

PARTED.

Which of us two is to blame? you ask.
Falling and flushing with wounded pride
Which of us two were an exact task.
Holding the balance on either side,
Bright was the morning, but all too brief,
Beautiful the day that could thus begin,
Fair was the carload in bloom and leaf,
Sharp were the thorns that were hid within.

Each made light of the loosening chain,
Lips were smiling, and brows serene,
Showing no sign of the hidden pain.
Hiding the scar where the wound had been,
Fain and holly were smile and speech,
Far divergent our minds and ways,
Slowly died from the heart of each
All the trust of the earlier days.

So it must come that the bonds would grow,
Slighter and weaker as months went past;
Word and deed had been false, you know,
Falseness ever must fall at last.
As for the world, let it pile or frown,
Care we not when its worst is said,
Snaps the bond ere the sun goes down;
Faith has vanished and Love is dead.

THE BABY'S MISSION.

The busy world about poor, old Grandpa Holmes seemed to have very little room to spare for him. His old arm-chair even, had grown to have a dwindled, apologetic look as it shrank more and more closely into the chimney corner.

The loud voiced neighbors would come and go, and come again, without noticing the bent, white head and silent form in the corner, with feet drawn closely out of the way, of the bustling daughter-in-law and her dozen boisterous boys,—always silent; for it seemed to the old man that there was no room in the world even for his weak, trembling voice.

Years and years ago, he had been the proud master of a broad farm in a happy Arcadian Valley. Lands, home, family and friends had left him one by one, and only the memory of them now remained. All in that beautiful world of the Past was no lack of room. There the fields were ever green and friends always kind. Sometimes, when almost happy in the serene light of those blessed days, he would berudely awakened by an impatient push from his busy, daughter-in-law, or by a snarl from his eldest grandson, who found the old, black Bible, grandpa's one book, in his way; and the old man would hobble from the room in silence and sit in the cold with a bitter pain in his heart, whose every pang, you may be sure, is noted, ay, and recompensed, by Him who seeth all things.

It was May; and grandpa Holmes had limped out into the sunshine with his old, black Bible. Some of the soft warmth and glow about him had crept into his heart, and the page before him, like the monkish manuscripts of old, was illumined by golden lights, soft gray shadows, the soft bird-songs, and rose tints from the blossoming apple-trees. The stirring daughter-in-law had not been about for some days, and the old man sighed, when he remembered that these periodical disappearances meant another grandchild, and less room than ever in the world for him. But just then his dim eyes fell upon the precious promise "And Lo, I am with you always, even to the end of the world," and he thanked God and took courage; for the end was so near.

The summer had been an unusually beautiful one, and Grandpa Holmes seemed to take a new lease of life in the open air. He took charge of the vegetable garden, and was so successful, that all the summer he kept the table supplied with delicious vegetables and fruits. More than once his heart had been warmed by words of praise from his usually silent son, who was only cruel in his silence; and even his daughter-in-law had called, one day, at table, for another plate of "grandpa's nice asparagus." When it takes so little to make the old happy, how cruel it is to withhold from them that little! But all summers must come to an end and after that—the winter.

Grandpa's chair was in its usual corner, and his quiet face had an expression pathetic to see, as he shrank into the smallest possible space and thought of the many cold, dark days to come. Some one pushed his feet, he drew them closer, they were pushed again; looking down the soft, round pink and white face of a roly-poly baby smiled into his, and two little fat arms were lifted, with a gentle, pleading coo to be taken. Feeling somewhat as old Simon must have felt, when he took the holy Christ-Child in his arms, he placed on his knee his youngest grandchild.

How strange that he had never noticed her before! How lovingly she nestled in his long empty arms, and with what soft delicious pat, she stroked his bright white hair!

"What is her name?" he asked of the mother whose wide black eyes were regarding them with surprise.

"Effie," she answered with unusual gentleness. "Effie!" The aged hand fell tenderly on the silky rings of hair. The name of his only daughter and best beloved child. Surely he was strong, loving soul looked from the blue baby eyes before him!

A foolish fancy perhaps; but ah, the peace and blessedness it brought! The baby's love and care for grandpa, grew with her growth. At the table her chair must be beside his; and how jealously she watched to see that he was not neglected! Before Effie's reign, the mother, in her haste to silence the clamor of her ill-bred boys, would serve them first; and many a cold morning grandpa's coffee would be entirely forgotten; and in consequence, the weak, old man would leave the table with a sense of loss in his shivering frame. Never now. The baby's sweet, clear tones emphasized by the drumming of a spoon on her tin plate would be heard above all the clamor.

"Grandpa, grandpa's jink."
At length it became the custom to serve him first, and once he was surprised by hearing his hitherto nobleservant son say:

"Don't take that crust, grandpa; take the soft piece." Finally it became the habit of the family to save the best bits for the Grandpa. One day the bustling daughter-in-law put a little pitcher of cream at the old man's plate for his coffee, and when he demurred, for the others used only milk,—he was struck dumb by one of his grandson's saying:
"Take it, grandpa, cream is none too good for you."

The winter so dreaded passed quickly away; for grandpa's corner,—it was Effie's as well, had become the centre of warmth and cheer. The whole family began to see him with the baby's eyes; the boys gathered about the hitherto silent, shrunken old man, and were delighted with his dry speeches and funny stories. Once when the eldest son sturdily pushed aside the old, black Book, to make room for his pipe, Effie doubled her little fists and stamped her tiny feet in such a tempest of indignation reproaches, that he retreated with precipitation and that nook was ever after sacred to grandpa, alone.

One day, after the baby had begun to toddle about, the minister called. It was not his first call, and although he had often seen the old man in his corner, he had merely noticed him by a nod and confined his conversation to the rest of the family. This time, Effie met him, led him to the corner, and said, as if showing a most precious treasure, "my grandpa" and then patting a chair near by as an invitation to be seated. The young man blushed crimson, when the gentle, old man said:
"You must excuse baby; she thinks every one must notice her old grandpa." But the young minister never afterward forgot the deference due to the aged.

Effie was nearly three years old when one lovely June day, the eldest grandson came in, and astonished the old man, by saying:
"Grandpa, I am going over to Ialington on business. Maybe you would like to go along and see uncle Jack's folks. I will get up the light wagon and you may take Effie."

Ialington was only six miles away; it was grandpa's old home and for years and years he had longed to see this place once more. Scarcely a week passed but that some of his people went there, yet, never until now had any one thought of inviting him.

In those years many a dear friend had sickened and died, and now but few of the old acquaintances were left; but when he sat in the carriage with Effie at his feet, smiling and prattling, and at his side the grandson, cheerful and considerate of his comfort, and drove through the old scenes and familiar places, swathed in the perfumed gold and tender green of early summer, he felt very near to Beniah Land, indeed, and almost in sight of the loved and lost companions of his youth. Would he ever forget that ride among the dear and never-to-be-forgotten associations of youth and early manhood?

"Jessie," said grandpa, when they passed the graveyard where the loved companion of his life lay buried, "I do not know as I ever said anything about it to any one, but when I die, I should like to be buried here by your grandmother."

"Die," said Effie, taking the hand, wrinkled hand in her two chubby ones, and patting it softly.

"What is die, grandpa?"
"It is sleeping in the ground, deary, just as the seeds do, and waiting for spring to come."

"Now, member, ganpa," with two pink hands firmly clasped on his knee, and a look of unconquerable determination in her blue eyes, "I seep wiv'vo, and get up wiv'vo, forever and ever, Amen," with an emphatic nod of her curly head.

The past two years of the dear, old man's life had been "full of blessings," as he meekly said in the Friday evening prayer-meeting; but when he reached home that night, fresh and cheery from his ride, he was received by every member of the family with so much kindness, that his eyes grew moist with emotion.

"Where is ganpa?" was Effie's question the first thing next morning.

"Grandpa is t're," said the mother, "Let him sleep."

Later, Effie came into the room with her blue eyes opened very wide.

"Mamma," she said, "I think ganpa must be waiting for Spring."

Effie was right. The cherished wish of the loving old man to see once again the dear, old home of his youth, had been gratified—the great All-father never forgets and never refuses any sincere and sinless desire of one his children—and he had no more to do, but to wait in silence for the golden Springtime of a triumphant Resurrection.

And Effie? The baby's work was finished too; before the end of summer, she was "seeping," as she had wished with her dear old "ganpa."
GRACE BROWN.
Anthony, Kansas.

The Panama Canal.
The project of damming up the Chagres with 26,000 cubic meters of earthwork, accompanied by a culvert large enough to admit the issue of a stream gauging 400 cubic meters per second, and needing for its course a cutting nearly as wide and deep as that required for navigation, depends, among other things, for its accomplishment, on the forbearance of earthquakes. One tremor of the ground would bring down the whole mighty structure. Altogether, M. De Lesseps and his shareholders are in a terribly awkward plight. They cannot very well abandon works which have cost over fifty millions of money, and yet they cannot with prudence go forward. They have two alternatives, and only two, before them. One of them is to sell the whole thing for, say twenty millions to the Americans—who are quite willing to buy the concern—and the other is to suspend M. De Lesseps, and to put in somebody who will personally superintend the works. Who that somebody ought to be we have, we confess, no idea.

It is maintained by some scientists that the aroma of fruits increases with the latitude while the sweetness decreases. Many herbs, such as caraway, are richer in essential oils in Norway than in more Southern regions. This effect is ascribed to the influence of the prolonged light of the summer months.

MAKING AN ENCYCLOPEDIA.

What it Costs—The Method Usually Employed—Pay for Contributions.

"How much does it cost to produce an encyclopedia?" was asked of an expert, and he said:

"That depends upon the method pursued in making it. The American Cyclopaedia cost \$500,000 before a penny was realized. The maps and engravings in the work cost about \$115,000. The best lithographers were employed and many of the pictures cost hundreds of dollars."

"How is an encyclopedia made?"
"Well, usually after the method employed in compiling dictionaries. Editors are engaged for the different departments. There is the religious editor, the medical editor, the historical editor, the scientific editor and the editor on miscellaneous subjects. The best authorities in the land are chosen to edit the work, and large salaries are paid. In the process of compilation an alphabetical rule is observed. The old encyclopedias, such as Chambers' and Encyclopaedia Britannica are followed as regards the subjects they treat. The modern encyclopedia, however, has very much of a newspaper flavor. It is based upon the principle of American journalism. It is timely and intended to hit the spirit of the age. The biographies of prominent men are made an especial feature. The American Cyclopaedia is the greatest undertaking in the art of book making ever attempted in this country. Charles A. Dana, of the Sun, was and is the editor in chief. He fixes the prices paid to contributors. He knows the value of every word that is written. If an article is handed in by a specialist and another comes in from an obscure professional man in any science he chooses the best."

"How much do the contributors to encyclopedias make?"
"Generally we pay magazine rates—that is, \$10 per 1,000 words. Many of the articles, however, cost far more than that. There are some contributors who receive \$500 or \$1,000 for a short article. They possess exclusive information, however. Dr. Shrady, who is the authority on cancer, and editor of the Medical Record, furnished us exclusive information on that subject and on many others connected with surgery. Of course a specialist is paid far more than an ordinary writer. Often a page costs us \$500. Then, again, we run page after page at the cost of \$20. Many of the writers are men who hold the foremost rank in literature. Consequently they demand large prices for their work."

"How much money is invested in encyclopedias?"
"That is a difficult question to answer. We have run into the millions on sales, but it should be remembered that encyclopedias are never sold in bulk. The installment plan is always adopted. Our contributors pay for each volume as it is issued."

"In case a volume is lost, can it be duplicated?"
"That depends on who the loser may be. A regular contributor, one who has been buying volumes after volume for years can certainly be accommodated. A genuine set of encyclopedias costs a great deal of money, about \$150 to \$200, consequently they are sold in instalments and the purchaser is protected."

Facts About the Sea.
The sea is the reservoir into which run all the rivers of the world. It is the cistern which finally catches all the rain that falls, not only upon its own surface, but upon the surface of the land and upon the roofs of our homes. All this water is removed again by evaporation as fast as it is supplied. It is estimated that every year a layer of the entire sea fourteen feet thick is taken up into the clouds. This vapor is fresh, and if all the water could be removed in the same way and none of it returned it is calculated that there would be left a layer of pure salt 230 feet thick on the bed of the Atlantic.

This is upon the supposition that three feet depth of water contains one inch depth of salt, and that the average depth of the ocean is three miles. At a depth of about 3500 feet the temperature is uniform, varying but a trifle between the poles and the equator. The colder water is below. It is reported that in many deep bays on the coast of Norway the water often begins to freeze at the bottom before it does at the surface.

At this depth waves are not felt. Waves do not travel—that is, the water does not move forward, although it seems to do so; it stays in the same place. The rising and falling moves on.

We measure waves by their height and by the distance from crest to crest. In deep water this latter distance is about fifteen times the height of the waves. In shallow water the proportion is less, and this makes a choppy sea.

The force of the waves is in proportion to their height. It is said that the sea strikes or Bell rock with the force of seventeen tons to each square yard. The pressure of the water ceases as we go down. At the depth of a mile this pressure is reckoned as more than a ton to the square inch—that is, more

than 133 times the pressure of the atmosphere.

To get correct sounding in deep water is difficult. A shot weighing thirty pounds carries down the line. Through this sinker a hole is bored, and through the hole is passed a rod of iron which moves easily back and forth. In the end of the bar a cup is dug out, and the inside is coated with lard. The bar is made fast to the line and a sling holds the shot on.

When the bar, which extends below the shot, touches the bottom, the sling unhook and the shot slides off. The cup in the end of the bar holds some of the sand, or whatever may be on the bottom, and a cover shuts over the cup to keep the water from washing the sand out. In this way we learn the character of the deep sea bottom.

It will be seen at once that we can know the depressions of the bottom of the ocean more easily and more accurately than we can learn the elevation of the land. As a consequence we have a better topographical map of much of that surface than we have of the continents.

The depth of the sea presents some interesting considerations. If the Atlantic were lowered 6564 feet it would be reduced to half its present width. If it were lowered a little more than three miles there would be dry land all the way between Newfoundland and Ireland. If the Mediterranean were lowered 660 feet, Africa would be joined to Italy and three separate seas would remain.

A Juvenile Martyr.

Among the waifs of the London streets whom Dr. Barnardo has been enabled to rescue is a little girl of whom the philanthropist gives the following history: "A little girl, named Peggy, nine years of age, was named a short while ago from a country town. Both her father and her mother were living. The father had suffered imprisonment twenty-two times for theft and for assaults with violence. The mother had been imprisoned nine times. The sister, of fifteen years, had been imprisoned four times. There was also a brother of fourteen at the very time undergoing his first imprisonment. Well, what about this girl of nine? We found that the child absolutely would not steal. I tell you, these are among the wonders that sometimes puzzle every one of us. Here we have a girl living among convicted criminals, who has never had any example all her life but the vicious example of crime, who has breathed nothing but an air of crime, and that girl says stoutly, 'I won't steal.' The father beat her; she was cruelly beaten by her mother. The neighbors wrote to me, and said, 'The girl is being slowly tortured to death because she won't steal.' We sent down and made inquiry. When we approached the father he replied immediately, 'Anybody may take her that likes. She is no good to us; she won't steal.' We might have prosecuted the father. But we felt the simplest thing was to induce him to deliver that child wholly to us, and this he did, and I have that little child to-day. She is receiving a Christian education in a village home, and her intelligence and aptitude for learning encourage us to believe that she will grow up to be a useful servant of Christ."

The Wise Hostess.
A hostess should, of course, exercise a wise exclusiveness, such as Lady Palmerston described when she said she "passed Lord Palmerston's acquaintances through a coarse sieve." No woman who entertains should invite her guests carelessly. The very respect which she owes to herself and her guests should prevent this. As a clever woman in London once said, "I am never flattered at being asked to Mrs. J.'s camp." No woman should allow her house to be degraded to a camp. One should winnow the chaff from the wheat.

A lady in entertaining has to remember always to invite those who are congenial. No one in this country can afford to make her parties either political, musical or literary exclusively; but one should have a general idea of sets and of their tastes, and of who would like to meet whom. Especially is this important at a breakfast or a dinner, where the guests must sit and talk for two or three hours together; there is no such ordeal of agreeability. To invite a vaporous, airy, foolish woman to sit next an Oxford professor, who has a specialty on which he wishes to talk and which she would not understand, is to make them both miserable. To ask a young poet to sit next an old campaigner, who has nothing to talk of but the dissection of character, who is given to social parboiling, is to make both miserable and will ruin one dinner at least. To ask a busy politician to sit next an abstract philosopher would not be half as bad. Therefore a woman has much to consider before she begins to entertain.

There are only two manufacturers of tape measures in the United States—the principal one at Brooklyn, N. Y., and the other at Cleveland, Ohio.

Female typewriters abound in Washington, and find their profession very lucrative.

The Bundesrath refuses to allow the Jesuits to return to Germany.

THREE PUPIL-DILATING POISONS.

Characteristics of a Peculiar Group—The Symptoms They Produce.

There is a peculiar group of poisons whose action is to dilate the pupils instead of contracting them, like opium, to arrest the secretions of the skin, to stimulate the brain, causing delirium, and paralyze the ends of the nerves of motion; to stimulate the spinal cord and then paralyze it; to increase the action of the heart and then to bring it to a stand-still. These drugs are belladonna (the deadly night shade), hyoscyamus, (henbane), and stramonium ("Jimson weed" or thorn-apple). These all act alike, but vary in strength; the order in which they have been named being that of their destructive qualities. They allay pain, but not to the same extent as opium, and induce sleep to some degree.

The symptoms produced are alike, and are as follows, when given in poisonous doses: Heat and dryness of the mouth and throat, nausea, vomiting, dizziness, indistinct or double vision, delirium, great excitement, convulsions followed by stupor and unconsciousness. The pupils of the eyes are dilated to their utmost, and light does not affect them. The face is reddened with eruption similar to that of scarlet fever; the eyes are fixed and brilliant; the gait is tottering; and the delirium is such as to cause silly talk and frequent bursts of careless laughter. The berries, root and leaves of belladonna have each caused fatal poisoning. The active principle, atropine, is an extremely powerful drug, producing the same effects when taken in very minute doses. Poisoning may result from applying a belladonna plaster to the skin, especially if the surface is broken. Most cases of belladonna poisoning result from mistakes in prescribing or administering remedies. Its use by criminals is rare.

Stramonium, or "Jimson weed," is such a common plant and accessible to every one that poisoning from the careless swallowing of its seeds is not at all uncommon. Scarcely a year passes but some child dies from this cause in the city. The authorities are certainly responsible for such accidents, as it would be an easy matter to cause every plant of the kind to be destroyed before the seeds have matured. In India a similar plant is often made use of by the Thugs to render their victims helpless. The symptoms are the same as those of belladonna poisoning. It is likely that some of the "drugging" employed by the professional thieves in this country is done with preparations of stramonium seeds.

Henbane (hyoscyamus) is poisonous in every part. Leaves, roots and seeds produce effects like those observed after poisoning by belladonna, but the dose required to produce such results is much larger. Twenty of the seeds have been known to produce poisoning, and the same may be said of the "Jimson weed."

The treatment of poisoning by any of these three plants is to remove all that may remain in the stomach by the most prompt and effective emetics; in case these do not act, the stomach tube must be brought into use. Then give castor oil to remove any of the poisonous materials that may have passed beyond the stomach. As there is no trustworthy chemical antidote, morphine may be given cautiously on account of its action being opposed in most particulars to that of these poisons. Coffee and alcohol should be given if the heart becomes very weak, as shown by the pulse. Animal charcoal and tannin have been given, although there does not appear to be any very good reasons for administering them.

Poisons in Food.
We are hearing a good deal of late about poisons in food containing protein compounds, such as the casein of milk and the myosin of lean meat and fish. The protein compounds are prone to decay—their action being decomposed by the action of the ferments called bacteria or microbes. In certain forms of decomposition substances of a more or less poisonous nature, called ptomaines, are formed from protein. It appears to be in this way that poisonous compounds are formed in cheese, meats, etc. While the true digestive ferments, such as the ptyalin of saliva and pepsin of gastric juice, are very different from the ferments just spoken of, yet microbes exist in the digestive apparatus of even the healthiest people, and within a short time past it has been found that poisonous compounds, formed probably by the action of microbes, often occur within our bodies.

The natural inference—it is not positively proved, I think—is that there may be cases in which the protein of certain kinds of food is thus transformed into injurious substances while passing through the alimentary canal. Perhaps this is the reason why certain persons cannot endure milk without pain or nausea, and it is not impossible that many of the cases in which one kind of food or another causes sickness may, in the light of future research, be attributed to such fermentations within the body.

Charley Little has been arrested in Indiana for stealing a monument.

OUT OF THE ORDINARY.

The great sheep-raiser, Mr. Mitchell of Elko, Nev., will have a wool clip of 50,000 pounds this season.

It is claimed that the use of electricity in the deep mines of Nevada has increased their productiveness 25 per cent.

The London Kennel Club has decided to let no dogs, born after this month, that have cut ears, to enter their bench shows.

Two billion dollars are invested in dairying, more than the value of the country's banking and commercial interests combined.

A cat kept in a swimming bath at Albany is said to be an excellent swimmer, and to like the water, into which she will dive in pursuit of fish.

Belgium, of all nations, has the greatest density of population, the largest diversity of occupation, the most uniform distribution of wealth and the minimum of pauperism.

It is said that the belief that the Eiffel tower causes thunder-storms is becoming an article of faith in Paris. Never have thunder-storms been so frequent there as in the last fortnight.

A bear that helps himself to trout from a pool formed by a dam in a brook is the extra inducement offered at a Catskill summer resort, where, of course, a sea serpent would be entirely out of place.

The British naval authorities believe they have secured plates absolutely impenetrable by missiles fired from any gun at present invented. A plate ten inches thick is being cast for experimental purposes.

Her majesty's steamship Pallas, 2,575 tons displacement, having engines of 7,500 horse-power, to develop nineteen-knots speed, and with an armament of sixteen quick-firing guns, has just begun in England, to be finished in 1897.

Paris is following the example of London and is about to build an underground railway line. The railway will be seven miles long although only four miles of it will be completely underground; the rest will go through cuttings and by viaducts.

Charlotte Harbor, Fla., is said to be so full of fish that it is actually running over. One day recently fully thirty pounds of fish jumped out on shore and were picked up by a citizen. There was one fifteen-pound redfish three five-pound snooks and five jack-fish.

The largest organ in the world has just been constructed by the Messrs Hill & Son, of London, England. It was made for the Town Hall of Sydney, New South Wales, at a cost of \$75,000. The instrument has 126 sounding stops, and possesses the extraordinary novelty of a pedal reed stop of sixty-four feet sounding length. The wind supply is maintained by a gas engine of great power.

The Egyptians have always been recognized for their ability in the manufacture of perfumes, but due credit was never given them before a vase containing some Egyptian ointment was opened at the museum at Alhwick. The perfume it contained still had a pungent odor, although it was more than 3,000 years old.

A Curious Dish.

A curious dish was prepared the other day for a British traveler in Mexico. The attendants served up an omelette and the servants partook very heartily of the dainty morsel, but the traveler mistrusted the food, owing to certain black particles mixed therein. Inquiring as to the nature of the suspicious ingredients, he could scarcely believe his ears when the reply was given: "Oh, those are scorpions," and an investigation proved this to be true, the lower order of Mexico thus utilizing the young scorpions, which are dug out, hundreds in a nest, their sting being cut off before cooking.

—It is said that the Russian government has at length agreed to permit a certain number of German officers to reside in Russia for the purpose of studying the Russian language, a permission which has already been formally granted to the Austrian officers.

—Morris Luttin, a seven year old, during a discussion with another juvenile about flying machines, jumped from the second story of the Pullman School, Chicago, thinking an overcoat arranged as a parachute would save off danger. Morris escaped with his life, but broke his thigh.

A Boston woman who invented a shoe sewing machine sold the patent for \$150,000.

A Cincinnati girl is said to have eaten twenty-seven dishes of ice cream in one afternoon.

Tam O'Shanter crowns of velvet or silk, are put in ladies straw hats and considered very novel.

Reefers and blazer jackets are made in silk, serge or flannel and are the favorites.