

HINTS TO TEACHERS ON THE CURRICULUM LESSONS.

(From Peloubet's Select Notes.)

May 10.—Phil. 2:5-16.

SUGGESTIONS TO TEACHERS.

Naturally, in teaching this lesson, we dwell briefly on the Epistle to the Philippians, when and where written, and the circumstances that led to it.

The subject of the lesson is, imitation of Christ. Show the need of an ideal and an example, and the highest and the best. Note it is the mind or spirit rather than the outward forms that we must imitate.

Illustration. From the aiming high with an arrow.

Illustrations. (1) Improvement in any kind of work comes from knowing what others have done, and going beyond that. We build on their foundation. Few will be very proficient in any art, as painting or architecture, or in any business or mechanical work, who do not study the best examples. (2) We need not only laws and descriptions of what is right, but an example which sets before our eyes the reality. Read a description of a machine, and you can get but a faint idea of it unless you have seen one. Even from the full description of the temple in the Bible, it has been found almost impossible to form an accurate model. No one could decide on the form of the golden candlestick of the temple till a model of it was found on the Arch of Titus at Rome.

I. We should imitate Christ in his self-denial for the good of others (vers. 2-8). Help the scholars to realize what Christ was before he came into this world, that they may see how great his condescension. This is a voluntary self-sacrifice.

Illustrate by Iphigenia, the beautiful daughter of King Agamemnon, in early Greek history, who was compelled to be a sacrifice to save Greece. Contrast this with the voluntary sacrifice of the leading citizens of Calais when besieged by the English, or with any voluntary giving of life to save others, as from drowning.

II. The reward (vers. 9-11). All the greatest deeds that the world honors have in them the element of self-sacrifice. The reward will fail if we humble ourselves for the sake of the reward. Choose. You must bow before Christ. Shall it be in loving worship or unwilling submission to his power?

III. The power (vers. 12, 13). In these verses we see how we may be enabled to follow Christ's example. Striving and succeeding because we work with God.

Illustrations may be found in all departments of work. The farmer can work successfully because God works in sun and rain, and the mysterious operations of nature. The engineer works because God's power is in the steam. The sailor works because God is in the wind and the sea.

IV. The motives (vers. 14-16) which impel us to follow Christ's example. (1) That we may be good. (2) That we may do good. We can do neither unless we avoid the things forbidden in ver. 14. We are in an evil world. Why? That we may overcome it and make it better (see John 17:15).

Illustration. We are safe in an evil world so long as the evil is not in us. As a ship is safe in the water so long as the water is not in the ship. And it is safe only there.

Illustration. The Christian is like a light-house, holding forth the word of life. Reflecting it from his daily life and words as the light in a light-house is reflected from a multitude of reflectors, so arranged as to send the rays in one direction over the sea.

THE BIBLE sparkles with beautiful truths. They may be found everywhere over its pages. There are texts adapted to the comprehension of the little child, and there are others adapted to the intelligence of mature years. Let us use judgment and discrimination in making selections to place before our scholars. If text cards are to take the place of the whole chapters which formerly the children were required to commit to memory, let us see to it that the verses are given entire, and that nothing is offered which is so discovered from its connection as to be without meaning, otherwise we give our children only a broken shell from which the very kernel of the nut has dropped out.—*Christian Intelligencer.*

TEMPERANCE PHYSIOLOGY.

FOR USE IN SCHOOLS AND BANDS OF HOPE.

(Published by A. S. Barnes, New York, under the direction of the National W. C. T. U.)

CHAPTER VI.—BONES.

Any part of an animal or vegetable body which has some special work to do, is called an organ. For example, the root takes up food for the plant; the eye is the organ of sight; the nose, of smell.

Plants and animals are called organic bodies, because they have organs. Stone, iron, coal, and other minerals, are called inorganic bodies, because they have no organs.

The solid parts of the body are called tissues; thus we speak of the fatty tissue and the muscular tissue.

THE HUMAN SKELETON.

This is so much like the skeleton of the ox or the cat, that studying their bones will help us to understand about our own.

The human skeleton is composed of about two hundred separate bones. It forms the frame work of the body, and furnishes a hard surface to which to fasten the flesh. It also protects the softer parts within, as the heart and lungs.

SHAPE OF THE BONES.

Some are long, like those of the leg and arm; some are flat, like the bones of the head. In the ankle and wrist, they are short and irregular. All are shaped for their special uses in the body.

COMPOSITION OF THE BONES.

The bones are made of both mineral and animal matter.

To prove this, burn the leg of a chicken in a slow fire; the animal matter will pass away, leaving a white substance the shape of the bone, until it is roughly touched—then it crumbles into dust. This is a kind of lime, and is valuable as a fertilizer.

The mineral matter may be removed by soaking a bone for a few hours in weak muriatic acid; the animal matter, or gristle, which is left, is soft and yielding, so that you may bend the bone, or tie it in a knot if long enough.

Egg-shells also contain lime. You may easily puzzle some of your friends by putting an egg into a very small-necked bottle. All that you need to do is to soak the egg in weak acid, until the shell is so soft that it can be pushed through the neck of the bottle; once in, it will take its natural form again.

In childhood, the bones contain more animal than mineral matter, and so are not easily broken; in old age, there is more mineral than animal matter, and the bones are brittle and break very easily.

GROWTH OF THE BONES.

Like the rest of the body, the bones are fed by the food we eat.

Mix some bright coloring-matter that is not poisonous, as madder, with the food given to the young pigs for a time, and then give the same food without the color. If the animal be killed after a short time, each bone will show the color of the madder. This proves that the bones were made from the food the animal had eaten.

LIFE OF THE BONES.

In infancy, bones begin their life as a sort of jelly, which hardens into gristle, or carti-

lage, as the child grows. This cartilage receives from the blood several kinds of food, the most important of which are certain forms of lime; these, little by little, change the soft gristle to hard bone.

Farmers give their hens oyster-shells, which contain lime, so that they may have material for the shells of the eggs they lay. Human beings get lime from milk and other foods containing it. When the bones have too little lime they are soft and weak.

A fatty matter, called marrow, is in the centre of the long bones, with blood-vessels passing through it and through very small holes in the bone itself, carrying food for its life and growth. Covering each bone is a very thin, tough skin.

BROKEN BONES.

If an iron rod in a steam-engine should break would it be enough to fasten the broken pieces tightly, end to end, and then wait a few weeks for the iron to grow together? You laugh at the idea. But the bones do that—they mend themselves when broken.

All that is needed is to put the ends in place and fasten them tightly with splints and bandages, so that they cannot move. Soon a jelly-like substance, made from the blood in the bone, connects the two ends; then this changes to gristle, and, by-and-by, into solid bone, and the break is mended.

The bones of young people, when broken, unite readily, and, in a few weeks, become as strong as ever. This is due both to the composition of the bones and the abundant supply of repairing substances in the blood. A bone broken late in life is a long time in being united, and is likely to remain weak.

THE SKULL AND FACE BONES.

These protect the organs of sight, hearing, smell, and taste, and the brain, the organ of thought.

THE TRUNK.

The bones of the trunk are the backbone, or spine, the ribs, the breast-bone, and the hip-bones. The spine is composed of a series of twenty-four little bones, called vertebrae.

Cushions of gristle lie between the vertebrae. If it were not for this, walking and running would jar the body greatly.

In sitting or standing, as we do through the day, these cushions are pressed and so flattened. When we lie down at night, they return to their natural shape, much as a rubber eraser would do if you pressed it with your finger and then took the finger away. For this reason, one is really a little taller in the morning than at night.

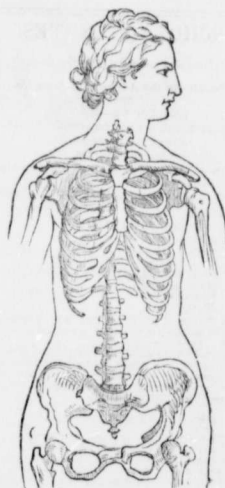
The ribs are slender, curved bones, twenty-four in number, twelve on each side of the body. Behind, they are attached to the backbone; in front, seven pairs are joined to a dagger-shaped bone, called the breast-bone; three are joined by gristle to each other, and then to the breast-bone; two are "floating" ribs. The hip bones are two large, irregular bones which form the side-walls of the lower part of the trunk.

THE UPPER LIMBS.

The collar-bones are in front of the upper part of the body; the shoulder-blade, at the back. Fastened to the latter, on each side, is the large bone of the upper arm; below the elbow, are the two bones of the fore-arm, and those of the wrist, the palm of the hand, and the thumb and fingers.

(To be Continued.)

A GREAT CHEMIST, named Liebig, says there is more nourishment in as much flour as will lie on the end of a table knife, than in nine quarts of the best beer. And more nutriment in a five-pound loaf than in 365 gallons of beer! And another great doctor says there is more food in as much oatmeal as can be bought for seven cents, than in \$2 worth of the best ale!



Natural form of ribs.

ENOUGH WITHOUT YOU.

"There are enough without you." So a woman once said to her husband, and lived to regret it with a bitterness which I trust neither you nor I may ever know. They had been speaking of something which had just cast a gloom over the little town in which they lived. A gentleman, a summer visitor to the place, had gone for a ramble upon the great mountain that overshadowed it, and had not returned; guides were seeking for him, in all directions, and one of the inhabitants, who was familiar with every path and winding of the hills, talked of joining in the search. He believed, he said to his wife, that he knew the route by which the stranger had gone astray, and the spot in which he might even now be found. But she dissuaded him from going. "Why should he put himself out, when so many others, accredited guides, too, were looking? Between them all they must surely come upon the wanderer soon." And he took her advice and stayed by his comfortable fire side, while the guides went to and fro upon the desolate fells to return at last bearing the lifeless form of him whom they had sought so long, found in the very spot to which he might have been traced while living, but for a woman's cruel too readily followed.

Do we shudder as we think how easily this life cut off in its prime might have been saved. Then let this true story bid us beware how we seek to detain any whose hearts are stirred up to lend a hand, even though it may seem to us superfluously, in the rescue of those lost ones who are now wandering on the dark mountains of sin, and who, unless timely sought and found must be outcasts for ever from that Fold to which the Good Shepherd so tenderly longs to welcome them. Can we not hear Him say, "I come, Who would abide My day. In yonder wilds prepare My way. My voice is crying in their cry— Help ye the dying, lest ye die." —*Woman's Union Leaflet.*

TEXAS has now by act of its present legislature, a constitutional amendment submitted to the people, prohibiting the introduction and sale of intoxicating liquors in the state. The popular vote will take place in August next.



The spine: the seven vertebrae of the neck, cervical; the twelve of the back, dorsal; the five of the loins, lumbar.