The YOUTH'S INSTRUCTOR

Vol. LVIII

October 4, 1910

No. 40

What Saith My Heart?

What does my heart say when it is sad,
To the hearts of my fellow men?
When all my thoughts are gloomy and dark,
Making the brightness of life a mere spark —
What does my heart say then?
It says in the language of sadness and gloom:
"I'm far too busy to give you room,
Go otherwhere now and leave me alone,
While I brood awhile o'er things of my own."
The heart is sad because of the thought,
And so it will ever be.
As thinketh a man within his heart,
So is he.

What does my heart say when it is glad,
To the hearts of my fellow men?
When all my thoughts are joyous and bright,
Making my life a pathway of light,
What does my heart say then?
It says in the language of gladness and cheer:
"Come in, dear hearts, I welcome you here.
Come share in my thoughts, my joy shall be thine;
I welcome you in to be guests of mine."
The heart is glad because of the thought,
And so it will ever be.
As thinketh a man within his heart,
So is he.

- Walter S. Whitacre, in Progress Magazine.



"Base and ignoble thoughts, if allowed to linger in the mind, sooner or later darken and stain it."

"At the general primary election in Texas, July 24, a majority of about forty thousand was cast in favor of the proposal to submit a prohibition constitution amendment to the vote of the people. Both branches of the present legislature, by a majority of more than two thirds, are also in favor of submission."

Montenegro is the world's newest kingdom. Prince Nicolas was elevated to the kingship on the day he and his wife were celebrating their golden wedding. The queen of Montenegro is the mother of Queen Helena of Italy. The creation of the kingdom took place in August, on the day Korea was made a Japanese province.

Nothing pays better than intelligent care of the health. The Pennsylvania State department of health, by its expenditure of three million dollars in the last four years, has, according to its own estimates, saved something like twenty-three million dollars for the State. The distribution of diphtheria antitoxin, the establishment of tuberculosis dispensaries and sanatoriums, and the inspection and correction of conditions that breed typhoid fever, are the most important activities of the department.

"It is the thing which we can do better than any one else, however trivial it may be, which commands success."

THE present program of utilizing waste products naturally includes the turning of insect pests into a commodity with a market value. The same newspaper which mentioned the importation by Germany of thirty-eight great bags of dried flies from the West Indies, also told of the capture of 125 bushels of grasshoppers by an enterprising American. Both the flies and the grasshoppers are to be used in fattening poultry.

Principal Contents

CONTRIBUTED ARTICLES	PAGE
Where Are You Investing? Angels in Disguise (poetry) Marriage From the View-Point of Seventh-day Adven ist Young People A Remarkable Clock How to Make Cake A Scrap-Book of Recipes	t- 4 . 6
SELECTED ARTICLES	
Distilled Gold Snake Bites New Paper Money How Stamps Are Gummed Bamboo in Texas A Fountain Pen Manufactory A Recipe for Sanity (poetry) Cradling the "Zhinga-Zhinga" The Folly of "Just This Once" Myalgia The Immorality of Carelessness	. 6 . 7 . 7 . 7 . 8 . 9 . 11



A Story of Vigor, Action, Courage, and Adventure

No modern tale of romance or adventure surpasses in interest this story of the fortunes of Jonathan, son of the king of Israel. The love of this royal youth for the shepherd lad David, and the marvelous happenings that befall the two, form a narrative no less interesting because true.

"A Man of Valor"

By Arthur W. Spaulding

is the true story of a real boy and of his growth into the same vigorous and valorous manhood to which every real boy aspires to-day. It's description of the intrigues of kings, the clash of opposing armies, and the final triumph of right over might, are most inspiring.

final triumph of right over might, are most inspiring.
The "Man of Valor" is a book which, once opened and read, becomes a chosen friend. While specially a book for boys, there are few girls who will not read it with intense interest.

For the lessons of practical value which naturally connect themselves with the narrative, it is well worth while for every parent to place this book in the hands of his children.

In Cloth, Handsomely Illustrated, the price is \$.75

Full Page
Illustration from
4 A Man of Valor"

Order from your Tract Society or from

Review and Herald Publishing Association WASHINGTON, D. C.



The Youth's Instructor

VOL. LVIII

TAKOMA PARK STATION, WASHINGTON, D. C., O OBER 4, 1910

No. 40

Where Are You Investing?

T. E. BOWEN

AY after day the Mission Board grapples with the problem of providing efficient, well-trained men and women for the mission fields. Sometimes the search is for a young man capable of stepping into the place made vacant by the removal of a conference president; sometimes it is for one to act as principal of some school; or a thorough Christian physician of skill is needed to direct a sanitarium; or a good evangelist or book man is called for. Young workers of ability are in constant demand.

Often the mind turns to the graduating classes that have been coming from our colleges and academies for several years past. The question was recently asked by one member of the Board, who had himself been a college president, "Where are the young men and women who have left our schools the past few years?"

We repeat, Where are they? Are they developing into responsible workers in the cause of God? Where are they investing the priceless talents they obtained at such sacrifice of time and means? Are they investing them in some worldly enterprise? If so, for what have they toiled? For what have the parents sacrificed, depriving themselves of the help of sons and daughters, sacrificing in many ways while those sons and daughters were acquiring an education at our institutions of learning? What are these young people doing to-day who were handed their diplomas on commencement day by the principals of our schools. God wants you, young man, young woman. He has work for you to do.

Many are nobly serving in some useful station in the vineyard. These lines are not addressed to such, but to the members of these graduating classes who are not so employed—a large majority.

It may be profitable to catch anew the inspiration of the moment when a large class of students are about to receive their diplomas. Let us listen to the earnest words of one professor as he addresses, in a baccalaureate sermon, the members of his graduating class:—

"My heart is intensely solemn as I face the grave responsibility of this hour—a responsibility I owe to God and to you in giving the proper message for this hour.

"There are two crowns proffered to you to-day at the beginning of your race through life, but you can obtain only one of them at the end of the race. Which shall it be—the corruptible or the incorruptible? There are two paths that lie before you. One leads to present joys and pleasures, but to future disappointment; the other leads to present hardships and anticipation, but to future joys and rewards.

"Mark well! you run this race but once. Wil! you run for the crown that perisheth? or will you set your face like a flint for the sure riches of eternity? If you wish to end well, you must start right, and run well. You must take the right path, and keep your eyes fixed on the right goal.

"A quaint old preacher of olden days used to put life in the form of a story, and liken it unto a man

crossing the ocean. He was leaning over the side of the vessel; it was a bright, sunny day, and not a wave broke the surface of the water; just a little ripple here and there kissed the rays of the sun, and the man, as he leaned over the rail of the vessel, was tossing something in the air, - something which, when it fell through the sunlight, sparkled with singular radiance and glory; and he watched it eagerly as he tossed it up and caught it as it fell. He tossed it up again and again, and it threw out its marvelous light as it fell. At last an onlooker came and said, 'May I ask you what that beautiful thing is that you are tossing up so carelessly?' He replied, 'Certainly; look at it; it is a diamond.' 'Is it of much value?' asked the spectator. 'Yes, indeed! of very great value. See the color of it; see the size of it. In fact, all I have in the world is in that diamond. I am going to a new country to seek my fortune, and I have sold everything I have, and have put it into that diamond, so as to get it into portable shape, that I may carry it with me wherever I go.' 'Then, if it is so valuable, is it not an awful risk you are running in tossing it up so carelessly?' was the next question. 'No risk at all. I have been doing this for the last half-hour,' said the man. 'But there might come a last time,' said the onlooker; but the man laughed and threw it up again, and caught it as it fell, and again, and again, and once more, and it blazed like a brilliant meteor in the sky as it fell the last time. Ah, but this time it is too far out. He reaches as far as he can over the rail of the vessel, but he can not reach far enough. There is a little splash in the ocean. For a moment he stands aghast and looks at the spot, and then he pulls his hair, and cries in despair, 'Lost! lost! Lost! All I have in the world - LOST.

"You say, 'No man would be so great a fool as that; that story is not true.' That story is true, and the young man is here to-day. Over yonder he sits. He has invested all the means he has in the world his time and efforts of years - in securing a priceless education. That ocean he is sailing on is time. That vessel he is on is life. That diamond in his hand is his priceless education - his talents and attainments. He is throwing it to the wind. He is juggling with it under a great risk. That young man has buried his talent in the ocean of time. He has bartered it for a mess of pottage to the flesh, the world, and the devil. That person is he or she who has secured a Christian education, and is prostituting that education to low and selfish purposes instead of high and lofty ideals to the glory of God.

"I fancy you ask me, 'How can I best use my talent to the glory of God and for my own eternal good?' Go with me, and I will show you. Go with me to the snow-capped mountains of the Himalayas, and look with me to the southward, the eastward, the northward, and to the westward, and you can still see every morning at the rising of the sun, the curling smoke of a thousand villages in India, in Burma, in China, in Tibet, and Afghanistan, where the name of Christ has

not yet been mentioned. Go with me to the heart of Africa, and I can still show you Moffat's vision, which led David Livingstone to give his noble heart and life to that needy field. 'Though a thousand die,' was the great missionary's dying appeal, 'let not the millions of Africa be given up to perish.' With millions of unsaved and unwarned souls in these and other benighted lands, do you ask me what you ought to do? Do you ask me what is the most pressing and most important work that ought to be done?

"The greatest question that God ever asked mortal man was, 'Whom shall I send, or who will go for us?' This question comes rolling down twenty-six centuries of time, and it comes rolling and thundering into this church to you to-day, and it should receive a response in your hearts at this time, as it never did in human hearts before, and your hearty answer should be, 'Here am I, Lord; send me.' 'Freely ye have received, freely give.'"

Dear young man in the vigor of life, what response are you making to the heavenly call? Where are you investing your priceless talent of a Christian education? Is it telling for your Master in advancing the life-and-death message of warning and entreaty now going to the world? Are you enlisted as one of his true-hearted soldier messengers? If not, why not? Has no man hired you? The Master says, "Go work to-day in my vineyard." Whatsoever is right that shall ye receive. Why linger? Somebody will surely perish if you go not. Can you afford the loss?

Angels in Disguise

Who is there has not met them here—God's messengers of hope and cheer? Unknown to honor or to fame, They pass by just a humble name; With gentle tread they come, they go, As ministering spirits below. Unheralded by trumpet blast, The world knows not an angel passed; Yet, lo, some soul in deepest night Sees suddenly a gleam of light, And, starting to his feet once more, Makes out the path he'd lost before.

Perchance, when wearied in the strife, We've felt discouraged e'en with life: We toil, it seems to us, in vain, We give our all, yet nothing gain. With sinking heart, and courage gone, We seem to walk the way alone. We long for touch of human hand, For some one who can understand, Yet those we thought the truest friends Are busied with some private ends And fail to see, and do not know That at their side a heart aches so.

But ah, when nearly we despair,
God sees, and sends his angels there.
Although they come in human guise,
We see heaven's light within their eyes
And know from whence they come and whom.
Celestial rays dispel the gloom,
Then close beside us we behold
The ladder Jacob saw of old,
And recognize as holy ground
The place we do life's trivial round,
Since daily toil, we've learned to see,
The gateway e'en to heaven may be.

PEARL WAGGONER.

Marriage From the View-Point of Seventh-day Adventist Young People



ARRIAGE is honorable in all" is an inspired comment upon the subject which we are to consider, and the Creator indicates that marriage is essential when he says,

"It is not good that the man should be alone; I will make him an help meet for him." He commanded later that they found and maintain a home. We are not likely to find anything more authoritative than these statements. No later conception of expediency or duty will successfully change this fundamental feature with normal human beings. We should expect then that a normal person would want to find a life companion adapted to himself or herself.

According to Bible records, the young man has been the aggressor, and the young woman the more passive member, in these transactions.

At what age is this matter to be considered? Physiologists agree that in temperate climates the best results follow unions contracted when the woman is twenty-one years old or past, and the man twenty-four years old or over.

Who shall be considered eligible? The fourteenth verse of the sixth chapter of Second Corinthians says: "Be ye not unequally yoked together with unbelievers." And in Gen. 24:3 we read, "Thou shalt not take a wife unto my son of the daughters of the Canaanites, among whom I dwell." Then read from "Patriarchs and Prophets," page 174, last paragraph, and page 175, paragraphs three and four. Now with this plain instruction before us, what do you think will be the effect upon one's Christian experience if intimate association with an unbeliever is encouraged? One may think it is safe to encourage the attention, and enlist the affection of an unbeliever, intending to

stop short of any binding obligation. Hundreds of well-meaning Christian young people have attempted to do that, but found that their own affections became enlisted. They were then influenced to ignore the warnings of God's Word, and be united to unbelievers. "But," you ask, "is it not proper to be friendly and sociable with the young people of your acquaintance? If not, how can we hope to help them?" Leading young people to the Saviour is often hindered rather than helped by the personal attractions of a young person of the opposite sex, and especially if that consideration prompts the association.

There are two very serious risks to that plan.

First, you can not know to what extent the affections of the other individual are enlisted; neither can you know what discouragement may result, nor what desperate deeds may be resorted to, when you decide to stop relations which you have appeared to encourage.

Second, by encouraging associations which, if carried far, will lead you to violate the instruction of God's Word, you invite Satan to influence your judgment. Persons who in other matters seem to be earnest Christians, very often do the most unexpected and unwise things when they come to decide matters which involve their affections.

When we recognize that it is wrong to marry an unbeliever, and we acknowledge that it is contrary to God's Word, it is a serious matter for one of our young people to voluntarily encourage the special attention of an unbeliever. It invites temptation; just as does the man who quits using tobacco and yet carries with him a plug of it, or an old pipe, taking them out of his pocket often, handling, smelling, and

looking at them. A Seventh-day Adventist school-teacher who was never very happy in the service of Christ, was always talking about how much she had to give up, and how hard it was. Whenever she could talk with a minister, she was asking if he thought it would be wrong to do this, or to go to that entertainment, or to wear a certain article of dress. Instead of inquiring how much she could do for Christ, it was how little she could do; how closely she could cling to the world. The one who is clinging to worldly associations must have the same weak Christian experience.

How May We Know

whether our social plans are safe and likely to glorify God? I will mention a few conditions which would make the matter doubtful. Take, for instance, a great wave of sentiment during the teens. You ask, "Can not a fervent and stable love develop in a youthful person?"- Yes, but experience shows that sentiments manifested toward the opposite sex by persons during adolescence (the period between twelve and eighteen years of age) are apt to be intense and changeable, and to be based on other considerations than those which should influence one who is deliberately seeking for qualities which will help him to glorify God. Instability marks the conduct of many during adolescence. I have known a youth to write to a schoolgirl, declare his great admiration for her, offer his love, and express the belief that his happiness depended on She did not encourage him, and a few days later he addressed another lady student in more ardent terms; but she, too, determined to pursue the purpose for which she came to school, and within thirty days the young man wrote the third lady, offering his affection, and pledging his loyalty. Is it not plain that sentiment rather than calm, prayerful deliberation was influencing the young man who could transfer his interest so readily from one individual to another? Do you think he made a success of studying during that time?

Another unfavorable indication is a great desire to bestow unnecessary attention on a young person of the opposite sex while one is selfishly blinded to the needs and affections of one's own mother. The desire on the part of a young man to carry a parasol for a young lady when his mother's wood-box and waterpail are habitually left for her to fill, or a young lady's desire to learn some sentimental song while her mother toils beyond her strength, and dresses in old and faded garments, are evidences that their love is not of a high order.

If young people find themselves determined to proceed in a hasty manner, independent of the counsel of parents and pastors; or if the developing of their acquaintance lessens their interest in the service of Christ; if it places obstacles between them and the work of God, they may well fear that their social relations are partaking of the spirit which works in the children of disobedience.

If your mutual interests are all submitted to the service of Christ, why should you not receive just as clear evidence of God's approval as was given when a wife was being sought for Isaac. When Abraham's servant made his request to Rebekah's parents, the conditions so clearly bore the stamp of divine approval that the parents replied, "The thing proceedeth from the Lord," and it would be superfluous for us to try either to help or to hinder. They were so fully con-

vinced, that they were willing to submit it to their Christian daughter. See Gen. 24:40, 50, 57, 58.

How Are Seventh-Day Adventist Young People

in small churches to select companions, if it is not to be done at school or at camp-meeting? Some of our most capable young people live where there is not another suitable young person connected with that church, nor located near them. That is just the condition that Abraham's son was in. God and Abraham both had that in mind. The Lord says he will withhold no good thing from us. He knows what sort of companion will help you toward the kingdom, and it makes all the difference in the world whether you want a companion for that purpose. God will not select some unattractive and unresponsive individual, if you are subject to his Spirit. His choice will seem so delightful to you that you will sing for joy, and the best of it will be that your fitness for each other will become more and more evident as you together meet life's joys and perplexities.

But supposing that person is a stranger to you, or you fear she might not be favorable. If you are truly a child of God, and have learned to commune with him, you can fully trust this matter to him. We may yet see some of the good old Bible types of courtship and marriage. God grant that we may see among our youth fewer of the sentimental, cheap romances with which Satan is ensnaring thousands who take their patterns from novels and the stage.

Then why is not the Adventist school or the campground a proper place for finding a companion? Our camp-meetings are very short occasions appointed for communion with God, for learning how to succeed in overcoming sin, and how to work for God in our several communities. Our schools, and especially our intermediate schools, are attended by persons whose education and preparation for God's work ought to receive the preference over everything else. Many who attend them have had but short experience in Christian service, and after longer experience in the way of God, they would be much more apt to know what kind of person would really be a helper in the great work of life. Those conducting our schools find that match-making seriously discounts the grade of class work done by students, and our pastors find that such things, if much engaged in at our annual convocations, greatly limit our spiritual victories.

It seems to me that any place where we see Christian young people is a proper place for persons so inclined to get acquainted, and particularly to observe the interest and success of each other in the work of God. Then if you later wish to cultivate the acquaintance of a person, it can be undertaken in a manner and place which will cause you no regrets, and in such a way that your influence shall not divert any one's mind from the great truths we profess. I have known unbelievers to come on to our camp-grounds, and be so impressed by the quiet earnestness of the many young people present, that they would inquire what we have that so takes hold of young people. They were impressed that we had a vital religion before hearing a word from the desk.

J. E. FROOM, M. D.

WE often fancy that we are occupying a large place in the attention of the world, when really we do not even fill a pinhole.— Henry van Dyke.



Distilled Gold

HE investigations of a French chemist show that gold in the electric furnace boils freely at a temperature of two thousand four hundred degrees centigrade. In two or three minutes, it is said, from one brindred to

one hundred fifty grams of gold pass into the state of vapor. In condensing upon a cold body, this golden vapor forms filiform masses and cubic crystals. At its temperature of ebullition, gold dissolves a little carbon, which, at the time of resolidification, is deposited in the form of graphite.

In an alloy of gold and copper, copper distils first.

In an alloy of gold and tin, the tin distils more abundantly than the gold, and, when a large quantity of these mixed vapors is taken, the tin burns on contact with the oxygen of air, forming oxide of tin, colored purple by a fine dust of condensed gold. This is one method of preparing the color known as "purple of Cassius."—Selected.

Snake Bites

THE most common of the poisonous snakes in this country are the coral-snakes, the copperheads, the water-moccasins, and many varieties of the rattle-snake. The symptoms of poisoning vary somewhat according to the variety of snake, and also to the state of the weather, and the condition which the snake is in at the time. The poisonous effects are more marked the hotter the weather is at the time; and the bite of a well-fed snake is more harmful than that of a snake which is fasting.

The symptoms of snake bite are both local and general. In the case of rattle-snake bite, the local symptoms consist in severe pain, and high discoloration about the wound, due to the suffusion of blood under the skin. The part becomes greatly swollen, and may even mortify.

The general symptoms come on quite rapidly. Sometimes within ten or twenty minutes after the bite there is a rapid and weak pulse, the victim is nauseated, often vomits, staggers as he walks, and suffers from marked and increasing prostration. Death may occur directly from the action of the venom, or it may follow later, and be due to prostration resulting from the gangrene occurring at the site of the bite.

Recovery, which occurs in about three fourths of the cases of rattlesnake poisoning, even when untreated, is very prompt, the symptoms of depression disappearing as rapidly as they came on.

When one has been bitten by a poisonous snake, the first thing to do is to prevent the entrance of the poison into the general circulation, which may be done by tying a cord or a strip of cloth as tightly as possible about the limb above the bite; then the part bitten should be cut freely with a sharp knife, with two or three crosscuts, so that it will bleed freely.

Sucking the wound is good for the victim, but dangerous for the person who does it, for the poison may be absorbed through any small abrasion near the mouth.

The elimination of the poison that may have been absorbed should be promoted by the use of purgatives, and by wrapping the victim in blankets with hot bottles to promote perspiration.— Youth's Companion.

A Remarkable Clock

Walking down the principal street of San Diego recently, I saw a clock that I thought would interest the readers of the Instructor. It has twenty dials, and stands on the sidewalk in front of the jewelry store of J. Jessop and Sons, its makers. It is twenty-one feet high, and tells simultaneously the time of all nations, also the day of the week, the date, and marks the sec-

onds. Four of the dials are each four feet in diameter. The master-clock is enclosed in plate glass, so that its every action can be seen, and the whole is illuminated each night. The clock is jeweled with tourmaline, topaz, agate, and jade. It is the only clock of its kind in the world that was made in a retail jewelry store. It was fifteen months in building, and cost three thousand dollars.

It is interesting to stand before this clock at perhaps ten o'clock in the morning, and think of our New York young people as having finished their dinner, and our Liverpool friends as almost ready for supper, while our missionaries in India are surrounded by the darkness of midnight. Below we give the readings of thirteen of the faces of this clock:—

New Paper Money

Instead of being crisp, the new money to be produced by the government Bureau of Engraving and Printing will be soft and velvety. Experiments are being made for the purpose of demonstrating the advantages of such paper. By the new process it will take sixty days less to manufacture a bank-note than by the present method. The chemical solution employed not only renders the money soft and pliable, but also makes it non-shrinkable. The solution acts as an antiseptic and conservative. When applied to old documents, it seems to knit the fiber together, and prevent further decay. By the process of printing the paper money now in use, the paper has to be thoroughly soaked in water. While it is in this soaked condition, one side of the paper is printed. The sheet



is then placed in a steam-room, and kept under high temperature for thirty days, the time necessary for the ink to dry. The sheet is again soaked, as in the first instance, and the reverse side of the bill printed. The thirty days' drying process then has to be repeated. In cases where a third impression on a bill is necessary, when the printing is done in two colors, the wetting is again repeated, and another month must be consumed. In printing bills on paper treated by the new process, wetting is unnecessary, the ink being dry within forty-eight hours.— Technical World.

How Stamps Are Gummed

OFFICIALS of the Bureau of Engraving and Printing at Washington aver that one of the most delicate operations connected with the manufacture of our postage-stamps is the gumming thereof.

When the sheets have been printed, they are passed under a roller, from which they receive a thin coating of gum, and then gradually over coils of steam pipes until they are dried. Much care is exercised to get the layer uniform on every part of the surface.

The gum in the little vats, from which it drops to the roller, is maintained at an even temperature and thickness. Tests are frequently made of the warmth and humidity of the work-room.

But even with the perfection of mechanical exactness, some allowance must always be made for the season of the year. For summer sale a slightly harder gum is used, because of the trouble occasioned by the sticking together of stamps. In winter precaution against the cracking of the gummed surface through contraction is necessary. A third grade of the material for other seasons is known as "intermediate." — Harper's Weekly.

Bamboo in Texas

THE experiment of growing bamboo is meeting with remarkable success in south Texas. The plants seem to be as well adapted to the soil and climate of that region as to their native land. Some of these plants are now more than three years old, and have attained a height of more than sixty feet. While no attempt as yet has been made to convert the jointed stalks to commercial uses, it is said that the matter of making furniture, and utilizing the material for a variety of other purposes, is in contemplation by the growers in Texas. It is known that bamboo is specially serviceable for windbreaks, and it will probably be extensively used for this purpose in the lower Gulf coast region of that State. One of the serious problems of the farmers and gardeners of that section is to provide some cheap and effective method of protecting growing crops from the terrific wind that sweeps inland from the ocean during nearly the whole of the year. It has been demonstrated that bamboo is ideally fitted for barriers against the wind, and that a hedge of it planted on the windward side of a field insures protection to growing crops for many years. The plants require no attention, and often attain a height of twenty to thirty feet the first year. They lend a picturesque, tropical beauty to the farms and gardens, - Popular Science.

The Summer Sun

To please the child, to paint the rose,
The gardener of the world, he goes.

- Robert L. Stevenson.

The Ancient Incubator

Few of those who wrestle with the chicken-incubator problem, and often fail to solve it, realize how old an art they are struggling to master. Thousands of years ago Egyptians in one part of the world and the Chinese in another had the art of incubating eggs so highly developed that it was a hereditary profession, the secret of the successful processes being guarded with religious acredness and handed down from father to son. The odd stoves called "mammals" that the Egyptians used as incubators, date back to remote antiquity. Even before the French Revolution the Paris markets had incubator chickens, thanks to the Bonnemain apparatus, which was invented in 1777.—Selected.

A Fountain Pen Manufactory

THE operators sat in front of long benches, almost shoulder to shoulder, in front of each a tiny copper wheel that revolved with such speed that it seemed it was standing still.

In the rear of this grinding-floor stood a metal trough, twenty feet long, three feet wide, and twelve or fourteen inches deep, and this was half filled with water.

As the five-o'clock whistle blew, the note of the humming wheels fell, and the men hastened toward the trough to wash their hands. When hands were clean, each operator washed face and hair in an enamel wash-basin, and carefully added this water to that in the trough.

"What's the matter? Have you no running water in this building?" a visitor asked of the foreman.

"That's not the point," the foreman exclaimed.

"The water in that trough is probably the most valuable waste water under sunshine. From morning to night these men sit grinding gold pens until the very air they breathe is filled with invisible gold-dust that settles on face, hands, and hair of the operator. Out of that wash-trough we take from four hundred to five hundred dollars' worth of gold-dust every month.

"Interesting? Here's another interesting fact: we buy overalls and jumpers for our men every month; when these suits are old and worn out, we reclaim from them about five dollars each, for they're literally saturated with fine gold-dust.

"The ordinary sweepings from the floor of our grinding-room we sell for fifteen hundred dollars a month."

It would be difficult to find an incident which would illustrate better than this one to what an enormous industry the manufacture of the highest grade of fountain pens has grown.

Imagine thirty tons of rubber turned annually into so many "barrels" for fountain pens. Imagine the block of gold it would take to balance five full-grown men weighing one hundred seventy pounds each, and imagine this chunk — worth more than \$200,000 — turned into gold pens. And imagine what it means when a company makes and sells one million fountain pens a year, and when it can boast that twenty million of its pens are in use throughout the world. This is the record of the company that manufactures Waterman's Ideal Fountain Pen.

Few industrial stories are more interesting than that of the manufacture of this high-grade pen, for to make a perfect fountain pen is like making a highgrade watch.

The place where Waterman's Ideal Fountain Pens

are made is an enormous ten-story, all concrete, fireproof factory that stands on the East River front in the shadow of Brooklyn Bridge in New York City. In architecture there is probably not another building like it in the United States, for three quarters of the wall space of the structure consists of windows. No buildings save those where our high-grade American watches are built can begin to equal this one for air, sunshine, and light. It is the latest design in modern factory architecture, up to date, not only so far as its own requirements are concerned, but providing as well for the health and comfort of its workmen.

But it is in the work that goes on in this great building that the chief interest lies; for to build a Waterman's Ideal Fountain Pen requires two hundred ten distinct operations, or at least fifty more than are necessary to build an automobile.

The first step in the making of the pen takes place on the floor where are gas furnaces wherein it is possible to obtain the fabulous temperature of 1900° F., which is necessary to melt the gold. To this floor comes the gold just as it is procured from the United States assay office, in little bricks twenty-four karats fine, measuring about $2\frac{1}{2} \times 1\frac{1}{2} \times 3\frac{3}{4}$ inches each, worth from five hundred to one thousand dollars a brick, according to size. The first step is to bring this gold from twenty-four karats down to fourteen karats fineness; for twenty-four-karat-fine gold is soft, and lacks resistance and the resilience necessary to make good pens.

Inside the furnaces are crucibles resembling tall four-inch flower-pots. Into these earthen vessels the gold bricks and the metals with which the gold is to be alloyed are placed. Then the blasts are set to roaring until the metals have melted to a liquid at a dazzling white heat, after which it is poured into molds, ten inches long, an inch wide, and a quarter-inch in thickness.

From the furnaces the gold bars are sent to the rolling department, where they are passed from fifteen to twenty times through steel rolls, until the bars become flattened into ribbons the thickness required for gold pens.

The floor where the pen really begins to take shape is studded with presses arranged along the walls adjoining the expansive windows. At one of these presses a man stamps the blanks out of which the pen points are eventually made, after which they are notched, and then they are ready for as delicate an operation as is performed during the making of a chronometer.

Even the pen point of as hard metal as fourteenkarat gold could not begin to withstand the wear and tear of the constant friction in writing. Nothing but iridium, the hardest of all our metals, can begin to stand the wear. Iridium costs fifteen hundred dollars a pound, wherefore, in order to keep the price of pens within the limit of reason, it is necessary to apply a mere grain of this metal to the extreme point of contact.

To accomplish this by means of a damp camel's-hair brush, the operator, who uses a magnifying-glass, selects an infinitesimally small particle of the metal, applies this to the tip of the pen, and fuses it to the gold point. After this the pen point is slit, and then passed through a half-dozen foot-power stamps. One of these stamps the name of the company on the pens; another turns in the corners; still another bends the pen into round shape; and so on.

Then comes the most delicate operation of all, the

grinding and setting of the pens. Three floors are necessary to accommodate the grinders that make the points for the Waterman's Ideal Fountain Pen. Side by side the operators sit in front of their wheels fastened to benches ranged about the windows. Along-side each man is a powerful incandescent light arranged on a patented swivel that permits swinging in every conceivable direction, for use on dark days, as the grinding operation is one that must be performed under the microscope, and requires as much light on dark days as during sunshine.

What the grinder really does, no layman can see. The operator merely applies the pen to the wheel, now at one and now at another angle. Only when finished you see the evenness of the work and the tiny tip of iridium that is fused to the under side of every Waterman's Ideal Fountain Pen point, if you look sharp

enough.

At this stage in the grinding lies the secret why, no matter what your idiosyncracies of wrist or finger, there is always among Waterman's fountain pens a pen that fits your hand even as glasses prescribed by an oculist fit your eye. From double hard to extra soft the pens range, from the larger sizes made for men to the smaller and dainty sizes made for women's hands.

Once the pens are ground, it remains only to polish them and to send them to the assembling floor, where the gold points are put into the "reservoir" with the patent "spoon feed" which is the invention that has made Waterman's Ideal the world's highest-grade fountain pen. In fact, it was this spoon feed that turned the fountain pens of former days into the perfect-working, ever-ready pen of to-day.

The seventh floor is devoted entirely to this final combining of gold points and the rubber holders. The latter consist of just four parts, each of which receives the same care in manufacture at their Seymour, Connecticut, rubber plant as do the gold points in New York; each part to fit to the infinitesimal test of the microscope and the proving of the assembling department. Only the highest grade of carefully selected Para rubber is used.

On the various floors of the new Waterman's Ideal factory are the great vaults wherein are stored from two hundred thousand to three hundred thousand dollars' worth of fountain pens. On one entire floor the gold-workers fashion the gold and silver mountings for costly presentation fountain pens.

A volume might be written about this new home of the world's greatest fountain pen, Waterman's Ideal. A chapter alone might be written about the third floor, where annually enough fountain-pen ink is made to float a "Mauretania;" but the foregoing must suffice.— The Washington Post Monthly Magazine.

A Recipe for Sanity

Are you worsted in a fight?
Laugh it off.
Are you cheated of your right?
Laugh it off.
Don't make tragedy of trifles,
Don't shoot butterflies with rifles—
Laugh it off.

Does your work get into kinks?

Laugh it off.
Are you near all sorts of brinks?

Laugh it off.

If it's sanity you're after,
There's no recipe like laughter—

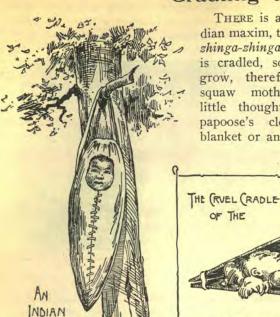
Laugh it off.

— Henry R. Elliot, in the Century.

(OCOON

(RADLE

Cradling the "Zhinga-Zhinga"



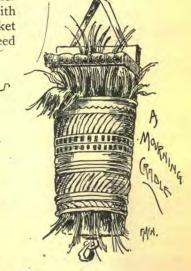
THERE is an old Indian maxim, that as the zhinga-zhinga (baby) is cradled, so will he grow, therefore the squaw mother gives little thought to her papoose's clothes,— a blanket or an old shirt

FLATHEAD INDIAN PAPPOOSE

there not something infinitely touching and pathetic in this evidence of aboriginal motherhood?

The Taos mother makes a cradle similar to the one made by the Navajo - both using the backboard and pocket pouch, while the Apache mother

makes hers with a wicker trellis frame covered with a braided bark blanket or a canopy of reed



From Junior Herald

FM: M

is sufficient,—but to the cradle she turns her utmost

By this crude craft the primitive maternal expresses the holy symbol of motherhood. And her love is made plain to us by the time and labor spent in its construction and the thought exercised in weaving the tender messages that adorn the exterior.

These beds vary in minor detail with each tribe, but they are essentially the same wherever you see them. A flat board about three feet long by two feet wide, ovoid in shape, forms the back. If the father of the zhinga-zhinga is a chief, the cradle-board is covered with finely woven blankets, and the pouch, fastened at the bottom and sides, pocket fashion, is made of the softest buckskin. Choice sweet-grass and moss are used for the lining, and the gayest of beads and shells are gathered for the trimmings.

When buckskins can not be procured, a combination of shrubwood and reed splints is used for the covering, grass matting for the lining, and soft, fragrant ribbons made from the bass or linden-tree bark for thongs.

The mourning cradle reveals one of the most curious and likewise interesting customs of these savage people. Every Indian family of any standing keeps one of these mourning cradles in reserve, so if the zhinga-zhinga dies during the cradle period, it can be mourned as a child of the Great Father should be mourned.

After the burial, according to tribal rule, with the choicest of his toys beside him (usually a weed ball and a bone rattle), the sorrowing mother gets down the mourning cradle from its keeping-place on the house tree, decks it with crow feathers and quills, hangs the remaining playthings at its side, and, for a year or more, carries it wherever she goes.

No matter how burdened the bereaved mother is, or how rough the road she must travel, the empty cradle is tenderly borne. She will talk and croon to this monument of her little one when busy in her wigwam or plodding the forest path, just as if the child she loved were still occupying the little bed. Is

splints. In this the zhinga-zhinga is placed as soon as it is named. If a nu-shinga (boy baby), the name is always in keeping with some event that occurred at the exact moment of his birth. Part of this name known only to his parents - is kept a secret until his marriage, when it is whispered to the bride as a part of the wedding ceremony.

The Apache mother is very superstitious, believing that some great evil will befall her zhinga-zhinga if it sleeps in any cradle but the one in which it was first

The cocoon cradle of the Comanche is another interesting type. This cradle is one of the most primitive in existence, being made from tough, watertight bearskin, doubled and laced with leather thongs in such a way that only the head of the infant is seen.

The inside is soft and comfortable, and when the baby wishes to sleep, he draws in his head, turtle fashion, and snuggles down in the depths of his cozy crib.

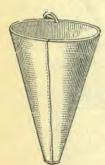
The V-shaped cradle of the Flathead Indian is indeed an instrument of torture, rather than a bed.

In this tribe, a flat head is considered a mark of beauty, and the zhinga-zhinga is placed on the backboard at the head of which is fastened a shorter slab to be pressed down upon the forehead. This head slab is fastened to the backboard with leather straps, and as the forehead recedes, or yields to the pressure, the straps are tightened until the little head is the desired shape. Three or four months are required to shape the zhinga-zhinga's head, and after that time he plays and enjoys life as do his little cousins.

So, according to Indian belief, as the zhinga-zhinga is cradled, so will he grow, and every squaw mother, whether Taos, Navajo, Apache, Comanche, or Flathead, considers her baby's bed of the greatest importance, as well as a manifestation of her highest art. And if you ever wish to get upon the heart side of one of these aboriginal mothers, ask her about her zhinga-zhinga's cradle, and she will respond with much the same enthusiasm as does the New England housewife when you mention preserves, pickles, or pie crust. - Blanche Young McNeal, in the Junior Herald.

THE TIDREN'S COKING CASS CONDUCTED BY D. D. FITCH

How to Make Cake Layer Cake, Lady-Fingers, and Kisses



Our lessons would hardly seem complete without some instruction in cake making, but I hope our INSTRUCTOR boys and girls will take more interest in making good bread than they do in cake. Read what "Ministry of Healing," page 302, says about cake. If we eat any, let us refuse that which contains baking-powder or soda.

We need few ingredients for our cake,—six fresh eggs; one-

half pound of pastry flour; one-half pound of sugar; and a little flavoring. You will be more likely to be successful if you make a layer cake; so have ready three shallow oiled tins, which have been dredged with flour by throwing a liberal supply in, and then emptying out all that does not adhere to the tin. You

should have a slow, even fire, so that the cake will not set before it has had time to rise. Separate the eggs, placing the whites in a large cake bowl, and the yolks on a saucer. Beat the whites as stiff as possible with a wire whip, then add half of the required amount of sugar, and beat again; add the other half, and continue beating. Next add three of the yolks, and beat them in well; now the other three, and after all are thoroughly beaten, carefully sift in the flour. Do not beat it in, but fold it in as carefully as possible.

Now add the flavoring. Ground nut meats, chopped raisins, or citron may also be added if desired. Place a third of the batter in each tin, and bake at once. The cake is ready to be removed from the oven when no batter adheres to a broom straw or toothpick which you insert.

Delicate preparations called lady-fingers and kisses

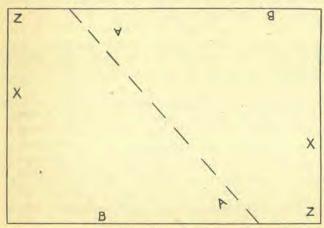


DIAGRAM FOR THE CONE

can be made from this same batter by forcing it through a pastry tube, made of cloth or paper. To make it of the latter material, select a piece of soft, tough Manila paper fourteen by twenty inches, and



MAKING KISSES

cut into two pieces, as is shown by the dashes in the diagram. Lay one piece of the paper on the table before you with edge marked B toward you, and the sharp end marked A pointing to the right; lay the back of the left hand over the portion marked X, and grasp cor-

ner marked Z between the thumb and finger of that hand. Now grasp point A between the thumb and finger of the right hand, and bring it entirely around the portion in the left hand, folding point A into the cone, over the portion marked B.

Now pour the cake batter into this tube. Tightly squeeze together the large end of the bag, holding it in your right hand, and the point in the left. A piece of Manila paper fitting your largest shallow baking-pan or roll baker, should be at hand. Beginning at one





MAKING PAPER CONES



BEATING THE CAKE INGREDIENTS

sheet has been filled, sprinkle the whole with powdered sugar or shredded coconut. It does not matter how much you get on the paper, as you can get off all that does not stick to the batter by grasping between the thumbs and fingers the two corners nearest you, and quickly lifting the paper up and letting it down again.

By so doing all the sugar or coconut that does not stick to the batter, falls onto a paper which should be under the Manila paper.

If you now have a shallow pan, it will not be difficult to slide this paper, with batter on it, onto the pan. If the pan is too deep, it may be possible to use it wrong side up. The batter, being thin, will bake very quickly, so needs careful watching.

To remove the kisses and fingers from the paper, invert them on the table, and brush the paper with



LADY-FINGERS AND KISSES

water. Allow them to remain damp for about five minutes, then as you pick up the paper, they should peel off easily. Place the damp side of two of these together, and pack them away in such form. A seeded raisin may be pressed into the top of each one before baking if desired.

Do not become discouraged if at first you do not succeed. We have given you an approved and tried recipe, and as best we can, have told you how to proceed; so you can not fail in time to get good results if you exercise care in following directions.

A Scrap-Book of Recipes

BEGIN a scrap-book of choice recipes, adding to it from time to time as you see or hear of good things to eat. Do not trust to your memory, thinking, "O, I surely can remember that!" for just when you wish to make use of a certain bit of information, you will find it has slipped from you. The very fact that you have taken the pains to write it will aid in remembering it.

A good plan to follow in preparing such a scrapbook is to purchase five or ten cents' worth of plain, strong paper, eight and one-half inches by twelve inches, from the printer, and with such a punch as harness-makers use, punch four holes three inches apart, and one quarter of an inch from the edge. On these sheets you can write such recipes as mother or friends may give you. Bind all together with shoestrings or fancy cord.

In preparing a scrap-book after this method, you can have your book just as large or as small as you wish, and can reclassify the contents at any time.

In making clippings, remember to choose only those that are worth while. Keep in mind the following rules:—

The recipe should present a simple, healthful, and palatable food.

If the recipe calls for a large number of ingredients, it is not worth while to preserve it.

If it calls for vinegar, you can substitute lemon juice. If it calls for flesh, some nut preparation might be used as a substitute. If it calls for mustard and such condiments, you can leave out the harmful ingredient; but if it calls for baking-powder, soda, or saleratus, it is to be discarded, because the mixture would not be wholesome.

If the article can not be successfully prepared without being fried, it is not worth while to give the recipe a place in your scrap-book. D. D. Fitch.

The Folly of "Just This Once"

One of the chief dangers in any one's life course is the inclination to experiment in sin. In that direction is unexplored territory, with a touch of excitement in the excursion. Sin invites a trial, promises quick returns in self-gratification, and keeps any thought of the after-cost as far out of sight as possible.

One of sin's most alluring forms of invitation is the call to an alleged harmless experiment in real life, a single excursion into that beckoning land. And devilish skill has invented no more plausible, and no more destructive, plea than the frank, open-faced, cheery call to "try it just once."

Some of us like to think that we are no longer affected by such a call as that. There was a time when the keen curiosity of youth, the passion for experiment, the longing for anything forbidden, might have caused a great commotion of spirit within us. But all that is a thing of the past. We are buried now in a press of work. Life lacks the glamour it once had. The blood flows slowly where once upon a time it leaped. And we flatter ourselves that Satan's schemes for our downfall have seen their best days, and a lull has come in the warfare of good and evil in us, especially in the tug of that old desire to experiment in forbidden things.

But the fight is not over. The form of the testing may be changed; the varieties of sin that once charmed us may have become detestable and loath-some; yet ears that are deaf to the call of these remote and hated sins, are still capable of listening to the call of other sins, in the old and strangely plausible approach with their plea of "just this once."

It is a curiously effective plea. After all we have learned about our proneness to become creatures of habit, after all we have observed in the failing lives of others, after all the agony we have suffered in the struggle to recover ground lost through experiments in evil, it would seem that sane men and women, young and old, would be as cautious against the approach of the old "just this once" plea as against the approach of a pleasant-faced thug and cutthroat well known to his intended victim. We know what he is after. But we let him come on to close quarters—well, just this once. And what more could he want?

The persistence of temptation is such that no man can comfortably assure himself that this method of testing has ceased in his case. A man of established principle, of upright life, will by no means escape the testings of "just this once." Every strong principle he has will be attacked again and again, and many an argument will be pressed upon him to prove that while his principle is right enough in its way, he ought not to be so hidebound, so strait-laced, as to stick to that principle in this case, when his own interests and the interests of others will suffer by his peculiar notions.

The man who assents to the rightness of certain principles, and practises them nearly always, almost without a break, hardly ever turning aside from them, can not fairly be called a man of principle, because you can not be quite sure that he will think it desirable to stand by those principles under all circumstances. Once in a great while he has chosen to ignore in an open-eyed, perfectly frank way what he has been known in general to hold. To do what he did "just once" seemed to count for so little with him

that you wondered how often the "just once" might be repeated if the desire were strong enough.

The American total abstainer who takes wine in Europe need not wonder at the lifting eyebrows and incredulous smile of some of the home folks who saw him dining over there, and who listen to his total abstinence pronouncements at home. . . . The teacher who on principle never goes to the theater at home, but who decides to go when on a visit to the metropolis, just to see what it is like, understands only too thoroughly the folly of "just this once" when she is greeted from the next row by one of her scholars whom she has been trying to help in the overcoming of the theatergoing habit.

And even though no one in our acquaintance ever knows of these deliberate departures from our principles, what a fearful loss there is in our inability henceforth to say squarely that these things we have wholly let alone! A reformed man was once telling at Northfield some of his terrible experiences of sin, and pressing home upon the spellbound audience the reclaiming power of Christ, when a minister on the platform leaned over to Mr. Moody and whispered, "I wish I had such a story as that to tell."

"I wish I had such a story as that to tell."

"O," exclaimed Moody, "don't say that! Thank
God you haven't! Thank God you haven't!"

No single experiment in sin can possibly be made without bitter results. We must not, as we value our allegiance to Christ, even begin to get used to the notion that the curse of sin is in its continuance. The true testing-quality of "just this once" lies in its appeal to us to consider a single wrong act as morally unimportant, easily put into the background of life, and well worth experiencing while it lasts. We can assent to this, and set in motion a long procession of regrets, and wrestlings, and ugly personal problems; or we can meet the sinister sophistry with a rockribbed, "No." Who of us in his right mind would not choose the clear, high levels of the land entered by that stout refusal, in preference to the tangled swamps of an experiment in sin? - Editor of Sunday School Times.

Myalgia

Ir you have suffered from an attack of severe muscular pain in the small of the back which your physician has treated under the name of myalgia, and some friend speaks of your illness as lumbago, you need not feel insulted, as the two words apply to the same affliction. Myalgia simply means pain in the voluntary muscles. If it occurs in the back, it is known as lumbago; if it affects the muscles of the neck, it is called torticollis; and if the chest muscles are the sufferers, the affection is known as pleurodynia.

Myalgia, although extremely uncomfortable while it lasts, is a temporary disorder, generally brought about by a slight strain or wrenching of the muscles, or by a local "catching cold," and in many cases by a combination of these two causes.

In persons of a rheumatic constitution, or in those suffering from malaria, it is easy to localize muscular rheumatic pains, and thus set up an attack of myalgia. Intestinal autointoxication, or a condition of self-poisoning, may also be an underlying cause.

For the reason that an attack of myalgia can not always be readily traced to its cause, it is not always easy to find the right method of treating it. Naturally, in the gouty subject, treatment of the gout is called for; while in malaria, remedies for malaria will help the lumbago, although they will be of no service at all to

one suffering from intestinal indigestion. At the same time, whatever the cause, the local treatment will be about the same in all cases, because it is directed especially to the relief of the pain.

This local treatment may be summed up in two words—rest and warmth in the first place until the worst of the pain has been relieved.

In some cases the pain of lumbago is so severe that it calls for more radical measures, but pain-stilling or narcotic drugs should never be given except under the direction of a physician. Heat may be applied either in the dry or the moist form. Sometimes a hot flax-seed poultice, with a little mustard added, and a day's rest in bed will suffice for a cure. The old-fashioned practise of wrapping a hot flat-iron in flannel, and applying it to the painful spot, is a good way of getting dry heat.

After the acute pain has subsided, there is nothing better than massage to persuade the muscles back to their normal work again. A liniment may be rubbed in at the same time, and sufficient friction used to redden the surface of the skin. The affected muscle will recover much more rapidly if exercised, and when the acute pain has lessened, the patient should be encouraged to practise gentle movements of the parts.—

Youth's Companion.

The Better Rule

THE rule to find out what a boy likes to do and let him do that, is good, provided, in addition, you find out what he does not like to do, and make him do that also. The mind and the will need discipline as well as the body. A boy gets strong through using his muscles until they ache, and then through keeping on using them until the ache wears off, and flabbiness becomes firmness. Then he can endure.— Selected.

The Old Thrill of Feeling

MAY I never face a dawn
With all the awe and wonder gone.

— Meredith Nicholson.

A Merciful Hat

A DUTCH sculptor, living in Rome some time ago, received a commission to make a statue of President Kruger. It is now nearly finished, and is unique in its way. Mr. Kruger is represented as wearing a tall hat in bronze, and according to the wish of Madame



The Delineator

UNDER THE GUIDANCE OF THEIR DIRECTRESS, THESE
GIRLS CUT AND MADE THE DRESSES THEY
ARE WEARING

Kruger, the top of the hat is said to have been made concave, so that it may catch and hold rain-water, in which little birds may bathe and quench their thirst.— Selected.



 Secretary Corresponding Secretary

Study for Missionary Volunteer Societies

As the society study is omitted this week, we suggest that the meeting be devoted chiefly to the consideration of home missionary work — what your society is doing, and how it can do more. If possible, it would be well to give some time to the Reading Courses which are making their first appearance in this issue of the Instructor.

Further, we suggest that you speak briefly of the Standard of Attainment plan. Some conferences have passed resolutions urging their young laborers to take the Standard of Attainment examination both in Bible doctrines and denominational history.

Since the society studies on Bible doctrines are not yet completed, it has been thought best to postpone the regular semiannual Standard of Attainment examination until November. We hope this will enable more in your society to take it. The Standard of Attainment membership is growing constantly; the door is kept ajar, and surely every young person who desires to obey the command to "study to show thyself approved," will do well to strive to enter.

Missionary Volunteer Reading Courses

Senior No. 4 — Lesson 1: "Successful Careers," Chapters 1-5

Note.—The "test questions" are put in to help you in your personal study. Glance over them before reading the assignment; then after reading, answer them carefully. As you read the book, it will be interesting to notice how fully the author develops his plan of bringing out in the biographies the seven points mentioned in the preface.

Test Questions

- Relate the incident which changed the life course of Admiral Farragut.
- 2. What part did Farragut act in the Civil War? What tribute paid him shows his earnestness?
- 3. Show that Salmon Chase was truthful and persevering.
- 4. Tell what you consider the turning-point in his life. Why? What important positions did he hold in the nation?
- 5. Why did Daniel Webster's decision, "I can, and I will," enable him to become an orator? How did he and his brother Ezekiel secure an education?
- 6. What kept Lord Shaftesbury amid the temptations of school life? Explain how Mary Millis evidently led him to a noble life.
- 7. Quote the motto which ruled his life. Give his definition of religion.
- 8. Why did Mr. Seward oppose slavery so strongly? Do you think there was any providence in his being Secretary of State during the Civil War?
- 9. What per cent of these men obtained a college education?
- ro. How is Mr. Farragut's life a warning? How are Mr. Chase's and Mr. Seward's an inspiration to stand for the right? How is Mr. Webster's a reminder of our own indebtedness to others? How is Lord Shaftesbury's an emphasis of the importance of daily Bible study?

Notes

Perseverance.— Demosthenes, Curran, and Disraeli are mentioned in Webster's biography. Demosthenes had an impediment in his speech, but he determined to become an orator. He went to the seaside and declaimed with pebbles in his mouth, trying his lungs against the waves. Perseverance made him the foremost orator of ancient Greece. Curran, when making his appearance in court, became so confused that he could hardly speak. Stammering on for a few moments, his nervousness disappeared, and from that day he was regarded as one of Ireland's most successful lawyers. Disraeli failed utterly in his first attempt at public speaking; but he declared, "They shall hear me again;" and they did, for he became a prominent speaker in the English Parliament.

Lord Shaftesbury carried on his investigations in person, not through agents. He went into the worst quarters of London at midnight to speak words of hope and love to the wretches there, and awake longings for a better life. He often talked with the homeless boys, questioning them as to their habits, an encouraging industry, honesty, and virtue. "Once he confronted an assembly from which all but professed criminals were rigidly excluded. And there, after opening devotional exercises, he frankly asked them of their manner of life, and as frankly they confessed the crimes by which they lived. He besought them to forsake the old life for a new career; and when they told him that they 'must either steal or die,' and that 'prayer, however good, was not food for an empty stomach,' he planned in their behalf the emigration scheme that paved the way for hundreds to begin life anew, under more hopeful surroundings." It is said he was never known to make even the most trifling promise which he left unfulfilled. One motto of his life was, "Love—Serve."

Junior No. 3 — Lesson 1: "How the World Is Clothed," pages 7-34

Note.— We hope that every member of the junior reading circle will keep a geography and a dictionary with the Reading Course book. You are now starting on your trip round the world with Mr. Carpenter. This week you visit the cotton fields. Trace your journey on the map, locating every place Mr. Carpenter speaks of. If you have a good dictionary, you can probably find pictures of the animals and plants mentioned.

Test Questions

- I. If trade with all foreign countries should suddenly cease, how would manufacturers of clothing doubtless feel? Why?
- 2. From what part of the world do you imagine the different articles of clothing that you are wearing,
- 3. Why do you think people dress so differently in different parts of the world?
- 4. Name nine animals from whose wool or hide clothing can be made, also six plants which are used for making clothes.
- 5. What country claims to have first made silk? What did people once use for needles and pins?
- 6. Name seven States in which cotton is grown. What foreign countries produce cotton? Tell three ways in which cotton is picked.
- Describe the appearances of a cotton field at different times of the year.
- 8. Describe the growth of the cotton-plant. Where did it probably originate? What climate is best suited for cotton growing?
- 9. When was the first cotton shipped from the United States to England? The United States now produces what proportion of the cotton used in the world? What part does it use?
- 10. Name several kinds of cotton, and tell how they differ. What is sea-island cotton? How is it used?
- 11. How did Eli Whitney invent the cotton-gin? What has it done for the cotton industry? Tell what you know of a modern ginning establishment.
- 12. Locate on your map all the places mentioned in this week's reading.

Note

Sheep ranches are numerous in Australia. Last summer a lady whose husband owns two or three large sheep ranches visited this country. On one of the ranches were fifty thousand sheep. Some have many more.



III - Before the High Priest; Peter Denies Jesus

(October 15)

Lesson Scriptures: Mark 14:53-72; John 18: 15-18, 25-27; Matt. 26:57-75; Luke 22:54-65.

MEMORY VERSE: "Whosoever therefore shall confess me before men, him will I confess also before my Father which is in heaven. But whosoever shall deny me before men, him will I also deny before my Father which is in heaven." Matt. 10: 32, 33.

The Lesson Story

I. Though all the disciples fled when Jesus was arrested, Peter and John turned and followed him to the palace of the high priest. John was known to Caiaphas, and went in where Jesus was held a prisoner. Peter was left outside for a while, but John spoke to the servant who kept the door, and obtained permission to bring in Peter.

2. John did not pretend that he was not a disciple of Jesus. He did not stay in the company of those who were reviling his Master, but kept as near Jesus as he could, and remained in a place where he was not

noticed during the trial of his beloved Lord.

- 3. Houses of great men in the East are built in the form of a hollow square, with a courtyard in the center. This court is entered by an archway through the front building called "the porch" in the New Testament. The palace of the high priest was probably built in this form. "And the servants and officers stood there, who had made a fire of coals; for it was cold: and they warmed themselves: and Peter stood with them, and warmed himself." Peter was not with the right persons. He did not try to keep close to Jesus, but "followed him afar off, . . . and sat with the servants, to see the end."
- 4. Nothing that the priests desired had been gained in the hearing before Annas. "And they led Jesus away to the high priest: and with him were assembled all the chief priests and the elders and the scribes.

 . . And the chief priests and all the council sought for witness against Jesus to put him to death; and found none. For many bare false witness against him, but their witness agreed not together."
- 5. At last two witnesses were found whose testimony agreed better than that of those who had testified before them. They declared, "This fellow said, I am able to destroy the temple of God, and to build it in three days." They did not repeat the words as Jesus said them, but he listened patiently, answering nothing to all the testimony borne against him.
- 6. "And the high priest arose, and said unto him, Answerest thou nothing? what is it which these witness against thee?" Thus were fulfilled the prophetic words, "He was oppressed, and he was afflicted, yet he opened not his mouth. . . . He was taken from prison and from judgment." When arrested, Jesus was not even allowed to be put in prison. They "sought" for witnesses against him,—not for him that he might be set free if guiltless. There was no justice in his trial.
- 7. Since the testimony of the witnesses was not very satisfactory, Caiaphas now determined to force Jesus to condemn himself. He first placed the Saviour under

a solemn oath, saying, "I adjure thee by the living God, that thou tell us whether thou be the Christ, the Son of God." Now Jesus was called to bear witness to the truth, and he was no longer silent. "Jesus saith unto him, Thou hast said." This meant that what Caiaphas said was truth,—he was the Son of God. Then Jesus added, "Hereafter shall ye see the Son of man sitting on the right hand of power, and coming in the clouds of heaven. Then the high priest rent his clothes, saying, He hath spoken blasphemy; what further need have we of witnesses? behold, now ye have heard his blasphemy."

- 8. It was contrary to Jewish law to try a prisoner and condemn him to death in the night, and the priests now waited for the morning when all the members of the council could be gathered together. While they waited, Jesus was kept bound and guarded as if guilty of death. He was mocked and abused, while Satan and his angels urged on the people to sneer at his words that he would be seen "coming in the clouds of heaven."
- 9. Peter and John saw and heard it all. "And as Peter was beneath in the palace, there cometh one of the maids of the high priest: and when she saw Peter warming himself, she looked upon him, and said, And thou also wast with Jesus of Nazareth. But he denied, saying, I know not, neither understand I what thou sayest. And he went out into the porch; and the cock crew."
- 10. "And after a little while another saw him, and said, Thou art also of them. And Peter said, Man, I am not. And about the space of one hour after another confidently affirmed, saying, Of a truth this fellow also was with him: for he is a Galilean," "Surely thou also art one of them; for thy speech bewrayeth thee. Then began he to curse and to swear, saying, I know not the man. And immediately the cock crew."
- "And Peter called to mind the word that Jesus said unto him, Before the cock crow twice, thou shalt deny me thrice." That which pained the heart of Jesus most was that his own disciple should deny him in his hour of trial. While the profane words were on Peter's lips, he saw his Lord looking at him in pity and sorrow. That look broke his heart. He remembered how Jesus had warned him, loved him, had told him to watch and pray, and how he had slept in the garden. That look told him that Jesus loved him still, "and Peter went out, and wept bitterly."
- 12. "And as soon as it was day, the elders of the people and the chief priest and the scribes came together, and led him into their council, saying, Art thou the Christ? tell us. And he said unto them, If I tell you, ye will not believe: and if I also ask you, ye will not answer me, nor let me go. Hereafter shall the Son of man sit on the right hand of the power of God. Then said they all, Art thou then the Son of God? And he said unto them, Ye say that I am. And they said, What need we any further witness? for we ourselves have heard of his own mouth." The high priest asked, "What think ye? They answered and said, He is guilty of death.
- 13. "Then did they spit in his face, and buffeted him; and others smote him with the palms of their hands, saying, Prophesy unto us, thou Christ, Who is he that smote thee?" Priests and rulers were so filled with the spirit of Satan that if the soldiers had not protected Jesus, he would have been killed before he was nailed to the cross.

Ouestions

I. Who were the disciples that followed Jesus to his trial? Which one was acquainted with the high priest? Where did John go? Where was Peter? In what way did he gain permission to enter the palace?

2. What did John not do? Where did he not stay? To whom did he keep as near as he could? What

what did he wish to hear and see?

3. How are many of the houses built in the East? How is entrance obtained? Where were the servants and officers of the high priest standing while Jesus was being tried? What had they done for their comfort? Who stood by the fire with them? How did he follow Jesus? With whom should he have been?

4. How had the priests been disappointed in the trial before Annas? Where was Jesus then taken? Who assembled there? For what did the priests and council seek? What witness did many bear against Jesus? What was the trouble with their testi-

mony?

5. At last who were found? What did they declare? Why was their testimony not correct? What

did Jesus do while the witnesses testified?

6. What did the high priest then say to Jesus? What prophecy was fulfilled at this time? What privileges were not granted Jesus that are usually given the worst of criminals? What is true of his trial?

7. When nothing could be found to condemn Jesus. what did Caiaphas determine to do? What did he do first? What did he adjure Jesus to tell? Why was Jesus no longer silent? What witness did he bear? What did Caiaphas then do? What did he say?

8. What was the Jewish law concerning the condemnation of prisoners? For what did the priests wait? How was Jesus treated during the night? Who urged the people on in their abuse of the Saviour? At

what words did they especially mock?

9. Which of the disciples were present at this trial of Jesus? Where was Peter? Who saw him there? What did the maid say to him? What denial did Peter make? Where did he then go? What was heard as he went out?

10. After a little while what did another servant say? How did Peter reply? How much time passed before another accused him? What did he affirm? Why was he so sure that Peter was a disciple of Jesus? In what way was his speech different from that of others? What did Peter then begin to do? What immediately took place?

11. Who turned and looked at Peter at that moment? What did Peter see in that look? What pained Jesus most of all in his trial? What did Peter remember? How was he affected by the look Jesus gave him? Where did he go? What did he do? What would have saved him from this sad experience?

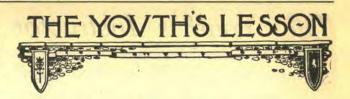
Repeat the memory verse.

12. When it was day, who came together? What question was asked Jesus? What did he reply? Where will those priests see Jesus again? What question did all ask as they heard his words? Repeat the answer of Jesus. What did the members of the council then say? Of what did they say he was guilty?

13. How did some treat Jesus after that? With what were these men filled? did others do? What would they have done had not the soldiers pro-

tected Jesus?

THE world belongs to the energetic. - Emerson.



III - Jesus Before Caiaphas and the Sanhedrin at Night; Peter's Denials

(October 15)

Lesson Scriptures: Mark 14:53-72; John 18: 15-18, 25-27; Matt. 26: 57-75; Luke 22: 54-65.

Lesson Helps: "Spirit of Prophecy," Vol. III, chapter 8 to page 123; "Desire of Ages," chapter 75 (last part); Sabbath School Worker.

PLACES: Jerusalem, before the Sanhedrin at night. Persons: Our Lord, John, Peter, Caiaphas, and the council, witnesses, onlookers, guards, servants.

MEMORY VERSE: Matt. 10: 32, 33.

Questions

- 1. From the house of Annas where was Jesus taken? Who was at the house of Caiaphas? Mark 14:53; note 1.
- 2. What disciple returned, and followed Jesus? Mark 14: 54.
- 3. How did Peter obtain admittance into the high priest's palace? John 18:15, 16; note 2.
- 4. What success did the council have in their examination of Jesus? What was the character of the testimony borne by the witnesses? Mark 14:55-59.
- 5. What did Jesus do when questioned by Caiaphas? Verse 60.
- 6. What did the high priest at last do? Matt. 26:63; note 3.
- 7. What reply did Jesus make when placed on oath? Mark 14:62.
- 8. How did the high priest manifest his horror at Jesus' answer? What course of action did they decide upon? Verses 63, 64.
- To what shameful treatment was our Lord subjected? Verse 65.
- 10. Where were the servants and soldiers gathered during the trial? John 18: 18.
- 11. As Peter stood with them, apparently indifferent, what question startled him? What was his reply? Mark 14:66-68.
- 12. What warning had Jesus previously given him? John 13:36-38.
- 13. What followed Peter's first denial? 14:68.
- 14. What further accusation did the maid make? How did Peter meet it? Verses 69, 70.
- 15. What did he do when accused the third time? Verses 70, 71.
- 16. What followed his third denial? What did Peter then remember? Luke 22:61.
- 17. What recognition did Jesus give this denial? How was Peter affected? Verses 61, 62; Mark 14:72.

Notes

r. From the haughty Annas Jesus was taken before the imperious Caiaphas, a Sadducee, and the legal head, by permission of Rome, of the Jewish Sanhedrin.

mission of Rome, of the Jewish Sanhedrin.

2. Though Peter had forsaken Jesus and fled, he still loved his Master. He must see him, even to the end. Matt. 26: 58. But he "followed him afar off." The devil's most effective temptations come to us when we are following "afar off." Let there be no doubt where you stand; follow close to the Master, and no one will ask, "Are you this man's disciple?"

3. To their unjust charges and false testimony our Lord did not reply. But when the high priest in judicial capacity employed the form of legal oath, Jesus responded.

The Youth's Instructor

ISSUED TUESDAYS BY THE

REVIEW AND HERALD PUBLISHING ASSN.,

TAKOMA PARK STATION, WASHINGTON, D. C.

FANNIE DICKERSON CHASE

EDITOR

Subscription Rates

YEARLY SUBSCRI	IPTION	-	_	-	\$1.	00
Six Months -	-	-	-			50
	CLUB	RATES				
5 or more copies to one	address, o	ne year, eac	h -	-		\$.75
5 or more copies to one	address, s	ix months, e	each	-	-	.40
5 or more copies to one	address, t	hree months	, each	-		.20

Entered as second-class matter, August 14, 1903, at the post-office at Washington, D. C., under the act of Congress of March 3, 1879.

John Hunt in Fiji

THE history of Christianity in the Fiji Islands is one long romance. Among the early heroes, John Hunt, an English plowboy, stands in the front rank. When he went to the islands, cannibalism and infanticide were common practises. More than once, in front of the missionary's house, victims were killed, roasted, and eaten, while the missionary's wife was obliged to look on. Yet Hunt saw marvelous changes. Chiefs protected him. On one occasion, when one unfriendly chief threatened harm, the king said, "If you harm the missionaries, I will begin to eat chiefs." Hunt gave the people the Word of God in their own language; he traveled incessantly, and labored without sparing himself. When he was dying, the native Christians met, and entreated God to spare him. "O Lord," cried one, "we know that we are very evil; but spare thy servant. If one must die, take me; take ten of us; but spare thy servant to preach Christ to the people." He died, thirty-six years old, having begun a work that resulted in the complete triumph of Christ in the islands. - Christian Endeavor World.

Japan Annexes Korea

THE Yi dynasty in Korea has endured for five hundred eighteen years, but has at last succumbed to the inevitable, and yielded its power to Japan. Twelve millions of people, and a country as large as England, have been added to the domain of the Japanese emperor.

The treaty of Portsmouth, between Japan and Russia, gave to Japan the "guidance, protection, and control" of Korea, over which the great war had been waged. For three years Japan has attempted a control that was short of absolute sovereignty; but final absorption was inevitable, and has been foreseen from the beginning. On the twenty-second of August the document granting Japan entire authority over the Hermit Kingdom was signed. It was kept secret until the twenty-fourth, when its contents were divulged to the representatives of the Powers. The great mass of the Koreans has been kept in entire ignorance of the matter, but no serious disturbance is anticipated when the change is officially proclaimed.

Japan will make liberal provision for the emperor of Korea and his family, receiving them, and other Korean officials, into the Japanese nobility.— Selected.

Babies as Object-Lessons

THE scientific care of babies is a new course added to the education of the girls in the public schools of Philadelphia. Physicians, assisted by trained nurses, and with a real baby as a model with which to illustrate the talks, are in attendance at regular sessions of the girls' schools to teach the future mothers of the nation how to raise healthy babies with the least trouble.

The milk bottle plays the most important part in the "properties" of the lecturer. The girls are shown how to wash the baby's bottle thoroughly, how to prevent the collection of germs in the rubber nipple, how to keep the baby's mouth clean, and what to do and not to do to insure the milk itself being wholesome and free from impurities.

The live baby is brought into service to show just how an infant should be washed and dressed, how it should be placed in its cot, and how protected from cold in winter and from overdressing in summer.

— Popular Science.

The True Shepherd

The Lord our shepherd is
Through all the fields of care;
He guides us with his shepherd's crook
To pastures green and fair.

He knows each throbbing heart When sins the soul oppress; He condescends to lift the load, And never fails to bless.

He, like the shepherd true, E'er knows his wandering sheep, And ever plans to lead them back Where they may safely sleep.

Then let us follow on
In paths divinely blest,
Till we are in his pastures rare
Within the fold of rest.

JOHN FRANCIS OLMSTED.

The Immorality of Carelessness

LACK of thoroughness in our work bespeaks sin in our life. For we ought to be thorough; we ought to carry any piece of work that is entrusted to us through to the end that we are expected to reach. Not to go as far as we ought to go in so doing is a betrayal of our trust. And the attitude which permits us to be careless in work will permit us to be careless in what we call matters of moral right and wrong. Hugo Munsterberg has given us something to think about when he said, in the Atlantic Monthly: "Thoroughness is only another form of conscientiousness. He who early acquires the habit of inaccuracy and carelessness will never have the energy to work against evil where it is easier and more convenient to let things go as they will." The mere psychologist, however, does not reckon with the transforming, recreating power of Christ. Even a lifelong habit of carelessness in little things, lowering and poisoning as it does our whole moral tone, can be overcome in Christ. And the more we open our lives to Christ, the more we shall hold ourselves accountable to him, in all that we do, for a thoroughness that must meet the test of his eyes .- Sunday School Times.

[&]quot;THE golden beams of truth and the silken cords of love, twisted together, will draw men on with a sweet violence, whether they will or no."