

how much the body depends upon it, and may perhaps be brought to reflect on the dependence of the spirit on the grace of God, which is its food. It requires much strength of will to give up 'pleasant food' of any kind, at first; but unless this will is brought into subjection to the will of God, abstinence is of no use in elevating the character.

We know that the fastings of the Prophets and Apostles were productive of great good to themselves and those for whom they labored. We know that our blessed Lord's example should be followed in this respect as well as others; therefore why should we not try to do what we can in carrying out all the precepts of the Church for growth in grace? As to sewing for the poor on Friday, I think that nothing can be accomplished without having a fixed time for it; and as Friday is the day on which is commemorated the greatest sacrifice that was ever offered or ever can be, is it very much for us to give up music, embroidery, entertaining books, pleasant food, or the society of friends, all of which is proper at other times, and thereby have opportunity to visit the sick, feed the hungry, and clothe the destitute? I have no doubt that God's blessing will surely come to those who seek it this way, and that His grace will abundantly satisfy the longing thirst for righteousness which prompts all these efforts to obtain it.

When Elizabeth gave these answers to her friends, her face was suffused with a glow that made it look as if the sun were shining on it, and there was a touching inflection in the tones of her voice, that was remembered by these friends long after the voice was still in death. That beautiful, solemn, and comprehensive prayer of Bishop Wainwright's for Friday, was one that Elizabeth was known to use more than any other, and the echo of her voice seemed to ring through it when those who followed her example used it every Friday.

Dear reader, it is possible for us to follow this example! A new life was begun in each one of us at Holy Baptism; shall it not be nourished and sustained by all the means of grace that our dear Mother the Church has provided for us?

ABBY G. SHAW.

THE CHURCH AND THE INDIANS.

St. Paul's School, Yankton Agency, Dakota, Jan. 12, 1875.

To the Children of the Church, and other Benefactors of Boarding Schools in the Missionary Jurisdiction of Niobrara:

MY DEAR FRIENDS: Out in this Indian country we have, on the whole, charming winter weather. But it is winter weather without possibility of mistaking it—still, bright, crisp, and cold, cold, all the way from zero down to 30 degrees below. But sometimes—and sometimes has been several times this year—old Winter seems to try to be not only as cold as he can, but as blustering as he can, and for two weeks past has almost brought us to our knees protesting that we are willing to take his word for it, that he can be all-conquering if he wishes, and have not a particle of desire that he should prove it by his deeds.

While I write we have a terrific storm upon us, the mercury 23 degrees below zero, and the wind blowing almost a hurricane. We quail before it in this stone building—God pity the poor Indians in their tipis! The storm burst in one of the panes of a window in the boys' lower dormitory, and drove the snow in with such violence that the dormitory, beds, and all, was this morning covered with snow for twenty-five feet of its length. The boys, while asleep, instinctively hugged each other and drew themselves, heads and all, under the covers, and I believe slept through it all. The dormitory looked this morning more like a snow-bank than a bedroom.

On the sounding of the 'rising bell' the boys were lifted from their snowy beds and carried to the other end of the room, from which they scampered away, without much regard to appearances, crying out 'Osa! do!' i. e. Very cold! to the warm washroom on the floor below.

Our water privileges hardly deserve the name, when the water for this large household of fifty people has to be dipped in buckets from the river, and hauled in barrels a quarter of a mile, while the temperature is so low that what is water one moment is (to exaggerate a little) ice the next. The boys who constitute the water squad have done their duty nobly throughout this whole cold term of ten days, during which the mercury has each morning ranged from 5 to 23 degrees below zero. The wood-chopping squad deserves equal credit. Our consumption of fuel in this School and in Emmanuel Hall, near by, is enormous. The boys have to cut all the wood in the open air, and even with the violent exercise of wood-chopping, it is a question often whether they can generate as much heat as old Boreas can cold. Of course we save them all we can, and they are required to do nothing which the Head Master and other teachers do not join in.

I went down to Emmanuel Hall this morning soon after breakfast to see how they fared there. The storm had evidently been playing hide-and-seek through the old log church, and as if to put the best face on its sacrilege, had left as the only token of its pranks in holy places the most delicate festoons and tracery work of snow as light as gossamer. Emmanuel Hall, which adjoins the church on the west, being new and strongly built, had stood the storm pretty well; but the force of the driving wind manages to sift the snow, which in this country is as light as a feather and as fine as dust, through cracks and orannies which are so small that the eye cannot easily discover them. And therefore, though I say that Emmanuel Hall stood the storm pretty well, I do not

mean to deny that the snow was gathered together out of some of the more exposed rooms by the shovelful.

Few of you would feel inclined while the cold is so biting to come out and see the Schools which your charity sustains, and I will not give you an invitation just at present; but could you come, and, beginning with our Boarding School, which is most distant from civilizing influences, and going on through all them, notice how the number of scholars increases and the general condition of the schools improves as you come among Indians who have been longer under good training, you would be greatly delighted. You would hardly believe, on visiting the Girls' School, at Santee, or the Girls' School, at Yankton Agency, that the neat, quiet, well-behaved girls whom you will find busy in the kitchen, or working at a loom, or reciting their lessons in school, are the same creatures as those out of whom wild Indian life makes the repulsive-looking hags whom you see among them, butchering beef or splitting wood; nor credit the fact that the boys of St. Paul's, now figuring at the blackboard, now rushing out hallooing for recess, and now setting the tables and making beds, would under other circumstances have grown up to paint their faces, wear the scalp-lock themselves, and seek to take the scalp-locks of their enemies.

A remark made the other day by one of our Christian Indians led me to the happy thought that our efforts for the children may be doing a work for their parents, of which we do not always think. He came to ask me to baptize some grand-children of his. I asked, 'Are their parents Christians?' 'No,' said he, 'they are not. But I am.' He continued: 'I have noticed that old antelopes are very wild and scary, and our hunters find it very hard to catch them. So they catch the young ones. The old ones come to seek for their young, and then our hunters catch them too. And I thought, if you would take and baptize these little grand-children of mine, you might catch their parents too.'

In the hope of this good Indian let us labor on, praying and working for the young, in the expectation that the Saviour Whom we serve will give us a double blessing, first turning the hearts of the children to Himself, and then turning the hearts of the parents to the children.

In School Circular No. 2, I gave you some of the Indian names of the boys and girls in our Boarding Schools. Were it not that so much space would be required, I should be glad to insert here complete lists of our scholars—their Christian names, their Indian names and the meaning of them. Let me give you, instead, a number of the Christian names of the girls and boys in our schools. Most of them will be quite familiar to you; a few may seem somewhat strange. You will of course understand that, in the case of both boys and girls, the same names are borne by several scholars. Thus the name John belongs to quite a number of our boys; and the same is the case with the names George and James, and Charles and William. So, too, with the girls. The names Mary and Julie and Louise and Sarah, are repeated in several instances. But here are the names: Amelia, Angeline, Cecilia, Charlotte, Deborah, Elizabeth, Emma, Flora, Grace, Helen, Josie, Julia, Katie, Laura, Lizzie, Louise, Lucie, Mary, Philomena, Sallie, Sarah. Of boys—Adam, Alfred, Charles, Charlie, David, Edward, Eugene, Felix, Frank, George, Henry, James, John, Joseph, Joshua, Leon, Lucien, Mark, Matthew, Richard, Robert, Simon, Thomas, William, Willie.

After each name must one day be written the words 'And he died.' Let us, while there is time, write by our prayers and efforts after each name 'God save him.'

With grateful regards, very faithfully, your fellow-worker,

WILLIAM H. HARE, Missionary Bishop of Niobrara.

THE APPLICATION OF WIND TO STRING INSTRUMENTS.

At a late meeting of the London Musical Association, Mr. J. Baillie Hamilton of University College, Oxford, read a paper on 'The Application of Wind to String Instruments,' and before attacking his subject, he gave an account of the circumstances which had led him to devote his attention to it. At Harrow Mr. Hamilton had studied the matter with Mr. John Farmer, the organist and music-master of the school, and after going to Oxford he determined to pursue his investigations, but found that they involved such intense application and the devotion of so much time to surmount even the mechanical difficulties in the way, that he had since given up his university career in order to carry out his experiments. Mr. Hamilton then proceeded to sketch the history of the various efforts made to apply wind to strings, beginning with the old Æolian harp, in which the vibration of the string is made by a natural draught of wind. All the subsequent attempts in the same field were but efforts to reduce that beautiful, but fickle source of sound to human control. The primary necessity was to make the whole string sound, and to do this it was needful to increase the draught of air and to concentrate it on the string. Isidore and Jullien made several instruments in which the difficulties were partly overcome, but the first wind fiddle he had read of was made in Central Africa by the bushmen, who, however, had failed like the European inventors, in the concentration of the wind on the string. Mr. Hamilton then described the various elementary stages of his investigations, the result of which he showed by producing a sound from a string divided into three parts, to the centre of which a reed was applied; the fundamental note being thus reinforced. A diaphragm pipe was also sounded to the same note. Mr. Hamilton next defined the respective advantages of wind and string. The string, he asserted, has (1) a simple mode of reinforcement; (2) economy of space to produce a given note; (3) the blending of harmonies upon the common sound board; and (4) sympathy. The wind, on the other hand, has (1) the sound of the organ-pipe, has, he argued, the advantages of (1) special reinforcement by a column of air; (2) volume of tone; (3) variety and quality; and (4) sustained sound. In his new instrument he claimed to have rendered the moving and sympathetic power of the string coexistent with the intensity of the organ-pipe,

thus producing a new and fine effect. He then gave illustrations by sounding notes giving the reed and string tone together, the first of which produced an effect which might be described as that of a string horn; the second gave the peculiarly beautiful effect of the Æolian harp; and the third the note of the trumpet without the peculiar reeling sound which it is so difficult to avoid in that instrument. But when he had got thus far Mr. Hamilton said he was met by the question, how would it be possible to keep a string organ in tune, the proverbial tendency of strings to get out of tune being regarded by many persons as an almost insuperable obstacle? He had, however, introduced an elastic string which would not get out of tune. Mr. Hamilton then proceeded to reply to a series of questions put to him by the Earl of Wiltton, Mr. Bullah, and other gentlemen, and he mentioned incidentally, in reply to a query as to the variety of effects which could be produced on a string organ answering to those of the stops on an ordinary organ, that he could at present reckon on giving at least thirty stops. Mr. Hamilton explained that he had been unable to bring with him his complete apparatus, owing to his inability to obtain the use of the room to fit it up, and thus he had only been able to illustrate his remarks by single sounds, but he hoped to give more complete illustrations at a future day.—*Pall Mall Gazette*.

For the Church Journal and Messenger.

A LENTEN THOUGHT IN RHYME.

O little life of ours—
So few, so poor the years!
A way of sadness and of shame,
A path of sighs and tears!

Man's path to his work,
And goeth forth to fight;
The noonday brings but weariness,
And after that the night!

The harvest is of sin;
The gleanings but of tares;
We rest at holy eventide,
Mid cold and cumbering cares!

And yet we live and laugh,
And call it merry life;
We lay us down to sleep and dreams,
With wild and passion rife!

We call the moments ours—
Ours—like the little sod,
All from our Father's land we take,
Once given by our God!

We fall from smiles to tears;
We leap from tears to smiles,
Our happiness is to forget
A little, lingering while!

This is not wise, I ween;
This is not as we read
In that dear life, divine and blest,
That life—our Christian Creed!

That Heart, which stooped from heaven,
Because it felt our woe,
And lived and loved and died and rose
For fallen hearts below!

Methinks I read therein
Another tale and truth,
How in the grace of Christ our Lord,
Is found eternal youth!

The everlasting health
Which comes from God alone;
The grace, the mercy, and the peace,
Which reign about His throne!

How Jesus went about,
Beloved of earth and heaven;
His life a way for each and all,
In endless pity given!

He walked with wayworn men;
He sat beside their feast;
The Friend of sinners and of saints,
The highest and the least!

He healed their sick and sad;
He even raised their dead;
So good and great was He who had
Not where to lay His head!

He wept with those who wept—
The many all around!
He wept—a human Saviour wept—
O happy, holy ground!

Tell me no longer, life
Is but an empty dream!
Tell me no longer things that are,
Are only what they seem!

There is a better life;
There is a brighter love;
There is a way from earth and sin
To Life and Light above!

Labor is all in Christ,
And victory hath a crown!
The soul that hopes and waits in God
Is nevermore cast down!

This life may be a Lent
To weary hearts and worn;
But Lent of fast and tear and prayer
Leadeth to Easter morn!

A. Z. G.