back to China; but there every April, on a certain day, the family tombs are visited and offerings made. The Chinese think that we do the same on Decoration Day; at least this is the impression of many. The prayers offered at the tomb of an ancestor are ready made and printed and are not recited, as the bearer very naturally argues that the soul of the ancestor if it knows anything is aware of what is wanted, so it is simply burned at the tomb. The following is a literal translation of a prayer offered copied from one of the slips:

TANGKWANG,
12th month, 3d moon, 1st day.

I, Lin Kwang, the second son of the third generation, presume to come before the grave of my ancestor, Lin Kung. Revolving years have brought again the season of spring. Cherishing sentiments of veneration, I look up and sweep your tomb. Prostrate I pray that you will come and be present, and that you will grant to your posterity that they may be prosperous and illustrious. At this season of general showers and gentle breezes I desire to recompense the root of my existence, and exert myself sincerely. Always grant your safe protection. Most reverently I present the five-fold sacrifice of a pig, a fowl, a duck, a goose, and a fish; also an offering of five plates of fruit, with libations of spirituous liquors, earnestly entreating that you will come and view them. With the most attentive respect this announcement is presented on high.

The religion of the Chinaman and of Chinatown is bounded by no narrow limits. It is boundless—fitted for all stations, and is a jumble of tradition, superstition and ignorance, incomprehensible to nine-tenths of its so-called adherents.—*San Francisco Call.*

Life indeed is short, but by ills it becomes too long.

AGRICULTURAL.

TOPICS OF INTEREST RELATIVE TO FARM AND GARDEN.

Grow From the Best Seed.

The kind of tubers to use for seed potatoes is discussed by a correspondent of the New York *Tribune*, who says that possibly a large crop of fine-sized potatoes may be grown from small tubers in rich, mellow soil, but the principle is all wrong. The potato is a subterraneous branch, with buds analagous to those above ground, and on this account some writers argue that the matter of size is unimportant. Every right-minded nurseryman knows how necessary it is to increase his stock of plants from sound, healthy specimens only, and the most vigorous, well-ripened shoots are invariably selected. The forthcoming generation depends in great degree upon this act, as is frequently demonstrated by the transmission of diseases which ordinarily are not handed down through the means of seeds. The potato cutting, as it were, even if taken from a poor little tuber, will by liberal use of manure and thorough culture produce some large specimens; but will the crop be so uniformly large as if large tubers were used? Reason says no. The large tubers will give a very much better average in the long run.—*American Rural Home.*

Ensilage Made from Apple Pomace.

An interesting experiment conducted at the Massachusetts station and reported on by Professor Goessmann, was of ensilage made from apple pomace. The pomace which served for the preparation of the apple ensilage was taken from a cider mill near Amherst the latter part of October, and consisted of the clear press refuse of a mixture of different kinds of apples.

Two casks of a capacity of from fifty to sixty gallons each were used for the experiment. These were painted inside with a black tar varnish to render them air and water tight. The pomace was stamped down solid, and subsequently covered with tar paper, which was held down by a layer of sand several inches in thickness, and some large stones. The casks, thus filled, were kept in a corner on the barn floor until the following May, when they were opened to examine their contents. The material was found throughout apparently as fresh as when put up; neither mouldy nor rotten, nor even discolored on its surface. It had a pleasant, fruit-like acid odor and taste, and contained but traces of ammonia compounds. One hundred parts of the fresh apple ensilage required 0.744 parts of sodium hydroxide for the naturalization of its free organic acids, which prove thus to be less than in either kind of corn ensilage. The ensilage of apple pomace is highly relished by cows and swine, and is, if not superior, at least equal, pound for pound, in feeding value to the apple pomace, which served for its production. The nitrogenous constituents had increased at the expense of the saccharine constituents; the latter had been destroyed at a higher rate by fermentation than the former.—*New York World.*

Bushes and Weeds on the Farm.

It seems a very strange thing, says a correspondent of the *Country Gentleman*, that our farmers should allow so many bushes, shrubs and weeds growing along the public highways and in other conspicuous places on their farms. What a bad effect it has on the appearance of a man's farm! So small an expense would be required in removing them all. Can it be that some farmers want their farms to revert to wilds? They all the time receive no profit from them, but they have to pay taxes on them. I cannot see why it is that farmers sometimes increase the acreage of their land. They do not see the extent of land which might, with large profits, be brought under control, and produce more on a small area with less labor, and without extra taxes and cost.

Farmers are careless, and try to do a great deal without doing it well. If they had only considered it in time they would have been the first to exclaim against the folly of refraining from doing a thing which could be done so easily, and which was of so much importance.

All will agree with me when I say that if the highway is simply mowed every year clear up to the fence, no weeds will grow up there as a general thing, but grass, on the other hand, will take their place, and cause as beneficial a supply as any part of the farm. Every one knows too well for me to express it, that weeds and bushes cannot live where they are regularly mowed every year. Every one who has any sense of propriety will be struck with the folly of so mowing a field that when the central part is cut for harvest, a streak will be left along the fence which is not mowed. Let me say to every farmer who has not mown up to his fences fully this year, or who has bushes and coarse weeds growing along them, which are in consequence of that space not having been mown in years back, to do so this year: mow every one of those weeds and bushes, and do not fail to do this every year, and in a few years he will have no bushes along his fence, and every inch of his farm will pay and look better.

Farm and Garden Notes.

A New York State cow-feeder says that wheat-bran and middlings have given him the best results.

Rye, if sown now, will grow, and as it is hardy, will furnish early green food before the grass makes its appearance in the spring.

One of the best supplementary feeds with corn-fodder is wheat-bran. It is even better in the winter as a supplementary food for cows.

If every farmer who cuts down a tree will plant a young one in its place the result will be a constant supply of timber and fuel as well as a profit.

Sell all young cattle that you do not intend to keep over winter that are in good condition. They will soon cost too much to keep if you have not a proper place and proper feed for them.

The natural life of sheep is shorter than that of any other domestic animal. Five or six years is the limit of practical usefulness, though valuable breeding ewes may be kept one or two years longer by careful treatment.

It is cheaper to clean out the poultry-house every day than to allow the droppings to accumulate, for the reason that it requires but a short time for the volatile elements of the manure to escape. What is saved by not frequently cleaning the house, as labor, is lost in the depreciation of the droppings.

It is a singular fact that gypsum or plaster of paris is so little used. The cheapest of all mineral fertilizers, and the one best adapted to clover, its use rarely extends far beyond the locality where it is dug and ground. There its cheapness insures a large use by neighboring farmers, who find it very profitable.

A late cultivation of strawberries, with the application of a bag of superphosphate per acre, scattered in the rows near the roots of the plants, will give good results next spring. All the runners between the rows should be removed, the grass hoed away between the plants, and the ground made as clean as possible.

It is asserted that "a mixture of lime in clay soil has the effect of making them porous and friable; hence, by such treatment they are made more workable and are better fitted for nourishing the life of plants. Clays that harden into solid lumps after a shower of rain are little better than rocks, in so far as the food of plants is concerned."

Professor Arnold, who has been inspecting the English modes of agriculture, states that the English dairymen are far in advance of the American. They use greater skill in feeding and husband the manure better, as well as using economy in every department. He states that if our dairymen would economize as well they would make their farms fertile and become wealthier.

A swine-breeder says that in weaning pigs there is something more to be considered than simply taking them away from their mother. They should be weaned gradually, so as not to receive any stunt or set-back. To take pigs away before they have been taught to eat gives them check for at least two weeks. Feeding them in a separate place to which they have access will accustom them to eating.

An experienced farmer warns others against giving cotton-seed meal to breeding cows or to young stock of any kind. It is very difficult to digest, and when fed to cows often causes abortion. Great care must be used in getting animals accustomed to this food, which cannot be fed in large quantities even to stock accustomed to it. Young calves fed even a little have been killed by it. Linseed-oil meal is now cheap enough, and with Northern farmers will continue to have the preference.

Most cellars in early winter will be decidedly benefited by thorough ventilation. The air is usually too warm at this season, and ventilating on cold days to lower the temperature will not only remove the foul air, but will also to some extent prevent the decay of vegetables which causes it. With a thermometer in the cellar it is easy to decide when the air approaches a freezing point, and after this the ventilation may be restricted to warm days in winter when no danger of frost need be apprehended.

It is not wise to put leaves for protection thickly over plants. They hold moisture, and rot instead of protect, and often breed mildew, which is as bad as cold. It is bright light, together with frost, that injures plants, and enough leaves to shade is all that is required. This is why evergreens—such as rhododendrons and kalmias—suffer so much in winter. Something to keep off the sun is as beneficial as something to keep off the frost. For this reason the ground is itself a good protector. Many tender fruits can be taken care of by bending the branches and covering with earth.

Roots want air as well as water, and the soil should be somewhat open in order to permit air to circulate through it. When the earth does not dry up rapidly something is wrong. It is no uncommon sight to see benches of roses, carnations and other things completely sodden, and the plants then die from root fungus. When fungus does appear, sulphur exposed to the hot sun's rays, is among the best remedies. The above remarks have in view mainly the culture of flowers in benches, as practiced in florists' greenhouses. But similar instructions are needed for the smaller grower.

Professor Shelton has found that in feeding cooked corn and raw corn to pigs the advantage was decidedly with the latter. In an experiment which he made the corn was cooked by steam in a barrel, to which a pipe was run from the boiler. It was so thoroughly acted upon by the heat that each grain could be easily crushed between the thumb and fingers. During the coldest weather the cooked corn froze in the troughs, often before the pigs could eat. Every detail of the experiment goes to confirm the opinion that nothing is gained by cooking the food; that the trouble and expense are given for nothing.

Bird Stories.

Ramon Vejar of Pomona, Cal., killed a four-legged quail.

Sailors caught a seagull in the English channel while it was floating asleep on the water.

A large eagle flew down in a street in New Haven, Conn., and got into a fight with a dog. It was captured by a policeman.

Wine-growers of Sonoma County, California, placed poisoned wheat in their vineyards and thus killed vast numbers of quail.

D. H. Owings, living near Sturgeon, Mo., caught twenty-three owls and hawks in a steel-trap on a tree near his hen-house in six months.

Millions of gulls are found about the mouth of the St. Croix River, and furnish profitable sport for Indians, who sell their plumage for millinery and decorative purposes.

A turkey cock in Americus, Ga., left his mates and lived with a flock of guinea hens. His devotion carried him so far that he hatched out a nest of guinea eggs and provided for the little chicks.

One of the results of the reckless killing of herons, storks, egrets, and other birds of South Florida is an increase in the number of snakes about the lakes and ponds. The great blue heron is a famous snake-catcher.

The Japanese tumbler is a singular bird, which has a habit of jumping from its perch, turning a somersault in the air, and then coming down right side up on its perch again. It performs this trick dozens of times in succession. The bird is somewhat larger than a canary.

Ahead of the Egyptians.

"Talk about Egyptian embalming," said a Chicago undertaker. "Why, it don't compare with what we do nowadays. Those old Egyptians didn't know what art was in the profession of undertaking. There is too much nonsense afloat about the lost art of embalming as practiced by the Egyptians. In the first place their climate is of a kind to preserve dead animal tissue whether it is embalmed or not. It is very dry in Egypt and the temperature is even. The boasted mummies of Egypt are simply dried up specimens of skin and bones. To day we can embalm a body so that it will preserve the fullness and hue of life and it will never dry up at all. If the modern process of embalming had been know to the Egyptians of several thousand years ago, those old Kings who were laid away in the pyramids for us moderns to look at, instead of presenting the appearance of tanned leather, would have the kingly dignity of form and feature which was theirs when their bodies were laid away for the last long sleep."

POPULAR SCIENCE.

Some photographs of a recent thunder storm in France are said to indicate that the normal form of lightning discharges between the clouds and the earth is that of an irregular spiral.

The London *Lancet* and other European medical journals are presenting Professor Buisson's treatment for hydrophobia as more efficacious than Pasteur's. It is asserted that Beisson's method effects cures even after rabies have been developed.

Gas locomotives are in successful operation at Melbourne, Australia. A six-horse power engine is supplied with reservoirs, sixteen inches wide and six feet long, containing gas compressed to represent 280 cubic feet, sufficient for a fifteen-mile run.

Attention is again turned toward Antarctic explorations, through an address by Baron Von Muller, who points out that by establishing an outpost at Auckland or Macquarie Island, and an expedition aided by steam and electric balloons, the problems connected with Polar exploration could, in all probability, be solved. There seems a chance that the Australian Government will undertake the task.

One pound of coal, according to recent Franklin Institute tests, will yield an amount of light averaging 150 candles with the electric arc light (about 60 per cent. of this if glass shades are used), twenty candles with incandescent lamps, and fourteen to seven candles with gas. In this estimate it is assumed that steam coal is burned under a good boiler for the electric lights, and that the gas is obtained from a bituminous coal.

The recent voyage of the electric launch Volta across the British Channel, from Dover to Calais and back, is regarded as a scientific success far in advance of what was expected. The Volta is built of galvanized steel plates, and her deck is nearly on a level with the water. Below the deck are placed the electric accumulators. These are little square boxes about eight by twelve inches, and are wedged closely together to prevent shifting.

An account is given in the *Revue Scientifique* of an Italian method of preserving bodies in a soft and flexible state for several months, and by this means enabling them to be dissected without any danger to the preparator or the anatomist. To this end they are placed in some sort of a receptacle or other, and covered with a layer of the thickest and purest honey that can be obtained. If it be desired to preserve an entire cadaver by this simple and inexpensive process, the plan pursued is to begin by carefully filling the encephalic, thoracic, and abdominal cavities with a sufficient quantity of tannin. This process, when conducted with care, is stated to give remarkable results, a corpse thus prepared appearing for several months to be asleep. In a sense, the alcoholic fermentation that occurs under these circumstances serves it as food while preserving its softness and flexibility to a degree strongly resembling that of real life. When the fermentation ceases, a hardening of the parts occurs, and renders the artistic forms of the body still more marked.

How the Thistle Travels.

Wherever civilized man goes, there the thistle accompanies him as a matter of course in his various wanderings. It adapts itself to all earthly environments. Close up to the Arctic Circle you find it defying the indigenous reindeer with its prickly wings; under an equatorial sky you may observe it accommodating itself most complacently with a sardonic smile to tropical existence, and battling with the prickly cactuses and the thorny acacias, to the manner born, for its fair share of the dry and arid uplands. Even nettles are nowhere in competition with it; in spite of its valuable and irritating sting, the nettle has not the plasticity and adaptibility of constitution that mark the stout and sturdy thistle tribe. Garnered and harvested yearly with the farmer's corn, its seeds have been gratuitously distributed by its enemy, man, in all climates; and, when once it gains the slightest foothold, its winged down enables it to diffuse itself *ad infinitum* through the virgin soil of yet unconquered and unthistly continents. A field of thistles in England itself is a beautiful sight for the enthusiastic botanist (who has usually a low opinion of the agricultural interest); but in the fresh and fallow earth of New Zealand they attain a yet more prodigious and portentous stature, that might well strike awe and dismay into the stout heart of a Berkshire farmer.

The fact is, the thistle is one of those bellicose plants which specially lay themselves out, in the struggle for existence, for the occupation of soils where they are compelled to defend their leaves and stems from the constant attacks of the larger herbivores. On open plains and wide steppes much browsed over in the wild state by deer or buffalo, and in the degenerate civilized condition by more prosaic cows and donkeys, one may always note that only the prickliest and most defensive plants have any chance of gaining a livelihood.—*Popular Science Monthly.*

Cat's Eyes and Moonstones.

"Here is something for the lover of fine jewels," said Mr. Ed. Smith, himself a connoisseur in gems, and he opened a small velvet box about the size of a thimble and displayed something that shone like moonlight.

"That is just what it is, condensed moonlight," said Mr. Smith. "There is the opaline glory without the color and the shifting light. It is the cold, pale brillancy of moonshine, and has never before been worked. It is the Ceylon moonstone or moonlight quartz."

The stone was set in a lady's brooch, of small oval size. The faces of two children were carved in the moon-tone, which was surrounded by a circle of diamonds.

"We prize it very highly, as it is the coming gem," continued Mr. Smith. "It cannot be imitated any more than moonlight can. The water has petrified the rare brillancy of a tropical moon held in its depths. It took centuries to solidfy it, but only a moment to imprison that glory of whiteness. It gives the arbitrary belle of the present a new fashion. It is much more pellucid than opal, which is water, petrified with multitudes of infinitesimal fish in it, which are developed by microscopical power. There are no fish in the moonstone. The shifting colors of the opal are caused by the expansion of the fish under heat."

"And not by any adverse fate?"

"Certainly not. The superstition set forth by Sir Walter Scott in 'Annie of Geiernstein' is very charming, but does not coincide with facts. The moonstone and the cat's-eye will be the leading styles in gems for gentlemen's wear this season. And the ladies will wear the moonstone as a substitute for their favorite pearls, which it surpasses in beauty."—*Detroit Free Press.*

Italy has twenty-one universities—one more than Germany.