

to God Almighty, whom he praises with lute and voice.

The lamb is a symbol of innocence, as the dove is of simplicity and purity of heart. The open book represents the Gospel, the story of God's love. The angels are always thought of in three ways. The wings remind us that they are God's messengers; the musical instruments, that they sing praises to Him; and they are also guardians, "they watch and duly ward." In all the great events of our Lord's life, from His birth to His resurrection, and His ascension into heaven, they attended upon Him. They are always represented as young, because they are in the presence of God, with whom is no time nor change.

The old artist reminds us in this picture how all created things, from tiny bird to holy angel, adore as their Creator the Christ Child whose coming to earth "for us men and for our salvation" we celebrate at this time. And as we look, we hear again the Christmas invitation, "O come let us adore Him, Christ the Lord."

A CHRISTMAS CAROL.

In the bleak midwinter
Frosty winds made moan,
Earth stood hard as iron,
Water like a stone;
Snow had fallen, snow on snow,
Snow on snow,
In the bleak midwinter
Long ago.

Our God, Heaven cannot hold Him,
Nor earth sustain;
Heaven and earth shall flee away
When He comes to reign;
In the bleak midwinter
A stable-place sufficed
The Lord God Almighty
Jesus Christ.

What can I give Him
Poor as I am?
If I were a shepherd
I would bring a lamb;
If I were a Wise Man
I would do my part;
Yet what can I give Him —
Give my heart. —C. G. ROSSETTI.

Is the word "succeed" so stale that we must always say "make good?" Is the word "win" so weak that we must always say "win out?"—Youth's Companion.

BOTANY.

L. A. DEWOLFE.

Each teacher, of course, will use her own initiative in choosing nature study topics. Lest someone, however, is at a loss what to do during the winter, I suggest the following experiments.

EXPERIMENT 1.

Take two tomato cans and fill each to within an inch of the top with wet soil well pressed down. Then sprinkle an inch of loose soil on top of one of these, and leave the other as it is. Weigh them. After leaving them two days in the school room, weigh again. Which lost the greater percentage in weight? To what is the loss due? Weigh again at intervals for a week or two. Keep a record of losses. According to this, which dries faster, loose or compact soil? Apply this fact to cultivated and uncultivated garden soil or farm land during dry summer weather. What is one reason for frequent hoeing of the garden? Would hoeing and harrowing aid or prevent loss of water from the soil?

EXPERIMENT 2.

Does soil contain air? Fill a pickle bottle level full of loose soil. Into this slowly pour water until no more will sink into the soil. What does the water replace? Can you pour as much water into compact soil? Actually try it. What percentage of the volume of loose soil was air? How does that compare with the air percentage in compact soil? Try this with soils in various degrees of looseness.

For arithmetic the results might be tabulated thus:—

Volume of soil.....	a
" of water added.....	b
Therefore $\frac{b}{a}$ = air portion of whole volume.	
" $\frac{100b}{a}$	
———— = air percentage of whole volume.	

EXPERIMENT 3.

Do plants need air about their roots in order to grow?

Find out by trying to grow them in soil deprived of its air. For this experiment try two plants — say corn — in flower pots. Water when necessary;

