

GAINING AND LOSING A DAY.

A QUEER FACT EXPLAINED IN A VERY SIMPLE MANNER.

YOU often hear some one who thinks himself "cute" telling how sailors in circumnavigating the globe "gain" a day. Such persons, says the *St. Louis Republic*, almost invariably mention the "gain," but it is seldom you hear of the "lost" day, which can also be dropped out of the existence in making a trip around the world. The facts are these: If he goes to the east he gains a day; to the west he loses one. It comes about in this way: There are 360 degrees of longitude in the entire circle of the earth. As the world rotates on its axis once in each twenty-four hours, one twenty-fourth of 360 degrees, which equals 15 degrees, corresponds to a difference of one hour in time. Now, imagine a ship sailing from New York to the eastward. When it has reached a point 15 degrees east of the starting point the sun will come to its meridian, or noon line, one hour sooner than it does at the point from which the ship sailed. When the ship has reached a place 30 degrees east of the sailing point it will be noon two hours sooner on shipboard than it will 30 degrees to the westward, and so on until when the ship has reached a point 180 degrees from the place of sailing it will be 1 o'clock, say Tuesday morning with the people in the ship when it is only 1 o'clock in the afternoon of Monday with the people at home; in other words, the ship has sailed just one-half the distance around the world (180 degrees), and has gained exactly twelve hours. Double this and you can readily understand how the day is gained in sailing around the world to the eastward and you will soon find the roof of the mystery of the "lost" day which is dropped out of the calendar by a person who crosses the total 360 degrees with his face constantly turned to the west.—*Exchange*.

CANOE SONG OF THE MILICETES.

TRANSLATED BY J. E. MARCH.

"Whu-t-hawgn!
Mochsqua-look!
Piskit pokut mitatako
Piska-tah.

Blade of maple!
Boat of bark!
Hear the voice that calls
Through the dark.

Blade of maple!
E'en the leaves
Of the overhanging trees
Strive with quivering gemulation.
Strive with sibilant vibration,
To repeat the voice that calls
Through the dark.

Boat of bark!
The river's breast,
Softly by thy light form pressed,
Tells thee—in the waves that leap
Against thy prow, then gently creep
Along thy sides into the deep
To sleep—
How sweet the voice that calls
Through the dark.

Voice that calls!
Thou hast made
Arms of steel dip deep the blade.
Where the waves leapt, there the spray is;
Where they gently crept, the foam is;
Where they slept, I'm piling billows
Heap on heap,
Across the deep,
Seeking out the voice that calls
Through the dark.

Blade of maple!
Thou hast heard;
Boat of bark, thou, too, art stirred,
O'er the waters we are leaping,
Now 'neath tangled branches sweeping
To the nook where love is keeping
Never-sleeping tryst for me,
Under birch and maple tree.
Sweet!
We knew thy voice was calling
Through the dark.

School-Room Methods.

LESSONS ON MONEY AND MEASURES.

Class work.—Albert has 4 cents; he spends half his money; how much has he left? Tom has a 2-cent piece and Harry has a piece which is worth just half as much. What is Harry's piece? James buys a pencil for 2 cents, and sells it for twice as much as he gives. How much does he get for it?

Seat work.—Draw a line four inches long. Divide it into four equal parts. Draw a line two inches long. Draw another two inches long through the middle of the first. Draw a line one inch long. Draw another line just one-half as long.

Class work.—Here is a measure which holds one pint. Let each child see and handle the measure. Here is another measure which holds one quart. Let each see, etc. Which is the larger of the two measures? John may fill the pint measure with water. We have here a quart of water. We will empty the quart measure. Now see how many pints of water will be required to fill it. Continue and vary these experiments. We say "two pints, one quart." How many pints in one quart? One pint is what part of a quart? If a quart of milk cost 4 cents, what does a pint cost?

Seat work.—Copy this and learn it by heart:

Two pints, one quart; Copy: pint, pints; quart, quarts; inch, inches; foot, feet.

Class work.—Which is more, 1 quart or 1 pint? How much? Which is more, 1 quart or 2 pints? Which is more, 3 pints or 1 quart? How many pints in one quart? In 2 quarts? John sold 2 pints of milk to Mr. Smith and half as much to Mr. Jones. How much did he sell to Mr. Jones? In 4 pints how many quarts? With the pint measure, measure $\frac{1}{2}$ of 4 pints. How many quarts is this?

Seat work.—Copy the following: qt. means quart; pt. means pint; ft. means foot; in. means inch; ct. means cent.

Copy and fill the blanks:

In 1 quart there are _____ pints.

In 1 quart there are _____ half-pints.

In 4 pints there are _____ quarts.

Class work.—If one quart of buttermilk costs 2 cents, what will $\frac{1}{2}$ a quart cost? If one quart of buttermilk cost 2 cents, what will one pint cost? If one pint of milk cost 2 cents, what will two pints cost? If one pint of milk cost 2 cents, what will one quart cost?

Seat work.—Write and fill blanks:

2 pints are 1 _____

1 pint = _____ quart. $\frac{1}{2}$ quart = _____ pint.

1 pint = _____ quart. A quart is _____ times as much as a pint.

3 pints = _____ quarts.

4 pints = _____ quarts. A pint is _____ of a quart.—*Baldwin's Industrial Primary Arithmetic.*

Educational Notes.

AN English correspondent of the *Boston Herald* has found in a "Dictionary of the Isle of Wight Dialect" a number of words which English writers usually class as American provincialisms. Among them are "cute" and "piert," found also in one of George Eliot's novels; "backed up," "call," in the sense of reason or necessity; "chipper," "darn," as a mild oath; "fall," for autumn; "gal-luses," "heft," "hunk," "jaw," meaning to scold; "jiffey," "get out of kilter," "rare," in the sense of under-done; "thick," for intimate; "gumption," "tan," meaning to thrash; "spells" of weather; "put to rights," etc. The subject is a most interesting one, and deserves more attention from philologists than it has thus far received. The compiler of the dictionary in question says that many of the provincialisms in the Isle of Wight are identical with those current in the adjoining counties of Hampshire, Wilts, and Dorset, once forming a part of the Saxon kingdom of Wessex, and that the basis of the dialect of this region is purely Anglo-Saxon.—*Toronto Mail*.

THE latest Government returns in England show that there are actually 175 certificated school masters in that country who receive less than fifty pounds per annum and no less than 2,261 of them, or 37 per cent., receive less than £75 per annum (*i.e.*, less than 29s. per week), and of all the certificated assistant masters in England and Wales not

7 per cent. are paid as much as £150 per year (or 58s. per week). With the women things are still worse, for no less than 872 certificated assistant mistresses receive less than 16s. per week for their work, and the great majority of them, over 64 per cent. receive salaries of less than 29s. per week. And yet School Boards and managers wonder that they cannot get boys and girls to become pupil teachers.

ACCORDING to the latest returns at hand, Boston expends annually for school purposes a larger sum than any one of twenty-seven of the States in the Union, including all the New England States but Massachusetts, and a larger gross amount than any other city except four—namely, New York, Chicago, Philadelphia and Brooklyn. Even in comparison with these cities its expenditure for this purpose is the largest according to population. Philadelphia expends \$2.40 per capita; Brooklyn, \$2.95; New York, \$3.36; Chicago, \$4.00, and Boston, \$4.55. And yet it is true that Boston finds it impossible to build school-houses with sufficient celerity to accommodate the rapidly increasing numbers of her juvenile population.—*Common School Education*.

THE publishers of *Education*, Boston, have established a "Teachers' International Reading Circle." It is designed to be a practical application of the University Extension idea to teachers, providing a course of professional reading and study by topic, question, and written work, under the direction of a secretary, covering a period of three years, with diploma on graduation. The address is 50 Bromfield Street, Boston.

For Friday Afternoon.

THE SIN OF OMISSION.

It isn't the thing you do, dear,
It's the thing you leave undone,
Which gives you a bit of a heartache
At the setting of the sun—
The tender word forgotten,
The letter you did not write,
The flower you might have sent, dear,
Are your haunting ghosts to-night.

The stone you might have lifted
Out of a brother's way,
The bit of heartsome council
You were hurried too much to say;
The loving touch of the hand, dear,
The gentle and winsome tone
That you had no time nor thought for,
With troubles enough of your own.

These little acts of kindness,
So easily out of mind,
These chances to be angels
Which even mortals find—
They come in night and silence,
Each chill, reproachful wrath,
When hope is faint and flagging,
And a blight has dropped on faith.

For life is all too short, dear,
And sorrow is all too great,
To suffer our slow compassion
That tarries until too late.
And it's not the thing you do, dear,
It's the thing you leave undone
Which gives you the bitter heartache
At the setting of the sun.

—*Christian Intelligencer*.

JACK FROST.

JACK FROST is a roguish little fellow,
When the wintry winds begin to bellow,
He flies like a little bird thro' the air,
And creeps in the little cracks everywhere;
He nips little children on the nose,
He pinches little children by the toes,
He pulls little children by the ears,
And from their eyes draws big, round tears,
He makes sad folks say, Oh! oh! oh!
He makes glad folks say, Ho! ho! ho!
But when we kindle up a great warm fire
Then Jack Frost makes his bow to retire,
So up the chimney skips the roguish boy,
And all the children clap for joy.
He makes sad folks say, Oh! oh! oh!
He makes glad folks say, Ho! ho! ho!
—*Adapted from "Songs, Rhymes, and Games," by Mrs. Hubbard.*