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THE SUMMER MAN.

In summer, at the mountains blue,
Where life is fair, but men are few,
He gayly sports, he has his day;
And by the sad sea wave like
He is a much-admired beau
Until the season fades away.

He dresses in the height of style,
There's fascination in his smile,
He's nimble in the giddy dance;
He picnics plans with ready skill,
With love-makings he plays at will,
But is not hurt by Cupid's lance.

He wins the good-will of mammas,
The dark suspicion of papas
He waives away with graceful tact;
He sings love songs with tender power,
He always wears a little flower,
He knows both how to speak and act.

At archery, in tennis court,
He rivals all in the gay sport,
But plays so that the fairest wins;
And yet, through some most subtle art,
The vanquished believ still take his part,
And leave him with unpunished sins.

But summer joys, alas! are brief;
He's cut down like the tender leaf
When blushing fields grow sadly brown;
Mammas and splendid girls no more
Admire him as they did of yore:
He's but a dry-goods clerk in town.

And all who smiled in sweet July
In dull September pass him by;
Now he's of quite another plan;
And though he wears a faultless hat,
And just as stylish a cravat,
He only is a summer man.

—*Susan Hartley, in Harper's Weekly.*

MY BROTHER CALEB.

How He Protected a Black Family Sheep.

I really believe that the matter of finding an appropriate title for this little history has taken as much time and made me more trouble than did the writing of it. In fact, what I have set down at the head of these pages was my first thought on the subject, and I have been able to think of nothing better. It is quite natural that this should be so, for I never knew a time when Caleb did not seem to me every thing that a dear brother should be, and make me by his care and kindness hardly realize my lack of parental nurture.

My father I never knew; he died suddenly while I was a mere babe. From my earliest recollections of my mother she was an invalid, sometimes bedridden, rarely able to endure a carriage-ride, even in the best weather, and generally confined to her own chamber. All that she was able to do for me she did, but her poor health made it necessary that I should be cared for during my childhood by others, and until I was twelve years old, I was looked after during the day-time by a succession of nursery-maids and governesses. During the seasons that mother's frightful headaches gave her a brief respite, I was allowed to visit her room, and although she was at such times very sweet and pleasant, the recollection of her pale, suffering face was always a sad one to me. She never was able to come to meals with us; so this brief view will go far to explain how it was that Caleb really took the place of all other relatives.

He was teller in one of the banks, and had to be away from home the whole day. How I used to long for his return at night! After the usual fashion of children, I studied my books and recited my lessons to my governess, but book-learning had no charm for me unless Caleb was with me to share the task, and make it easier. His evenings were almost wholly devoted to my improvement and pleasure, and I can see now what gave me no concern as a child—that this sacrifice of his time for me made it necessary for him to devote to his own reading, hours when he should have been asleep. Dear, unselfish brother! He never had cause to reproach himself with his treatment of me, certainly. So it is plain enough that Caleb was the largest figure on my domestic horizon; at least, until my marriage. And while this record may speak of others as often as of him, none but he could ever claim to be the hero of it.

My life had passed away peacefully and without striking events until the summer of my tenth year. I had always lived in the same house; indeed, it is still my home, and that of my husband and children. It is inexpressibly dear to me from the memories of a lifetime—for I am far past the middle-age now—from the births, the deaths, and the one marriage, at least, that have occurred within its walls, and dear beyond all this with the memory of Caleb, which every room and almost every object in it suggests to me.

This house and all its appointments, I am told, were the pride and delight of my father, Judge Maytham. It is a large, roomy mansion, in the fashionable quarter of the city, with every thing in and about it for comfort and taste, nothing for mere show. My father left a fortune to his family, but this made no difference with Caleb's employment. He was in the bank before father died, and after that I presume he owned stock there; but he liked his position, and would not relinquish it. I was the only daughter of the family, and the choice of my father gave me for life the stately name of Regina, which Caleb and others usually contracted to Regy.

In the summer of my tenth year, a startling incident happened in the house. It was on the night of the 13th of June. Caleb came home at six o'clock, tired, but good-natured as ever. Mother was having one of her painful neuralgic attacks, and the doctor had come a few moments earlier. Caleb went up to her chamber at once, and remained there nearly an hour. When he came down he said to me:

"The doctor has given her an anodyne, Regy, and says she must be kept quiet. So don't go to her room to-night. Now let's have supper."

I rang the bell, the meal was brought, and we two sat down to it alone, as usual. The doctor came down in a few moments, gave some directions beside what he had left with the nurse, took a cup of tea, and departed. After our supper was over and the table cleared, we sat by the great lamp, and according to our custom, I related to him all the incidents that had happened at home during the day. At last we said good-night. My room was between mother's and Caleb's. I was asleep in less than ten minutes, but Caleb (as he told me afterward) was not able to sleep immediately, and without undressing, sat down to read a paper.

He also told me afterward that the alarm of which I am about to speak occurred a few minutes before twelve, and that it was a crash, like the fall of something in the library. I heard no alarm of that kind. What I *did* hear, what every body in the house heard, was the report of a pistol. Every body but poor mother; an opiate had made her sleep heavy, and she was mercifully spared any knowledge of the dreadful occurrence. She had to know of Caleb's injury—and here I am necessarily getting in advance of my story. I awoke with a shock. The report, coming in the silence of midnight, sounded in my ears louder than thunder. I heard a scream from the room of one of the servants—another—a chorus of them; and without a thought of danger, I jumped from the bed and ran down to the library in my slight dress.

Caleb was leaning against the secretary, clasping his left arm above the elbow with his right hand. The hand-lamp was on the window-seat; the next window, opening on the piazza, with its shutters, was swung wide open, and at Caleb's feet was the little drawer from the secretary. I looked at his face, and became speechless with fear; it was so wild, so pallid with anguish, that it seemed the face of some other than Caleb. The sight of scared women peering over my shoulders, crying and screaming, aroused him.

"Be still!" he commanded, fiercely. "There's no danger now, I tell you."

There was a loud peel of the door-bell, and then a double knock.

"I'm the policeman!" came from the outside. "What's the matter?"

Caleb went immediately to the front door.

"There's nothing the matter," he said. "No trouble at all; women frightened for nothing."

"Thought I heard a pistol."

Caleb turned from the door—I held the lamp now; he came a few steps toward me in an unsteady way, and then fell in a faint on the floor. I kept my senses, if none of the rest did. I opened the door, called the policeman back, got him to help us take Caleb upstairs, and then despatched him for the doctor. The latter came, and Caleb, now conscious and appearing more like himself, declared that his hurt was a mere scratch. It was not serious, the doctor said, after examination; a superficial flesh-wound in the arm. More policemen came, with a captain among them, and inspecting the open window, they found that a part of the shutter had been cut away, and a large circular piece removed from the pane with a diamond, so that a hand could be inserted and the catch pushed back. The drawer on the floor was empty. The police captain was anxious to learn the details of the burglary immediately, and as the doctor allowed Caleb to talk, his story was at once told.

He was reading in his room. So noiseless was the entry of the burglar into the library that he heard nothing of it; he was alarmed by a noise, which it now appeared must have been the fall of the drawer to the floor, as it was drawn out too far. He snatched a loaded pistol from a shelf where he always kept it, and descended the stairs in his stockings. The burglar was standing motionless, with the drawer in his hands, as though waiting to see if the noise had caused any alarm. He was masked. He fired a pistol at Caleb and rushed to the window, and that was about all the latter could tell about it. Any thing in the drawer? the captain wanted to know. Yes; a pocket-book, with one hundred and twenty-five dollars, which was gone. Why didn't Mr. Maytham shoot, too?

Caleb passed his hand over his face, as though he wished to shut out the ugly sight. Caleb did not like to talk about the affair at all, and abruptly changed the subject when I referred to it; so it came to be as a sealed book between us. And for a while longer our old life went on as usual.

For a while longer; but the ten years that are numbered between these two parts of my history wrought many changes. Mother's sufferings were over; she had now been sleeping by father's side four years. My governess and maid had long been discharged; my school-days were over, and—well, to make a long story short, I had been married a few months, and Dick—that's my husband—and I kept house with Bachelor Caleb. No other arrangement than this would my brother consent to; and as it suited both of the other parties, I may say that it arranged itself.

On a chill evening in October, Dick and I were waiting for Caleb. He was more than an hour late when we heard his ring. I ran to the door and opened it—and started back. There was Caleb, and there were two other men supporting a third between them.

"Regy," said my brother, "call the housekeeper, and have her bring a light. You stay in the dining-room. I will explain presently."

He spoke in the quick, direct way that I never thought of questioning. I did as he directed, and heard them all go up-stairs to one of the vacant chambers. Soon the men, two of them, came down and rode away in the carriage that had brought them; and in a few minutes Caleb came in and took his seat with us at the table. He sipped his tea in an absent kind of way, and said, abruptly:

"We put him to bed, and Mrs. Wynn is with him. I will get a nurse in the morning."

Both Dick and I stared at him. Caleb smiled—a mournful smile, indeed—and continued:

"No, children, I am not crazy. Get your supper, and I'll tell you all about it."

Our supper did not last long. Caleb took two or three turns about the room; it was easy to see that he was keeping down his feelings.

Going to the secretary in the library, he unlocked a large drawer, and, taking a quarto volume from it, he laid it on the table. "Look!" was all he said. The cover bore, in large gilt letters, the words: "Family Bible—Maytham."

"Caleb!" I cried, reproachfully, "You never told me of this."

"There was a reason; here is the reason."

He opened the volume to the family record. There was the record of the births of our father and mother; their marriage; the births of us two; and between Caleb's and mine, with a date which showed the person to have been three years younger than Caleb was the name: "Dennis Maytham."

I looked up in amazement.

"Our brother, Regy," said Caleb.

Then his strength left him; he dropped into a great chair, covered his face and sobbed like a woman. I was on the floor at his feet in an instant, with my arm around him.

"Tell me all, brother," I said.

"I'll make it a short story, Regy—and Dick; there can be no more secrecy about it now—but I can't bear much more myself to-night. He was wild, bad and wayward; he nearly broke mother's heart, and at last father disowned him. This was soon after you were born, Regy. I think the sorrow of it hastened father's death; and it has been the shadow on my life. This afternoon, a poor wreck of a man, ragged and consumptive, stopped me on the street and implored alms. I looked into his sunken eyes and saw—my brother Dennis! I called a carriage; I took him to the hospital, and had him washed, dressed and shaved, and called the doctor. 'If it's anybody you are interested in, Mr. Maytham,' was his decision, 'you have only to make him comfortable for a few days. Medicine can do nothing for him.' And then—I brought him home."

He could say no more. I pressed his hand; and after we had sat in silence for some moments, I urged him to go to bed, telling him that Mrs. Wynn should provide for watching with Dennis, and in the morning we would see him together.

"I do need rest," he said, very wearily. He kissed me and went upstairs. Neither Dick nor I could find words in which to say much to each other just then about this tremendous revelation; and as it naturally excluded every other subject from our minds we made the evening a short one.

For what happened during the night I am indebted to the account of Mrs. Wynn. I do not believe that Caleb had been in bed at all; for about eleven o'clock he went softly into the room where his brother—our brother—was lying, and taking no notice at all of the housekeeper, softly called his name. Dennis was asleep, but the voice awakened him. Caleb drew a chair to the bedside, and laying his face upon the pillow by the poor wasted one, took a hand in his own.

"You're too good to me, Cale; I don't deserve it," said a husky, whispered voice.

"Never mind about our deservings, Den. You've as much right here as I have. In the morning you shall go all over the old house again; and you shall see Regy, who was only a little thing when—when you left us."

"You are very kind, brother; but I shall never leave this room till they take me out. O Caleb! it's a terrible record of sin and crime that I have made for myself. Can you forgive me? Perhaps,"——

"Yes, Denny, gladly; and God will, too, if you ask Him. But can you forgive me, Den?"

"You! for what?"

"I failed in my duty to you in those old days when you began to be bad. I have realized it since, and it has haunted me. Voices in the night have awakened me with the cry—where is thy brother? It seems to me now that I could have won you back, Denny, if I had tried. I was careless, indifferent about you. Mother asked me more than once to look after you, and—and—I did not. Forgive me, Den."

The weak, wasted form raised up in the bed; Caleb's hand was flung away, and the husky voice poured forth a torrent of words.

"Cale, you don't know what it is I ask you to forgive. You do not know that after wandering about and seeing the inside of many prisons, I came back here, ten years ago. I was reckless, wicked, savage. I heard you had every thing. I broke in here in the night, and rifled the drawer where father used to keep money. You caught me at it; I fired at you, and escaped. I might have killed you; I did not care then. With this knowledge can you forgive me?"

"I knew it was you, Den, all the time."

"You did! How?"

"Who else but you could know that money was kept in *that* drawer. I knew your figure, too, Dennis; I never doubted it was you. I am glad the policemen didn't get you; I wouldn't let them in; I sent them away. Poor brother! indeed, I did know you all the time. Why should not I forgive you? I am much to blame for it all."

Their heads lay together on the pillow again; each had an arm thrown over the other. Mrs. Wynn heard their whispered voices for some minutes, but not their words. When they had been silent for some time, she approached the bed. Caleb was fast asleep; but Dennis——Dennis had awakened to another life.

I began with Caleb; let me close with him. We were together some happy years after this; so many, that he held and played with each of my children. Others said that he aged, but I could not see it; to me he was always the same handsome, noble brother, and surely, a more faithful, a more tender heart never beat in a man's bosom. Only yesterday I came across a touching memorial of him. I was turning over the pages of the great family Bible, and a date on one of the margins in Caleb's handwriting caught my eye. It was the date of Dennis' death.

On the same page these words were underscored:

"*First be reconciled to thy brother.*"

—*Youth's Companion.*

BLOOD PURIFICATION.

Mode of Living Which Makes the Consumption of Medicine Unnecessary.

I hazard nothing in pronouncing the average "blood purifier" in the general market a fraud, an imposition, certainly in the pretensions of what is effected by the use of such means of purifying the blood, while this is done so effectually by natural means, or would be effected if we would but allow nature to do her own work in her own way. "Fearfully and wonderfully made" as this body man festly is, it is well calculated to perform all necessary functions, and would do so, aside from various disturbing causes, acting in opposition to nature's sanitary measures.

While this body is constantly wearing out, particle by particle actually dying, to be replaced by new materials produced by the food daily eaten, it is absolutely necessary that adequate means should be in as constant exercise, that the body may be kept pure, in its normal state.

Added to this natural and necessary impurity, that caused by the decay of minute particles, a great deal of food is taken which is unfit for the production of pure, new blood; much that is actually undergoing the putrefactive process, as the very "tender" meats, actually made so by the fact that decomposition has proceeded so far as to destroy a part of the cohesive attraction, the fibers easily yielding, which is called "tenderness." If more of this is taken than can be digested, the putrefactive process is still continued, the remains soon becoming sufficiently putrid to suit the taste of the whole class of scavengers whose mission is to devour that which would prove contaminating to the higher orders of creation.

These putrescent juices are taken up by the absorbents, enter the circulation, and are carried to the various depurating organs, that they may be ejected by the most direct means. The more active and efficient of these are the liver and kidneys, each faithfully performing their duties, at least till both are poisoned, contaminated, broken down by the excess of impurities and poison with which they are brought in contact in their attempts to purify the system. It seems to be the more especial duty of the kidneys to carry off the excess of the nitrates, such as is found in flesh, the victims of kidney troubles oftener than otherwise being those who take an excess of meats. It is the more especial missior of the liver to dispose of the carbons, more particularly the greases and fats, from which fact the victims of liver affections are generally excessive in the use of such articles.

The breathing of pure air is a very important means of purifying the blood, which process is constantly in progress, just to the extent that the air is pure, as it will be if unconfined, coming in contact with the light of the sun and the leaves of the vegetable creation.

Again, since more than one-half of the refuse of the body passes off through the pores of the skin, it becomes very important to have these pores open and active, which will be promoted by cleanliness—"next to godliness."

Last, though not least, pure blood can be made *only* from pure and wholesome food, so easy of digestion that none will remain to putrefy in the system.—*Dr. Hanaford, in Golden Rule.*

—While a female baseball club, clad in jerseys, knee-breeches, colored stockings and red caps were playing ball in New Orleans, a young man darted out of the crowd, and, seizing one of the young women by the back of the neck, started to rush her off of the field. "Police!" shouted the manager. "Arrest that man." "Not much," said the young man, "this girl is my sister, and I'm going to take her home," and he did.—*N. O. Times.*

—General Grant's book has been translated into Japanese.

UTILIZING REFUSE.

Why and How It Should Be Converted Into Fertilizers.

Corn cobs rot very slowly, and but few farmers have the patience to wait until they are decomposed. They are very rich in potash, over twenty-five per cent. of that substance existing in them. The cobs that accumulate annually on those farms where corn is made a special crop make quite a large amount of potash, but not in an available form, and the farmer can not utilize them as he should. It is suggested that they be burned to ashes, which is a very sure way of deriving the potash from them, but every one thousand pounds of cobs contain two pounds of nitrogen, and it, also, is an item worth saving. The question is whether the heat derived from the cobs is sufficient to pay for burning them and allowing of the loss of the nitrogen. Over-balancing this is the fact that by reducing them to ashes they are rendered soluble and available. There is another form of utilizing the cobs, however, which is to grind the grain and cob together. Although the nutritive matter in cobs may be but a small proportion, yet the two pounds of nitrogen, some carbon and a portion of the phosphates and lime will be appropriated as food, the refuse being voided as manure. The use of the grain and cob ground together, therefore, gives a greater proportion of potash to the manure, and the practice should therefore be encouraged.

But there are other kinds of refuse as well as cobs which should be converted into available fertilizers, such as straw, cornstalks, scrapings and other undesirable material. It may be stated in the beginning that it will be necessary to render all such substances fine before they can be properly used, either for direct application upon the land or as absorbents. To burn them is to lose much that may be valuable, and to attempt to decompose them by placing them in the manure heap before subjecting them to some kind of process for reducing them is to lose time. In order not to entail expense in reducing such material to a fine condition, it should be passed through a cutter and fed with ground grain, and those portions which are unfit for the purpose of feeding may be laid aside and made fine for bedding purposes. It may be stated here that any kind of material that has been made fine and then saturated with liquid manure, or urine, will not only absorb such, and become saturated, but will also quickly become decomposed and be ready for the plants without the necessity of heating it in the manure heap. If once an accumulation of such material is commenced, all the refuse liquids or other waste materials of the farm may be added to it.—*Farm, Field and Stockman.*

THINNING FRUIT.

An Important Matter Which Has Long Been Neglected by Horticulturists.

When planted in good soil, good thrifty fruits will nearly always overload themselves, and in order to secure the best, smoothest and largest fruit, considerable thinning must be done; this is especially the case with grapes and tree fruits.

Choice apples, peaches, pears, quinces; in fact, the best of all kinds of fruit command the best prices and always sell. Ofttimes the market becomes glutted with poor fruits, and the prices realized are really below what it costs to produce them and sometimes they can not be sold at any price, while at the same time the choicest and best are selling at a profitable price.

Too many fall into the error of thinking that by thinning they lessen the quantity so much that they prefer to let the fruit all remain. This is a mistake, as well as to think that by thinning they lessen the profit on the fruit. When a tree is heavily loaded, the fruit must necessarily be small and this will lessen the quantity; then the fruit being small will sell for a less price, and really cost more to sell, and you really lose rather than make by not thinning. Then in addition, when a tree or vine is allowed to overload and mature the fruit it is a strain upon the vitality of the tree, so much that a rest must be had and the next year the tree will fail to bear.

Whenever tried judiciously, thinning fruit always pays; but it requires considerable courage when the trees are laden with young fruit to go over and pull off and throw away a considerable portion of the fruit. To one who has never tried it, at first it would seem like a waste; yet it has been tested sufficiently to prove its value.

The work of course should be done early, as soon after the fruit has set as possible. The longer the fruit grows after setting the more waste of vitality of the tree, that should go to the other fruit that is left upon the tree to mature. It should be done as evenly as possible over the tree, thin so as to give each specimen left as much room as possible. Close crowding is what often makes ill-shaped fruit. If you have never been in the habit of thinning try a few trees first to see the effect, and in a majority of cases you will conclude that it is beneficial.—*N. J. Shepherd, in Michigan Horticulturist.*

A GOOD FERTILIZER.

Marl in the Western States, and How to Test Its Presence.

Marl, unlike clay, on being placed in water will crumble down, often into powder. Clay remains intact. Clay is composed of alumina and silica, and is formed by the breaking down of granite and other rocks of a like formation. It may contain lime, magnesia and oxide of iron, often in notable quantities. Marls, on the other hand, are valuable in proportion to the carbonate of lime they contain. When they are strong in lime they are termed calcareous; when deficient in lime argillaceous.

A good test for marl, besides its property of naturally breaking down in water, is its effervescence under the action of muriatic acid, or even when treated with strong vinegar. Marls composed of shells are the best, since in addition to lime they contain also bone earth, and are sometimes so rich in carbonate of lime that they may be burned into quicklime. Dr. Kedzie of the Michigan Agricultural College has found samples in Michigan beds containing fifty to ninety per cent. of carbonate of lime and two to six per cent. of magnesia. He thinks the best results are obtained with marls on light, sandy soils, with a fair proportion of humus—decayed vegetable matter. On such soils they may, indeed, favor nitrification, or the gradual conversion of insoluble nitrogen compound into soluble nitrates. Marl on sandy soils accomplishes the condition named above. It also tends to bind and render sandy soils more fertile through consolidation. From fifteen to thirty loads may be applied to an acre, though as much as one hundred loads have been applied with benefit.

There are marl-pits scattered extensively over the prairie and timbered region of the West waiting development. Simple means for determining will aid any farmer in his search for this material. If it crumbles down to a fine powder in water, or foams when the dried marl is pounded fine upon having muriatic acid poured over it, it is marl, and the stronger the effervescence the richer the marl.—*Chicago Tribune.*

HOME, FARM AND GARDEN.

—Cows ought to be milked with great regularity for best results.

—A well ventilated bedroom will prevent morning headaches and lassitude.

—Oxen can be trained to mind a quiet and determined voice without this shouting.—*N. E. Homestead.*

—Be careful how you doctor sick fowls. More poultry is lost by injudicious dosing of various nostrums, than by lack of attention when sick.—*Cincinnati Times.*

—Prof. Cook, of the Michigan Agricultural College, says that most of the failure to destroy potato bugs by Paris green comes from waiting until eggs have been laid on the vines before applying it. Make the first application just as the plants come up.

—The best varieties of lettuce for summer use are the yellow butter and the white summer cabbage. In a deep, well enriched soil they stand the heat well and remain for a long time in a condition for use. These varieties form large heads, and on this account are objectionable to some persons.—*N. Y. Herald.*

—A gardener who has an early piece of ground remarks that green peas for the early market are a safer crop for moderate but sure profits than any other. The home-grown peas have the preference over those shipped from the South. They can only be grown profitably where cheap labor can be had in picking them.

—Crow's-nest: Fill a deep pudding tin or dish with apples cut in thin slices; sugar and cinnamon, or lemon, to sweeten and flavor to taste, and a little water; cover with a thick crust; bake until apples are tender; serve hot with hard sauce, or with cream and sugar; be sure to cut air holes in the crust to let the steam escape.—*Boston Budget.*

—A noted medical authority recommends the following in a case of diphtheria: Pour from twenty to forty drops of a mixture of equal parts of turpentine and carbolic acid into a kettle of water, kept simmering over a slow fire, so that the air of the sick room will be constantly impregnated with the odor of these two substances.—*Chicago Times.*

—Fig Cake Filling: Three-fourths pound of figs, and one cup of raisins. Chop these very fine, then add one cup of brown sugar, a lump of butter the size of an egg, four tablespoonfuls of currant jelly and one cup of water. Boil till done. Bottle it. This will keep some time, and is as nice to use in loaf cake as for filling in layer cake.—*The Household.*

—A mixture which is said to be a cure for undue perspiration of the hands is made of a quarter of an ounce of powdered alum, the white of one egg, and enough bran to make a thick paste. After washing the hands, apply this; let it remain on the hands two or three minutes, and then wipe off with a dry, soft towel. Lukewarm water is better than hot or cold if the skin is tender or inclined to hap.—*N. Y. Times.*

CHEESE-MAKING.

Pertinent Suggestions Offered by a Dairyman of Experience.

We condense the following directions from an address on the subject recently given before the Ontario Dairymen's Association by a dairyman of extended experience:

For summer and fall cheese rennet should be used in sufficient quantity to produce coagulation in fifty minutes, with the milk at a temperature of from eighty-six to eighty-eight degrees. In the spring, while making fodder cheese, use one-third more rennet and less salt. The purpose of this is to facilitate the ripening process, in order that the product may be ready for the market at the earliest day possible. To accomplish this result, four ounces of rennet for summer, and six for spring, with salt in proportion will be sufficient. The cheese-maker learns by experience that in two messes of milk, produced on different soils, the conditions of heat and manipulation being the same, the cheese produced by the one, when ready for market, will be found to be more moist than the other. This must be attributed to a constitutional difference in the milk arising from the differences in the soil, food and water. The experienced maker may regulate the matter by variations in cutting, scalding and stirring. Having ascertained that moisture predominates in the milk of a given dairy he will cut finer, scald more slowly and stir longer, for the smaller the cubes the more thorough will be the operation of heat upon them, and the more thoroughly we stir the more certain we shall be to expel the moisture. Immediately after the cutting, stirring should begin. The curd cubes should be stirred about fifteen minutes, then put over the fire and stirred half an hour continuously, then stirred several minutes after taking from the fire, to prevent their baking to the bottom of the hot vessel. Heating should proceed slowly at first, but gradually increase as the whey separates. Ninety-eight degrees is the temperature in summer, but as the season advances the milk becomes richer, and it is necessary to have the temperature higher. The heat must be kept up until the curd is matured, and then cooked and aired well before salting.

At the first indication of acidity the whey should be drawn; here is the great secret of cheese-making—the absolute expulsion of the whey at the nick of time when acidity is known to be near and yet has not appeared. After the whey is removed, and when the subsequent stirring proceeds, a new acid makes its appearance in the body of the curd, which seems to depend for its development upon the action of the air, and the presence of which experience has shown to be an essential element in the make-up of cheese. This acid should be allowed to develop properly before the addition of salt, as the presence of that substance will preclude its appearance.

Curd should contain about thirty-five per cent. moisture when pressed, and dry out down to thirty-three per cent. when cured. To determine and retain this proper proportion of moisture in cheese, is one point which requires good judgement in the operator, and can not be determined readily by any means now known of a practical nature. Observation and practice are the only guides at present known, and a cheese-maker must rely on his own experience and good common sense.

An important point in cheese-making is to know exactly how long the milk should stand before the introduction of the rennet. Cheese-makers know that frequently drawn milk is not always susceptible to the action of rennet. A test of this is to take an ordinary sized teacup, holding one gill, and into this full of milk introduce a dram, or a teaspoonful of rennet of which you know the strength, and the time employed to perfect coagulation. This will furnish you with unerring certainty with a knowledge of that which you are in search. By the use of this test it is possible to determine to a minute the time which would be consumed before cutting should begin. If the milk does not curdle well, sour whey should not be used, but the milk subjected to the natural action of heat, by which the change is hastened without detriment to the quality of the milk.—*Chicago Inter-Ocean.*

SUCCESSFUL ADVERTISERS.

The Secret of Forcing People to Believe That They Want An Article.

It is very rare to find a business man and an extensive advertiser who has a clear conception of the secrets of his own advertising success. Usually those points on which he lays most stress are harmless hobbies and have produced no benefit whatsoever. One notion upon which much stress is laid, and which is commonly considered the whole secret of successful advertising is to attract attention. The ordinary advertiser is so thoroughly permeated with the idea that this is the secret of success, that he feels perfectly satisfied when his advertisement is showy and in a position where it can not fail to be seen.

In all successful advertising there is something deeper than this. Simply attracting attention and becoming well known is not all that is needed. Many of our readers will call to mind an advertiser who in 1871-2 succeeded as well as most men in getting a recognition from the public. He failed, however, to induce people to buy. While he possessed the secret of attracting attention, he did not know the secret of a successful advertisement. It is a rule that men never buy until they want, or think they want. No matter how frequently a man's attention is called to the fact that Pill's "Butter Polish for Shirt Fronts" is forty-nine per cent. pure, he will not buy until he feels a desire for a buttered front, instead of the common oleomargarine style. Placard the pyramids of Egypt, and paint on every peak of the Rocky Mountains, paste in the crown of every hat in the United States, the fact that Pill's "Shirt Front Butter" sells for ninety-nine and four-tenths cents per package, yet not a raw "jack" will buy until he wants his "biled shirt" with a lubricated front.

The real secret is in persuading, convincing even against the will—forcing people to believe that they want an article. This art, or secret, the good advertiser always possesses. He may seem to direct all his efforts to attracting attention, or to the production of stunning effects, yet, if we examine carefully, the strong point is found in the persuasion or conviction which he manages to carry to the mind of the reader. The art of making a noise, of producing a great display, of securing good positions and of gaining notoriety, sink into insignificance beside this persuasive method of putting things. Often it is not done by words or sentiments. The want may be insinuated in the mind by a turn of an expression, or a name. A picture or a trade-mark have been in some cases the successful means. The method matters little, so long as the public is made to feel the want for the advertiser's goods.—*The Office.*

UNEMPLOYED WOMEN.

What Shall Be Done With Those Who Can Do No Work?

To the thoughtful woman the question recurs again and again: What can be done with the purposeless, untrained women willing to work for wages but unable to spend time and money in a doubtful attempt to fit themselves for a particular occupation? A women's exchange is chiefly a storehouse for undesirable articles, a few of which are bought in pity. It is a device of those who are earnestly seeking to help their fellow-women and not a natural outgrowth of the law of supply and demand. The training school begins at the foundation; it fits a girl to hold her own, asking no favors.

A woman's duty begins with the woman nearest to her by ties of blood and affection, and stretches out to those accounted less fortunate than herself; but it does not end there. There are women far above her in the scale of wealth, perhaps, who need a wider outlook and broader sympathies; who need to be drawn out of themselves and their exclusiveness; who need to be interested in the great, busy, struggling world outside of their circle, and to feel that upon them rests, in part, the responsibility of making it better and purer. In some ways they are more restricted than the woman who sews for them. The wife of a teamster, if she have the time, can take up any remunerative employment, and her friends neither question nor repudiate her. The wife of a millionaire, possessed of unlimited leisure, must be idle. For "he also is idle who might be better employed." If she can endure the epithet of "peculiar" she may give her life to the investigation and improvement of tenement houses or devote herself to a particular line of study; otherwise her work for her fellow-men and women will be confined to charity balls and fashionable bazars. To do aught which would bring her a return in money is not to be thought of for an instant.

And from the wife and daughter of the millionaire to the girl who starves behind a counter rather than go into a comfortable kitchen, the same power is at work. Alas! how weak we are. Women may say that all honest work is ennobling, and all voluntary idleness belittling, and that, in comparison with the woman who never lifts a finger to serve another, nor has a thought above her own adornment and her social conquests, the woman who does the work of her kitchen, if she do it well, is worthy of all the honor; but the conviction has not yet become a part of them.—*Ella C. Lapham, in Forum.*

—When a woman wants to drive a hen she shakes her dress at it. Cloth shoos, as it were.—*Easton (Pa.) Free Press.*

THE GENERAL MARKETS.

KANSAS CITY, Aug. 3.			
CATTLE—Shipping steers	$3 75	@	4 50
Native cows	2 00	@	2 25
Butchers' steers	3 10	@	4 00
HOGS—Good to choice heavy	4 80	@	4 95
Light	4 20	@	4 75
WHEAT—No. 2 red	80½	@	80¾
No. 3 red	72	@	73
No. 2 soft	68	@	68¾
CORN—No. 2	34	@	36½
OATS—No. 2	29	@	30
RYE—No. 2	50½	@	52
FLOUR—Fancy, per sack	1 60	@	1 75
HAY—New	5 50	@	9 00
BUTTER—Choice creamery	16	@	17
CHEESE—Full cream	8	@	9¼
EGGS—Dozen	8	@	8
BACON—Hams	8	@	12½
Shoulders	5	@	6
Sides	6	@	6½
LARD	5	@	6½
WOOL—Medium unwashed	16	@	18
POTATOES	30	@	40
ST. LOUIS.			
CATTLE—Shipping steers	4 50	@	4 75
Butchers' steers	3 75	@	4 25
HOGS—Packing	4 80	@	5 05
SHEEP—Fair to choice	2 25	@	3 50
FLOUR—Choice	2 90	@	3 10
WHEAT—No. 2 red	75½	@	75¾
CORN—No. 2	35½	@	36½
OATS—No. 2	27	@	27½
RYE—No. 2	50	@	51
BUTTER—Creamery	17	@	20
PORK	10 00	@	10 50
COTTON—Middlings	8	@	8⅛
CHICAGO.			
CATTLE—Shipping steers	3 40	@	3 75
HOGS—Packing and shipping	4 55	@	5 17½
SHEEP—Fair to choice	3 05	@	3 25
FLOUR—Winter wheat	4 15	@	4 40
WHEAT—No. 2 red	74	@	76½
No. 3	69	@	70
No. 2 spring	73½	@	74½
CORN—No. 2	40½	@	43
OATS—No. 2	27	@	27¼
RYE—No. 2	52	@	54
BUTTER—Creamery	13	@	17
PORK	9 95	@	10 10
NEW YORK.			
CATTLE—Exports	4 10	@	5 35
HOGS—Good to choice	5 00	@	5 30
SHEEP—Common to good	3 00	@	4 65
FLOUR—Good to choice	3 30	@	5 00
WHEAT—No. 2 red	83	@	83½
CORN—No. 2	50½	@	50¾
OATS—Western mixed	32	@	40
BUTTER—Creamery	17	@	19
PORK	10 25½	@	10 75
PETROLEUM—United	66	@	66¼

For the Ladies.

Laughter is the poor man's plaster,
Making every burden lighter;
Turning sadness into gladness,
Darkest hour to May dawn brightens.

"Tis the deepest and the cheapest
Cure for ills of this description,
But for those that woman's heir to,
Use Dr. Pierce's "Favorite Prescription."

Cures all weaknesses and irregularities, "bearing down" sensations, "internal fever," bloating, displacements, inflammation, morning sickness and tendency to cancerous disease. Price reduced to one dollar. By druggists.

THE great trouble with a buzz-saw is that it never wears false teeth.—*Lowell Citizen.*

I Had a Dreadful Cough,

and raised a considerable amount of blood and matter; besides, I was very thin, and so weak I could scarcely go about the house. This was the case of a man with consumption arising from liver complaint. He recovered his health completely by the use of Dr. Pierce's "Golden Medical Discovery." Thousands of others bear similar testimony.

PEOPLE going on an excursion are so happy to get home that they are glad they went.

THOSE who are trying to break up the baneful habit of intemperance will experience great benefit from the use of Prickly Ash Bitters. Liquors derange the system. Prickly Ash Bitters will remedy the evil results and restore the brain, stomach and liver to healthy action, thereby strengthening the will power, thoroughly cleansing and toning up the system, and remove every taint of disease. It is purely a medicine and while pleasant to the taste, it can not be used as a beverage by reason of its cathartic properties.

PAT—"Be jabers, what harrud toimes! If I had me loife insured I'd take it."—*Chicago Journal.*

HALL'S Hair Renewer always gives satisfaction, and is indorsed by our best physicians.

As a stimulant to the stomach, liver and bowels, the safest remedy is Ayer's Pills.

A BANG is something to a door—especially when it is on a pretty girl.

* * * * Delicate Diseases, affecting male or female, however induced, speedily and permanently cured. Illustrated book for 10 cents in stamps. World's Dispensary Medical Association, 663 Main Street, Buffalo, N. Y.

THERE is but one "school of journalism," and that is—journalism—*Buffalo Express.*

WHAT'S the BEST DISINFECTANT and remedy for skin irritations and defects? GLENN'S SULPHUR SOAP. HILL'S HAIR AND WHISKER DYE, Black or Brown, 50c.

WHY is a doctor never sea-sick? He is used to see sickness.

BEST, easiest to use and cheapest. Piso's Remedy for Catarrh. By druggists. 50c.

IT actually improves the bicycle record to have it broken.

FRAZER AXLE GREASE lasts three times as long as others and saves horses and wagons.

DR. JOHN BULL'S
Smith's Tonic Syrup
FOR THE CURE OF
FEVER and ACUE
Or CHILLS and FEVER,
AND ALL MALARIAL DISEASES.

The proprietor of this celebrated medicine justly claims for it a superiority over all remedies ever offered to the public for the SAFE, CERTAIN, SPEEDY and PERMANENT cure of Ague and Fever, or Chills and Fever, whether of short or long standing. He refers to the entire Western and Southern country to bear him testimony to the truth of the assertion that in no case whatever will it fail to cure if the directions are strictly followed and carried out. In a great many cases a single dose has been sufficient for a cure, and whole families have been cured by a single bottle, with a perfect restoration of the general health. It is, however, prudent, and in every case more certain to cure, if its use is continued in smaller doses for a week or two after the disease has been checked, more especially in difficult and long-standing cases. Usually this medicine will not require any aid to keep the bowels in good order. Should the patient, however, require a cathartic medicine, after having taken three or four doses of the Tonic, a single dose of KENT'S VEGETABLE FA