said a thousand times, as if that morsel of paper were his living spokesman. Truly, the girl was very much in love, and absence made her heart grow fonder, which is not usual with either male or female hearts, unless I see the world wrongly altogether.

About this time Sophia—and not Sophia only, but all of us—began to notice that Mr. Brent looked paler than usual, walked with a slight drag of the right foot, and sometimes missed a word out of a sentence without being aware of it. Again, he would observe the mistake, and correct it with an appearance of irritation. "Brain mischief going on," old Sparker whispered. And he was right; for one Sunday evening, after preaching, the rector suddenly became speechless in the vestry, and lost his power of motion. He never spoke a syllable again; and even when he opened his eyes there was no reason in them. A dreadful storm of wind and rain came on that night, and blew the golden cock from off the church steeple, and some of the masonry with it. The tempest raged round the rectory garden, and uprooted two great elm trees, and cast them across the lawn in gigantic ruin. Meanwhile the rector lay as quiet as if a summer breeze was blowing. There was no storm that could roar loud enough to disturb his sleep. And in the morning, when we awoke to see what the wind had done in our gardens and parks, we heard our kind-hearted little rector had departed from us forever, just while the storm was uttering its fiercest blast.

We said that we could have better spared a better man, looked grave a moment, remarked how uncertain life is, and then talked of the storm, and forgot the rector. But to Sophia his death was a terrible sorrow. Somehow Percival seemed gone: she would hear no more about him, nor have the remote but still very actual comfort of talking with his father and seeing his old haunts. She had borne trials already, and other trials awaited her; but this was, after all, one of the sorest she ever felt. She grew lonely, sad, doubting; began to think Percy would forget her; tried valiantly to battle with her fears; cried many hours when she was alone, then wiped her eyes and went downstairs smilingly; but it was an aching heart that beat in her breast. And the body of the rector was laid to sleep in the churchyard, and his successor came. The king was dead, and the cry was, "Long live the king!" for we were all pleased with our new parson. He preached sermons shorter by five minutes than those of Mr. Brent. He kept two curates, good-looking bachelors. He worked the parish well. So we confessed every one that the loss of poor Brent was gain to us; especially these last few years, we said, when trouble overcame him, and this brain mischief had been stealthily making its way nearer to his vital part. Very soon the old rector's name was forgotten; but day by day and week by week we noticed that over the grave where his mortal part lay fresh flowers were strewn by some tender and unforgetting hand.

CHAPTER V.

THE LIVES OF OUR CHARACTERS ADVANCE.

Five years had passed away since Sophia and Percival were parted, and time had left its marks upon other personages of our story beside its heroine. Without any question, Sibyl had greatly increased in personal attractiveness. Her dark superb style was developed and heightened as she drew nearer to the meridian of life. No doubt the early bloom of youth was gone; but her form had become more finely rounded, and her carriage had become more stately. She was a beautiful woman of the world; no man ever looked at her once only. But her manner had become more reticent than ever. She relied on her beauty for a place among her sex, and was at no pains to cultivate conversation, letters or any branch of the art of pleasing, except the setting forth of personal charms. Had her manner and her talk been what she might easily have made them, she would have shone out as a beauty, indeed, in the prime of her womanhood. For Sibyl had no lack of sense nor of education either; but proudly reposing on her incontestible loveliness, she rather withdrew than put forward her other attractions. Still she could display herself when she pleased; one occasion I well remember, when she met in company a vivacious Italian, who was extremely struck with her appearance, and paid her a profusion of gay compliments. At last, his English failing, he tried to enhance his polite speeches by some poetical quotation in his own language, adding that he was afraid she would hardly understand what he had said. On the instant Sibyl answered him back with a return quotation, as I understood, from the same author. Not knowing Italian, I could not appreciate her readiness; but that the retort was lively and happy was sufficiently proved by the foreigner's delight. His eyes sparkled with pleasure.

"You know more than I do," he exclaimed, clapping his hands. "You are a wonder—a wonder, my dear lady!"

But Sibyl relapsed into silence, and treated her success with a sincerity of indifference which showed how lightly she regarded any mental achievement.

Car had meanwhile changed in a way the very opposite. She had grown thinner; and her frame, which was a large one, was more prominent. Car had gone in for intellectual ideas, and was improving her mind diligently, and was fast obtaining in our little town the reputation of being what is now called a woman's rights woman. She had become rather too fond of talking in mixed companies on high subjects, and so fell into the very error her lively little mother had foreseen ten years before.

"As to Car," Mrs. Barbara said one day, "she is turning schoolmistress. She talks lectures. I wonder she does not get a few lessons in action," the little satirist said; "it would become her drawing room and dinner table finely. Any actor or popular preacher could tell how to arrange her elbows when she is discoursing. I can't; for my education, dears, was neglected—in that particular department. We only danced and sang and flirted when I was a girl. Why, I remember once meeting a man who talked of Peru, and, I assure you, dears, I thought it was somewhere in Germany! But what matter! The world was ours, and we had only to live and enjoy and make others enjoy. And we did it, girls; we did it! O, that I was young again!"

Caroline Doolittle, however, was not very popular in Kettlewell; and this was undoubtedly owing, not to her sound mental cultivation—which was as genuine as it was laudable—but to the mischievous habit she had of bringing her attainments into prominence. I suppose she did it to manifest her superiority over the rest of the women; but, unfortunately, the result was that, while she vexed the women, which she did not mind, she repelled the men, which she did mind very much.

One man, however, paid her the tribute of a homage which was as unceasing as the voice of a waterfall. Morning, noon and night Egerton sounded the praises of his wife. He had grown stout and healthy looking, and he was as great a simpleton as ever. Indeed, his giggle had got new notes of imbecility in it, and was now a perfect wonder of vacuity in unarticulated sound. He had a slight drop in his lower lip, too, and a fixed smile, which might have made his very dog understand what mental weakness is in mankind. But Egerton adored his wife. They had three children now, and from infancy he pointed these children to their mamma as the sole model of excellence and strength. Egerton was very fond of nursing his children, and would walk up and down with them by the hour, telling them at brief intervals to look at their mamma.

"Tremendously gifted woman," he would sometimes say to his friends. Then, dropping his voice like Guy Fawkes in the conspirators' room: "Sometimes I see her reading for two hours at a stretch. I have timed her by my chronometer. What would have become of me if I had not married that woman I don't like to say. I *think*," Egerton would add, solemnly, "I *think*, with my disposition and my way of looking at things, you know, I should have gone to the bad."

Egerton had also given himself up greatly to the study of cooking, and had a little room fitted up with a stove, and hung round with pots and pans. I think this must have been about the time when the great Soyer was teaching us English people how to work wonders with soup and fish and fowl. In this room Egerton would concoct rare dishes, generally coming out with a very red face, and now and then upsetting a boiling saucepan down his thighs; on which occasions he would rush from the room shrieking, and declare that it was really too bad, and he would give the whole thing up. Egerton had an idea of working a reform in the present way of cooking red mullet.

"A delicious fish," he would say; "but under the present system it is sent up in paper; treated, in fact, as if it were a package. It is intolerable that a delicious fish should be treated as if it were a package."

Time, which was writing its record on our younger people, had not forgot to pencil deeper lines on Archibald Goldmore. Visible signs of advancing years were upon him, and the elephantine firmness of his tread was going. He stooped; his hair was not so gray as once it had been. Goldmore, the wise, the sensible, the millionaire, was dyeing his hair to keep up the appearance of youth beside his lovely wife. Ah, lovely young women, what fools you make of us withering, elderly men!

And even the little mother, so long undying in her energy, began to show symptoms of decline. The light step was falling into a slower movement; the quick motions of the frame were seldom seen; she was growing a little deaf, and every one observed it, though, with characteristic vivacity, she tried to hide the failing. She began to like quiet—bodily quiet—and would sit in her chair hour after hour; but her mind was as active and her tongue as pungent as ever; and often Sophia would laugh till she was tired at the little woman's quaint remarks or droll stories of days gone by. She commented on everybody and everything with the same satire, sense and absorbed worldliness as of old. Her two sons-in-law furnished her with abundant material for criticism; and Sophia often blushed to think how heartily she enjoyed her mother's caustic comments on Goldmore and Egerton. Both were favorites with the old woman; but Goldmore's mercantile stiffness and Egerton's feebleness of mind were too tempting for her to resist.

"I can hardly keep my countenance, Sophy," she used to say, "when these two men come in together. One I can stand; but both is more than mortal can." (They generally looked in after church.) "'Mrs. Temple, how do you find yourself this morning? Pretty well?' She hit off Goldmore's voice to the note. And then: "'O, how are you? Tremendously warm day, isn't it? I do dislike a tremendously warm day?'" delivered exactly as Egerton would. Thereupon the little satirist would fall back in her chair laughing, and pleased to see Sophia laughing.

"Now, really, mamma, you are too bad!" Sophia would say.

"Not a bit, Sophy. You like it, or you would not laugh. And, beside, why need the old man be a bore and the young man a blockhead? O, may the day never dawn when I do anything but laugh at a stupid or a fool!"

Still Sophia was kept in wonder and fear by her mother's growing turn for economy. In some things she was becoming almost penurious, and the question: "What will it cost?" which once she disdained to ask of *anything* that pleased her, was now never off her lips. There was a positive alarm about her manner, too, when any new expense was in view, which was full of grave suggestions; and Sophia quite tried to reconcile herself to Goldmore's opinion that her mother had lived beyond her means, and was now trying to eke out her means. Beside, the old woman would sometimes, in a covert way, try to sound Sophia as to what she would do when left alone in the world, and once she actually asked her if she had any idea of ever making money for herself. This uneasy question pointed only too plainly in the direction of the practical Goldmore's observation, that Mrs. Temple was living on an income that would perish with her, and that Sophia would be left in poverty. But beyond conjecture no one could go, for the old woman kept her secret, and would not suffer any interrogations. To Sophia she confided that she felt a little alteration in strength; but even to her she would not admit that the cause was old age.

"I am a little exhausted, Sophy," she said one day. "You see, I have worked hard at enjoyment for a great many years. I shall do just what Johnson used to make our peach trees and vines do at the Beeches. Let me rest for a few months, and next year I shall recruit, regain strength, Sophy, and be as lively as ever. O, Sophy, Sophy," she cried, clapping her withered hands together with a sprightliness which, whether real or feigned, was equally amazing. "I shall enjoy the world, relish it, smack my lips over it, girl, for years and years to come!"

CHAPTER VI.

IN WHICH LADY BEAUTY HAS HER PORTRAIT PAINTED IN PRINTER'S INK.

[Shall I tell you why I have written this story? It was because I met Sophia Temple, then styled "Lady Beauty," in her fifty-third year; and her power to charm (at an age when charms are commonly supposed to be dead and gone) led me to ask, What is this woman's secret? And having searched into her life and character, and noted her ways, I venture to offer this imperfect record of her life, and this still more imperfect picture of herself, for the study of her sex generally. I wish to convince women that it is a great mistake on their part to suppose that their power to please departs with youth. At all times I have noticed that men of sense seldom admire—or, if you like, grow enamored of—women for beauty alone, but for character, manner, taste and conversation. Now, while beauty (we must admit) lessens with time, character, manner, taste and conversation may each be refined and enriched; and these, I believe, by their improvement can quite compensate for the loss of personal charms. Mere beauty is but one bright, unchanging beam—it will grow even wearisome; but wit, sense, courtesy and humanity are forever casting forth new and unexpected rays, and enlivening intercourse with agreeable surprises. And so the story of Lady Beauty is written as a humble attempt to encourage women to try to be charming to their latest day. For they can do it if they try.]

Sophia was without question far inferior in physical beauty to Sibyl, and I think most people would have said that she was not so handsome as Caroline. Her features were regular, her nose straight and fine, her complexion delicate and rosy; but still, in her face she was no model of womanhood. Her expression—and what is expression but character fixed in the countenance?—made Sophia what she was. Her delicate upper lip, with the hint of firmness in its fine line, told of resolution; the soft hazel eyes, with their upward glance, had a look of aspiration; the mouth was full of tenderness, ready to mold itself to every affectionate feeling. But what was this after all? Sophia's nature in Sophia's face!

She was the best dresser I ever knew. Of color, either by study or natural gift, she was a perfect mistress. Accordingly her appearance pleased numbers of people before they saw her face; and many a time as she went down the street the curiosity of those who walked behind was aroused to see what might be the face of the woman whose gown and mantle were so striking by the harmony or the contrast of their hue. Flowers, ribbons, brooches, all that sets off dress, she used with the most unerring taste. And she managed through all the changes of fashion to respect herself and her own figure and face; in the fashion she always would be, but still she modulated it so as to be the queen and not the slave. No doubt Sophia must have paid great attention to her dress, but I scarcely think she could have achieved such constant success, or so complete, had she not been a dresser born.

Then her manners in society were captivating. Here I think the little mother's homilies were useful, indeed. With what a graceful attention she heard what you had to say! How modestly she gave her own opinion! She was well read, and could take her part in most conversations with ease: and now and then she could deal out a witty stroke. Indeed, Sophia had a great deal of humor, but seldom gave it the rein in society. Night was her time, with Car and Sibyl; and often the two more brilliant girls, as they laughed at her comical reminiscences of the day would feel how easily Sophia could outshine them if she tried.

She loved the world. Here again the influence of her mother was perceptible, with this difference, that the world in her mother's language signified society, and nothing more, while Sophia would have included in it the whole of nature and life. I do not think I ever saw any one who had such a simple and unaffected enjoyment in living as she. A walk in the woods was enchantment to her; and, on the other hand, I have seen her on the tiptoe of pleasurable excitement for a ball. She was no poetic recluse; she never shunned society or its pleasures, but rather sought them. There was not a particle of affectation about her; indeed, she retained her girlishness and her love of girlish amusements for an unusually long time.

And she certainly remembered her mother's teaching in another particular; she tried to please. She knew that a woman ought to be an object of admiration and affection, and she ruled her whole life with this fact in view. But Sophia understood the art of charming, which, with all their gracefulness, few English women entirely do. Perhaps Nature feels that she has given our English women enough already, and, mindful of the limitation which ought to mark all mortal things, has withheld that one gift which would make them irresistible. Sophia knew that face and figure are not everything. She understood that it is the woman a man admires, not her eyes or nose or lips or waist; the whole woman—person, dress, manner, talents and character. Frenchwomen are in this respect more far-sighted than our English ladies, but even Frenchwomen do not fully realize this great social truth. A woman who knows that her dress is tasteful and her expression agreeable and her conversation lively will be little dismayed to hear of crows' feet round her eyelids or gray hairs on her temples. Her better part is blooming amidst the gentle decay of more material charms. You will laugh when I tell you before the story ends how Sophia Temple, Lady Beauty, at the age of fifty-three, had a new lover, and what a lover he was.

One touch I must add to this picture. Sophia was in the best sense of the word a religious woman. "Without love," cries a great novelist, "I can fancy no gentleman." A little diffidently I should add, without religion I can fancy no lady. Sophia's piety was in no way obtrusive, never puritanical, never ascetic, but gentle, animated and humane. It quite saved her from her mother's narrow and heartless and merely sparkling worldliness. Sophia loved the world, but had a hope beyond it, and her religion gave a richness, a sweetness, a seriousness to all her charms.

I must admit, however, that many of Lady Beauty's own sex declared her to be nothing particular. That men admired her was not to be denied, but women would often ask dryly what it was for. When I knew her well enough to take such a liberty, I ventured to say to her one day that, greatly as she was praised by our sex, her own appeared to decline to accept her as by any means representative. She laughed with much gayety.

"Some of us," she replied, "admire in ourselves what is forcible and striking. I believe you said to me yourself one day that Lady Macbeth and some other eminent ladies of the imagination, whom we remember, made a sufficiently vivid impression to satisfy both sexes. You added something like this: I somewhat doubt if Lady Macbeth would be altogether a success in the drawing room."

"What, then, is your idea of a woman?" I asked.

"I have drawn up a set of beauty rules," she replied, rising and going to her desk. "They will be the best answer to your question." She laughed with great sportiveness, so that I could not tell whether she was jesting or in earnest.

So she gave me her beauty rules there and then. But these I reserve for the last chapter of this story, when, in parting with my readers and my heroine, I shall narrate two curious illustrations of her power to please.

I repeat, this story is written for the instruction of the tens of thousands of Englishwomen who can be like Sophia Temple if they try. Whoever of my fair readers will follow this amiable example shall be relieved of the anxiety of glancing over her shoulder for ever to see what brighter beauty of later date and fresher charms may be coming up behind. Youth and the attractions of youth need not be despised by such a woman; neither need they be envied. Her knowledge of society, her ways of the world, her familiarity with character—these, together with taste, refinement, virtue, and the desire to please, will give her the victory over time. Like our dear Lady Beauty, she, too, shall be charming to her latest day.

CHAPTER VII.

A BOXING MATCH.

Prendergast, who resided not far from Kettlewell, had occasional opportunities of meeting the Temples; and it had been the little mother's expectation that he might renew his suit, and, perhaps, after a time, draw Sophia's affections to himself. He made no sign, however; and for long enough it seemed as if our heroine was to have no further trouble from mankind. But at last—at the end of the five years after Percival's departure for Australia—a new lover came upon the scene.

His name was Done. He was the only son of one Mr. John Done, a retired merchant of great wealth, whose antecedents were generally described in this way, that he had something to do with leather. The Dones were plain people, but not vulgar; and having resided in Kettlewell for twenty years, and being charitable and religious, they had gradually made their way into our town society. In fact, they were now received in companies where, at their first coming, they dared not have set foot. Still, it was never forgotten that Mr. Done was not altogether one of us. When any stranger would make inquiry concerning him, the reply would generally be in this form: "Done is a worthy old fellow, and gives capital dinners. If you want a subscription for any good cause, go to Done. He is modest, unaffected, and not the least purse-proud. *In early life he had something to do with leather.*" This last clause was a formula repeated as faithfully as if it was a line of "God Save the Queen."

[To be Continued]

A Mysterious Package Received by a Bank.

CINCINNATI, June 5.—The Van Wort, Ohio, National Bank received yesterday by United States express from the Union National Bank of this city, a package purporting to contain $10 000, but when opened was found to be filled with cotton, pasteboards and railroad advertising bills. The package should have reached Van Wort on Wednesday. The money clerk who received it here says he sealed it with green wax. The way bill for the run of Tuesday night had the package marked "short." When received the package was sealed with red wax, the delay of twenty-four hours in transit is not yet explained, but will doubtless give a clue to the robbers. No thorough investigation of the method of substitution can be made here. Superintendent Conex, of Toledo, is looking into the matter. The package could pass over three roads, and through the hands of three messengers between here and Van Wort. This could easily explain the twenty-four hours delay. The package was not sealed by the money clerk here, having been previously sealed by the bank.

The Maxwell Case.

ST. LOUIS, June 4.—When the criminal court this morning continued the hearing of the case of the State vs. H Brooks, alias H. L. Maxwell, John J. Martin, counsel for the defense, continued his plea for the prisoner. It is expected that he will have concluded his argument by the time recess is taken. He will be followed by Mr. Glover, who will make the closing argument for the prosecution, which will probably occupy the remainder of to-day and part of to-morrow, when the case will go to the jury. A verdict will probably not be returned before late to-morrow afternoon.

The Pall Mall Gazette on Blaine's Correction.

LONDON, June 4.—The Pall Mall Gazette commenting on Mr. Blaine's correction of the report of his Portland speech says: "It is quite in accordance with Mr. Blaine's character to hurl insults and retract them. Mr. Blaine is a public man, whose support is almost a discredit. He is now posing to gain the next nomination of the Republican party to the presidency, and if he succeeds it is pretty safe to say that America will repeat the rebuff it gave him two years ago."

Business Failures.

NEW YORK, June 4.—The business failures occurring throughout the country during the last seven days as reported to R. G. Dun & Co., number for the United States 160, and for Canada 27, or a total of 188 as compared with a total of 181 last week, and 167 for the week previous to the last. More than one half of the casualties are reported from the Western and Pacific States.

A Fight Expected Between Troops and Indians.

NEW YORK, June 4.—A Tombstone special to the Herald says: A courier arrived from Dragon Mountain, fifteen miles north of this place early yesterday morning, bringing the news that the soldiers have driven fifteen Indians into a natural fortification known as the Cochise stronghold. A company of troops are behind the hostiles, and two other companies are trying to head them off. It was expected that a fight would take place between the troops and Indians before dark, and it seemed to be probable that the soldiers would be able to kill or capture the red skins. There is a great many wood choppers in these mountains and it is feared the Indians will kill some of them before being driven out.

A New Association to be Formed.

TORONTO, June 4.—At a meeting of the oarsmen of the Hanlon regatta last night, it was announced that Teemer and Ross would not be present. Lots were drawn for the arrangement of scullers in heats. In one heat Hanlon, McKay, Stanton, Hosmer and Ritz will row; in the other Gaudier, Plaisted, Hamm, Lee and Conley. A resolution to form an association of professional oarsmen was carried unanimously and Hanlon, Gaudier and Hosmer were appointed a committee to draft by-laws for the organization.

The President to Visit New Hampshire.

NEW YORK, June 4.—A Herald Plymouth special says: "The president and Mrs. Cleveland will visit New Hampshire during the summer. The president will spend a portion of his August vacation in the White mountains, making a tour of the principal resorts. No public notice has been given of the intended visit because of an injunction placed by the president upon the hotel keepers, who are to entertain him. He will come to New Hampshire from the Adirondacks by special train."

Martin Irons' Tool Chest to be Sold for Debt.

SEDALIA, MO., June 5.—Martin Irons' tool chest, which has been at the Missouri Pacific shops, since the inauguration of the strike, was to-day advertised to be sold on Monday next to satisfy a debt of seven dollars and fifty cents due Patrick O'Conner for rent. The chest was seized last evening, and is now in the custody of Constable Carns. O'Conner is the individual who attached a portion of Irons' household goods a few days ago.

FARM AND GARDEN

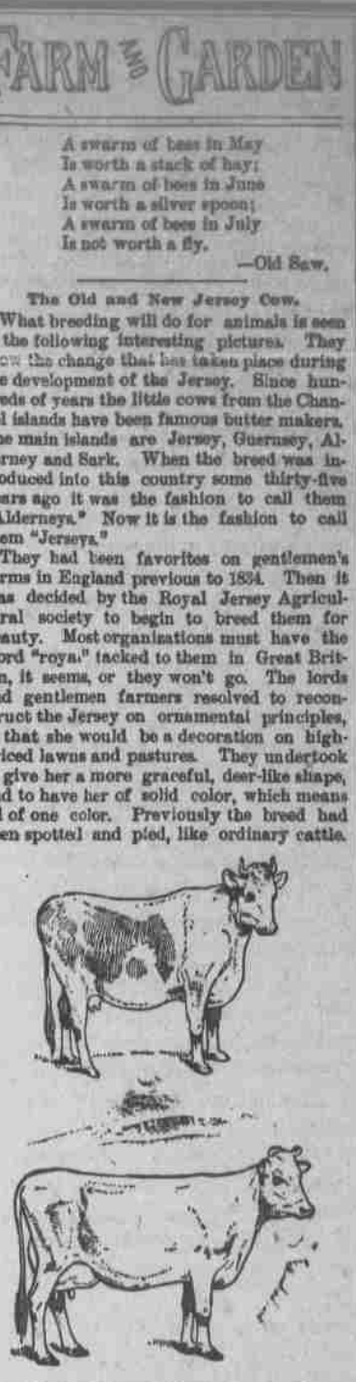
A swarm of bees in May
Is worth a stack of hay;
A swarm of bees in June
Is worth a silver spoon;
A swarm of bees in July
Is not worth a fly.

—Old Saw.

The Old and New Jersey Cow.

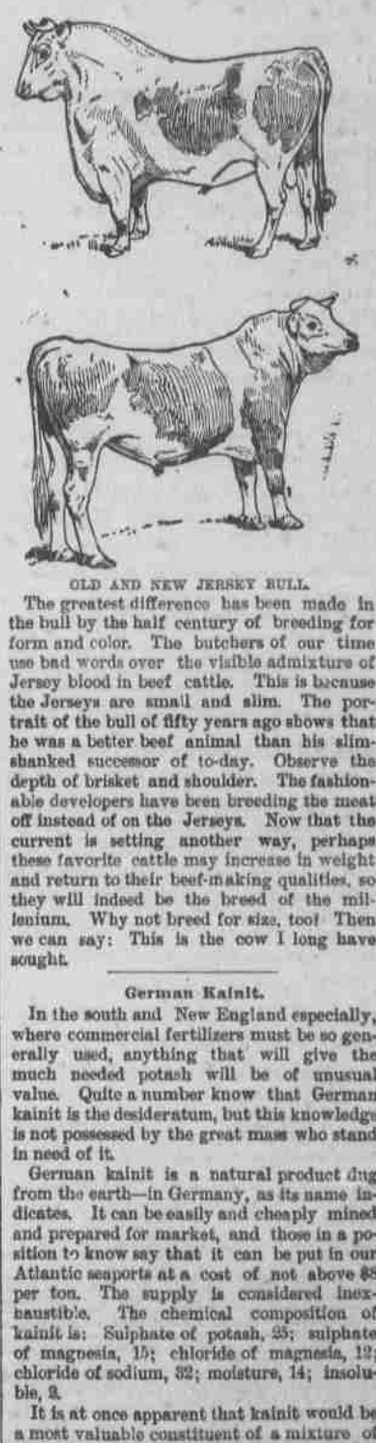
What breeding will do for animals is seen in the following interesting pictures. They show the change that has taken place during the development of the Jersey. Since hundreds of years the little cows from the Channel islands have been famous butter makers. The main islands are Jersey, Guernsey, Alderney and Sark. When the breed was introduced into this country some thirty-five years ago it was the fashion to call them "Alderneys." Now it is the fashion to call them "Jerseys."

They had been favorites on gentlemen's farms in England previous to 1834. Then it was decided by the Royal Jersey Agricultural society to begin to breed them for beauty. Most organizations must have the word "royal" tacked to them in Great Britain, it seems, or they won't go. The lords and gentlemen farmers resolved to reconstruct the Jersey on ornamental principles, so that she would be a decoration on high-priced lawns and pastures. They undertook to give her a more graceful, deer-like shape, and to have her of solid color, which means all of one color. Previously the breed had been spotted and pied, like ordinary cattle.



JERSEY COW OF THEN AND NOW.

The fashionable colors were solid fawn, silver gray and pale lemon fawn. In 1834 two typical cows were selected to breed from, as showing nearest perfection of that shape and color desired to be reproduced. Paintings were made of the two animals. One of them was the cow whose picture is here given. The other animal is the most famous fashionable butter maker of these days, Mary Anne, of St. Lambert. The longer body, straight line of the back and more deerlike head are some of the points of difference. Since 1834 the fashion has been to breed for color and shape. The recent butter making exploits of the breed, however, have knocked the breath out of the color and shape boom. The craze is now for butter makers, be form and color what they will. So possibly the next generation will revert to the white spots and rough frame.



OLD AND NEW JERSEY BULL.

The greatest difference has been made in the bull by the half century of breeding for form and color. The butchers of our time use bad words over the visible admixture of Jersey blood in beef cattle. This is because the Jerseys are small and slim. The portrait of the bull of fifty years ago shows that he was a better beef animal than his slim-shanked successor of to-day. Observe the depth of brisket and shoulder. The fashionable developers have been breeding the meat off instead of on the Jerseys. Now that the current is setting another way, perhaps these favorite cattle may increase in weight and return to their beef-making qualities, so they will indeed be the breed of the millenium. Why not breed for size, too? Then we can say: This is the cow I long have sought.

German Kainit.

In the south and New England especially, where commercial fertilizers must be so generally used, anything that will give the much needed potash will be of unusual value. Quite a number know that German kainit is the desideratum, but this knowledge is not possessed by the great mass who stand in need of it.

German kainit is a natural product dug from the earth—in Germany, as its name indicates. It can be easily and cheaply mined and prepared for market, and those in a position to know say that it can be put in our Atlantic seaports at a cost of not above $8 per ton. The supply is considered inexhaustible. The chemical composition of kainit is: Sulphate of potash, 25; sulphate of magnesia, 15; chloride of magnesia, 12; chloride of sodium, 32; moisture, 14; insoluble, 2.

It is at once apparent that kainit would be a most valuable constituent of a mixture of fertilizers for many of our farm and garden crops. It is an established fact that while clover contains a larger amount of nitrogen than almost any other crop grown on the farm, it does not seem to need nitrogeneous manures. Potash and lime are the elements it most needs. It is well known that the best way in which to supply the lime is by applying gypsum; and can there be any doubt that the most feasible means of providing the potash is afforded by German kainit? Potatoes are another crop frequently greatly benefited by a provision of potash; and where commercial fertilizers only are used on this crop, it is reasonably certain that kainit should be one of them.

The composition of a complete economical manure for cotton is an important problem, as commercial manures must at present, at least, be relied on altogether to make profitable yields of this king of southern crops. The only considerable elements of the diet of cotton are nitrogen, lime, potash, phosphoric acid and magnesia, the percentage of potash and magnesia, as compared with other crops, being large. Superphosphate will give the phosphoric acid; gypsum, the lime and nitrogen (the last element gathered by it, not contained in it); but until the use of kainit was suggested, to supply the potash in sufficient quantities was impossible, consistent with economy. Kainit, however, gives both the potash and magnesia, completing the special fertilizer for cotton.

It is almost needless to suggest the use of kainit upon tobacco. This crop needs potash so urgently and largely that kainit is the very fertilizer for it.

Girdling Fruit Trees.

Professor J. L. Budd, of the Iowa Agricultural college, writes: Mr. J. R. Spalding, of Springfield, Ills., has practiced ringing for fruit for a number of years past. His plan at first was to girdle every other tree in thickly planted young orchards, but he now rings all the trees. He rings the trees in the latter part of April, which time with us in the central district of Iowa would be from the 10th to the 15th of May. He takes off a ring of bark from the stem one half inch in width entirely around the tree, taking care not to injure the cambium layer under the bark. He says: "If hard winters will kill the trees, so much the more necessity for getting them to bear when young, hence I begin to girdle when the trees are but six years old. So far I have found no harm resulting from the process. It sets them to bearing at once, and they bear full, too."

With thickly planted orchards, where the alternate trees will soon have to be removed, Mr. Spalding's plan may be safely tried. To illustrate its working on thrifty young trees: Two years ago, on the 10th of May, I was looking at some vigorous Tetofsky trees, on rich soil, which had not yet borne a dozen apples, though over four inches in diameter of stem. I recommended ringing, and at once the owner pulled out his knife and went at them, taking off a ring of bark nearly an inch in width. Of course this did not check the ascent of water and nutriment from the roots in the newer wood, and it did not prevent the perfect assimilation of the sap in the leaves. Yet it prevented—measurably—the formation of new deposits of wood growth below the ringing. Hence the tendency in the top to that ripened state of wood which favors blossoming and fruiting.

The next spring these trees were white with blossoms, and they held a fine crop of fruit.

Rough Feed Wanted.

All domestic animals need rough feed or "stover" mixed along with the fine food, hogs as well as the rest. In the case of the ruminating animals, it is doubtful if grain or meal fed alone goes to the first stomach at all. A large majority of the experiments made to determine this point clearly show that fine foods do not, to any material extent, go to the first stomach when fed to cattle alone; and if food does not go to the first stomach it can be only very imperfectly digested, since it escapes the macerating process of the rumen, and being remasticated and mixed with the saliva. How true this is every large feeder of cattle, in the west at least, must know. A large proportion of the kerne's of corn eaten by the animals is found in their droppings, some whole, others broken, but all indigested. If they had passed into the first stomach they would have been raised and remasticated, and certainly would not have escaped this process scarcely broken. So it is when meal is fed. It passes into the third and fourth stomachs, a mass of dough into which the gastric juices cannot penetrate. It is true that the muscular contractions of the stomach will give a gentle motion to the dough; but this will make it more compact rather than of a character that the gastric juice can operate freely upon it. If, however, we mix this meal with cut straw or hay the mixture will go to the first stomach, and will, of course, be remasticated; while the bits of straw or hay will allow the gastric juice to circulate through the mass and insure complete digestion.

In June.

Those who have orchard grass and clover in some fields will be glad that they may begin the hay harvest by cutting these long before timothy and red top meadows are ready for the mowing machine. This saves a great deal of worry, and when the timothy is ripe it may be cut at once if proper calculations have been made. As to the age when timothy should be cut, it is well to bear in mind that for one's own use it can hardly be cut too green after the heads are well out, but for sale for city feeding it is preferred as old as it can be without the seed shelling off from the heads. It is used not so much as nutriment as for bulky food with oats or ground feed.

Watch for the currant worm, and as soon as the leaves appear ragged apply white hellebore—a tablespoonful to the pail of water—by means of a syringe. Repeat in about a week.

Market chickens may be pushed to advantage by frequent feeding, besides having a free run, if possible, while they are growing and before they are put up to fatten. After ducks have passed the delicate stage, and have their feathers, they may be given frequent feeds of food to give them rapid growth and size. The earlier they are sold after they become marketable the greater will be the profit.

The curculio attacks the plums soon after the fruit is set. Jarring the trees and catching the fallen insects upon sheets spread upon the ground is the only effective remedy. If one bud on a graft takes the start of all the others stop it by pinching. If shoots appear upon grapevines where they are not wanted remove them.—American Agriculturist.

Things to Do and to Know.

Don't cut the lawn grass too short.

Mow the roadsides and keep down the nasty weeds.

Plant celery from the middle of June to the middle of July.

Sow cucumbers for pickles in June. Make the plants rather close together in the rows.

The United States crop report shows wheat to be in excellent condition at the end of May.

Has anybody ever tried spraying with Paris green or London purple for the plum curculio?

Encourage toads in your hotbed and garden and they will destroy more than their weight in insect pests.

Dust melon vines with Paris green or London purple to keep off the bug. Dust with one part of the powder to twenty-five parts flour.

Sweet lemons are a favorite Mexican dainty. They are the shape, color and size of the lemons of commerce, but are sweeter than the banana.

Thousands of acres of the best cotton and rice lands in South Carolina have been devastated by the flood there. Hundreds of head of live stock were drowned.

Once more we permit ourselves to remark that Persian powder will destroy the cabbage worm. Dust it on with the pepper-box like can that is provided to go with it.