

OUR YOUNG FOLKS.

THE ARITHMETIC OF GINGER-BREAD.

"R-U-D-I-M-E-N-T-S, rudiments," spelled Katy. "Believe I'll find out what that means this very minute; it's better 'n these horrid fractions," and she started to look for the word in the worn old Webster's "Unabridged" that papa had banished from his handsome shelves to the children's room upstairs.

Poor Katy!—she had been droning wearily through the rules for multiplication and division of fractions all the long afternoon study-hour. It was just the dreariest part of the whole book. "Case First,—To multiply a fraction by a whole number. Case Second,—To multiply a whole number by a fraction." These were the very worst, scarcely exceeded by the corresponding rules for division, and Katy had just about worn out her brown eyes crying over the cases in which you multiplied by the numerator and divided by the denominator, or multiplied by the denominator and divided by the numerator.

"It is just the hatefulest old study in school, mamma," said Katy to her mother, who passed through the room and looked askance at Katy's red eyes,—“the very hardest one to see any use in. I don't suppose I'll ever in all my life have to multiply or divide a whole number by a fraction; hope not, any way. I despise halves and quarters of things so awfully."

Mamma didn't reply, but wearily threw herself down on the little bed that was kept in the nursery, with very dark circles about her eyes, and a pale, tired face.

"Do you believe, Katy, you could go down and stir up some ginger-cakes for tea? Christine is hurrying with her ironing, and Mary must take baby while I go and sleep off, if possible, this miserable headache," said Mrs. Richards, only half opening her weary eyelids.

"O yes, mamma, anything is better than these hateful rudiments. I looked that up just now in Webster. 'First beginnings,' it says; only I think it's hard enough to be the last endings;" but seeing no brightening in her mother's eye, she hastened to help her down into her own room. Then with gentle hand she settled the pillows comfortably, saturated a handkerchief with camphor, closed the shutters, and ran softly down still another flight of steps into the basement kitchen.

"Christine, I'm to make ginger-cakes for tea, all my own self. Mamma said so, and she's gone to lie down and sleep off her headache, and musn't be disturbed," said Katy, half afraid that Christine might hunt up confirmation of the gingerbread business. It was something new, certainly, to turn this harum-scarum little creature loose in the pantry to rummage the spice-boxes, and break up the cream in the cellar in her search for sour milk. But, with large families, there are times when the work crowds fearfully, and the only way is to press more hands into the service, not minding always if they are unskilled ones.

"Vell, Mees Katy, please keep te muss

ober dare in te sink so mooch as you can," said Christine, evidently not jubilant at the prospect of cleaning up after a little girl's baking; "an' don't leaf te wet spoon in te soda, nor drip te sour milk roun' te cellar. It's dare in te big jar unter te window."

Katy got down the gem-irons for the first thing, greased them with Mary's patent gridle-greaser (a pine stick plentifully supplied with cotton rags at one end); then climbed up to the shelf where the book of recipes was kept.

"'Meeses Vite's soft ginger-cake' is vat you wants, Mees Katy, an' we takes 'double of the receipt,'" said Christine, quoting an expression familiar to Yankee cooks.

"That 's just two of everything. *I know*," and Katy tossed her curls with an air of conscious greatness.

"Two times one cup of molasses,—here goes that. Two times two spoonfuls of soda,—that 's four spoons. My! but does n't it foam up beautifully! Two spoons ginger in two-thirds of a cup of hot water—no—oh, dear! It is the soda that ought to go in the hot water, and—oh, horrors! it's *two times two-thirds* of a cup of hot water. Well, now! If those hateful fractions are n't right here in this gingerbread! Christine, O Christine!" cried Katy in despair. "Come and tell me how much is two times two-thirds of a cup!" But Christine, alas! had already gone upstairs, with her basket of white, freshly ironed clothes poised on her head.

"Two times two-thirds of a cup. Why, it must be more 'n one cup, and yet it says 'of a cup.' If 't was n't for that, I'd go and get two cups and fill them each two-thirds of a cup—that 's one cup."

And the poor little girl found herself in worse "deeps," even, than ever she had fathomed in the "Rudiments."

Ned came into the kitchen at that moment, his books flung over his shoulder, and Katy's face lighted up. She could appeal to him. But when she asked him how much two times two-thirds of a cup could be, Ned, with all a boy's wisdom, gave answer like this:

"Two times two-thirds? Case of multiplying a fraction by a whole number. Rule: 'Multiply the numerator of the fraction by the whole number and place the result over the denominator.'

"Two times two-thirds are four-thirds. Improper fraction. Reduce to a whole or mixed number. Rule: 'Divide the numerator by the denominator.' Three is in four once and one-third over. One cup and one-third of a cup."

"But it says 'of a cup,' Ned. Who'd ever think that 'of a cup' meant part of two cups?" argued Katy, in a despairing tone.

"Well, I did n't write the receipt book, Kit, and besides, that 's grammar, not arithmetic, and I'm not up in grammar." And Ned, wisely refraining from venturing beyond his attainments, went upstairs to put away his books.

"Who'd ever 'a' thought of such a thing," whispered Katy to herself, "that Rudiments would come handy in making ginger-cakes?"

The family ate them hot for supper that night, despite Doctor Dio Lewis and all the laws of health, and pronounced them very fine cakes indeed. What they lacked in ginger (you see Katy, in her perplexity over the hot water, forgot to double the ginger) papa made up in praise, and, as mamma's headache was gone, they all were happy.

Katy was early at school the next morning, and, shying up to the teacher's desk, she said:

"Miss Johnson, you looked as if you thought I was either crazy or stupid the other day, when I said I did n't believe Rudiments were 'in anything in the world.' You see, I meant 'in' anything we *do* or *make*. But I've come to tell you that I've changed my mind. Last night I had to make gingerbread for tea, and the first thing I knew, I got right into fractions—two-thirds of things—and all the rules."—*St. Nicholas*.

A BIRD THAT TURNS SOMER-SAULTS.

THERE'S a pretty little bird that lives in China, and is called the Fork-Tailed Parus. He is about as big as a robin, and he has a red beak, orange-coloured throat, green back, yellow legs, black tail, and red-and-yellow wings. Nearly all the colours are in his dress, you see, and he is a gay fellow.

But this bird has a trick known by no other birds that ever I heard of. He turns somersaults! Not only does he do this in his free life on the trees, but also after he is caught and put into a cage. He just throws his head far back, and over he goes, touching the bars of the cage, and alighting upon his feet on the floor or on a perch. He will do it over and over a number of times without stopping, as though he thought it great fun.

All his family have the same trick, and they are called Tumblers. The people of China are fond of keeping them in cages and seeing them tumble. Travellers have often tried to bring them to our country, but a sea voyage is not good for them, and they are almost sure to die on the way.—*St. Nicholas*

I LIKE TO HELP PEOPLE.

A WOMAN was walking along a street one windy day, when the rain began to come down. She had an umbrella, but her hands were full of parcels, and it was difficult for her to raise it in that wind.

"Let me, ma'am; let me, please," said a bright-faced boy, taking the umbrella in his hands. The astonished woman looked on with satisfaction, while he managed to raise the rather obstinate umbrella. Then taking out one of those ever-handy strings which boys carry, he tied all the parcels snugly into one bundle, and then politely handed it back to her.

"Thank you very much," she said. "You are very polite to do so much for a stranger."

"Oh, it is no trouble, ma'am," he said with a smile. "I like to help people."

Both went their ways with a happy feeling in their heart, for such little deeds of kindness are like fragrant roses blossoming along the path of life.